Yaquina Bay Bibliography by Date to 2023
Compiled by Susan Gilmont, Heather Hiveley, Mary Markland and Janet G. Webster

Oregon's estuaries are important ecosystems for scientific study. Consequently, knowledge of what research has been conducted helps us identify benchmarks and plan new projects. A comprehensive bibliography of published research, technical reports, local documents, and data sets is one means of recording this knowledge. For these reasons, the Guin Library staff have compiled bibliographies on Netarts Bay, the Salmon River Estuary, Siletz Bay, Yaquina Bay, the Alsea River Basin, the Yachats River Estuary and the Umpqua River Basin.

Yaquina Bay, located in Oregon's Lincoln County, has been extensively altered by jetties, dredging, landfills, roads and other human modifications. The Oregon estuary classification system designates Yaquina Bay as a Deep Draft Development estuary. It has been studied for decades, at times aggressively so. With renewed interest in Yaquina Bay as a research site, Oregon Sea Grant and the Environmental Protection Agency generously funded the beginning of this bibliography. The initial compilation was done by graduate student Heather Hiveley and the Guin Librarian, Janet Webster. Further citations were added by Susan Gilmont, under the direction of Janet Webster and Mary Markland. In addition to some attention to the area's pre-history, the historical period covered extends from Theodore Talbot’s trip through the region in 1849 through June 2023.

A web-based version of this bibliography is available at: https://guin.library.oregonstate.edu/oregon-estuaries. The web version offers keyword searching, including major concepts as well as species names and geographic referents.

U.S. Coast Survey. 1868. Topography of Cape Foulweather and entrance to Yaquina Bay U.S. Coast and Geodetic Survey U.S. Coast and Geodetic Survey. Register No. 1086. May be viewed online at: https://historicalcharts.noaa.gov/.


Oysterman's Association. 1878. "Minutes of the Oysterman's Association Meeting." Newport, Or. "5 July 1878"

U.S. Congress. Senate. 1880. Letter from the Secretary of War transmitting, in response to resolution of the United State Senate of the 18th ultimo reports respecting the entrance of Yaquina Bay, Oregon. 46th Congress, 2nd Session, Exec. Doc. no.148, 3 p. Government Printing Office (Washington, D.C.) Accompanied by 1 map. April 13, 1880. This important document includes a report by George W. Wood describing the condition of the entrance to Yaquina Bay before human modification. It describes the original entrance as a braided channel with a shifting main channel, and a depth in the main channel at low tide of only 9 feet. https://ir.library.oregonstate.edu/concern/technical_reports/mk61rh42z


Fagan, David D. 1885. A History of Benton County, Oregon Including Its Geology, Topography, Soil and Productions. Portland, Or.: A.G. Walling. Written just 20 years after the area was opened for white settlement, and when the Yaquina watershed was still part of Benton County, Fagan's history gives a good look at the beginnings of American settlements and commerce in the area. Chapter 35 (geography) and 50-51 (Yaquina Precinct history) are of particular interest. "Eight sloughs, varying in length from two to six miles, branch off from the main river, five on one side and three on the other, and are navigable to their heads by batteaux, upon which farmers can take their produce to port on two tides, if not one, with but slight assistance from sail or oar." (p.298) https://tinyurl.com/4m2b7zz8

Dickins, E.F. 1887. Topographical Reconnaissance from Yaquina Bay to Alsea River Oregon U.S. Coast and Geodetic Survey U.S. Coast and Geodetic Survey. This and other historical charts are available at: https://historicalcharts.noaa.gov/.

Bancroft, Hubert Howe. 1888. "Yaquina Bay." In The works of Hubert Howe Bancroft. Volume XXX : History of Oregon, Vol. II. 1848-1888. 30. p.203-204. San Francisco: A. L. Bancroft & company. Describes the wreck of the schooner Juliet on January 28, 1852, when it was driven onshore near Yaquina Bay. While passengers and crew waited for horses to arrive that would allow them to travel to the Willamette Valley, they explored the area, discovering the attractive farmland, native oysters and clams, and noted that the bay was navigable for shallow-draft vessels, "but the entrance was a bad one," (p.203). Available online in Google Books. https://tinyurl.com/6epklhg

Oregon. State Board of Fish Commissioners. 1888. Annual Reports of the State Board of Fish
Commissioners to the Governor of Oregon: 1888: [First Annual Report]. First annual report of the Oregon Fish Commissioners. 12 p. (Salem, Or.: Oregon. State Board of Fish Commissioners) Includes early efforts at building a hatchery, a review of fisheries legislation, fisheries statistics, and official correspondence. 
https://ir.library.oregonstate.edu/concern/technical_reports/z316q251m

Sheridan, Phillip Henry. 1888. Personal Memoirs of P. H. Sheridan, General United States Army. Vol. v.1. pp.95-104. New York. Charles L. Webster & Company. In Google Books. In the summer of 1856, Phil Sheridan was stationed at Fort Hoskins in Yamhill County. He led a detachment of troops to Yaquina Bay to deliver cattle to starving Indians on the newly formed Siletz Reservation. Passages discuss building a road between King's Valley and Siletz, the cattle delivery, and building a blockhouse for the reservation agent at Yaquina Bay in part of the Native American cemetery. In a memorable passage, Sheridan mentions Native American women and children capturing crab in the bay by torchlight. "... the reflection by the water of the light from the many torches, with the movements of the Indians while at work, formed a weird and diverting picture of which we were never tired." (p.100) https://www.gutenberg.org/ebooks/4362

Collins, J. W. , and United States Fish Commission. 1889. "Report on the fisheries of the Pacific Coast of the United States. .." Report of the Commissioner for ... / United States Commission of Fish and Fisheries. pt.16, appendix 1: p.3-269. Covers July 1, 1888 to June 30, 1889. This document offers a glimpse of the beginnings of the Oregon Coast fishing industry. Describes major rivers and estuaries, sites with greatest fishing activity, major fisheries, fishing seasons, fishing grounds, equipment used and how products were preserved or distributed. Statistics for 1888 are given. Includes maps of major streams. Note: many stream names have old-style spelling. 
https://penbay.org/cof/COF_1888_5.pdf

Commissioners., Oregon. State Board of Fish. 1889. Annual Reports of the State Board of Fish Commissioners to the Governor of Oregon: 1888: [Second annual report]. . 21 p. (Salem, Or.) Reviews fisheries legislation, law enforcement, hatchery program progress, dangers to salmon. Complains about seals, sea lion and bird predation on salmon. Recommends small bounties for scalps of salmon predators. Reviews major fishing streams. Fiscal and statistical reports included. 
https://ir.library.oregonstate.edu/concern/technical_reports/t148fh84s


3
U.S. Congress. Senate. 1890. Letter from the Secretary of War transmitting, in response to resolution of the 5th instant, a report on the improvements of the entrance of Yaquina Bay, Oregon. Executive Document. 51st Congress, 1st Session. no.47. Government Printing Office (Washington, D.C.) Reports on work on jetties at Yaquina Bay. The south jetty was considered complete about November 1, 1889, but settling and scour induced a need for more reinforcement. The north jetty was about 1/3 complete. Estimates costs. The goal was for the channel to be deep enough to permit ships drawing 25 feet to use the bay. Gives technical reasons why the engineers couldn't be sure this would be possible. Accompanied by 1 map. February 10, 1890. https://ir.library.oregonstate.edu/concern/technical_reports/1z40kt297


DeCourcy, Bolton W. 1891. "On the Straits of Juan de Fuca, Puget Sound; and government improvements on the Pacific Coast." Transactions of the American Society of Civil Engineers. 25, p. 420-441. Notes West Coast harbor engineering projects in the early 1890s. Includes maps of harbor entrances. "Yaquina Bay has another good appropriation... The project approved is, to raise the south jetty to full high-water without extending it, and to construct a mid-tide jetty on the north side of the entrance..." The relationship between the jetties and the reef is discussed.

Keep, Josiah. 1891. "Mollusks of the San Francisco markets." The Nautilus. 4, no. 9: 97-100. https://www.biodiversitylibrary.org/item/45404#page/5/mode/1up

Oregon. State Board of Fish Commissioners. 1891. Third and Fourth Annual Reports to the Governor, 1889-1890. 55 p. Dec.1, 1888 - November 30, 1890. Both reports cover legal aspects of state fisheries, financial reporting, hatcheries and statistics. The 4th report (1890) includes General Fishing Laws of Oregon: Relating to Oysters; Killing Fish with Explosives; and Protection of Red Fish; as well as a section on the Game Laws of Oregon, and a list of U.S. and Canadian fish commissioners. "We also had complaints from Benton County in regard to parties setting nets and traps across the streams, but being very busy at the time we . . . wrote to the parties making complaint that there was no law to prevent persons from setting nets or traps across any stream in this State." (p.8) https://ir.library.oregonstate.edu/concern/technical_reports/xd07gt61t
U.S. Congress. House. 1892. Bar at entrance to harbor at Yaquina Bay, Oregon. *Executive Document*. 52nd Congress, 2nd Session. Executive Document no.96, 8 p. Government Printing Office (Washington, D.C.) In 1892, the bar at the entrance of Yaquina Bay was 14 feet deep at low tide. Requests to deepen the entrance to 25 feet came from local residents, including supporters of T. Egerton Hogg's Oregon Pacific Railroad, which had its terminus on the bay at Yaquina. The request to deepen the harbor entrance was found to be impractical and too expensive. The report includes a letter supporting the proposed project from William M. Hoag, receiver for the Oregon Pacific Railroad. Accompanied by: 1 map. December 9, 1892. [https://ir.library.oregonstate.edu/concern/technical_reports/mp48sd28n](https://ir.library.oregonstate.edu/concern/technical_reports/mp48sd28n)

U.S. Congress. Senate. 1892. Letter from the Secretary of War, in response to a resolution of the Senate February 1, transmitting a report on the improvement of the entrance of Yaquina Bay, Oregon. *Executive Document*. 52nd Congress, 1st Session. Executive Document no.30, 8 p. Government Printing Office (Washington, D.C.) February 8, 1892. In 1892, the Senate Committee on Commerce requested the original 1880 survey reports on Yaquina Bay be furnished to them. The 1880 documents are included in this report. [https://ir.library.oregonstate.edu/concern/technical_reports/4x51hj32t](https://ir.library.oregonstate.edu/concern/technical_reports/4x51hj32t)

Oregon. State Board of Fish Commissioners. 1893. Fifth and Sixth Annual Reports to the Governor, 1891-1892. 44 p. "Yaquina river. No cannery in operation this year. There are 52 men engaged in fishing, including 12 oystermen. Of the salmon caught there will be about 600 barrels salted, and about 125,000 pounds shipped fresh. The oyster fisheries are not improving to any great extent, the amount for the past year being 1,217 sacks, containing two bushels each. The greater portion of these were shipped to San Francisco. On the Siletz, Salmon, and Nestucca rivers no fishing was done except for home consumption. The catch of the streams combined may reach 50,000 pounds." (6th report, 1892, p.33-34) In addition to the Annual Reports, gives the fish laws and game laws of Oregon. [https://ir.library.oregonstate.edu/concern/technical_reports/qv33rx511](https://ir.library.oregonstate.edu/concern/technical_reports/qv33rx511)

Wilcox, William A., and United States Fish Commission. 1893. The fisheries of the Pacific Coast *Report of the Commissioner for ... / United States Commission of Fish and Fisheries*. Pt.19, appendix 1, p.139-304. Government Printing Office (Washington, D.C.) Covers July 1, 1892 to June 30, 1893. This document carries forward the introduction to Pacific Coast fisheries begun in the 1889 report and has many more statistics. Most statistics, unfortunately, are given by county rather than by river or estuary, but statistics for individual rivers are given for featured streams. We can, for example, get statistics for oyster harvests in Yaquina Bay. Statistics cover 1889-1892. Includes Plates 1-14, mostly illustrating representative fish species. Note: many stream names have old-style spelling. Many subsequent reports on Pacific Coast fisheries appear in the Report of the Commissioner series, including the 1896, 1901 and 1905 reports.
Oregon. Fish and Game Protector, and Hollister D. McGuire. 1894. First and Second Annual Reports of the State Fish and Game Protector of the State of Oregon: 1893-1894. 43 p. State of Oregon (Salem, Or.) Lists canning / packing factories and amounts canned. Gives names of people fined for violating fish and game laws. Interesting account of building a hatchery on Knowles Creek, a tributary of the Siuslaw River, and waiting for Chinook to come in so their eggs could be harvested. "But no fish made their appearance. Investigation showed that the fishermen lower down the stream were violating the law by stretching their nets clear across the river and catching every fish that entered." [https://ir.library.oregonstate.edu/concern/technical_reports/vx021f77g](https://ir.library.oregonstate.edu/concern/technical_reports/vx021f77g)

U.S. Coast and Geodetic Survey. 1895. Yaquina River Entrance, Oregon [cartographic material]. This delightful map from 1895 shows the old and new lighthouses, a system of beacons, oyster beds, a shipwreck on the shore, and local communities. It covers the entrance to Yaquina Bay upriver to the Oysterville area. Topography dates from 1868-1887. Hydrography dates from 1868. "The bar is from an examination by the Corps of Engineers U.S.A. in 1894." "Note: the bar is subject to frequent change and the buoys are shifted accordingly. Strangers should not attempt to cross the bar without a pilot." Available from NOAA's Historical Charts page: [https://historicalcharts.noaa.gov/](https://historicalcharts.noaa.gov/).


---. 1895. Preliminary examination of Yaquina Bay, Oregon. Executive Document. 53rd Congress, 3rd Session. Executive Document no.227, 4 p. Government Printing Office (Washington, D.C.) Reports on a study to consider increasing the depth of the channel at the entrance to Yaquina Bay. Recommends against further channel deepening. "In my opinion it is beyond the power of man to make it into a harbor of sufficient capacity for deep-draft ships engaged in foreign commerce, or in fact to give this entrance a bar channel depth appreciably greater than that now existing." (p.3) [https://ir.library.oregonstate.edu/concern/technical_reports/6395w759n](https://ir.library.oregonstate.edu/concern/technical_reports/6395w759n)

and it was decided to transplant some oysters in Yaquina Bay. This article describes the
shipment and events preceding it.

al Survey (U.S.). Annual report of the United States Geological Survey to the Secretary of
the Interior. 17, no. Part 1: 441-520. Good photographs
https://archive.org/details/ageologicalreco00dillgo0g

Oregon. Fish and Game Protector, and Hollister D. McGuire. 1896. Third and Fourth Annual
Reports of the State Fish and Game Protector of the State of Oregon: 1895-1896. State
of Oregon (Salem, Or.) Includes an account of the effort to transplant Eastern oysters in
Yaquina Bay, and an appendix on "The Biology of the Eastern Oyster on the Oregon
Coast" by F.L. Washburn. Describes fisheries by county, and gives statistics.
https://digital.osl.state.or.us/islandora/object/osl%3A67543/datastream/OBJ/download
/1895-1896.pdf

Annual Reports of the State Fish and Game Protector of the State of Oregon. State of
Oregon (Salem, Or.)
https://digital.osl.state.or.us/islandora/object/osl%3A67543/datastream/OBJ/download
/1895-1896.pdf

Commissioner for ... / United States Commission of Fish and Fisheries... pt.22, p.575-659.
Published as an appendix to the 1895/1896 annual report. Most statistics are for 1895
only. 1893-1895 statistics for Chinook and coho salmon (in cases canned) are given for
Lincoln and Douglas counties. The Oregon section concludes with a discussion of killing
sea lions around Port Orford.
https://babel.hathitrust.org/cgi/pt?id=mdp.39015053244474&seq=11

Fisk, W. L., and United States. Army. Corps of Engineers. 1897. Improvement of Yaquina Bay,
Oregon. Annual report of the Chief of Engineers to the Secretary of War for the year...
Improvement of rivers and harbors in Oregon, and of lower Columbia River, Oregon and
Washington. Report of Capt. W.L. Fisk, Corps of Engineers, officer in charge, for the
fiscal year ending June 30, 1897, with other documents relating to the works. no. RR 10,
Annual reports of the War Department. Report of the Chief of Engineers, Appendices
part 4. An 1895 survey proposed extending the North Jetty by 2,100 feet and the South
Jetty by 2,200 feet to deepen the water on the inner bar. It included plans for groins to
prevent wave action from undermining the jetties and to remove “two detached rocks
in the paths of vessels” (p.3395). The Corps awaited adequate funding to proceed with
the project. This report includes an excellent summary of this history of the entrance to
the harbor and previous work done. Includes commercial statistics for the bay.
U.S. Congress. House. 1897. Preliminary Examination of Yaquina and Big Elk Rivers, Oregon. *House Document*. 55th Congress, 2nd Session. House Document no.112, 3 p. Government Printing Office (Washington, D.C.) Includes a brief report of a survey of the Yaquina River to the head of tide, including part of the Big Elk River up to Sunset Quarry. Concludes that the river is "sufficiently navigable to meet all demands of commerce," (p.2) and doesn’t recommend improvements. Accompanied by: 1 map. [https://ir.library.oregonstate.edu/concern/technical_reports/d791sg65n](https://ir.library.oregonstate.edu/concern/technical_reports/d791sg65n)

United States. Congress. Senate. Committee on Commerce. 1897. Yaquina Bay and Willamette and Yamhill Rivers, Oregon. *Senate Document (United States. Congress. Senate).* no.37, 54th Congress, 2nd session, 3 p. (Washington, D.C.) Discusses appropriations for engineering projects in Yaquina Bay, the Willamette River and the Yamhill River. Money was appropriated for continuing improvement of the Yaquina Bay jetties, for a "snag boat" and to build dikes on the Willamette River, and for a lock and dam on the Yamhill River. [https://ir.library.oregonstate.edu/concern/technical_reports/6w924c14h](https://ir.library.oregonstate.edu/concern/technical_reports/6w924c14h)


United States. Congress. House. Committee on Appropriations. 1898. Letter from the Secretary of the Treasury, transmitting a copy of a communication from the Secretary of War submitting an estimate of appropriation for improving Yaquina Bay, Oregon. *House Document* no.320, 55th Congress, 2nd session, 2 p. Forwards to the Congress an estimate from the Secretary of War for the fiscal year 1898/1899, estimating a cost of $150,000 for improvements to the Yaquina Bay harbor. [https://ir.library.oregonstate.edu/concern/technical_reports/rx913q36x](https://ir.library.oregonstate.edu/concern/technical_reports/rx913q36x)


---. 1899. "Transplanted oysters: condition of the eastern bivalves in Yaquina Bay." *Morning
Oregonian, 1899, 'Sept. 27, p.9. Published Sept. 27, 1899. Includes drawings of oyster vessels, equipment, and oysters. Gives temperatures of the waters in Yaquina Bay from July 15-August 22, 1899. Most of the article is a quotation from Professor Washburn.

Reed, F.C. 1901. Annual Reports of the Department of Fisheries of the State of Oregon to the Legislative Assembly, Twenty-First Regular Session. State of Oregon (Salem, Or.)


Woodcock, A. R. (Arthur Ray), 1880-, and Oregon Agricultural College. Agricultural Experiment Station. 1902. Annotated list of the birds of Oregon. Bulletin / Oregon Agricultural Experiment Station. no.68, 116 p. Oregon State University Agricultural Experiment Station (Corvallis, Or.) A classic early list of Oregon birds, this work suffers from its over-emphasis on the Willamette Valley. Nevertheless, it is interesting and a bit sad to read a local note that around 1902 there were 10 pairs of bald eagles on the Yaquina River, "but their increase is most effectually stopped by the constant killing of young birds by local sportsmen." (p.34) https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/zc77sq44s

Anonymous. 1903. "Hatchery notes." Pacific Fisherman. 1, no. 11: p.8. Brief note. “Mr. Webster, deputy fish warden, says that the state’s salmon interest at Yaquina, Alsea and Siuslaw reports an unusually good run of silverside salmon this fall, the hatcheries are making a good showing, the catches equaling, if not excelling, the capacity of the different plants.” https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/2891

----. 1903. "March report of Oregon Fish Commissioner – the spring closed season. Yaquina Hatchery site." Pacific Fisherman. 1, no. 4: p.12. “We have not been able to get a title as yet to the desired properties for our Yaquina station, and I am beginning to fear that we will not be able to, so as to get at permanent buildings for this coming season’s work.” “Complications” included securing a water supply for the proposed hatchery. https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/3029

----. 1903. "Salmon reviews. Columbia River." Pacific Fisherman. 1, no. 8: p.7. “Very little preparation is being made for salmon canning on the Oregon coast streams during the present fall season, because the price of that character of fish is low and considerable stock is held over. The canneries that will be operated are as follows: Coquille, Umpqua, Siuslaw, Alsea and Tillamook. The canneries that will not be in operation are at
Nehalem, Nestucca, Yaquina, Siletz and Coos Bay.”  


Van Dusen, H.G. 1903. Annual Reports of the Department of Fisheries of the State of Oregon to the Legislative Assembly, Twenty-Second Regular Session. State of Oregon (Salem, Or.)

Anonymous. 1904. "The canned salmon industry: a history of the industry on the Pacific coast."  Pacific Fisherman. 2, no. 1: p.36, 38, 40-42. This article reviews the canned salmon industry on the Pacific Coast from its beginnings on the Sacramento River in 1864 through 1903. Oregon’s major salmon canning streams are briefly mentioned. The issue also includes an article by David Starr Jordan on the salmon of the Pacific.  https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/4718

Anonymous. 1904. "Coast canneries operating."  Pacific Fisherman. 2, no. 10: p.12. Ten canneries will be in operation on the Oregon coast during the present fall season. They are the plants of S. Elmore & Co., at Nehalem, Tillamook, Alsea, Siletz and Umpqua; Hurd’ s at Siuslaw; Smith’ s at Coos Bay; Timmons’ and Prospers’ canneries at Coquille, and Barnes’ canners at Yaquina.”  https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/4286

----. 1904. "Shell Fish Department. Oysters for Yaquina Bay "  Pacific Fisherman. 2, no. 6: p.31. This article updates the status of oyster culture at Yaquina Bay in the early 20th century. Eastern oysters were planted in the bay in 1896, and they thrived, but failed to
propagate in the cooler Pacific waters. So, the Yaquina Bay Oyster Company began importing oyster seed in 1904, accepting the added cost of being unable to get the oysters to reproduce. This would be the practice for quite some time to come. Some wondered if Japanese oysters might do better, but at this point, that experiment was not yet tried.


---. 1904. "Shell fish department. Experiments at Yaquina Bay." Pacific Fisherman. 2, no. 12: p.19, 21. This article summarizes a report made by State Biologist Albert R. Sweetser to the Oregon Legislature about oyster culture in Yaquina Bay. Eastern oysters were planted and grew to great size but could not spawn in the cold bay waters. Sweetser recommended that the experimental bed be protected for a further four years to gather data and continue experiments. He added that Japanese oysters might be able to spawn, and should be tested, and it might be a good idea to re-plant native Olympia oysters in places where they once thrived, such as Coos Bay.


---. 1904. "Shell fish department. Yaquina Bay." Pacific Fisherman. 2 no. 7: p.27. This article gives an update on the status of Eastern oysters planted in Yaquina Bay in the spring. The oysters were thriving, and the State Fish Warden was excited about the possibilities, not only for Yaquina Bay, but also for Coos Bay. “That Coos Bay was once a great oyster bed is proved by the dredging work that was done at Marshfield some years ago. At that time a channel six feet in depth was scooped out, and all the refuse removed was old oyster shells. One of the principal made streets of Marshfield is of old oyster shells. From reports, this bay was probably the greatest oyster bed in the world at one time—and that not in the distant past. Indians have told that there were an abundance of oysters at Coos bay prior to the big fire. The information coming down through the Indians is a belief that the big fire killed the oysters.”


Van Dusen, H.G. 1904. "Oregon Fish Commissioner’s report for June. Yaquina Hatchery." Pacific Fisherman. 2 no. 7: p.14. “Superintendent Smith has been retained at the Yaquina station this season to finish up the construction work and make complete everything connected with the hatchery. As this is a fall activity, it will be another couple of months before the racks will be put in.”


Anonymous. 1905. "Columbia River." Pacific Fisherman. 3, no. 11: p.14. Brief news note. “Salmon canneries at Yaquina bay, Ore., have been running at their full capacity. The run was not quite as heavy as in some years in the past, but enough to keep all canneries
busy, and the output of the canneries will be as large as usual.”

---. 1905. "Columbia River. The Yaquina hatchery." Pacific Fisherman. 3 no. 4: p.17. “Reports have been received from the Yaquina hatchery showing that 4,000,000 silverside and 3,000,000 chinook salmon have been hatched there this season. About 1,000,000 steelhead salmon eggs have been taken and these will be used in the salmon hatchery exhibit at the Lewis and Clark fair.”
https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/3953


---. 1905. "Shell fish department. Oysters for Yaquina Bay, Oregon." Pacific Fisherman. 3, no. 7: p.34. Brief news note. “Ninety barrels of young oysters from Delaware bay on the Atlantic coast have arrived at Yaquina bay in Oregon, and have been planted in the oyster beds at Oysterville, by J. D. Wilcox, William Toner, and their associates. The same parties a year ago brought out a carload of oysters from the East and planted them at the Oysterville beds and recent examination has shown that these have grown well and are in a thriving condition. ... That makes three carloads of eastern oysters planted in Yaquina bay by private enterprise, and the industry there is said to be very promising.”

---. 1905. "Will raise Jap oysters." Pacific Fisherman. 3, no. 6: p.29. Brief news note. “M. W. Davis, of Corvallis, Ore., the owner of extensive oyster beds in Yaquina bay, has planted Japanese oysters in his beds and will experiment with them and see what success there is in raising them on the bay. The oyster shipment consisted of only two tubs and came from Kanagawa to the northward of Yokohama. They arrived in Corvallis in very good shape.”

Oregon. Fish Commission. 1905. Annual Reports of the Department of Fisheries of the State of Oregon for the Years 1903 and 1904 to the Twenty-Third Legislative Assembly [Regular Session]. State of Oregon (Salem, Or.)

summaries of the state of the fisheries in 1904. [https://tinyurl.com/jjmevwv7](https://tinyurl.com/jjmevwv7)


---. 1906. "Oregon hatchery operations." *Pacific Fisherman*. 4, no. 12: p.19. It rained heavily on the Oregon coast in October, 1906. This item tells how hatcheries fared in the fall downpours and is followed by more detailed reporting on individual hatcheries.

---. 1906. "Oregon hatchery work." *Pacific Fisherman*. 4, no. 11: p.17. "Hatchery work on the minor Coast streams has a favorable outlook. Logging has hampered hatcheries on those streams in past seasons, but Mr. Van Dusen thinks he is finding ways to meet this difficulty. Logs by being rolled into streams to wait for a freshet to wash them down either choke the streams so that salmon cannot approach the hatchery racks or tear out an ordinary rack when the freshet comes. By making the racks strong and giving them a flat, smooth surface on the top, it is found that logs are carried over, by the higher water, without difficulty. Since this plan was followed on Yaquina River, three years ago, the take of salmon eggs has been increased from little or nothing to 6,000,000 and 8,000,000 eggs a year."

---. 1906. "Shell Fish Department. Japanese oysters for Yaquina Bay" *Pacific Fisherman*. 4, no. 6: p.27. "M. M. Davis, of Corvallis, Ore., has received a shipment of thirty boxes containing 350 pounds each of Japanese oysters which he will transplant in his beds at Yaquina Bay, Oregon. The shipment came from the northern part of Japan and was shipped from Yokohama. ... A shipment of eastern oysters from Narragansett Bay, Rhode Island, for the beds of Davis & Toner at Yaquina Bay will arrive very shortly."

---. 1907. "Build two hatcheries" *Pacific Fisherman*. 5, no. 5: p.22. The Oregon State Board of Fish Commissioners authorized construction of a McKenzie River hatchery, to be supervised by W.A. Smith, who’d be transferred from his job on the Yaquina River. Commissioners also authorized construction of a Siuslaw River hatchery.


---. 1907. "Shellfish." Pacific Fisherman. 5, no. 9: p.32. "There is considerable contention over at Yaquina Bay, Ore., relative to replanting the Oysterville Flats. Master Fish Warden Van Dusen believes that he will get the government to put in a biological station on the Oregon coast, preferably at Yaquina Bay, where there is already a small oyster industry in existence..."

---. 1907. "To restock natural oyster beds." Pacific Fisherman. 5, no. 4: p.26. "The Oystermen of Yaquina Bay, Oregon, recently held a meeting at Oyster City, Ore., for the purpose of taking steps to restock certain natural oyster beds known as Oysterville Flats. They agreed to set aside these flats from the present time to Nov.10, 1909 and to plant on said flats one-half of all the natural oysters tonged from the natural oyster beds up until June 15, 1908. In this way they hope to re-stock valuable natural oyster beds which have become depleted."

Van Dusen, H.G., and Oregon. Dept. of Fisheries. 1907. Annual Reports of the Department of Fisheries of the State of Oregon to the Legislative Assembly Twenty-Fourth Regular Session. State of Oregon (Salem, Or.)

Anonymous. 1908. "Coast districts [Oct. 1908]." Pacific Fisherman. 6, no. 10: p.28. Lists salmon canneries operating on the coast, comments on “the short run of salmon this year” on the Siuslaw, thought to be caused by “the large number of spotted or hairless seals at the mouth of the river... The sand banks are simply alive with them and subscriptions are being taken up to get ammunition to set men to kill them off.” Also includes a note about a die-off of herring during their run in Yaquina Bay. “...thousands of herring were strewn on the beach of the Pacific Ocean near Yaquina Bay ... This year heavy sudden rains fell when the herring were going upstream and so much fresh water overwhelmed the fish.” https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/6010

---. 1908. "F. C. Barnes." Pacific Fisherman. 6, no. 1: p.31. Photograph of F.C. Barnes, “who has been a prominent canner since 1886. He is now operating three salmon canneries, namely at Yaquina Bay, Ore., South Bend, Wash., and Lake Bay, Alaska.


---. 1908. "To fish cod off Yaquina Bay." Pacific Fisherman. 6, no. 7: p.27. This news item is not
about the estuary, but it does concern the economic development of Newport. “Voeth & Humbree have organized a new fish firm at Newport, Ore. Their intention is to operate gasoline schooners in the fishing banks of Yaquina Bay. Some years ago, the U.S.S. Albatross surveyed these banks lying southwest of the bay and reported that cod and halibut were on the grounds in large quantities. ... The new enterprise is but one of several now under way. It is understood that the J. M. Alexander Company, of Aberdeen, is expecting soon to put one or more vessels into the business out of this bay and at least two other firms are busily looking over the ground with a view to erecting large cold storage plants for the handling of cod and halibut.”


Van Dusen, J. R. 1908. "Hatchery operations, coastal streams." *Pacific Fisherman*. 6, no. 3: p.15. From the Oregon Fish Warden's annual report for 1907. "The hatchery work on the streams of the state flowing into the Pacific Ocean, south of the Columbia River, was, without doubt, interfered with considerably this season by the extreme dry spell of weather that we had throughout the entire fall months, thereby causing the streams to all run so low that the chinooks were kept back from ascending the streams to spawn, and when the rains did come – late in the season – they caused such severe freshets that our temporary racks broke, thereby permitting the salmon to all pass by the hatcheries, and where we had permanent racks the greater number of the salmon passed over and went on to the extreme sources of the streams, where they, of course, spawned naturally. Notwithstanding these adverse conditions, the result of the season’s work shows very well at all of the stations, excepting on the Coquille, where they lost their entire supply of silverside salmon, just as they were ready to spawn. ..." Gives the take of spawn for the Yaquina, Siuslaw and Umpqua hatcheries.


Wygant, Morris. 1908. Map of the Survey of the Oyster Grounds on Yaquina Bay. This map is the official legal record of ownership and titles to all private cultivated oyster beds on Yaquina Bay by agreement of the State Board of Fisheries. This survey map and record was duly approved by the Yaquina Bay Oysterman's Association as noted above and approved by the Governor and State Board of Fisheries in September 1908. The map can be found in:

https://ir.library.oregonstate.edu/concern/technical_reports/p5547r898
Anonymous. 1909. "News items from the fisheries districts. Coast districts." Pacific Fisherman. 7, no. 12: p.22. Early fall runs were slow to start due to low water, but salmon quality and abundance were good. “Warden McAllister has made arrangements to build a permanent hatchery on the Coquille River where large numbers of Chinook and Silverside eggs have been taken in the past. Next year similar stations will be established on the Alsea and the Nehalem.”
https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/6457

McAllister, H. C. 1909. "Report of Oregon Master Fish Warden -- 1908. District no.2. Coast streams." Pacific Fisherman. 7, no. 2: p.35. "The conditions on [coastal] . . . streams this year were anything but favorable. Owing to the excessive dry weather and continued drought, the streams were all at a very low stage during the greater part of the fishing season; in fact, lower than for years past. This, in a measure, prevented the salmon from coming in, and in consequence the industry suffered, as did our hatchery work. . . While the total pack this year is practically the same as in 1907, it shows a falling off of 50 per cent on Chinooks. . . We now have permanent hatcheries on the following streams: South Coos, Siuslaw, Yaquina, Umpqua and Trask. It is my desire to locate also on the Coquille, Alsea, Nehalem, Siletz and Nestucca." Statistics show hatchery fry.

Oregon. Fish Commission. 1909. Annual Reports of the Department of Fisheries of the State of Oregon to the Legislative Assembly Twenty-Fifth Regular Session. State of Oregon (Salem, Or.)

U.S. Congress. House. 1909. Yaquina River, Oregon. Letter from the Secretary of War, transmitting, with a letter from the Chief of Engineers, report of examination of Yaquina River, Oregon, from Yaquina to Elk City. House Document. 61st Congress, 2nd Session, House Document no.351, 4 p. Government Printing Office (Washington, D.C.) December 15, 1909. Described the Yaquina Bay and River from Yaquina to Elk City, the communities and industries there, and considered proposed channel deepening. "The General Government expended nearly $700,000 in providing a suitable entrance to Yaquina Harbor, but no advantage was taken of this improvement. On the contrary the commerce, which was never large, dwindled away to a few hundred tons, and the improvement was abandoned about 1905. Under these conditions, it is not probable that the stretch of river under consideration would be extensively used if improved." (p.4) Recommended against further improvements.
https://ir.library.oregonstate.edu/concern/technical_reports/1g05fc138

Anonymous. 1910. "News from the fisheries districts. Columbia River." *Pacific Fisherman*. 8, no. 6: p.20. Brief news note. “Master Fish Warden McAllister recently visited Yaquina Bay, where he assisted in planting a carload of lobsters which arrived there recently from the coast of Maine. There also arrived some 200,000 lobster eggs, and these will be hatched in the car, and as soon as the lobsters reach sufficient size they will be liberated. The transplanting of the lobsters from the Atlantic to the Pacific Ocean is an experiment upon the part of the federal fishery department, and was brought about through the efforts of Senator Bourne, who is chairman of the senate committee on fisheries.”


McAllister, H. C. 1910. "Annual report of the Oregon Master Fish Warden, 1908." *Pacific Fisherman*. 8, no. 2: p.36-37. "Freshets on nearly all the small streams this year prevented our securing any considerable amount of spawn. The high waters came at a time when we were right in the midst of our egg taking, washing away in several instances, our racks and traps, entailing the loss of our fish and damaging, to a great extent, our hatchery property. This was true on the Siuslaw, Yaquina, Coquille and Coos Rivers, where our egg take has been comparatively small. Temporary repairs, as far as possible, have been made at each of the stations but without any prospects of relieving the conditions..." Gives statistics for salmon eggs taken and notes work on hatchery facilities. https://digitalcollections.lib.washington.edu/digital/collection/pacfish/id/6602


---. 1911. "Oregon Fish Warden’s annual report." *Pacific Fisherman*. 9, no. 1: p.12. One of the recommendations Oregon Fish Warden R. E. Clanton made to the Oregon Legislature in his annual report for 1910 was to “Provide a five-year closed season for the hatching of lobsters in Yaquina Bay and its tributaries.” This recommendation is related to an
experiment in planting Maine lobsters in Yaquina Bay in 1910.  

Clanton, R. E. 1911. "Annual Report of the Oregon Master Fish Warden, 1910. Hatchery operations." *Pacific Fisherman*. 9, no. 2: p.38-39. "This fall we have been able to secure 100,000 chinook and 2,382,000 silverside eggs, with a number of the latter parent fish still in the river. In addition thereto, with a view of restocking the waters of Yaquina Bay with chinook salmon, 500,000 eggs were transferred in this station from the Umpqua River hatchery where we took more spawn than we were able to care for properly."  

McAllister, H. C., R. E. Clanton, and Oregon. Fish Commission. 1911. Biennial report of the Department of Fisheries of the State of Oregon to the Twenty-Sixth Legislative Assembly Regular Session. State of Oregon (Salem, Or.)  
https://tinyurl.com/5n7575sy

U.S. Congress. House. 1912. Yaquina River, Oregon from Toledo to Yaquina. *House Document*. 62nd Congress, 2nd Session. House Document no.519, 12 p. Government Printing Office (Washington, D.C.) An earlier request for dredging a channel in the Yaquina River from Yaquina to Toledo having been rejected by Congress, the citizens of the area formed a port district and raised funds to support dredging. In response to this effort, the Army Corps of Engineers recommended the project be undertaken, with most funding coming from the local community. Includes descriptions of the river, the communities and industries on its banks, an estimate of expenses, and outlines a proposed method for the dredging. Accompanied by 1 map. February 1, 1912.  
https://ir.library.oregonstate.edu/concern/technical_reports/k643b162r

Winningstad, O. 1912. Corvallis and Eastern Railroad Company Section Maps. available at Lincoln County surveyor's office.

https://tinyurl.com/2p84pub5

https://tinyurl.com/xhxtz329

(Washington, D.C.) This is a response to a request for improvement of the Yaquina Bay bar and harbor entrance. Includes information on port and terminal facilities, area industries and commerce, and work done upriver from Yaquina to Elk City. Concludes that further work on the harbor entrance is unjustified. https://ir.library.oregonstate.edu/concern/technical_reports/5m60qs36s

Senate., U.S. Congress. 1914. Dike on Olalla Slough, Lincoln County, Oreg. Senate Report. 63rd Congress, 2nd Session, no.649, 2 p. Authorizes maintenance of a dike on Olalla Slough, which was recommended by the War Department, "provided a suitable gate is inserted therein, to be opened and closed at certain stages of the tide for the passage of boats." "Olalla Slough is a tidal stream emptying into Yaquina River, the tidal influence extending about 2 miles up the slough from its mouth, for which distance it is navigable at half tide for small boats and scows . . . The stream is used to a limited extent by settlers to transport their farm products to market and to float logs to the sawmills on Yaquina River." https://tinyurl.com/2b559f6


Cobb, John N. 1916. "Pacific salmon fisheries (2nd ed.)." Report of the Commissioner for ... / United States Commission of Fish and Fisheries. app.3,255 p. The annual report in which this article is published covers July 1, 1915 to June 30, 1916. Some good canned salmon pack statistics from the 1880s to 1915. Includes b+w photographs of hatcheries, canneries, etc. Pagination is separate from the main report, but this report begins at p.349 in the main volume. https://tinyurl.com/zumv3rbx

U.S. Congress. House. 1917. Yaquina Bar, Bay, and Harbor, Oreg.: Letter from the Secretary of War, transmitting, with a letter from the Chief of Engineers, reports on preliminary examination and survey of Yaquina Bar, Bay and Harbor, Oreg. including consideration of any proposition for cooperation of local interests. House Document. 65th Congress, 1st Session, House Document no.109, 18 p. G.P.O. (Washington, D.C.) The United States' declaration of war on Germany on April 6, 1917 imparted some urgency to harbor improvements. This document describes proposed projects at Yaquina Bay: to extend the south jetty, repair and extend the north jetty, construct a spur jetty and dredge the channel. Improvements were justified to provide access to area timber. Accompanied by 3 maps. https://ir.library.oregonstate.edu/concern/technical_reports/5138jf37r

Anonymous. 1918. "1917 Oregon Coast canned salmon pack." Pacific Fisherman Yearbook. 16,
p.58.  Gives 1917 canned salmon pack statistics for Oregon coast rivers and bays. The Yaquina cannery was consolidated with a Waldport cannery, and ceased operation. Canneries at Empire City (Coos Bay), Florence (Siuslaw) and Gardiner (Umpqua), did not operate in 1917, although canneries in Florence and Reedsport did. In Google Books. https://babel.hathitrust.org/cgi/pt?id=uc1.31822007477532&seq=24


United States. Army. Corps of Engineers. 1919. An act to authorize the construction and maintenance of a dike on Depot Slough, Lincoln County, Oregon. Report of the Chief of Engineers U.S. Army. 1918/1919 pt.3, p.3949. (Washington, D.C.: Government Printing Office) This is Chapter 204 in section, "Laws Affecting Corps of Engineers." Gives text of H.R. 7637 (65th Congress, 2nd Session), Nov. 7, 1918, which authorizes a dike on Depot Slough, "with a gate therein so constructed and maintained as to be readily opened and operated to permit the passage of logs, but arranged to automatically close for such times as may be necessary to prevent the overflowing by the tides of the lands above the said dike..." Secretary of War and Army Corps Chief of Engineers have to approve construction, and the dike or dam cannot be used "to develop water power or to generate electricity." In Google Books. https://tinyurl.com/3x7dbg3


Goodwin, Helen Durrie. 1920. "Shipbuilding in the Pacific Northwest." Washington Historical Quarterly. 11, no. 3: p.183-201.  Includes a list, "Chronological Table of the Chief Coast-Built Vessels1788-1895." Here, we learn, for example, that the "Augusta" was built in Yaquina Bay in 1888. Contains a valuable bibliography of early sources on this topic.
Anonymous. 1921. "Siletz bridges washed out: waters in district reported to be highest in 30 years." *Morning Oregonian*, 23 Nov 1921, p.7. "The Orton bridge over the Siletz river, the steel bridge at Siletz, the Fuller bridge and lower Farm bridges were all washed out by the flood. This district experienced the heaviest flood in 30 years, the water rising more than 30 feet in three days. The rainfall in the first 24 hours was 5 1/4 inches, and for 36 hours was 6 3/4 inches." This flood caused "numerous washouts." Other bridges washed out included railroad bridges near Chitwood, a railroad bridge at Pioneer, and a new county bridge over the Big Elk. Authorities indicated it would take "two to three weeks" to get the rail lines clear.

Cobb, John N. 1921. "Pacific salmon fisheries (3rd ed.)." *Report of the Commissioner for ... / United States Commission of Fish and Fisheries*. Appendix 1,255 p. The annual report in which this article is published covers July 1, 1920 to June 30, 1921. Some canned salmon pack statistics from the 1880s to 1919. Includes b+w photographs of hatcheries, canneries, etc. [https://tinyurl.com/2pjyd32t](https://tinyurl.com/2pjyd32t)


Anonymous. 1923. "Oyster beds change hands." *Pacific Fisherman*. 21, no. 9: p.32. Brief news item about much of the oyster grounds on Yaquina Bay being bought up "by Portland parties who are said to intend to restock the beds with Eastern oysters." [https://hdl.handle.net/2027/uc1.31822009664962](https://hdl.handle.net/2027/uc1.31822009664962)

Johnson, Bolling Arthur (ed.). 1924. Pacific Spruce Corporation and Subsidiaries: C.D. Johnson Lumber Company, Manary Logging Company, Pacific Spruce Northern Railway Co.: an Illustrated Story Reprinted from the Lumber World Review. 93 p. Lumber World Review, 1924 (Chicago, Il.) This publication is a reprint of an article originally published in the February 10, 1924 issue of the Lumber World Review. It was subsequently reprinted in 1981 by the Lincoln County Historical Society. https://ir.library.oregonstate.edu/concern/defaults/j67314933


Anonymous. 1925. "Newport plant improved." Pacific Fisherman. 23, no. 6: p.35. Brief news item about expansion by the Newport Ice & Fish Company. "A new wharf with a frontage of over 100 ft. has been built, the building enlarged and more machinery installed.”

Shoemaker, Carl D. 1925. "The salmon fisheries of Oregon." Pacific Fisherman. 23, no. 2: p.12-13, 20. This is a brief overview of Oregon salmon fisheries by the General Manager of the Oregon State Fish Commission. One of the more interesting aspects of this account is the author’s comments on the citizenship requirement for getting a fishing license. The citizen requirement had been passed during a period of xenophobic alarms about foreigners taking “our fish.”


United States. Army. Corps of Engineers. Portland District. 1926. Report of the Chief of Engineers, U.S. Army. Part 2. Commercial Statistics. Waterborne Commerce of the United States for the Calendar Year . . . This is the place to go to find statistics for what was shipped out of various ports. Although this record is for 1926, the publication is a series that began in 1876 under a slightly different title. 1907-1944 carried the title shown in this record. 1997- is available online under the title, Waterborne commerce of the United States. Smaller ports such as Depoe Bay don’t appear in the series until the 1950s. Hathi Trust has scattered numbers under a range of titles. The link here has issues from 1892-1965. https://catalog.hathitrust.org/Record/008978819

Anonymous. 1927. "1926 Pacific mild-cured salmon pack." Pacific Fisherman Yearbook. 25,p.190. The Burke Packing Company had plants up and down the Oregon Coast packing mild cured salmon, including plants on the Siletz, Yaquina and Umpqua Rivers. Statistics are in units of tierces (about 800 pounds) and are lumped in with statistics for Bay City, Cushman and Pacific City.
https://ir.library.oregonstate.edu/concern/technical_reports/zw12z6006


Anonymous. 1928. "1927 Pacific mild-cured salmon pack." Pacific Fisherman Yearbook. 26, p.186. The Burke Packing Company had plants on the Oregon Coast packing mild cured salmon, including plants on the Yaquina and Umpqua Rivers. Statistics are in units of tierces (about 800 pounds) and are lumped in with statistics for Astoria and Cushman.

---. 1928. "Fair run of Oregon silvers." Pacific Fisherman 26, no. 12: p.32. Brief news item. It looks like 1928 was not a good year on the Columbia River. "The dismal character of mid-fall fishing on the Columbia River and Oregon coast was lightened only by a very fair production of Silversides at Nehalem bay, Yaquina bay and the Umpqua river and other Oregon coast points. October fishing in these coastal waters returned larger catches of Silversides than in some years."

---. 1928. "Filleting at Newport, Ore." Pacific Fisherman 26, no. 7: p.19. "What is believed to be the first fish-filleting enterprise of commercial importance in Oregon is being initiated by the Newport Fish company of Newport, on Yaquina Bay... The introduction of filleting on the Oregon coast is expected to be of great benefit to the fishermen of that district..." The article introduces the leaders of the company, including Andrew J. Naterlin, and roughs out their ideas for the company.


Anonymous. 1929. "Fall salmon canning results in light pack." Pacific Fisherman. 27, no. 13: p.15, 17. While the 1929 salmon in Puget Sound was large, this was not the case on the Oregon Coast, where low water was blamed for light returns. "The Siletz River had relatively the best salmon run on the Oregon coast from Yaquina Bay north to the Columbia, proving to be the best this stream has had in some years. Consisting principally of very large Silvers, the Siletz run was an important factor on the Oregon
coast this fall. On Yaquina Bay the situation was rather disappointing, the catch
dwindling long before the end of the season, Nov. 15. The run into this bay is never
large, Yaquina deriving its salmon principally from the troll operations during the
summer. As there are no canneries at this point, the fish go for fresh shipping, mild
curing and freezing.” (p.17)

article about the popularity of fresh and frozen fish processed by the Newport Fish
Company. “In addition to its fresh fish business, the Newport company mild cures some
salmon and handles halibut, although this fishery was curtailed somewhat during the
past season by shortage of bait. Yaquina Bay has been closed to shad fishing for some
years, but is now open and it is expected will yield substantial quantities of this fish
during the spring months.” The article includes a b+w photograph of company officers
Andrew J. Naterlin and Crad Meredith displaying frozen fillets.

27,p.152. The Burke Packing Company had plants up and down the Oregon Coast
packing mild cured salmon, including plants on the Siletz, Yaquina and Umpqua Rivers.
Statistics are in units of tierces (about 800 pounds) and are lumped in with statistics for
Bay City, Cushman and Pacific City. Also gives statistics for the Newport Fish Co. on
Yaquina Bay and the Morris Beck company at Florence, as well as for other coastal sites.
These are the only canning statistics found for the Oregon Coast in 1928.

Galtsoff, Paul S. 1929. Oyster industry of the Pacific Coast of the United States. Report to the

article summarizes twenty-five years of observations of a suborder of migratory shore
birds. https://sora.unm.edu/node/183

item. “The Burke Packing company’s station at Newport, Ore., has been handling
ocean-caught crabs this season with fair results, according to Ed Hoyt, superintendent.
Heretofore, crabbing at that point has been confined to bay operations, with the
fishermen selling largely to the local resort trade...”

---. 1930. "Refrigeration revolutionizes salmon fishery of the Oregon Coast." Pacific Fisherman
28, no. 11: p.25-26. By 1930, the heyday of canneries on the Oregon Coast was over. A
cannery operated on the Rogue River, and another at Bay City on Tillamook Bay. The
rest were closed. “Fishing is no longer limited to bays and rivers, for off-shore fishing
fleets work up and down the coast outside these inlets... Salmon taken off the Oregon
coast are delivered to three markets – Coos Bay, Yaquina Bay and the Columbia River.
This running of troll salmon to relatively distant ports for landing has been made possible by the development of refrigeration technique aboard these ocean fishing craft.” (p.25) Instead of canneries, coastal sites had small cold storage stations. The article includes a photograph of the Columbia River Packers Association’s new fish receiving and mild curing station on Yaquina Bay, which the article states is the best on the coast and includes an extensive description of the facility.


Hayden, Mildred Vera. 1930. "History of the Salmon Industry in Oregon." M.A., University of Oregon History of the salmon industry. Statistics cover the fish pack from 1866-1927. Worth reading to see what the issues looked like to someone at that time.

Lokken, Harold. 1930. "The halibut fisheries of Oregon and California." Pacific Fisherman 28, no. 12: p.22-24. Describes the new southern U.S. Pacific halibut fishery in 1930. “Rumors exist of unexplored banks located a hundred miles off the coast, but to date no one has made an attempt to find them.” Known banks were easily fished out, and fishers supplemented their catches with red cod, ling cod, sablefish and sole. “Of the ten vessels landing fish at Newport, four are owned in Portland and are operated exclusively from Oregon ports, while the remainder are Seattle-owned and operate on the Oregon banks during the summer months when the fish are most plentiful there.” (p.22) Describes difficulty crossing the bar in spring and fall and mentions the proposed jetty extension. Includes a photograph of halibut boats in Newport harbor (p.22)


Anonymous. 1931. "1930 – Frozen fish prepared." Pacific Fisherman 29, no. 2: p.193. Gives the annual summary of fish frozen in 1931, including on the Oregon Coast. Statistics for the Burke Packing Co. plants at Gardiner and Newport are combined, as are those for the Gold Beach Packing Co. plants at Bandon and Empire. Included statistics for the Newport Fish Co.

---. 1931. "Little fall salmon canning done: Puget Sound winter fishing seasons closed; low prices result in curtailed fishing operations – fresh fish trade is dominant activity." Pacific Fisherman 29, no. 13: p.19-20. The Depression began to bite the fishing industry in the fall of 1931. “With fish available in quantities beyond the power of the established markets to absorb for the moment, fishermen took to peddling their catches through the country and small towns and consigning their fish direct to the Portland market. This practice had a demoralizing effect upon the business of established dealers.” (p.20)

---. 1931. "Naterlin purchases control of the Newport Fish Co." Pacific Fisherman. 29, no. 9: p.65. In 1931, Andreq J. Naterlin bought out Crad Meredith’s interest in the Newport Fish Company. The U.S. dredge “Savannah” was dredging the Yaquina bar in the summer of 1931, improving conditions, and optimists were hoping that the Depression would come to a quick end. The article discusses the officers of the company and its business focus, as well as current market and supply conditions. It includes a photograph of Antone Naterlin, the President of the company, as well as a view of the Newport waterfront showing the Newport Fish Company building.

---. 1931. "Oregon fishery legislation is viewed variously by operators." Pacific Fisherman 29, no. 5: p.30-31. This article gives comments from Andrew J. Naterlin of Newport and Charles Feller of Marshfield on activities of the Oregon legislature affecting the fishing industry. Includes a photograph of A. J. Naterlin. Mr. Naterlin is quoted extensively, including these remarks, “Several good, worthy laws were enacted, such as closing the Salmon River to commercial fishing; placing a size limit on troll-caught salmon; and reverting the oyster beds of Yaquina Bay back to the people. Although the latter law will not have much effect on the oyster situation of Yaquina Bay for a few years, it openly condemns the present method of leasing the entire beds to one individual or company. Such a law will mean the saving of the oysters in Oregon.”
---. 1931. "Oregon oysters get O.K." *Pacific Fisherman* 29, no. 13: p.67. This brief news item shows the response to Dr. Nathan Fasten’s article on the Yaquina oyster beds of Oregon, in which Fasten charged that sewage in the river was a potential danger. The State Board of Health studied the issue and announced that, “Oysters produced in the state of Oregon are entirely unpolluted.”

---. 1931. "Pacific Coast Ports: [Oregon]." *Pacific Fisherman*. 29, no. Handbook Number: p.78-85. These are brief looks at facilities available for fishers in Oregon around 1930. Maps show harbors, fuel and oil stations, yacht clubs, small craft landings, small craft anchorages and drawbridges. Entries are brief. Here, for example, is the entry for the Umpqua River, “Gardiner and Reedsport are principal centers. Cold storage and fresh shipping of salmon and shad. Troll and gillnet salmon, gillnet shad, most of which are shipped fresh, either direct to markets or to other points for packing. Ice, oil, stores. Coast guard lifesaving station. Bar impassable in rough weather” (p.85.) Includes maps of Astoria, Yaquina Bay and Coos Bay.

---. 1931. "Protection for Sealions." *Pacific Fisherman* 29, no. 6: p.58. “Revocation by the Oregon legislature of the bounty on sealions and the enactment of a law actually making the killing of these animals illegal, and providing a penalty therefor, has aroused considerable comment.” The bounty on killing seals, however, remained in place.

Fasten, Nathan. 1931. "The Yaquina oyster beds of Oregon." *The American Naturalist*. 65, no. 700: p.434-468. This article stirred up quite a fuss locally when it was published, mostly for stating the obvious. The author called attention to sedimentation problems in the bay and the problem of human sewage, which, at the time came from Toledo, Newport, and the small settlements at Yaquina and Oysterville. "The tides then carry such material back and forth over the entire river, making it possible for dangerous disease-producing organisms to be disseminated ... Inasmuch as the oysters from the Yaquina region are sent to various markets ... for human consumption, they may be regarded as a source of grave danger to human individuals." (p.438) Photographs and maps.

McMillan, H.C. 1931. Preliminary Report of Oyster Investigations 1931. 6 p. In the summer of 1931, the author investigated Tillamook, Netarts, and Alsea bays to determine their suitability for oyster culture. He also investigated in more detail the state of oyster growing in Yaquina Bay, the only place in the state where oysters were grown commercially. The author urges that fully grown oysters in Yaquina Bay be harvested before they die. This is an unpublished manuscript that was distributed locally. [https://ir.library.oregonstate.edu/concern/technical_reports/js956g28c](https://ir.library.oregonstate.edu/concern/technical_reports/js956g28c)

McMillin, Harvey C. 1931. Progress Report: Yaquina Bay Oyster Investigations. [U.S. Bureau of Fisheries]. Unpublished manuscript that was distributed locally and is cited in contemporary publications. Describes oyster grounds, a brief history of the oyster industry in Yaquina Bay, and current conditions. Shows salinity of Yaquina Bay for May-
August 1931 and 1931 spawning season. Recommends expanding production on State-owned beds.  https://ir.library.oregonstate.edu/concern/technical_reports/f7623c96f


Anonymous. 1932. "1931 – Frozen food prepared." Pacific Fisherman 30, no. 1: p.197.  Table gives the annual summary of fish frozen in 1932, including the Oregon Coast. Statistics for the Burke Packing Co. plants at Astoria and Gardiner are combined. The table includes statistics for the Newport Fish Co. As the Depression deepened, frozen fish production on the Pacific Coast dropped by almost 12% over 1930 production. (p.196)

---. 1932. "New oyster projects on the Oregon Coast." Pacific Fisherman 30, no. 2: p.59.  This short article describes recent and ongoing oyster-growing activities on the Oregon Coast. In Netarts Bay, the Pacific Oyster Company was “developing 600 acres of oyster land” and transplanting Japanese oysters into the bay. Yaquina Bay had seen its native Olympia oysters decline, had tried Eastern oysters, “a venture which was not attended with great success,” and was about to experiment with Japanese oysters. Experimental plantings of oysters in Nehalem Bay had done well and there were plans to plant both Eastern and Japanese oysters there.  A succinct and highly informative summary of activities.

---. 1932. "Oregon Oyster plant improved." Pacific Fisherman 30, no. 10: p.48.  Brief news item describing improvements at the Oregon Oyster Company’s wholesale and retail headquarters in Portland. “The company derives its oysters from Yaquina Bay, Ore., controlling practically the entire supply of the fine Yaquina natives. In addition, it has recently made substantial plantings of Eastern and Japanese oyster seed.”

---. 1932. "Oyster company expands." Pacific Fisherman 30, no. .5: p.48.  This brief news item recounts a bold expansion in the depths of the Depression. The Oregon Oyster Co. of Yaquina Bay decided to expand to a $100,000 investment. “The company will then have in full production approximately 300 acres, producing both the Japanese and native Yaquina oysters. Over 100 men will be used to work the beds, which would produce 60,000 sacks on estimate.”

see what the issues looked like to someone at that time.


https://ir.library.oregonstate.edu/concern/technical_reports/zs25xd865


https://ir.library.oregonstate.edu/concern/technical_reports/cf95jb851


https://ir.library.oregonstate.edu/concern/technical_reports/br86b402m

Anonymous. 1934. "Penters find business good at Newport." Pacific Fisherman 32, no. 10: p.35. Brief news item. While 1933 was a hard year for the fish business, things were looking a little better in 1934. This article details the “good summer’s business” reported by W.A. Penter and his son, Harold, “who are now operating the Yaquina Bay Fish Co. at Newport...” “The last week in July was particularly good and all the fishermen enjoyed bigger catches than during 1933.”


Shaw, J. N. (James Niven), B. T. (Bennett Thomas) Simms, and O. H. (Otto Herbert) Muth. 1934. Some diseases of Oregon fish and game and identification of parts of game animals. Station Bulletin / Oregon Agricultural College Experiment Station. no.322, 23 p. (Corvallis, Or. Oregon State Agricultural College Agricultural Experiment Station) Regarding a parasite causing skin growths, "Here again the fish had become unfit for food because of the unsightly appearance. The name of this parasite is Myxobolus squamae (Keysselitz).... This same parasite was found in cutthroat and steelhead trout taken in the Alsea and Big Elk rivers in Benton county during the winter. The cutthroats from the Big Elk contained large numbers and were in poor condition."
United States. Congress. House. Committee on Interstate and Foreign Commerce. 1934. Dams and dikes in Lincoln County, Oreg. *House Document* (*United States. Congress. House*). no.730, 73rd Congress, 2nd session, 2 p. Report to accompany Senate Bill 1759. Extends the time allowed to drain wetlands of the Yaquina River estuary around Nute Slough and Boone Slough. The time allowed in the 1930 bill for draining the wetlands had expired. [https://ir.library.oregonstate.edu/concern/technical_reports/hd76s053w](https://ir.library.oregonstate.edu/concern/technical_reports/hd76s053w)


Oregon State Planning Board. 1936. Oregon's Wild Life Resource. A Report by Advisory Committee on Wild Life and Research Staff. State Planning Board. 148 p. Oregon State Planning Board, (Salem, Or.) Before World War II, relatively few natural resource management reports from Oregon state agencies were published. This report covers current (circa 1936) management issues, fur-bearing animals, predators, waterfowl,
upland game birds, fisheries and conservation. Fisheries data includes salmon pack statistics, 1880-1931, as well as statistics (various years) for seal and sea lion bounties, hatchery releases and fish eggs taken, and fisheries catch statistics. The report contains interesting details, such as a list of private game reservations. “Commercial catching of clams is forbidden the year round at Netarts Bay, Tillamook County.” (p.81) “Rakes or submerged pots may not be used to catch crabs in Yaquina or Siletz Bay or Rivers. The only device legal there is the regular open net called a ring or hoop.” (p.82) Maps, charts, tables. https://ir.library.oregonstate.edu/concern/technical_reports/h702q722c


Anonymous. 1939. "Yaquina Bay oysters studied by biologist." Pacific Fisherman. 37, no. 8: p.66. Dr. Willis H. Rich of the Oregon State Fish Commission began investigating the native oysters in Yaquina Bay. "Condition of the Yaquina beds has not been satisfactory for some years and it is hoped that biological studies may indicate means by which they may be improved."

Dimick, R. E. 1939. The History of the Yaquina Bay Oyster According to Professor Dimick OSU. 1. This brief one-page report was written by R.E. Dimick, a prominent Oregon State University professor who studied the oysters of Yaquina Bay, Oregon during the 20th century. This report details human use of the native oyster through 1923. Misspelling in title is original https://ir.library.oregonstate.edu/concern/technical_reports/xw42n8388


Gerow, James. 1939. "Bald eagle kills black brant." The Murrelet. 20,p.44.

Graf, William. 1939. "The Distribution and Habits of Amphibia and Reptiles in Lincoln, Benton and Linn Counties." M.S., Dept. of Zoology, Oregon State College. Interesting observations are tucked away in this Master’s thesis. Consider this example of the habits of the rough-skinned newt, Taricha granulosa, which Graf calls by its older name, Triturus similans, “During late summer and early fall or large masses groups of Triturus
have been observed to congregate at a common point in the water . . . The numbers observed have been from a dozen to fifty or sixty and even up to several hundred. July 16, 1938, such a mass group was observed in Beaver Creek between Waldport and Newport about a mile above the mouth of the creek. The water was perfectly clear and about three or four feet deep where about sixty Triturus were “swarming” in a quite compact mass in the middle of the stream about a foot above the bottom of the stream bed. All seemed to be crowding about a common point, yet there was nothing visible which might attract them.” Includes bw photographs of specimens and habitats.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/j098zf49j

Oregon Websites and Watersheds Project, Inc. 1939. "1939 Yaquina River aerial photos [website]." Includes four aerial photographs showing the drainage boundary between the Yaquina and Siletz Rivers. Includes South Beach, Yaquina Head, Newport, Toledo, Eddyville. http://www.orww.org/R/YQ/AP-1939.html


---. 1939. Yaquina Bay and River, Oregon: Entrance to Toledo, Sheet 2 Yaquina Bay and River, Oregon U.S. Army Corps of Engineers office, Portland, Oregon. Possibly reduced from original. "K-9-55B" The map can be found in: https://ir.library.oregonstate.edu/concern/technical_reports/p5547r898.

---. 1939. Yaquina Bay and River, Oregon: Entrance to Toledo, Sheet 3 Yaquina Bay and River, Oregon U.S. Army Corps of Engineers office, Portland, Oregon. Possibly reduced from original. "K-9-55D" The map can be found in: https://ir.library.oregonstate.edu/concern/technical_reports/p5547r898.


This paper concerns ways to enhance the native Olympia oyster fishery in Yaquina Bay. It includes a valuable account of the history of the oyster industry in Yaquina Bay, and b/w photographs of the research project. Maps include the classic 1908 map of Yaquina Bay oyster grounds and 1939 maps showing channel depths from the entrance to the bay up to Toledo. [Link to the map](https://ir.library.oregonstate.edu/concern/technical_reports/p5547r898)

Dye, Eva Emery. 1941. "Boone family reminiscences as told to Mrs. Dye." *Oregon Historical Quarterly*. 42, p.220-228. In 1905, Mrs. Eva E. Dye travelled to Boone's Island on Yaquina Bay and interviewed George Luther Boone, great-grandson of Daniel Boone, in his home on the bay. Mr. Boone's description of the bay at the turn of the century is vivid and immediate. "In August the bay is alive with sardines; in March and April alive with herring; in August, September, October, November, the air is full of salmon leaping, jumping right out of the water. Scow-loads of salmon are taken right in front of the house. Thousands of cases are canned close by. We can our own salmon. Norwegian herring (pilchards) are caught by the bushel, so fat they break in two like a stick." Mentions Native American hunting of sea lions and European hunting of sea otters in Yaquina Bay.


U.S. Congress. House. 1941. Yaquina River and tributaries, Oreg.: Letter from the Chief of Engineers, United States Army, dated March 31, 1941, submitting a report, together with accompanying papers and illustrations on a preliminary examination and survey of Yaquina River and tributaries, Oregon, authorized by the Flood Control Act approved June 22, 1936, and by Act approved July 1, 1935. *House Document* 77th Congress, 1st Session, House Document no.304, 19 p. Government Printing Office (Washington, D.C.) Accompanied by 2 maps. July 1, 1941. Local interests had requested reinforcing dikes and dams in the Toledo and Poole's Slough areas, as well as work in the Mill Four district and Boone's and Nute's Sloughs. While the Poole's Slough and Toledo area work was rejected, in the name of flood control, work on the Mill Four drainage district was permitted, and the closing off and draining of Nute's and Boone's Sloughs was authorized. [Link to the report](https://ir.library.oregonstate.edu/concern/technical_reports/gt54kn419)

the north and south jetties and maintenance dredging to improve the entrance to the harbor at Yaquina Bay. Describes past harbor improvements and expenditures and gives a brief description of the area and economic activities involving the harbor. Accompanied by 1 map. Oct 27, 1941. Accompanied by: 1 map. Oct 27, 1941.

Anonymous. 1942. Portion of Yaquina Bay and River, Oregon Showing Location of Dredge Samples. 1 p. May be reduced from original. Possibly a figure from a report.


Dimick, R. E. 1944. "New locality records of three Pacific Coast fishes from Oregon." *Copeia*. no. 3: p.185. First reports of three species previously unknown in Oregon waters, all caught in Yaquina Bay. The fish mentioned are a bat stingray caught May 15, 1941; a queenfish caught June 16, 1942; and three leopard sharks caught May 1, 1943 "about 5 miles up the bay from ocean."


Twenhofel, W.H. 1946. "Mineralogical and physical composition of the sands of the Oregon


Oregon. Fish Commission. Research Division. 1947. A Preliminary Report on the Condition of the Populations of Silver and Chinook Salmon on Oregon Coastal Rivers. 35 p. Oregon Fish Commission. This is a preliminary look at coastal streams, except for the Umpqua River, and was followed by A Report of Fisheries Investigations in Oregon Coastal Streams South of the Columbia River and Exclusive of the Umpqua River, which is a more thorough exploration of the causes of the declines in Oregon coastal salmon runs. Charts give runs for each river from 1928 through 1945. [https://ir.library.oregonstate.edu/concern/technical_reports/3484zh70c](https://ir.library.oregonstate.edu/concern/technical_reports/3484zh70c)

improvements. From summary: "The cutthroat trout populations are on the decline in all coastal streams with the exception of the Necanicum and Siuslaw rivers." "Steelhead seem to be holding their own ... south of Tillamook Bay but are continuing to decline north of that area." "Silver salmon have been greatly reduced in all coastal streams but are making a come-back in the Necanicum, Dee, and Siuslaw rivers. " "The spring chinook has all but been exterminated..." (p.31). Charts.

https://ir.library.oregonstate.edu/concern/defaults/r494vq85g

Tollefson, Roger, and Oregon. Fish Commission. 1947. Pacific Oyster Seed. Shellfish Investigation Progress Report. no.4, 3 p. “In the spring of 1947, importation of Pacific oyster seed from Japan was resumed for the first time since before the war. Major plantings of this seed were made in Tillamook and Coos Bay with additional trial plantings in various other localities in Oregon.” (p.1) Included in the shipment of Pacific oyster seed (Crassostrea gigas) was a small trial shipment of the highly desirable Kumamoto oyster (Crassostrea sikamea), which was planted in Tillamook and Yaquina bays. This is the first known planting of Kumamoto oysters in Oregon.

https://ir.library.oregonstate.edu/concern/technical_reports/zc77sq87k

---. 1947. The Yaquina Bay clam fishery: preliminary report. Shellfish Investigation Progress Report. no.2, 10 p. “Starting the first part of July, 1947, the Fish Commission of Oregon set up a field station at Newport for the purpose of conducting research on shellfish.” (p.1) The status of clams in Yaquina Bay was the first topic studied. This paper gives the conditions of clam beds, lists species found, gives preliminary age composition and recruitment data, and notes concerning the intensity of the fishery and the possibility of overfishing. Includes graphs and a hand-drawn map. Note: the geographic feature referred to as “Point Virtue” is now known as Idaho Point.

https://ir.library.oregonstate.edu/concern/technical_reports/8c97kq88b


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/tb09j830w

Oregon. Fish Commission. 1948. "Herring spawning." Research Briefs - Fish Commission of Oregon. 1, no. 2: p.9. Brief note. "A heavy spawning of Pacific herring occurred in many of the Oregon bays the latter part of February and first of March, 1948. In Yaquina Bay the peak came on February 28, and at approximately the same time in Tillamook Bay. Boat bottoms, piling, floats, etc. were coated with from one layer of eggs up to deposits of one-half inch in thickness..."

https://ir.library.oregonstate.edu/concern/technical_reports/3f462600t

Includes hand-drawn sketches of bay clams. Includes statistics for Yaquina Bay for a week of low tides in July of 1947. The complete report also includes two short reports, "Drag Boat Damage on Crabs" and "Herring Spawning," which reports on herring spawning in Tillamook and Yaquina bays.

https://ir.library.oregonstate.edu/concern/technical_reports/3f462600t

Talbot, Theodore, and Lincoln County Historical Society. 1948. Lincoln County lore, from the Journal of Lieut. Theodore Talbot, U.S.A., on his journey through Lincoln County and along the Oregon coast in 1849. Vol. no.1. 86 p. Publication (Lincoln County Historical Society (Lincoln County, Or.)). Newport, Or.: Lincoln County Historical Society. Journal of Lt. Theodore Talbot, describing a journey to Lincoln County to examine the "Alcea River and the country adjacent" in the summer of 1849.

https://ir.library.oregonstate.edu/concern/defaults/bz60cx72m


https://ir.library.oregonstate.edu/concern/technical_reports/3f462600t


https://ir.library.oregonstate.edu/concern/technical_reports/x346d508p

Tollefson, Roger, and Oregon. Fish Commission. 1948. Proposed regulations of the clam fishery of the State of Oregon. Shellfish Investigation Progress Report. no.11-A, 10 p. Fish Commission of Oregon, By 1948, Oregon’s clamping regulations spilled over into fifty-one different sections of administrative rules. They were “cumbersome” at best. The previous legislative session had repealed many outdated laws but kept them in effect until the Fish Commission could study the issue and propose new regulations. The Commission had been studying the issue for a little more than a year in Tillamook, Yaquina and Coos bays and in this document gives its first recommendations, primarily focusing on the gaper, or “horse,” clam fishery. Among other recommendations, the Fish Commission proposed closing Nestucca Bay to commercial clam digging.

https://ir.library.oregonstate.edu/concern/technical_reports/2v23vv147

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/fj2364397


Marriage, Lowell D., and Oregon. Fish Commission. 1949. Horseclam condition studies. Shellfish Investigation Progress Report. no.18, Fish Commission of Oregon. The first regulations restricting clamming in Oregon went into effect in 1948. Clamming had initially been barred from Jan. 1-June 30; clam diggers objected that this was too restrictive and lobbied for longer seasons. This 1949 document examines the fat gaper or horseclam, to see when its condition was at its best, to determine the best times for open clamming seasons. The authors concluded that they needed more information about the winter months before they could contemplate a change. This document gives a good example of earlier natural resource management and decision-making. Original report and supplement with more data for 1949. Includes charts and hand-drawn illustrations of clams. https://ir.library.oregonstate.edu/concern/technical_reports/ft848r22f

https://ir.library.oregonstate.edu/concern/technical_reports/z890rz949

----. 1949. "Leopard shark reported from Yaquina Bay." Research Briefs - Fish Commission of Oregon. 2, no. 1: p.6. Brief entry. "On September 21, 1948, while gill-net fishing for salmon in Yaquina Bay, Mr. J. C. Shermer, a gill-net fisherman of Yaquina, Oregon, removed a shark from his gear some five miles upbay from the ocean. This shark, which was landed at Yaquina Bay Fish Company, Newport, Oregon, was identified ... as a male leopard shark... It measured 44 inches from the tip of the snout to the tip of the upper lobe of the caudal fin and weighed 11.5 pounds." 
https://ir.library.oregonstate.edu/concern/technical_reports/vq27zp14s

Tollefson, Roger, Lowell D. Marriage, and Oregon. Fish Commission. 1949. Ghost shrimp, weights of crabs — Oregon landings, souvenir crabs. Shellfish Investigation Progress Report. no.16, 15 p. This 3-part document describes the ghost shrimp fishery, explains a method to tax commercial crab landings, and notes a business that was catching small shore crabs and embedding them in plastic for sale as tourist souvenirs (the “badge” of the Newport Crab Festival). Gives methods of harvesting ghost shrimp and lists the
number of commercial fishers in Alsea and Siletz bays. Gives statewide Dungeness crab landings.  
[https://ir.library.oregonstate.edu/concern/technical_reports/1544bq05s]

Investigation of proposed log boom on Yaquina River. *Oregon Fish Commission. Shellfish Program Special Report*. no.9, 5 p. Reports on an investigation of a request by the C.D. Johnson Lumber Company to construct a log boom two miles below Toledo on the Yaquina River. Local residents were concerned that the boom would damage clam beds. "Since it seems inconceivable that a log boom over the flat would fail to completely destroy the bed, granting of permission for such a boom is hereby opposed from the standpoint of the clams involved." Includes a hand-drawn map of the area.  
[https://ir.library.oregonstate.edu/concern/technical_reports/sn009z526]

[https://ir.library.oregonstate.edu/concern/technical_reports/1544bp92x]

Baldwin, Ewart M. 1950. "Pleistocene history of the Newport, Oregon region." *Geological News Letter*. 16, p.77-81. This article gives a concise summary of Baldwin's work on the area in the 1940s. It includes a hand-drawn map. There is an interesting speculation about a shift in the mouth of the Yaquina River. "The former mouth of the Yaquina River probably lies somewhat south of its present mouth beneath the dune area where evidence is buried. At present, the dunes have been encroaching northward and driving the river against the resistant Astoria sandstone along the north bank," (p.79)  
[https://www.gsoc.org/s/1950-NEWSLETTERS.pdf]

[https://ir.library.oregonstate.edu/concern/defaults/1z40kz755]

[https://ir.library.oregonstate.edu/concern/technical_reports/1544bp92x]

McKernan, Donald L., Donald R. Johnson, John I. Hodges, and Oregon. Fish Commission. 1950. Some factors influencing the trends of salmon populations in Oregon. *Contribution (Oregon. Fish Commission)* no.12, 449 p. Oregon Fish Commission (Portland, Or.) Three factors were significantly correlated with fluctuations in Oregon silver salmon production. Logging, winter floods and low summer waterflows adversely affected salmon runs. Fishing intensity also affected subsequent productivity. Increases in fishing
effort on the rivers studied were followed in succeeding cycles by lower catches, and when fishing effort declined, ensuing silver salmon production generally increased.

Oregon. Fish Commission. 1950. Observations on horseclams of the 1949 set *Shellfish Investigation Progress Report*. no.20, 11 p. “An excellent opportunity was afforded to observe growth of horseclams of the one-year-plus class when it was discovered April 7, 1950, that a newly formed mud flat in Yaquina Bay, formed September and October 1948 by fill from dredging operations, had thousands of young horseclams embedded in it. Because the horseclams spawn in February and March principally, these clams would of necessity have to be of the 1949 spawn, or one-year-old class.” (p.1) Since the age of the clams was known, researchers used them to test clam aging techniques for accuracy. They conducted growth studies, and followed up on an earlier report (*Shellfish investigation progress report no.18*) on clam condition as affected by spawning. Includes hand-drawn graphs.

Oregon. Fish Commission. Research Division. 1950. The Ocean Crab Fishery, its Regualtion and Management. With Special Reference to the Siletz, Yaquina, and Alsea Bays. 4 p. Fish Commission of Oregon ([Salem, Or.]) Should fishing by crab pots instead of crab rings be allowed in certain bays in Oregon? An error caused the ban on crab pots to be deleted from the statutes. This 1950 paper considers whether the ban on crab-pots should be reinstated in Siletz, Yaquina and Alsea Bays. This is an Oregon Fish Commission internal discussion paper. 14 April 1950


Boydston, James R., and Oregon. Fish Commission. 1951. Report on sanitary survey Yaquina Bay shellfish growing areas: May, 1951 by Oregon State Sanitary Authority. *Oregon Fish Commission. Shellfish Program Special Report*. no.28, 5 p. Oregon Fish Commission ([Portland, Or.]) "The waters of the bay are grossly polluted from Toledo to a point about five miles below Toledo. The bay is moderately polluted tram a point five miles below Toledo to Coquille Point, and satisfactory for shellfish propagation tram Coquille Point to Newport. The discharge of untreated sewage by the city of Toledo into Yaquina Bay is the cause of nearly all the pollution found in the waters of the bay...The alarming
rate of increase in pollution of Yaquina Bay can be shown by the fact that for sections III and IV the median MPN [most probable number] for samples collected on ebb tide was 23 in 1944, 130 in 1948, and 240 in 1951." (from Summary and Conclusions, p.4) 
https://ir.library.oregonstate.edu/concern/technical_reports/6t053g530

https://ir.library.oregonstate.edu/concern/technical_reports/5425kg85g

https://ir.library.oregonstate.edu/concern/technical_reports/vt150j866

Marriage, Lowell D., and Oregon. Fish Commission. Shellfish Program. 1951. Investigation of proposed dredging operations in Yaquina Bay near the ship turning basin. Oregon Fish Commission. Shellfish Program Special Report. no.16, 3 p. Gives an Oregon Fish Commission shellfish biologist's response to a request by the C.D. Johnson Lumber Company to dredge in Yaquina Bay. Hand-drawn map shows the proposed location for disposal of dredging spoils. Includes the public notice issued by the Army Corps of Engineers. https://ir.library.oregonstate.edu/concern/technical_reports/cv43nx61h

https://ir.library.oregonstate.edu/concern/technical_reports/sj139235g

https://ir.library.oregonstate.edu/concern/technical_reports/0v8385061

---. 1951. Shellfish investigation progress report. Shellfish Investigation Progress Report. no.24, 16 p. (Fish Commission of Oregon) This report updates shellfish research by the Oregon Fish Commission from January to August, 1951. It includes criticism of human pollution such as lumber mill dust and human sewage, particularly in the Yaquina Bay area, discussion of a proposed experimental closure outside the mouth of Nehalem Bay to crab fishing, a study of size composition of bay crab populations, and a possible relationship between macro-algae and oyster mortality in Yaquina Bay. 
https://ir.library.oregonstate.edu/concern/technical_reports/6q182k90w
https://ir.library.oregonstate.edu/concern/technical_reports/7h149q56p

https://ir.library.oregonstate.edu/concern/technical_reports/dv13zv07k

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9z903422j

Watson, Gerald Harvey. 1951. "Bacteria as Food for the Larvae of the Native Pacific Coast Oyster, *Ostrea lurida* Carpenter." M.S., Dept. of Fish and Game Management, Oregon State College. Details research done at the Yaquina Bay Fisheries Laboratory in 1950-51, and includes a photograph of the lab about 1950. The author successfully artificially induced spawning of Olympia oysters. Bacteria were adequate food sources for the oysters. Oysters that ingested radioactive bacteria became radioactive themselves. Includes microphotographs of oyster larvae.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9p290c746


https://ir.library.oregonstate.edu/concern/technical_reports/xw42nd137


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/pz50gz46z
https://ir.library.oregonstate.edu/concern/technical_reports/8w32r6337

Marriage, Lowell D., Kenneth D. Waldron, George Hirschhorn, and Oregon. Fish Commission. 1952. Shellfish Investigation Progress Report. no.52, 27 p. This report gives data on growth and survival of Pacific razor clams, measuring clams from multiple sites. It tracks the length frequencies of clams, and length-live weight relationships. the time.
https://ir.library.oregonstate.edu/concern/technical_reports/v979v371b

Marriage, Lowell D., Kenneth D. Waldron, and Oregon. Fish Commission. Shellfish Program. 1952. Investigation of fish stoppage due to log jams in the Yaquina River and Elk River, August 12, 1952. Oregon Fish Commission. Shellfish Program Special Report. no.19, 3 p. "A survey was made on this date for the purpose of ascertaining whether or not log jams in the Elk City region of the Yaquina River and Elk River (Yaquina River tributary) were a serious menace to the passage of salmon." (p.1)
https://ir.library.oregonstate.edu/concern/technical_reports/12579s91d

Waldron, Kenneth D., and Oregon. Fish Commission. Shellfish Program. 1952. Report of dam at Chitwood mill on Haxel Creek, a tributary of Thornton Creek. Oregon Fish Commission. Shellfish Program Special Report. no.22, 3 p. Fish Commission of Oregon, Shellfish Program. Describes an investigation of a dam at a millpond near Chitwood, Oregon. The dam was on Haxel Creek, a tributary of Thornton Creek, a tributary of the Yaquina River. Includes a hand-drawn map of the area.
https://ir.library.oregonstate.edu/concern/technical_reports/z603qx87v

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/nc580p45h

Gharrett, J. T. (compiler). 1953. Summary, coastal river regulations, 1878-1950. Gives the details of fishing regulations from 1878-1950, with a 1974 addendum by Robert E. Mullen for some streams. We learn, for example, that in 1891-1892 "No fixed gear to extend more than one-third distance across streams," or that Beaver Creek was "closed to commercial fishing following 1916."

Herron, John E. 1953. "Stratigraphy of the Miocene Agate Beach Formation in Lincoln County,
Marriage, Lowell D., and Oregon. Fish Commission. Shellfish Program. 1953. Investigation of proposed work project by the Yaquina Dock and Dredge Co. in Yaquina Bay near Newport, Oregon. Oregon Fish Commission. Shellfish Program Special Report. no.25, 3 p. Yaquina Dock and Dredge Company had applied for a permit to construct a dike, bulkheads, a groin and to dredge at Sally's Bend in Yaquina Bay. The Fish Commission investigated to ascertain the effects of the work on natural resources. Includes a public notice from the Army Corps of Engineers.
https://ir.library.oregonstate.edu/concern/technical_reports/w0892b88h

https://ir.library.oregonstate.edu/concern/technical_reports/9p290f74m

---. 1953. Shellfish Investigations. Progress Report. no.27, 32 p. Shellfish studies from June 1 to December 31, 1952. Gives bay clam and crab investigations. It also summarizes a survey on razor clam production in Lincoln County conducted to determine whether commercial razor clam harvesting in the area should be closed.
https://ir.library.oregonstate.edu/concern/technical_reports/7h149q587

Pasquale, Nicholas. 1953. "Rearing of the Native Oyster Larvae, Ostrea lurida Carp., in Wooden and Concrete Tanks under Controlled Conditions." M.S., Dept. of Fish and Game Management, Oregon State College. Major professor was Roland E. Dimick. Recounts early (1952-1953) experiments rearing native oysters in Yaquina Bay.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/d504rn949

https://ir.library.oregonstate.edu/concern/technical_reports/cj82kc79z

https://ir.library.oregonstate.edu/concern/defaults/s1784r74q


44
McHugh, Robert A. 1954. Preliminary Report on a Study of the Factors Responsible for the Toxicity of Wastes from a Modern Kraft Pulp and Paper Mill. 10 p. Corvallis, Or.: Department of Fish and Game Management, Oregon State University. "The wastes investigated were obtained from the main sewer of a modern Kraft paper mill, pulping only Douglas fir. . . Even though the waste reaching the main sewer has been treated so that the content of inorganic sulfide, mercaptan, soap and black liquor is greatly reduced, it is still quite toxic . . . Salmon are killed at dilutions of 1 in 10 nearly always, at dilutions of 1 in 20 most of the time, and at 1 in 40 perhaps half the time." (from the Introduction) [WB-00234] [WB-00234]
https://ir.library.oregonstate.edu/concern/technical_reports/tx31qj21t

https://ir.library.oregonstate.edu/concern/technical_reports/kp78gh191

Oregon. Fish Commission, Lowell D. Marriage, Kenneth D. Waldren, Stanley N. Wilkes, and James McCauley. 1954. Shellfish Investigations Progress Report: January 1 to December 31, 1953. no.28, 52 p. [Oregon Fish Commission] This report updates shellfish studies from in 1953. It includes a summary of bay clam and oyster investigations, including details on attempted pest control and control of algae on oyster beds. It also contains results of the 1953 Tillamook Bay Clam Survey and discusses clam wastage during dredging. https://ir.library.oregonstate.edu/concern/technical_reports/n870zr48g


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/c821gn63w


company dumping dredging material in the bay, logging debris in Feagles Creek, and the resolutions of the problems.

https://ir.library.oregonstate.edu/concern/technical_reports/bg257f83v

McCauley, James E., Lowell D. Marriage, and Oregon. Fish Commission. 1955. "The intertidal mussel, piddock, and abalone resources of Oregon's outer coast." Research Briefs – Fish Commission of Oregon. 6, no. 1: p.4-13. This 1955 survey gave shellfish locations. Works like this should not be used without considering health issues such as bacteria counts, red tides, etc. "At Yachats there are mussels on the rocks on both sides of Yachats River. At Yachats Rock State Park one can easily gather mussels from the rocks where they are large and numerous…"  

https://ir.library.oregonstate.edu/concern/technical_reports/vd66w0709

Oregon. Fish Commission. 1955. Crab Tagging Experiment in Yaquina Bay 1955. 13 p. "During February and March, 1955 a crab tagging experiment was carried out in Yaquina Bay, by personnel of the Oregon Fish Commission Shellfish laboratory." The results reflect the intensity of crabbing in the bay. Includes a hand-written note about a tagged crab captured off the Alsea River 429 days after tagging. Hand-drawn colored charts.

https://ir.library.oregonstate.edu/concern/technical_reports/0r967444c


https://ir.library.oregonstate.edu/concern/technical_reports/c247ds826

Burt, Wayne V. 1956. Flushing of pollutants in the Yaquina River estuary. Technical Report / School of Science, Oregon State College. no.1, 25 p. Oregon State College, School of Science (Corvallis, Or.) Mimeograph. "The purpose of this study is to estimate the time and space distribution which pollutants would assume if they were introduced at various places in the Yaquina Bay and River system." (p.1) In 1956, during heavy rains sewage runoff from the City of Toledo was dumped into the river. The report suggests possible locations for sewage outfalls that would reduce river pollution. Reference 56-1.

https://ir.library.oregonstate.edu/concern/technical_reports/1j92g781d

Burt, Wayne V., and Oregon State University. School of Science. 1956. Hydrography of Oregon
estuaries, prior to June 1956. *Data Report / School of Science, Oregon State College.* no 2, 22 p. Oregon State College (Corvallis, Or.) Also numbered in the Reference series no.56-2. [https://ir.library.oregonstate.edu/concern/technical_reports/vm40xs83p](https://ir.library.oregonstate.edu/concern/technical_reports/vm40xs83p)

Gerlach, Arthur. 1956. "Lincoln District." *Oregon State Game Commission, Fishery Division. Annual Report - Fishery Division.* p.214-225. Extensive statistics, including creel census data for Alsea, Siletz and Siuslaw rivers. Summer fishing on Yaquina Bay is analyzed. Includes a list of stream barriers and pollution incidents addressed during the year. [https://ir.library.oregonstate.edu/concern/technical_reports/th83m3608](https://ir.library.oregonstate.edu/concern/technical_reports/th83m3608)


Westgarth, Warren C., Martin Northcraft, and Oregon. State Water Resources Board. 1956. Water quality data inventory. *Bulletin (Oregon State University. Engineering Experiment Station).* no.1, Engineering Experiment Station, Oregon State College ([Corvallis, Or.])


https://ir.library.oregonstate.edu/concern/technical_reports/t722hb284

https://ir.library.oregonstate.edu/concern/defaults/hq37vs212

Marriage, Lowell D., and Oregon. Fish Commission. 1958. The bay clams of Oregon: their identification, relative abundance, and distribution. Educational Bulletin (Oregon. Fish Commission) no.2, 29 p. [Oregon Fish Commission] (Portland, Or.) Condensed from Fish Commission Contribution #20. [1954 ed. has been digitized in OSU’s Scholar’s Archive.]

Phillips, Robert W. 1958. "Lincoln District." Oregon State Game Commission, Fishery Division. Annual Report - Fishery Division. p.228-244. Numerous statistics. Includes data from Siltcoos and Tahkenitch Lakes. "The prevention of pollution of Yaquina River and Bay by a pulp mill was achieved only after considerable effort by the Sanitary Authority and Fish and Game Commissions. The company was ordered to live up to its agreement to transport wastes to the Pacific Ocean. The aquatic resources of Yaquina Bay were saved, at least for the time being." (p.242)
https://ir.library.oregonstate.edu/concern/technical_reports/12579x43k

https://ir.library.oregonstate.edu/concern/defaults/hx11xm506


https://ir.library.oregonstate.edu/concern/technical_reports/p2676w188

Chadwick, George G. 1959. "The Threespine Stickleback, Gasterosteus aculeatus L., As a Bioassay Fish." Dept. of Fish and Game Management, Oregon State College. Major
professor was Roland E. Dimick. Masters thesis.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/np193c757

https://ir.library.oregonstate.edu/concern/defaults/m039k608j


https://ir.library.oregonstate.edu/concern/technical_reports/0r967823f

https://ir.library.oregonstate.edu/concern/technical_reports/p2676w188

Jewett, Stanley Gordon, Jr. 1959. The stoneflies (Plecoptera) of the Pacific Northwest. Vol. no.3. 95 p. Oregon State Monographs. Studies in Entomology Corvallis, Or.: Oregon State College. Stoneflies are aquatic insects living in cool, well-oxygenated streams. They are sensitive to the presence of pollutants, and their presence is a valuable indicator of good water quality. They are important food sources for fish, particularly trout. This classic guide includes a dichotomous key and numerous illustrations to help identify species. Note: species names may have changed since this publication was written.
https://ir.library.oregonstate.edu/concern/technical_reports/sf268986j

Oregon. Fish Commission. 1959. Shellfish investigations progress report: no.32 (April 1, 1956 -- March 31,1959). Shellfish Investigation Progress Report. no.32, 46 p. This report covers a 3-year period. It includes a growth survey of gaper clams to establish normal growth patterns, a summary of a transplantation of softshell clams into Siuslaw Bay, and the results of crab tagging to determine movement/migration patterns. This report also has research on personal-use fisheries for razor clams. Finally, it has the initial findings of exploratory dives for rock scallop and red abalone off the Oregon Coast.
https://ir.library.oregonstate.edu/concern/technical_reports/gt54kn800

https://ir.library.oregonstate.edu/concern/technical_reports/z890rz974


https://ir.library.oregonstate.edu/concern/technical_reports/3n204436h

https://ir.library.oregonstate.edu/concern/technical_reports/fq978015s


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vx021h165

Inc.

Ogden, Peter Skene. 1961. "Journal of A.R. McLeod (1826-1827)." In Snake Country Journal, 1826-27. no.23. edited by K.G. Davies, In Publications of Hudson's Bay Record Society, p.141-219. London: Hudson's Bay Record Society. Alexander R. McLeod's "Journal of a Trapping Expedition along the Coast South of the Columbia in charge of A.R. McLeod C. T., Summer 1826," was published as a section of Ogden's Snake Country Journal. On June 18, McLeod reached the Yaquina River "called by the Indians Econne" (p.157), which he described as shallow and broad, and camped in the area for several days, hunting and trapping beaver. McLeod also explored Beaver Creek and the Alsea, on down to the Siuslaw River. This volume includes a map showing the trip.

Schlicker, Herbert G. 1961. Landslides in the Newport, Oregon Area. 3 p. State Department of Geology and Mineral Industries (Portland, Or.)

https://ir.library.oregonstate.edu/concern/technical_reports/pc289j467


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/jm214s113


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2v23vx24w

Oregon. Fish Commission, C. Dale Snow, Robert J. Ayers, L. Dean Marriage, Gerald Davis, Erland Juntunen, and Stanley N. Wilkes. 1962. Shellfish Investigations. Progress Report no.32. April 1, 1956 - March 31, 1959. 40 p. Oregon Fish Commission This report covers a 3-year period. It includes a growth survey of gaper clams to establish normal growth patterns, a summary of a transplantation of softshell clams into Siuslaw Bay, and the results of crab tagging to determine movement/migration patterns. This report also has research on personal-use fisheries for razor clams, including number and rate of success of clam diggers, as well as calculations on clam wastage. Finally, it has the initial findings of exploratory dives for rock scallop and red abalone off the Oregon Coast.

https://ir.library.oregonstate.edu/concern/technical_reports/gt54kn800

Commission, Fishery Division. Annual Report - Fishery Division. p.301-316. Numerous statistics, from creel censuses to catch-and-effort statistics. "Salmon fishing in streams of the district was good to excellent. A large run of silver salmon which entered the rivers during a freshet in early October permitted anglers an opportunity to take bright fish in popular upstream fishing areas." (p.304)

https://ir.library.oregonstate.edu/concern/technical_reports/pn89dc32p


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/r781wj45b

Snow, C. Dale, Darrell Demory, and Oregon. Fish Commission. 1962. The 1960 Yaquina Bay Clam Study. 11 p. In 1960, the Army Corps of Engineers was planning to extend the jetties and to deepen the channel at Yaquina Bay. The Corps proposed to dump its dredging spoils in Sally's Bend, a highly productive part of the bay. In response to this request, in the summer of 1960, Fish Commission biologists surveyed the area. The report includes comparative data from Idaho Point, another popular clamming area. This is a transcribed typescript: the original mimeographed document was too faded to be scanned. Includes original maps.

https://ir.library.oregonstate.edu/concern/technical_reports/pg15bf33d


https://ir.library.oregonstate.edu/concern/technical_reports/td96k396s


Harris, Dennis R. 1963. Alternatives for Disposal of Kraft Mill Wastes in Yaquina Estuary, Oregon. 28 p. (Corvallis, Or.) "The purpose of this report is to evaluate alternate engineering plans for the disposal of wastes from a kraft process pulp and paper mill located at Toledo, Oregon. These alternatives have been evaluated from the standpoint of estimated annual cost and estimated resulting pollution of Yaquina Estuary in order to provide data for co-investigators on research grant R6-9515 "An Economic Evaluation of Water Pollution Control." (p.1)

https://ir.library.oregonstate.edu/concern/technical_reports/1544bp64r

Harry, George Y. Jr., and Alfred R. Morgan. 1963. "History of the Oregon trawl fishery, 1884-
Kumler, Marion Lawrence. 1963. "Succession and Certain Adaptive Features of Plants Native to the Sand Dunes of the Oregon Coast." Ph. D., Dept. of Botany and Plant Pathology, Botany, Oregon State University. In this interesting look at the vegetation of Oregon sand dunes, the author identifies nine different plant communities that represent different stages of plant succession on the dunes. The author also examined the effects of salt spray on dune plants. Includes b+w photographs. Major professor was William W. Chilcote.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/n009w536s

Long, J.B., and Howard F. Horton. 1963. Recreational and Commercial Use Pattern for the Fish and Wildlife Resources of Yaquina Bay, Oregon. 15 p. [Department of Fish and Game Management, Oregon State University] ([Corvallis, Or.]) Describes natural resource use in the Yaquina Bay area about 1963. Bay Crab, clam, oyster, salmon, cutthroat trout and bottomfish fisheries are discussed. Touches on jetty fishing, skin and scuba diving, offshore salmon fisheries, underutilized fisheries and waterfowl hunting.  
https://ir.library.oregonstate.edu/concern/technical_reports/qj72p772z

https://ir.library.oregonstate.edu/concern/technical_reports/rx913r17x

https://ir.library.oregonstate.edu/concern/technical_reports/2514nq850

https://www.dnr.wa.gov/publications/ger_ri22_tert_geol_west_or_wa.pdf

Snow, C. Dale, and Oregon. Fish Commission. 1963. Crab Fishermen Interviews. 10 p. "As requested, crab fishermen, processing plants, boat moorages, and chambers of commerce along the Oregon coast were interviewed to obtain their thinking on crab seasons and regulations." Interviews were conducted from Astoria to Brookings.  
https://ir.library.oregonstate.edu/concern/technical_reports/08612p411


DeMartini, John D. 1964. "The Life Cycle of the Trematode, *Telolecithus pugetensis* Lloyd and Guberlet, 1932." Ph. D., Dept. of Zoology, Oregon State University. Tracks the life history of a parasitic trematode. Identified seaperch as definitive hosts. Identified clams as second intermediate hosts. Includes line drawings of the parasite. Major professor was Ivan Pratt. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9k41zh726](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9k41zh726)


Matson, Adrian L. 1964. "Dissolved Silicate in Waters Offshore Oregon and in Four Adjacent Rivers." M.A., Dept. of Oceanography, Oregon State University. Major professor was Kilho Park. Master's thesis. Data in tables. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/rb68xf50q](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/rb68xf50q)

North, William Benjamin. 1964. "Coastal Landslides in Northern Oregon." M.S., Dept. of Oceanography, Oregon State University. Covers the North Coast from the Columbia River to Heceta Head. Photographs & maps. Masters thesis. Mostly concerned with erosion on the outer coast. Fairly extensive discussion of erosion in the Newport / Yaquina Head area. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/xw42n996c](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/xw42n996c)

Oregon. Fish Commission, C. Dale Snow, Emery J. Wagner, and Darrell Demory. 1964. Shellfish investigations progress report: April 1, 1961 - March 31, 1962. *Shellfish Investigations Progress Report*. no.34, [Fish Commission of Oregon] This report is an update of shellfish investigations from April 1961-March 1962. It includes a summary of observations of clam conditions, and discusses a Netarts Bay clam mortality, which drove the Fish Commission to ask the Tillamook County Court to inform them of any future construction projects involving estuaries. It brings up a potential Highway 101 reroute across two clam beds, and the research that was to be done on those beds. The final significant subjects discussed are personal-use and commercial clam fisheries, including number of diggers, and general information on clams dug.
Oregon. State Water Resources Board, USDA Oregon River Basin Survey Party, USDA Field Advisory Committee, United States. Dept. of Agriculture. Economic Research Service, United States. Forest Service, and United States. Soil Conservation Service. 1964. USDA Report on Water and Related Land Resources, Middle Coast Drainage Basin, Oregon: Based on a Cooperative Survey by the State Water Resources Board of Oregon and the United States Department of Agriculture. 138 p. “The State Water Resources Board of Oregon is making a survey and investigation of the Middle Coast Drainage Basin to develop information needed for planning the coordinated development of the area's water resources. The information needed for its study includes: (1) the kind and location of desirable water resource developments; (2) the amounts of water required; (3) the physical opportunities for developments to meet water needs; and (4) the broad economic aspects of possible development.” (from the Introduction) Includes b+w photographs, colored maps, tables. Nice overview of soils data.


Snow, C. Dale, and Oregon. Fish Commission. 1964. Damage to Clam Beds in Yaquina Bay by Tidal Wave on March 27, 1964. Information Report. 3 p. The tsunami that affected the Yaquina Estuary in March, 1964 was relatively minor, but it did some damage to clam beds, mostly on the south side of the bay. This document gives a detailed look at the state of the bay post-tidal wave. Includes reports from clam diggers and SCUBA divers, as well as visual observations.

https://ir.library.oregonstate.edu/concern/technical_reports/t435gd396


https://www.biodiversitylibrary.org/item/61619#page/3/mode/1up


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2j62s720z

Hutchinson, James M. 1965. Fish and Wildlife Resources of the Middle Coast Basin, Oregon, and Their Water Use Requirements. 32 p. (Portland, Or.: Oregon State Game Commission Basin Investigations Section) Assesses resources (primarily fish) of the Mid-Coast Basin. Makes recommendations on minimum stream flows needed to sustain fish. Includes reports on the stream cleanup / log jam removal program of the mid-1960s. Includes list of dams and waterfalls. Two folded maps show known salmonid spawning areas.

https://ir.library.oregonstate.edu/concern/defaults/s7526d23w


Snavely, Parke D. Jr., Holly C. Wagner, and Norman S. Mcleod. 1965. "Preliminary data on compositional variations of Tertiary volcanic rocks in the central part of the Oregon Coast Range." The Ore Bin. 27, no. 6: p.101-117. https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/4t64gs70t

Snow, C. Dale, and Emery J. Wagner. 1965. "Tagging of Dungeness crabs with spaghetti and dart tags." Research Briefs - Fish Commission of Oregon. 11, no. 1: p.5-13. 966 male crabs were tagged in August 1961 in the Sally's Bend region of Yaquina Bay. 95 tags were recovered. 72 tags were recovered in Yaquina Bay. 6 tags came from Alsea Bay. Spaghetti tags were more effective: some survived two molts. https://ir.library.oregonstate.edu/concern/technical_reports/2v23vv06j

describes coastal stream improvement efforts in the early 1960s. It was written during the heyday of the “stream clearance” policy, in which large woody debris, mostly in the form of logjams, was removed from streams. Other projects included fishways, rearing ponds, culverts. Includes “before” and “after” photographs of coastal stream projects.  
https://ir.library.oregonstate.edu/concern/technical_reports/1831cq190

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/c534fr656

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/0z709014j

U.S. Army. Corps of Engineers. Portland District, ed. 1965. Yaquina River and its Tributaries, Oregon: Review Report, Transcript of Public Hearing Held at Toledo, Oregon 27 April, 1965. Portland, Or.: U.S. Army Corps of Engineers. Portland District. This 1965 hearing was called to learn local residents' desires for the improvement of the Yaquina River and its tributaries. There is a good review of work done on the river in the 1930s and 1940s. Concerns from this meeting included dredging/channel maintenance for navigation, flood control, sedimentation and logjams and debris in streams. Includes oral testimony, written exhibits and statements and a list of participants.  
https://ir.library.oregonstate.edu/concern/technical_reports/5d86p065x


Barnes, James R. 1966. "The Morphology and Ecology of Echinorhynchus lageniformas Ekbaum, 1938 (Acanthocephala)." M. S., Dept. of Zoology, Oregon State University. This is a study of a common intestinal parasite of starry flounder. Slightly over 40% of flounder from Yaquina Bay that were examined were found to be infected. Includes electronmicrographs. Major professor was Ivan Pratt. Masters thesis.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6108vf613
Burgess, Fred J., and Roland E. Dimick. 1966. Pulp Mill Waste Degradation in Marine Waters: April 1, 1964 through March 31, 1966. 88 p. + 28 p. appendix. Corvallis, Or.: Oregon State University. "This progress report describes research conducted on pulp mill waste degradation in marine waters ... Engineering investigations ... have centered upon (a) treatment of mill wastes by dilution; (b) foam separation of strong wastes and (c) treatment of evaporator condensates by carbon adsorption. Biological studies have been concerned with development of bioassays suitable for assessing the effect of pulp mill effluent on the marine environment and for evaluating waste treatment methods." (from the Summary)Good data, photographs, Research grant WP-524
https://ir.library.oregonstate.edu/concern/technical_reports/z890rt651

Ditsworth, George R., and U.S. Department of the Interior. Federal Water Pollution Control Administration. 1966. Environmental Factors in Coastal and Estuarine Waters. Bibliographic Series. no.1, 62 p. (Corvallis, Or.) "Indexed herein are references to literature pertaining to the marine waters of Oregon. References to papers, depending on the subject matter contained in the paper, are indexed under one or more of the following headings: Marine Biology, Climate, Fisheries, Geology, Hydrology, Chemical and Physical Oceanography, and Bibliographies, Literature Surveys and Compilations." (Abstract) October, 1966. An excellent resource for older and classic references on the area. https://ir.library.oregonstate.edu/concern/technical_reports/6t053g86j

Gebhardt, Gary Alan. 1966. "Studies on the Molluscan and Fish Hosts of the "Salmon Poisoning" Fluke, Nanophyetus salmincola (Chapin)." M.S., Fisheries & Wildlife, Oregon State University. "This study was undertaken: (1) to obtain information on the distribution of the snail, Oxytrema silicula, in three coastal rivers in Oregon, and the seasonal incidence of infection in these snails and in snails from an inland stream, with the cercariae of the trematode, Nanophyetus salmincola; (2) to follow cercarial development in the snail under natural and experimental conditions; (3) to determine the species of animals naturally infected with the metacercariae and those susceptible to experimental infection; and (4) to follow development of the metacercariae in the fish hosts... The fishes Cottus perplexus, Lampetra richardsoni, L. tridentata, and Richardsonius balteatus, and the Pacific giant salamander, Dicamptodon ensatus, all from western Oregon streams, were found naturally infected with the metacercariae of N. salmincola. This is the first report of natural infections in an animal other than a fish and in nonsalmonid fishes" (from the Abstract.) Major professor was Raymond Milleman. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/g158bm45z

Hayes, Sidney Joseph, III. 1966. "Occurrence of Clostridium botulinum Type E in Shellfish, Lake Fish and Aquatic Sediments in the Northwest." M.S., Dept. of Microbiology, Oregon State University. Major professor was Dr. K.S. Pilcher. Master’s thesis
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/pg15bh211
Kjeldsen, Chris K. 1966. "Effects of Variations in Salinity and Temperature on Some Estuarine Macro-Algae." Ph. D., Dept. of Botany and Plant Pathology, Botany, Oregon State University. The major professor was Harry K. Phinney. Doctoral dissertation. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1j92gb29s


O'Flaherty, Mary L. 1966. "Taxonomy of Some Endophytic and Epiphytic Genera of Phaeophyta on the Oregon Coast." M.S., Dept. of Botany and Plant Pathology, Botany, Oregon State University. Major professor was Harry K. Phinney. Master’s thesis. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/sj139459g

Oregon. Fish Commission, C. Dale Snow, Darrell Demory, Waldemar DeBen, and John R. Neilsen. 1966. Shellfish investigations: April 1, 1964 - March 31, 1965. Shellfish Investigations Progress Report. no.36, 14 p. [Fish Commission of Oregon] ([Salem]) This reports on shellfish research from April 1964 to March 1965. It summarizes two clam mortality events, gives numbers of razor clams dug for sport and commercial fisheries and the results of the 1964 razor clam beach survey. Oyster work covered includes a study on the feasibility of growing oysters in the lower Necanicum River, as well as a cooperative study to determine if the European Flat Oysters could be introduced into Oregon. Finally, it summarizes long-range planning for the new intertidal non-food
animal studies. https://ir.library.oregonstate.edu/concern/technical_reports/gb19f652r


Stevens, Joe B. 1966. "Angler success as a quality determinant of sport fishery recreational values." *Transactions of the American Fisheries Society*. 95, no. 4: p.357-362. https://doi.org/10.1577/1548-8659(1966)95[357:ASAAQD]2.0.CO;2 "The empirical importance of “angler success per unit of effort” as a quality determinant of recreational values was investigated with regard to three sport fisheries at Yaquina Bay, Oregon. A 10% increase in salmon (Oncorhynchus) angling success would induce a long-run increase in angling effort of approximately 10%, although bottomfish (sea perches, Embiotocidae; starry flounder, Platichthys; and other estuarine fishes) angling effort seems to be considerably less responsive to changes in success. Demand functions and success “elasticities” for each fishery were used to estimate the decrease in net economic value associated with a pollution-induced reduction in angling success." (from the Abstract)

---. 1966. "A Study of Conflict in Natural Resource Use: Evaluation of Recreational Benefits as Related to Changes in Water Quality." Ph. D., Dept. of Agricultural Economics, Oregon State University. Major professor was Dr. Emery N. Castle. Doctoral dissertation. Related to pulp and paper mill waste disposal at Yaquina Bay, this study attempts to develop the theory and methodology for estimating the economic benefits of each possible method of waste disposal. Attempts to quantify the value of recreational fisheries in the Bay. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/m039k803k


Wiedemann, Alfred M. 1966. "Contributions to the Plant Ecology of the Oregon Coastal Sand Dunes." Ph.D., Dept. of Botany and Plant Pathology, Botany, Oregon State University. This excellent early look at plant communities in the Oregon dunes attempted to list the plant species found in the dunes, to develop some ideas about plant succession, and to describe some of the areas where dunes and deflation plains are found. Studies were conducted in 1963, giving a relatively early point of comparison for measuring changes
on the coast. "Since literature was scarce for this particular study, the author had to depend mostly on field observations." (p.100)


Gibson, Gary, Oregon. Fish Commission, and U.S. Fish and Wildlife Service. 1967. Oyster Mortality Study: Annual Progress Report July 1, 1966-June 30, 1967. 11 p. Fish Commission of Oregon ([Portland, Or.]) "Although Oregon has been relatively free from any major oyster mortality a monitoring program has been established with the basic objectives being to: (1) monitor mortalities; (2) collect environmental data; and (3) furnish oyster from a disease-free area for histological examination." (Introduction) Includes hydrographic data from test plots in Yaquina, Tillamook and Coos Bays, size and condition data for native Olympia oysters as well as Pacific oysters and a record of oyster mortalities for Yaquina Bay.

Gibson, Gary, C. Dale Snow, Oregon. Fish Commission, and U.S. Fish and Wildlife Service. 1967. Oyster Mortality Study: Hydrographic Data for Yaquina, Coos, and Tillamook Bays. 24 p. Oregon Fish Commission ([Portland, Or.]) Accompanies Oyster Mortality Study, 1966/67 report. "Tables 1 through 5 give salinity, temperature, dissolved oxygen, turbidity, and pH data for Yaquina Bay while Table 6 gives temperature and salinity for Tillamook and Coos bays." "This information appears in the quarterly and annual reports as either
mean values or ranges, but is presented in the following tables as collected. It is hoped that this information can be used for comparison in areas where high oyster mortalities occur." (Introduction) https://ir.library.oregonstate.edu/concern/technical_reports/ 


Markham, John C. 1967. "A Study of the Animals Inhabiting Laminarian Holdfasts in Yaquina Bay, Oregon." M.A., Dept. of Oceanography, Oregon State University. Sampled kelp holdfasts in Yaquina Bay from July-December, 1966. Analyzed 50 holdfast samples and found 6,687 individual animals. The major professor was Herbert F. Frolander. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/bk128d16n


Oregon State Sanitary Authority. 1967. Implementation and Enforcement Plan for the Public Waters of the State of Oregon. 98 p. Oregon State Sanitary Authority (Portland, Or.) This is a look at the sad state of Oregon’s waters in the mid-1960s and shows the beginnings of a plan for extensive and systematic monitoring of water quality. At the top
of the list was municipal sewage treatment.


Panshin, Daniel A. 1967. "Sea Level, Winds, and Upwelling along the Oregon Coast." M.S., Dept. of Oceanography, Oregon State University. Major professors were Dr. Robert Smith and Dr. June Pattullo. Master's thesis.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/p2676x99p

Port of Toledo (Or.). 1967. Proposed Modification of the Yaquina River for Navigational Channel from Deep Water in Yaquina Bay to River Mile 14 in the Vicinity of Toledo, Oregon. 48 p. Port of Toledo (Toledo, Or. ) "Public hearing, Toledo City Hall, Toledo, Oregon, April 20, 1967." "A presentation to the U.S. Army Engineer District, Portland, Corps of Engineers." Charts. Includes statistics of river-based economic activity in Toledo, i.e., board feet of lumber shipped, wood chips shipped, etc. from 1957 to 1966.

https://ir.library.oregonstate.edu/concern/technical_reports/hq37vp30d


Thompson, Rogene K. 1967. "Respiratory Adaptations of Two Macrurousanomuran Mud Shrimps, Callianassa californiensis and Upogebia pugettensis (Decapoda, Thalassinidea)." Dept. of Zoology, Oregon State University. Major professor was A.W. Pritchard. Masters thesis.

Wick, William Q., and Oregon State University. 1967. Workshop on Oyster Production in Oregon. 7 p. Held at Marine Science Center on 27 November 1967 With the construction of the Marine Science Center and the opening of its Pacific Fisheries Laboratory in 1965, Oregon State University had facilities for research that would ultimately lead to breakthroughs in Pacific Coast oyster culture. "Purposes of the workshop were to review present and planned programs of research with oysters in Oregon and to discuss problems of the oyster grower." (from the Introduction) Includes summaries of presentations by representatives of Sea Grant, the Oregon Fish Commission, Oregon State University Extension Service, oyster growers and Marine Science Center researchers.


University, 31 July 1969

Gibson, Gary, Oregon. Fish Commission, and U.S. Fish and Wildlife Service. 1968. Oyster Mortality Study: Annual Progress Report July 1, 1967-March 31, 1968. 12 p. Fish Commission of Oregon ([Portland, Or.]) "Objectives of Oregon's Oyster Mortality study for the year ending March 1969 were similar to those of the first 2 years of the program: (1) to monitor oyster mortality in Yaquina, Tillamook and Coos bays, (2) to collect hydrographic data in Yaquina Bay and (3) to furnish oysters to the University of Washington for comparative histological examination. Additional work was done on the seasonal growth of Pacific oysters, the survival and growth of native oysters from spat and low salinity tolerance of adult native oysters." (Introduction) 
https://ir.library.oregonstate.edu/concern/technical_reports/mw22v6241


Manske, Douglas C. 1968. "Distribution of Recent Foraminifera in Relation to Estuarine Hydrography, Yaquina Bay, Oregon." Ph. D., Dept. of Oceanography, Oregon State University. Studied foraminifera in Yaquina Bay to see how seasonal changes in hydrography affected their distribution. Includes sediment maps of Yaquina Bay and distribution maps for selected foraminifera. Includes plates with line drawings of foraminifera. The major professor was Dr. H. F. Frolander. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/zs25xc85p

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9c67wq01r

University. Department of Oceanography "1959-1968"
https://ir.library.oregonstate.edu/concern/technical_reports/gq67js418

Not all issues mention Yaquina Bay, years 1921, 1923, 1925, and 1935 are not included
https://ir.library.oregonstate.edu/concern/technical_reports/0p096765x

---. 1968. Synopsis and Explanation of Statutes in the Commercial Fishing Law Relating to State
Oyster Lands. 3 p. Fish Commission of Oregon, ([Portland, Or.]) This is a brief,
systematic look at problems relating to oyster farming on public lands that had built up
in the Oregon Revised Statutes by 1968, with recommendations for resolving the issues.
Includes glimpses of arcane and outdated legislation. "Another unusual provision in ORS
509.465 is the restriction placed upon the Fish Commission to lease Oysterville Flat and
Lewis Flat in Yaquina Bay only to local oystermen."
https://ir.library.oregonstate.edu/concern/technical_reports/k930bx722

Oregon. Fish Commission. Research Division. 1968. Studies on Increasing the Production
of Anadromous Salmonids in Oregon Coastal Lakes and Streams. 49 p. Fish Commission of
Oregon ([Portland, Or.]) Interesting information on miscellaneous activities
https://ir.library.oregonstate.edu/concern/technical_reports/qv33rx529


Phibbs, Duane, and Oregon. Fish Commission. 1968. Laboratory Rearing and Hatching of Pacific
Department of the Interior. Fish and Wildlife Service. "The Pacific Coast oyster industry
is dependent upon imported oyster seed from Japan. Inconsistent quantity and quality
of the imported seed is limiting growth and expansion of the oyster industry while the
demand for marketable oysters is increasing. The development of oyster hatcheries
on the Pacific Coast could provide the oyster industry with a continuous supply of seed
needed for increased production. Controlled hatchery conditions would also provide
better quality oyster seed production through selective breeding. The main objectives of
the first year were to develop spawning and setting techniques for Pacific Coast
molluscs." (from the Introduction) November 1968. The document does not indicate
which Yaquina Bay laboratory was used.
https://ir.library.oregonstate.edu/concern/technical_reports/5425kb477

Plowden, David, and Conde B. McCullough. 1968. "Yaquina Bay Bridge, Newport, Oregon
[archival photograph]." Photograph shows the roadway at entrance to Yaquina Bay
Bridge, a multi-span arch bridge, in Newport, Oregon.
https://loc.gov/pictures/resource/ppmsca.09503/
https://ir.library.oregonstate.edu/concern/technical_reports/ft848r215


https://ir.library.oregonstate.edu/concern/technical_reports/ft848r215

United States. Federal Water Pollution Control Administration. 1968. "Proceedings of the Oregon Public Meeting: National Estuarine Pollution Study, Federal Water Pollution Control Administration ", Newport, Or. 242 p. Transcript of Oregon public meeting. Appendices include the Oregon Chapter of the American Fisheries Society's report, "Crisis in Oregon's Estuaries," and a copy of the constitutional amendment that would become the Oregon Beach Bill. Yaquina Bay issues mentioned include dredging and landfills, pollution, clamming, fishing, log storage and the new Marine Science Center. MSC director Joel Hedgpeth testified at the hearing.
https://ir.library.oregonstate.edu/concern/technical_reports/ft848r215

Wares, Paul G. 1968. "Biology of the Pile Perch (Rhacochilus vacca)." M.S., Dept. of Fisheries and Wildlife, Fisheries, Oregon State University. Major professor was Howard F. Horton. Master's thesis.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/ft848r215


https://ir.library.oregonstate.edu/concern/technical_reports/ft848r215

Beardsley, Alan J. 1969. "Movement and Angler Use of Four Foodfishes in Yaquina Bay, Oregon." Ph.D., Dept. of Fisheries and Wildlife, Fisheries, Oregon State University. The major professor was Howard F. Horton. Doctoral dissertation. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/n583xz21f](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/n583xz21f)


DeMort, Carole L. 1969. "The Culture and Biochemical Analysis of Some Estuarine Phytoplankton Species." Ph. D., Dept. of Botany and Plant Pathology, Oregon State University. "The biochemical composition of ten species of estuarine phytoplankton was determined. Studies were made of their growth in various culture media and of their relative value as food for oyster larvae. Nine of the species were isolated from Yaquina Bay, Oregon. An attempt was made to select species which commonly occurred in the phytoplankton of the bay. . . Detailed descriptions of the nine species isolated from Yaquina Bay are given." (from the Abstract) Includes line drawings and bw
microphotographs of species studied. The major professor was Harry K. Phinney.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5425kf19p


Gibson, Gary, Oregon. Fish Commission, and U.S. Fish and Wildlife Service. 1969. Oyster Mortality Study: Annual Report April 1, 1968-March 31, 1969. 24 p. Fish Commission of Oregon ([Portland, Or.]) "Objectives of Oregon's Oyster Mortality study for the year ending March 1969 were similar to those of the first 2 years of the program: (1) to monitor oyster mortality in Yaquina, Tillamook and Coos bays, (2) to collect hydrographic data in Yaquina Bay and (3) to furnish oysters to the University of Washington for comparative histological examination. Additional work was done on the seasonal growth of Pacific oysters, the survival and growth of native oysters from spat and low salinity tolerance of adult native oysters." (Introduction)  
https://ir.library.oregonstate.edu/concern/technical_reports/jw827c483


Contribution no. 300


Marshall, David B., and Oregon State University. Agricultural Experiment Station. 1969. Engangered plants and animals of Oregon. Ill. Birds. Special Report / Agricultural Experiment Station, Oregon State University. no.278, 23 p. Lists threatened, endangered and rare bird species in Oregon in the late 1960s, when pesticides were taking their terrible toll on birds. Yaquina Bay was noted as a site where snowy plovers and bald eagles could be found.  
https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/gt54kp06x

McIntire, C. David, and Barry L. Wulff. 1969. Ecological-Physiological Investigations of Littoral Diatom Communities of the Yaquina River Estuary, Oregon. National Science Foundation Research Grant GB-7203. 61 p. Department of Botany and Plant Pathology, Oregon State University (Corvallis, Or.)
Millemann, Raymond E., and U. S. Public Health Service. Division of Environmental Engineering. 1969. Effects of Pesticides on Estuarine Organisms: Progress Report. June 1, 1966 through July 31, 1969. 102 p. Oregon State University (Corvallis, Or.) This report is largely concerned with the toxicity of Sevin (carbaryl) and Dursban (chlorpyrifos) on aquatic organisms. "The general objective of this research is to investigate the effects of various pesticides, which might be expected or are known to occur in estuaries, on the larval and adult stages of estuarine organisms, and to study the fate of these compounds in the organisms and the environment." (from the Introduction) 
https://ir.library.oregonstate.edu/concern/technical_reports/2n49t216g


https://ir.library.oregonstate.edu/concern/technical_reports/x059c808f


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/j3860b20z


Snavely, Parke D. Jr., Norman S. MacLeod, and Weldon W. Rau. 1969. "Geology of the Newport area, Oregon: Part I - geologic sketch of the Newport Area, Oregon." *The Ore Bin*. 31, no. 2: p.25-71. Part 1 of a field trip guide to the Newport area, "Geologic Sketch of the Newport Area, Oregon." Part II is the road trip guide. Includes maps, charts, black-and-white photographs. This part of the guide is focused on the geologic history and geologic formations in the area.

Thompson, Rogene Kasparek, and Austin W. Pritchard. 1969. "Respiratory adaptations of two burrowing crustaceans, *Callianassa californiensis* and *Upogebia pugettensis* (Decapoda, Thalassinidea)" *Biological Bulletin*. 136, p.274-287. Ghost shrimp and mud shrimp taken from Yaquina were studied. Both species have low metabolic rates and "are remarkably tolerant to anoxic conditions." (p.283) This may have implications for global warming and an expected higher frequency of anoxic events.


Anonymous. 1970. "Coastal salmon catch." *Oregon State Game Commission Bulletin.* 25, no. 2: p.2. News article summarizing the 1969 summer salmon season. “Winchester Bay produced the highest catch of any port along the coast with more than 63,400 salmon landed by just over 50,500 anglers. The sport catch at both Depoe and Yaquina Bays compared favorably with the past season catch. At Depoe Bay 38,400 anglers boated just about 28,200 salmon and about 56,200 anglers worked the offshore waters at Yaquina Bay taking 30,700 salmon.” https://ir.library.oregonstate.edu/concern/technical_reports/m039k576g


Buchanan, David V. 1970. "Effects of the Insecticide Sevin on the Dungeness Crab, *Cancer magister.*" M.S., Dept. of Fisheries and Wildlife, Oregon State University. Major professor, Raymond E. Millemann. "This study was undertaken primarily to determine the short-term and long-term effects of the insecticide Sevin on various life history stages of the Dungeness crab (Cancer magister), Also determined was the normalcy of
the occurrence of a free prozoal stage in the life history of this crab. Also, some morpho-
logical observations on the sex of third stage juvenile crabs were made." (Abstract)
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5425kc85v

insecticide sevin on various stages of the dungeness crab, Cancer magister." Journal of
the Fisheries Research Board of Canada. 27, no. 1: p.93-104.

Burgess, Fred J., Wesley P. James, U.S. Department of the Interior. Federal Water Quality
Administration, and Oregon State University. 1970. Aerial Photographic Tracing of Pulp
Mill Effluent in Marine Water.152 p.: Federal Water Quality Administration. U.S.
Department of the Interior. Photographs
https://ir.library.oregonstate.edu/concern/technical_reports/dr26xz07b

Oregon State University Sea Grant Marine Advisory Program. Includes map showing
distribution of landslides along northern Oregon Coast by landslide type.
https://repository.library.noaa.gov/view/noaa/34922

Clark & Groff Engineers, Yaquina Bay Regional Planning Commission, Engineering-Science Inc.,
Bay Regional Water and Sewerage Plan, 1970-2000, and Analytical Review of the
Estuary. (Salem, Or.: Clark & Groff Engineers) “To plan adequately for future
development of water and sewerage facilities in the Yaquina Bay region, it is first
necessary to make an objective estimate of the region’s land use and population.”
There is a chapter on the estuary and estuarine dynamics. Many colored maps.

Craig, James Morrison. 1970. "Distribution of Clostridium botulinum Type E in Fish, Shellfish and
the Marine Environment of the Pacific Northwest, and Protein Patterns of the Toxigenic
and Non-Toxigenic Strains." Ph. D., Dept. of Microbiology, Oregon State University.
Clams, oysters and crabs from Yaquina Bay were tested. The major professor was Dr.
K.S. Pilcher.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3r074x278

Crook, Gene Ray. 1970. "In Situ Measurement of the Benthal Oxygen Requirements of Tidal
Flat Deposits." M.S., Dept. of Civil Engineering, Oregon State University. The major
professor was Dr. David Bella. Master’s thesis.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6m311s07r

Investigation Information Report. no.70-3, Fish Commission of Oregon. Research
Division, South Beach is one of 16 Oregon beaches sampled south of Tillamook Head.

Gibson, Gary, Oregon. Fish Commission, and U.S. Fish and Wildlife Service. 1970. Oyster Mortality Study: Annual Report April 1, 1969-March 31, 1970. 23 p. Fish Commission of Oregon ([Portland, Or.]) "Objectives of Oregon's oyster mortality study for the past year included monitoring oyster mortality in Yaquina, Tillamook, and Coos bays, obtaining hydrographic data in Yaquina Bay; and furnishing oysters to the University of Washington and the Bureau of Commercial Fisheries (BCF) in Oxford, Maryland, for histological examination. Other activities included (1) determining seasonal growth of Pacific oysters in Yaquina Bay, (2) cooperating with the BCF Oxford laboratory on a study of the neoplastic disease in native oysters, Ostrea lurida, and (3) obtaining information on the longevity of Pacific oysters, Crassostrea gigas." (Introduction) During the study year, 8.6% of Pacific oysters in Yaquina Bay and 26.5% of the native Olympia oysters there died. [https://ir.library.oregonstate.edu/concern/technical_reports/r207tq124](https://ir.library.oregonstate.edu/concern/technical_reports/r207tq124)

Gonor, Jefferson J. 1970. "Oregon coastal marine animals, their environmental temperatures and man's impact." In *Man and Aquatic Communities; [Lectures]*, In *SEMIN WR*, 012 p.79-102. Corvallis, Or.: Oregon State University, Water Resources Research Institute. A seminar conducted by the Water Resources Research Institute [https://ir.library.oregonstate.edu/concern/defaults/6d5701452](https://ir.library.oregonstate.edu/concern/defaults/6d5701452)


Gonor, Jefferson J., Alan Bradley Thum, and David W. Elvin. 1970. Inshore sea surface temperature and salinity conditions at Agate Beach, Yaquina Bay and Whale Cove, Oregon, in 1970: a technical report to the Office of Naval Research. *Data Report (Oregon State University. Dept. of Oceanography)* no.45, 30 p. This publication is also numbered as Reference no.70-44. [https://ir.library.oregonstate.edu/concern/technical_reports/d791sh47x](https://ir.library.oregonstate.edu/concern/technical_reports/d791sh47x)

from Oregon." M.S., Dept. of Oceanography, Oregon State University. The major professor was H. F. Frolander. Master’s thesis.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2n49t605s

Goode, Wesley Lyle. 1970. "An Investigation of the Acoustic Signature of the Dungeness Crab (Cancer magister)." Master of Ocean Engineering, Dept. of Ocean Engineering, Oregon State University. Many animals living in estuaries or the sea are capable of producing underwater sound. Among these is the Dungeness crab, which makes sound through stridulation, or rubbing parts of its outer skeleton together. In this Master’s thesis, the author examined the acoustic signatures of stridulation in Dungeness and red rock crabs. The author learned how to distinguish between the two crab species, but was unable to learn how they produced the sounds. Differences between sound production of male and female crabs are discussed.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/c534fr01n


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/m613n2652

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/p289n18p

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/z316q4839

James, Wesley P. 1970. "Air Photo Analysis of Waste Dispersion from Ocean Outfalls." Ph. D., Dept. of Civil Engineering, Oregon State University. Major professor was Fred J. Burgess.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/df65vc20p

Martin, John V. 1970. "Salinity as a Factor Controlling the Distribution of Benthic Estuarine Diatoms." Ph. D., Dept. of Botany and Plant Pathology, Botany, Oregon State University. This work includes 8 plates of microphotograph of diatoms. The major professor was Harry K. Phinney.


Oregon State University. Extension Service, and Oregon State University. Sea Grant Marine Advisory Program. 1970. Crisis: Oregon estuaries: a summary of environmental factors affecting Oregon estuaries. S.G. no.2, 8 p. (Oregon State University. Sea Grant Marine Advisory Program) This was an important publication calling attention to environmental issues in Oregon estuaries. Reprinted as S.G. no.4, Crisis in Oregon Estuaries.

Oregon. Advisory Committee to the State Land Board, ed. 1970. Oregon's Submerged and Submersible Lands: a Study of Ownership History, Conflicting Claims of Title [and] Legislative Recommendations. [Salem, Or.]: Advisory Committee to the Oregon State Land Board. Includes discussion of court precedents and listing of Oregon's navigable waterways. https://ir.library.oregonstate.edu/concern/defaults/3t945w88m


https://ir.library.oregonstate.edu/concern/technical_reports/cv43nx632
Phibbs, Duane, and Oregon. Fish Commission. 1970. Laboratory Rearing and Hatching of Pacific Coast Clams and Oysters. Annual Report July 1, 1969-June 30, 1970. 16 p. U.S. Department of the Interior. Fish and Wildlife Service. "During the 1969-70 project year emphasis was placed on spawning and rearing clams which had not been previously spawned successfully. Salinity-temperature tolerances were determined for the laboratory-reared clam larvae. Field studies comparing growth of laboratory-reared and imported Pacific and Kumamoto oysters were continued. In addition, studies comparing various methods of oyster culture were initiated and winter survival of laboratory-reared oyster spat was studied. Laboratory-reared butter clams planted in Yaquina and Netarts bays were monitored for growth and survival. A plot of Manila littleneck clams was also established in Yaquina Bay." (Introduction) Document does not indicate which Yaquina Bay laboratory was used.


Snow, C. Dale, and Oregon. Fish Commission. 1970. Two accounts of the northern octopus, Octopus doefleini, biting SCUBA divers. Research Reports of the Fish Commission of
Oregon. 2 no.1, p.103-104. Fish Commission of Oregon (Portland, Or.) This article reports on two incidents in which divers attempted to move Pacific octopoda from their home territory. Each diver was bitten by an octopus. Gives symptoms, makes recommendations.  
https://ir.library.oregonstate.edu/concern/technical_reports/j96021409


Stiffler, Daniel F. 1970. "Cardiac and Respiratory Responses to Hypoxia in the Crab, Cancer magister (Dana)." M.S., Dept. of Zoology, Oregon State University. The major professor was Austin W. Pritchard. Master’s thesis.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5425kd37d


Wick, William Q. 1970. Crisis in Oregon estuaries. S.G. no.4, Oregon State University Sea Grant Marine Advisory Program (Corvallis, Or.)  
https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/4m90dw054

Williamson, Kenneth J. 1970. "A Study of the Quantity and Distribution of Bark Debris Resulting from Log Rafting." M. S., Dept. of Civil Engineering, Oregon State University. This study focused on the Yaquina and Klamath Rivers, in which Douglas fir and ponderosa pine
logs were being rafted downriver at the time. It was designed to estimate how much bark was dislodged from logs when they were dumped into rivers and while they were floated downstream; how much bark sank after being dislodged; and how much bark was present in benthic deposits. It concluded "that large amounts of bark are added to the water courses used for log storage and that large amounts of bark debris presently exist in the benthic deposits of these water courses." Charts, maps, original bw and color photographs.


Bennett, Donald E. 1971. "Biology of the Redtail Surfperch (Amphistichus rhodoterus)." M.S., Dept. of Fisheries, Oregon State University. Gives biological data on the redtail surfperch. The area studied was Alsea Bay and Yaquina Bay and the beach/surf zone between the two bays. The fish reside in the bays from April through September. Studied age, growth, reproduction, food habits and parasites. Assessed potential for recreational fishery. The major professor was Raymond C. Simon.


Emmer, Rod E., and Keith W. Muckleston. 1971. A compilation of flood abatement projects in Oregon WRRI (Series) no. 11, 122 p. Oregon State University. Water Resources Research Institute (Corvallis, Or.) This is a broad-brush look at flooding issues in Oregon. The entire state is covered. A table lists flood damages from 1955-1969. Existing flood control projects for each region are listed. Maps show flood-prone areas. https://ir.library.oregonstate.edu/concern/defaults/fj2366569

Frolander, Herbert F., M. Joan Flynn, Sharon C. Spring, Steven T. Zimmerman, and Charles B. Miller. 1971. Yaquina Bay zooplankton survey I. Data Report (Oregon State University. Dept. of Oceanography) no.48, 27 p. Department of Oceanography, Oregon State University (Corvallis, Or.) Also carries numbering of the Department's Reference series. Reference (Oregon State University Dept. of Oceanography). no.71-21. Although this is called Survey I, no more of these were published (Library of Congress catalog note). https://ir.library.oregonstate.edu/concern/technical_reports/8336h3366


Lukas, Gerald, Gary Gibson, and Oregon. Fish Commission. Research Division. 1971. Clam-Oyster-Abalone Larval Rearing: Annual Report July 1, 1970 to June 30, 1971. 16 p. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (Portland, Or.) Reports on studies of spawning and larval rearing of Manila littleneck clams, native littleneck clams, butter clams and gaper clams, including field work. "Field studies comparing growth and survival of laboratory-reared and imported Pacific and Kumamoto oysters were completed. We continued studies comparing various methods of oyster culture in Yaquina Bay. Winter survival of laboratory-reared oyster spat was determined. Adult red abalone were obtained for spawning purposes." (p.1) https://ir.library.oregonstate.edu/concern/technical_reports/v118rf35q

Malouf, Robert E. 1971. "Food Consumption and Growth of the Larvae of the Pacific Oyster, Crassostrea gigas." M.S., Dept. of Fisheries and Wildlife, Oregon State University. Major Professor was William J. McNeil. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vm40xv10k


Quinn, William H., David B. Enfield, and Techniques Development Laboratory, eds. 1971. The development of forecast techniques for wave and surf conditions over the bars in the Columbia River mouth and at the entrance to Yaquina Bay. no.71-9, *Reference (Oregon State University. Department of Oceanography)* Corvallis, Or.: Department of Oceanography, Oregon State University. [https://ir.library.oregonstate.edu/concern/technical_reports/4b29b720x](https://ir.library.oregonstate.edu/concern/technical_reports/4b29b720x)


Phase II: Conclusions [Draft]. Stamp on title page reads, "Draft."


*Special Report (Oregon State University. Agricultural Experiment Station).* no.327, 14 p. Oregon State University Agricultural Experiment Station (Corvallis, Or.)
https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/n583xz74g

Steinfeld, James D. 1971. "Distribution of Pacific Herring Spawn in Yaquina Bay, Oregon, and Observations on Mortality through Hatching." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was Dr. William McNeil.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/fn1072110

Thum, Alan B. 1971. "An Ecological Study of *Diatomovora amoena*, an Interstitial Acoel Fatworm, in an Etuarine Mudflat on the Central Coast of Oregon." Ph. D., Dept. of Zoology, Oregon State University. The major professor was Dr. J. J. Gonor.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/pr76f6431


Voth, David R. 1971. "Life History of the Caligid Copepod *Lepeophtheirus hospitalis* Fraser, 1920 (Crustacea: Caligoida)." Ph. D., Dept. of Zoology, Oregon State University. Major professor was Dr. Ivan Pratt. Doctoral thesis. The copepod *Lepeophtheirus hospitalis* is an external parasite of fish. It is studied here on starry flounder.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/sj139534t

https://catalog.hathitrust.org/Record/003171709
Wyatt, Bruce, and William Gilbert. 1971. Surface temperature and salinity observations at Pacific Northwest shore stations during 1970. Data Report / Oregon State University, Dept. of Oceanography. no.47, 19 p. Oceanography Department, Oregon State University (Corvallis, Or.) This publication also carries the numbering of another series: Reference / Oregon State University, Dept. of Oceanography; no. 71-8. https://ir.library.oregonstate.edu/concern/technical_reports/j96022023

Alspach, George Samuel. 1972. "Osmotic and Ionic Regulation in the Dungeness Crab, Cancer magister (Dana)." Ph. D., Dept. of Zoology, Oregon State University. How do Dungeness crabs cope with changes in salinity in their environment? This dissertation examines mechanisms for osmotic regulation in an important species. Major professor was Dr. Austin W. Pritchard. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/zc77st51t


Berglund, Lisette A. 1972. "Laboratory Studies of Successional Patterns in Assemblages of Attached Estuarine Diatoms." M.S., Dept. of Botany and Plant Pathology, Botany, Oregon State University. Studied settlement and attachment patterns of diatoms onto artificial substrates and contrasted patterns of Yaquina Bay-normal temperatures with a heated ecosystem.. Includes bw photographs of laboratory set-up. Major professor was Dr. C. David McIntire. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6w924d82v


Day, L.B. 1972. "Difficulties ahead for Oregon regarding estuary regulations, control and protection." The Proceedings of the Second Annual Technical Conference on Estuaries of the Pacific Northwest, Corvallis, Or., p.50-54. March 16-17, 1972. Written by a pioneer in Oregon's land-use planning process. This is a general talk about the situation in the early 1970s and not specific to any bay. Many suggested goals are still unmet. The conference was held March 16-17, 1972. https://repository.library.noaa.gov/view/noaa/34931


Goodwin, Clinton John. 1972. "Stratigraphy and Sedimentation of the Yaquina Formation, Lincoln County, Oregon." M.S., Dept. of Geology, Oregon State University. Master's thesis. The major professor was Alan R. Niem. While other formations in the Newport area (e.g., Alsea Formation, Nye Mudstone) indicate that the region was in the deeper ocean, the Oligocene Yaquina Formation was deposited in shallow seas, or on land. Several layers were deposited in river deltas. This thesis describes the formation. It includes color photographs and microscopic photographs of thin-sections of rocks. It is accompanied by two plates: a colored geologic map and columnar sections. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/m326m632g


Lund, Dennis. 1972. Status of Oyster Seed Production Studies at the OSU Pilot Oyster Hatchery, 1971-1972. 6 p. This paper is a record of early work in oyster culture in the west coast oyster industry. It summarizes operations for a year of running the OSU pilot oyster hatchery, and subsequent recommendations for its continued large-scale production of oysters. https://ir.library.oregonstate.edu/concern/defaults/1544bp83z

Lund, Ernest H. 1972. "Coastal landforms between Yachats and Newport, Oregon." Ore Bin. 34, no. 5: p.73-91. Still useful after all these years, this guide offers a road log, geological maps and bw photographs. https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/v692tb779

D., Dept. of Botany and Plant Pathology, Botany, Oregon State University. The major professor was Dr. C. David McIntire. Doctoral dissertation. Photographs. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1r66j344f


Oregon. Advisory Committee to the State Land Board, and Stanley F. Hamilton, eds. 1972. An Inventory of Filled Lands in Yaquina Bay and River. [Salem, Or.]: Oregon Division of State Lands. https://ir.library.oregonstate.edu/concern/defaults/w9505477b

----. 1972. Supplementary Report to an Inventory of Filled Lands in Yaquina Bay. 20 p. Oregon Division of State Lands ([Salem, Or.]) https://ir.library.oregonstate.edu/concern/defaults/hh63t155h


Pillsbury, Ronald D. 1972. "A Description of Hydrography, Winds, and Currents During the Upwelling Season Near Newport, Oregon." Ph. D., Dept. of Oceanography, Oregon State University. "Several series of measurements of the hydrography, currents, and winds during the past ten years are used as a basis for an overview of the physical oceanography and meteorology during the upwelling season near Newport, Oregon. . . The resulting description strengthens and extends the conceptual model of coastal
upwelling." (from the Abstract). The major professor was Dr. Stephen Pond. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9593tx320

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/dj52w854r


https://ir.library.oregonstate.edu/concern/technical_reports/1g05fc341


---. 1972. Yaquina Bay Marine Development Plan, Phase III: Prepared for the Yaquina Bay Task Force. 249 p. (Newport, Or.) "This report is phase III of a continuing action program which is dedicated to promote sound, environmentally compatible economic development of the Yaquina Bay area, Oregon, while preserving and enhancing its natural resources and life style. Its purpose is to establish the feasibility of expanding the marine-oriented economic base to provide a new and more stable employment opportunities. The scope of the study includes the examination of specific interrelated activities: commercial fishing, fish processing, warehousing and storage, moorage and transportation; recreational and sport fishing; supporting commercial-retail facilities, including marine repair and supply; marine-oriented industrial development, including activities related to the Marine Science Center; and transportation bearing directly upon marine-oriented facilities." (from the Abstract)

Snow, C. Dale, and Oregon. Fish Commission. Management and Research Division. 1972. Feasibility of Artificial Clam Beds. 8 p. Fish Commission of Oregon This paper discusses the accidental creation of two clam beds by the U.S. Army Corps of Engineers in Yaquina Bay in 1948 and in Coos Bay around 1950 through dumping of enough dredging spoil to create small islands in the river. The islands were subsequently colonized by clams. The suggestion is to test using dredging spoil to create more clam beds. "Fishery biologists are not in complete agreement on the desirability of such a project. From the viewpoint of shellfish biologists, this is a justifiable procedure. However, biologists working with finfish such as shad and striped bass are convinced that these areas are more valuable as feeding grounds for these species." (p.6) Includes maps showing the locations of the man-made clam beds.


Stock, Mary Wilford. 1972. "Biological Studies on Saldula palustris (Douglas) with Emphasis on Factors Influencing Wing Pigmentation (Heteroptera: Saldidae)." Dept. of Entomology, Oregon State University. "The life history and wing pattern variation of the intertidal shorebug, Saldula palustris (Douglas), were studied in field and experimental populations from June 1970 until February 1972. The study site was an estuarine salt marsh on Yaquina Bay near Toledo, Oregon." (Abstract) Major professor was John D. Lattin.


Zimmerman, Steven T. 1972. "Seasonal Succession of Zooplankton Populations in Two Dissimilar Marine Embayments on the Oregon Coast." Dept. of Oceanography, Oregon State University. The "two dissimilar marine embayments" were Netarts and Yaquina Bays. "Zooplankton tows and hydrographic observations were made. . . Five stations were sampled weekly in Yaquina Bay from May, 1969 through September, 1970. Three stations were sampled weekly weekly in Netarts Bay from October, 1969 through January, 1971. . . A one year period from October, 1969 through September, 1970 was used to make a comparison of location and succession of zooplankton populations in the two bays..." (from the Abstract) Major professor was H. F. Frolander. Doctoral dissertation.


Batie, Robert E. 1973. "Population Structure of the Intertidal Shore Crab Hemigrapsus oregonensis (Brachyura, Grapsidae) in Yaquina Bay, a Central Oregon Coast Estuary." Ph.D., Dept. of Zoology, Oregon State University. Studied the population of the yellow (Oregon) shore crab: the level in the intertidal where the crab preferred to live, reproduction levels, mobility, biomass, and the relationship to tidal cycles. The major professor was Dr. C. J. Bayne.


armatus Girard in Oregon." M.S., Dept. of Zoology, Oregon State University. Major professor was Ivan Pratt. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/7m01bq19d


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/05741v46k


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/m326m632g

Hanson, Alfred W. 1973. "Life Cycle and Host Specificity of *Diclidophora* Sp. (Monogenea-Diclidophoridae), a Parasite of Embiotocid Fishes." Ph. D., Dept. of Zoology, Oregon State University. The major professor was Ivan Pratt. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/tb09j783q

https://oregondigital.org/concern/images/fx71d070x

Krygier, Earl Eldon. 1973. "Distribution and Reproductive Biology of *Crangon franciscorum* (Stimpson) and *Crangon nigricauda* (Stimpson), in Yaquina Bay, Oregon." M.S., Dept. of
Fisheries and Wildlife, Fisheries, Oregon State University. The major professor was Howard H. Horton. Master’s thesis. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/np193c340


Lannan, James E. Jr. 1973. "Genetics of the Pacific Oyster: Biological and Economic Implications." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Dr. R. C. Simon. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/q811kn84d

Lincoln County Planning Department. 1973. Overall Economic Development Plan for Lincoln County, Oregon. Lincoln County (Newport, Or.)

Link, Terry, Darrell Demory, and Oregon. Fish Commission. 1973. The 1970 razor clam fishery. Shellfish Investigation Information Report. no.72-1, 3 p. Fish Commission of Oregon, management and research division South Beach is one of 16 Oregon beaches sampled south of Tillamook Head https://ir.library.oregonstate.edu/concern/technical_reports/x633f171g


Oregon Coastal Conservation and Development Commission. 1973. Estuary Planning Guidelines. 37 p. Oregon Coastal Conservation & Development Commission (Florence, Or.) The Oregon Coastal Conservation and Development Commission was created by the 1971 Oregon legislature. Its mandate was to develop a natural resource management plan for the Oregon Coast, emphasizing estuaries. Long-range plans for estuary rehabilitation and development were needed before other agencies would be able to issue permits for work in the estuaries. This document is a guide for the newly created estuary planning groups. Tillamook Bay’s sedimentation problems are used as an example in this report. https://www.govinfo.gov/content/pkg/CZIC-gc97-8-o7-o7-1973/pdf/CZIC-gc97-8-o7-o7-1973.pdf


Orwig, Charles Edwin. 1973. "Prediction of Monthly Streamflows for Oregon Coastal Basins Using Physiographic and Meteorological Parameters." M.S., Dept. of Civil Engineering, Oregon State University. Major professor was Dr. Peter C. Klingeman. Masters thesis. "Prediction equations were developed for estimating the flow regime at ungaged stream locations in the Oregon coastal range." (from the Abstract) https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/7s75dg37v


92
30, 1973. Fish Commission of Oregon ([Portland, Or.]) Mentions barbless hook methodologies and a troll salmon logbook program.

Richmond, Henry R, and Oregon Student Public Interest Research Group. 1973. The Oregon coast and the Oregon Coastal Conservation and Development Commission: the fox guarding the chickens? OSPIRG reports. 96 p. Oregon Student Public Interest Research Group (Portland, Or.) This scathing critique of the early efforts of the Oregon Coastal Conservation and Development Commission shows development activities on the Oregon Coast in the early 1970s, and the pressures on planning agencies and the environment at that time. It describes a fragmented government overly represented by development interests struggling to come to grips with complex issues and failing to use appropriate resources. Individual anecdotes are fascinating. This report does have a point of view. https://www.govinfo.gov/content/pkg/CZIC-tc224-o7-r53-1973/pdf/CZIC-tc224-o7-r53-1973.pdf


Schaumburg, F. D., and John Walker. 1973. Final Research Report on Water Resources Research Institute Project Entitled the Influence of Benthic Bark Deposits on the Aquatic Community and the Quality of Natural Waters. 24 p. Oregon State University. Water Resources Research Institute (Corvallis, Or.) Studied bark deposits from rafted logs on the Yaquina River. Concluded that the river moved swiftly enough that chemicals released as the bark decomposed would not harm benthic marine life. https://ir.library.oregonstate.edu/concern/defaults/ht24wp36x


Scott, James Michael. 1973. "Resource Allocation in Four Syntopic Species of Marine Diving Birds." Ph. D., Dept. of Zoology, Oregon State University. “During 1969-1971 I studied patterns of resource allocation and behavioral interaction among Brandt's Cormorants, Pelagic Cormorants, Common Murres and Pigeon Guillemots in the area of a breeding colony on Yaquina Head on the central Oregon coast. Extensive studies of the breeding colony were combined with detailed observations of the distribution, abundance and behavior of these birds at sea.” (from the Abstract). Bird censuses were conducted at Yaquina Head and in Yaquina Bay, and offshore distribution was noted. Diving, feeding and reproductive behaviors were studied. The major professor was John A. Wiens. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/hx11xk322


Walker, John D. 1973. "Effects of Bark Debris on Benthic Macrofauna of Yaquina Bay, Oregon." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was Richard S. Caldwell. Master’s thesis. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/gb19f908t](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/gb19f908t)

Wydoski, Richard S., and Donald E. Bennett. 1973. "Contributions to the life history of the silver surfperch (*Hyperprosopon ellipticum*) from the Oregon coast." *California Fish and Game*. 59, no. 3: p.178-190. [https://www.biodiversitylibrary.org/item/61820#page/1/mode/1up](https://www.biodiversitylibrary.org/item/61820#page/1/mode/1up)

[Oregon. Dept. of Fish and Wildlife]. 1974. Yaquina Bay Resource Inventory [Oregon Department of Fish and Wildlife] [Newport, Or,].

Armstrong, David A. 1974. "Some Biological Effects of the Insecticide Sevin on Marine Bivalves." M.S. Masters, Dept. of Fisheries and Wildlife, Oregon State University,. Major professor was Raymond Millemann. Master’s thesis. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5m60qw86m](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5m60qw86m)


---. 1974. "Effects of the insecticide Sevin and its first hydrolytic product, 1-napthol, on some


Breese, Wilbur P., and William Q. Wick. 1974. Oyster farming: culturing, harvesting, and processing a product of the Pacific coast area. S.G. no.13, Oregon State University (Corvallis, OR) "A non-scientific brochure for the beginning oyster farmer. It is mentioned that *Ostrea lurida* is cultured in Yaquina Bay and Netarts Bay, in Oregon." [https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/5t34sk37t](https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/5t34sk37t)


Elvin, David Winter. 1974. "Oogenesis in *Mytilus californianus.*" Ph. D., School of Oceanography, Oregon State University. Studied reproductive functions in the California mussel in a protected beach at Yaquina Head. Noted seasonal and environmental factors parameters affecting reproduction. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vd66w287w](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vd66w287w)

https://ir.library.oregonstate.edu/concern/technical_reports/zk51vh562

Goodwin, Carl R. 1974. "Estuarine Tidal Hydraulics: One Dimensional Model and Predictive Algorithm." Ph. D., Dept. of Civil Engineering, Oregon State University. Endeavors to define physical parameters controlling the propagation of tidal waves into estuaries, and to provide a predictive algorithm for tides. "To achieve this objective, a quasi-one-dimensional model has been built to generate the data on which a predictive method could be based." (from the Abstract) The model was verified for the Siletz, Yaquina and Alsea Rivers. Doctoral dissertation. Major professor was Bard Glenne.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1g05ff29


https://sora.unm.edu/sites/default/files/journals/wb/v05n03/p0091-p0093.pdf

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/fn107244

https://repository.library.noaa.gov/view/noaa/34935

Management and Research Division. Gives data on recreational and commercial clam fisheries. Total harvest, age composition data, survey of clam diggers on Clatsop County beaches. South Beach is one of 16 Oregon beaches sampled south of Tillamook Head.  
https://ir.library.oregonstate.edu/concern/technical_reports/bg257f819

Fish Commission of Oregon, Management and Research Division. Gives data on recreational and commercial clam fisheries. Total harvest, age composition data, survey of clam diggers. South Beach is one of 16 Oregon beaches sampled south of Tillamook Head.  
https://ir.library.oregonstate.edu/concern/technical_reports/p8418n95n

*Proceedings of the National Shellfisheries Association*, v. 64. p.73-76. The conference was held in 1973.

Fish Commission of Oregon ([Salem, Or.]) "The objectives of this study were to locate suitable intertidal and subtidal clam planting sites and to determine the feasibility of planting laboratory spawned clams. Criteria used to determine the suitability of potential clam planting sites included: an evaluation of species of clams indigenous to the survey area and the type of substrate and vegetation within the survey area." (from the Introduction) Also reports on attempts to induce spawning in red abalone. Maps show vegetation, substrate types and clam beds for Netarts, Yaquina and Alsea bays.  
https://ir.library.oregonstate.edu/concern/technical_reports/6h440s904

Lund, Ernest H. 1974. "Rock units and coastal landforms between Newport and Lincoln City, Oregon." *Ore Bin*. 36, no. 5: p.69-90. Although our understanding of vulcanism on the Oregon Coast has evolved since this article was written, it is still a useful guide for the interested layperson. Includes bw photographs and geological maps.  
https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/2f75r
d38k


O'Connors, Harold B. Jr. 1974. "Feeding Behavior of Two Populations of the Estuarine Copepod Acartia clausii." Ph. D., School of Oceanography, Oregon State University. Major professor was Lawrence F. Small. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/fj2365032


Oregon. Fish Commission. 1974. *Biennial Report 1972-1974*. 36 p. Fish Commission of Oregon This report summarizes the activities of the Fish Commission of Oregon for July 1972 to June 1974. It contains information on issues the Commission was unable to solve in that biennium, as well as its major successes. It also includes general operations reports, and a financial statement. Not all issues mention Yaquina Bay, years 1921, 1923, 1925, and 1935 are not included. https://ir.library.oregonstate.edu/concern/technical_reports/73666527c

Oregon. State Game Commission. Fishery Division. 1974. *Annual Report - Fishery Division*: 1974. 117 p. Oregon Wildlife Commission (Portland, Or.) "Ore-Aqua Foods, Inc. was granted one of Oregon's first private salmon hatchery permits. They will be rearing coho and fall chinook and releasing them into Yaquina Bay. Their production should make a significant contribution to the offshore and Yaquina Bay fisheries." (p.8) https://ir.library.oregonstate.edu/concern/technical_reports/bk128g39c


https://fisherybulletin.nmfs.noaa.gov/content/larval-fishes-yaquina-bay-oregon-nursery-ground-marine-fishes

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2b88qg89m


https://ir.library.oregonstate.edu/concern/technical_reports/v692t6898

https://ir.library.oregonstate.edu/concern/technical_reports/3n203z661


Snow, C. Dale, and Oregon. Fish Commission. Shellfish Investigations. 1974. Yaquina Bay South Jetty Softshell Crab Problem. 2 p. In 1974, large numbers of Dungeness crabs migrated into tide pools near the South Jetty of Yaquina Bay and went through their annual molt. The public discovered the abundance of crabs, and found that they were easy prey during low tides. The situation prompted an emergency closure of the area to crabbing. This report is attached to a memorandum about the closure from Thomas Kruse of the Oregon Fish Commission.
https://ir.library.oregonstate.edu/concern/technical_reports/zk51vh55s


Wilson, William J. 1974. "The Effects of Concentration and Particle Size of Suspended Materials on Growth and Condition of the Pacific Oyster (Crassostrea gigas)." M.S., Dept. of Fisheries and Wildlife, Fisheries, Oregon State University. The major professor was Richard S. Caldwell. Master’s thesis. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2514np862


Boese, Bruce L. 1975. "The Activity Pattern of Diadorea aspera." M.S. School of Oceanography, Oregon State University. Major professor was James McCauley https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5999n573s

Burreson, Eugene M. 1975. "Biological Studies on the Hemoflagellates of Oregon Marine Fishes and Their Potential Leech Vectors." Ph. D., Dept. of Zoology, Oregon State University. Includes electron micrograph and excellent line drawings. Although the author notes where leeches were found in Yaquina Bay, all infected fish were found in the ocean: no fish collected from Yaquina Bay were found to be infected with hemoflagellates. The major professor was Dr. Robert E. Olson. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2r36v182q](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2r36v182q)

Caldwell, Richard S., and Water Resources Research Institute. 1975. Hydrogen sulfide effects on selected larval and adult marine invertebrates. *WRRI.* no.31, 22 p. Oregon State University (Corvallis, Or) [https://ir.library.oregonstate.edu/concern/defaults/1j92gc265](https://ir.library.oregonstate.edu/concern/defaults/1j92gc265)

Choi, Byungho. 1975. "Pollution and Tidal Flushing Predictions for Oregon's Estuaries." M.S., Dept. of Civil Engineering, Ocean Engineering, Oregon State University. "The overriding goal of this study was to provide first order estimates of dilution and tidal flushing of waste discharges released hypothetically into various Oregon estuaries during critical low flows and tides." (from the Abstract) Masters of Ocean Engineering thesis. The major professor was Larry S. Slotta. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/db78tf26w](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/db78tf26w)


Cummings, T. Edwin, Lawerence Korn, and Oregon. Fish Commission. 1975. Status of private salmon hatcheries in Oregon, 1973-74. *Coastal Rivers Information Report.* no.75-1, 8 p. Fish Commission of Oregon, Management and Research Division. This document describes private salmon hatcheries in Oregon that were rearing chum, coho and Chinook salmon. [https://ir.library.oregonstate.edu/concern/technical_reports/h415pb23d](https://ir.library.oregonstate.edu/concern/technical_reports/h415pb23d)

Deason, Ellen Elizabeth. 1975. "An In-Situ Experiment on the Effects of Zooplankton Grazing and Nutrient Regeneration on the Phytoplankton of Yaquina Bay, Oregon." M.S., School of Oceanography, Oregon State University. The major professor was Herbert C. Curl Jr. Master’s thesis. Good data graphs. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5m60qw18g](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5m60qw18g)

Dollar, Victor R. 1975. [Correspondence File on Vic Dollar's Oyster Plat Lease]. Plat maps, letters, legal descriptions

Gaumer, Thomas F., Gerald Lukas, and National Marine Fisheries Service. 1975. Methods of Supplementing Clam and Abalone Production. Annual Report July 1, 1974 to June 30, 1975. 35 p. Fish Commission of Oregon "The principal objectives of this study were: (1) to locate suitable intertidal and subtidal clam planting sites and to determine the feasibility of planting laboratory spawned clams, (2) to map locations of bay clams having commercial harvesting potential, (3) to develop techniques for spawning and rearing native species of clams and determine if fast growth is a heritable characteristic of the Manila littleneck clam Venerupis philippinarum and, (4) to determine the feasibility of purchasing and planting juvenile red abalone Haliotis rufescens along the Oregon coast." (Introduction) Includes maps of clam distribution and substrate type for Tillamook, Yaquina, Alsea and Coos bays. https://ir.library.oregonstate.edu/concern/technical_reports/mp48sd27c

Good, James W. 1975. Estuary Development with Implications for Management: a case study of Northwest Natural Gas Company's Liquified Natural Gas (LNG) Project at Yaquina Bay, Oregon. 107 p. School of Oceanography, Oregon State University (Corvallis, Or.) https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6395wc74k

Goodrich, Thomas D. 1975. "Incidence and Significance of Bacterial Chitinase in the Marine Environment." Ph. D., Dept. of Microbiology, Oregon State University. Chitin is very important for fishes, making up most of their skeletons. This means that it matters how chitin breaks down and is recycled in the marine environment. In this work, the ability of a marine bacterium to break down and, in effect, to recycle chitin was studied. The author also considers the availability of free chitinase available for uptake in the marine environment. This availability was studied in Yaquina Bay and in the Pacific Ocean. Major professor was Richard Y. Morita. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/kk91fn78w

Jefferson, Carol A. 1975. "Plant Communities and Succession in Oregon Coastal Salt Marshes." Dept. of Botany and Plant Pathology, Botany, Oregon State University. Major professor was William W. Chilcote. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2v23vx42t

Kan, Ting T. 1975. "Systematics, Variation, Distribution, and Biology of Lampreys of the Genus *Lampetra* in Oregon." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Carl E. Bond. Doctoral thesis. Pacific lamprey was reported at Simpson Creek, a tributary of the Yaquina River. River lamprey was observed in Yaquina Bay, the Yaquina River and Simpson Creek. Western Brook Lamprey was observed at Rock Creek, Big Elk Creek, Flynn Creek and Simpson Creek.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1544br289

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/12579v94n

https://ir.library.oregonstate.edu/concern/technical_reports/7m01bm42k

Krygier, Earl E. 1975. "*Crangon nigricauda* and *Crangon franciscorum* in Yaquina Bay, Oregon [abstract]." Proceedings of the National Shellfish Association, v. 65. Abstract only


Langmo, R. D., C. N. Carter, and R. O. Bailey. 1975. Marketing characteristics of Oregon's fresh frozen shrimp industry. *ORESU-T*. no.75-002, 23 p. Oregon State University, Sea Grant College Program (Corvallis, Or.) Also numbered as Special report (Oregon State University. Agricultural Experiment Station); 440.  
https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/qz20sx38b

https://ir.library.oregonstate.edu/concern/technical_reports/gx41mj654


103
Fish Commission of Oregon, management and research division, South Beach is one of 16 Oregon beaches sampled south of Tillamook Head. Gives data on recreational and commercial clam fisheries.
https://ir.library.oregonstate.edu/concern/technical_reports/m039k5446

Lizarraga Arciniega, Jose Roman. 1975. "Shoreline Changes Due to Jetty Construction on the Oregon Coast." M.S., School of Oceanography, Oregon State University. This thesis was reprinted as ORESU-T no. 75-4 and is also NOAA Sea Grant Institutional Repository. Discusses accretion of sand due to jetties and physical settings conducive to erosion. The author developed a computer model to simulate shoreline changes after the construction of the Siuslaw River jetties. "The shoreline advances of the model agreed closely with the actual shoreline changes found in surveys following jetty construction." (from the Abstract)
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3b591c12s

Lizarraga Arciniega, Jose Roman, and Paul D. Komar. 1975. Shoreline changes due to jetty construction on the Oregon coast. ORESU-T. no.75-004, 85 p. Oregon State University Sea Grant College Program (Corvallis, OR) This publication is based on the Master of Science thesis published by Jose Roman Lizarraga Arciniega in 1975. Paul Komar was his major professor. Discusses accretion of sand due to jetties and physical settings conducive to erosion. The author developed a computer model to simulate shoreline changes after the construction of the Siuslaw River jetties. "The shoreline advances of the model agreed closely with the actual shoreline changes found in surveys following jetty construction." (from the Abstract) Fig.14 shows advance of the shoreline on the south side of the Yaquina River entrance from 1830 to 1974 (p.41). The thesis is also available online at:
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3b591c12s
https://repository.library.noaa.gov/view/noaa/39192


Oregon State University. Journalism Department, Judith Carol Carlson, Francois Archibald Gilfillan, Thurman James Starker, and August Leroy Strand. 1975. Transcript of interview
with Mrs. Violet Updike, July 16, 1975. *Oregon Pioneers Oral History Collection, 1975-1976 (bulk 1975).* 19 p. Oregon Pioneers Oral History Collection (OH 01), Oregon State University Archives (Corvallis, Or.) This oral history gives a delightful look into early days on Yaquina Bay, especially of the oyster industry, in which the speaker’s father participated. Daily life and education are featured. Mrs. Updike was an early teacher in Lincoln County. The interview was originally tape-recorded as part of a journalism project at Oregon State University to commemorate the American bicentennial. While the tape has deteriorated, a transcript of the interview is available by contacting the University Library’s Special Collections and Archives department: http://scarc.library.oregonstate.edu/.


Rothlisberg, Peter C. 1975. "Larval Ecology of *Pandalus jordani* Rathbun." Ph. D., Dept. of Zoology, Oregon State University. The major professor was Charles Miller. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/cv43p0460


Williams, Steven F. 1975. "Rearing Conditions and Their Effects on Growth, Food Conversion, and Survival of English Sole (Parophrys vetulus Girard)." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Richard S. Caldwell. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/0k225f61x

Williamson, Kenneth, and David A. Bella. 1975. Monitoring methods for estuarine benthic systems. Bulletin - Engineering Experiment Station, Oregon State University, Corvallis. no.52, 37 p. Oregon State University Engineering Experiment Station (Corvallis, Or.) "The purpose of this report is to present methods and procedures for monitoring estuarine benthic systems. Emphasis is given to those features of benthic systems of significant ecological importance. While the experience of the authors has been within estuarine environments, the material contained herein is relevant to a wide range of marine sediments." (From Introduction) https://ir.library.oregonstate.edu/concern/technical_reports/8336h288r

Wilsey & Ham, and Oregon. Coastal Conservation and Development Commission. 1975. Estuarine Resources of the Oregon Coast: a Natural Resource Inventory Report to the Oregon Coastal Conservation & Development Commission. Oregon Coastal Conservation and Development Commission (Florence, Or.) This report is one of ten natural resource inventories prepared by the OCC&DC in developing a natural resources management plan for the Oregon coast. The inventory is designed to provide a coastwide identification of the location, extent and characteristics, values and management problems of estuarine resources. (Introduction) Yaquina Bay section p.134-140. https://ir.library.oregonstate.edu/concern/defaults/ns064b38r


Brauner, David R. 1976. The Archeological Reconnaissance of the Proposed Newport to Waldport and Waldport to Yachats Sewer Systems, Lincoln County, Oregon. 6 p. Anthropology Department, Oregon State University (Corvallis, Or.)

Breese, Wilbur P., and Oregon State University. Department of Fisheries and Wildlife. 1976. The Use of Heated Seawater for Farming Oysters and Salmon. 67 p. Oregon State University. Department of Fisheries and Wildlife (Corvallis, Or.) For oysters, "The objective of these studies was to determine the biological feasibility of using the heated effluent from coastal nuclear power plants for culturing the Pacific oyster, Crassostrea gigas." (p.1) Work included oyster growth experiments, seasonal growth experiments and closed system studies. For salmon, "The objective of these studies was to determine the biological feasibility of using the heated effluent from coastal nuclear power plants for culturing chum salmon, Oncorhynchus keta, and, to a lesser extent, pink salmon O. gorbuscha." (p.3) Work included temperature vs. growth experiments, temperature x ration factorial experiments, and disease control studies. 

https://ir.library.oregonstate.edu/concern/technical_reports/cj82k818m


Cummings, Ed, and Oregon. Dept. of Fish and Wildlife. Fish Management Section. 1976. Spawning Fish Surveys in Coastal Watersheds, 1975. 10 p. Oregon Department of Fish and Wildlife. Counted spawning fall Chinook and coho salmon. Historic counts given. Less area was surveyed in 1975, and methods of data analysis were re-evaluated. 

https://ir.library.oregonstate.edu/concern/technical_reports/v692t6919

Diamond, Jerome. 1976. "The Population Dynamics and Reproductive Strategy of the Stream Snail Oxytrema silicula (Gould) in Relation to Stream Order." M.S., Dept. of General Science, Oregon State University. The author compared populations of a small freshwater snail in four streams in the Oregon Coast Range, including the Yaquina River near Eddyville, and Salmon Creek, a tributary of the Yaquina River. Samples were taken in each study area every three months. Stream order (from mainstem to branches) was important. The snails reproduced less in larger streams, perhaps due to a parasite. While reproduction was higher in smaller branches, so was mortality. This thesis gives a look at a part of stream ecology less often studied. Schematic drawings of stream reaches are included. Major professor was John H. Lyford, Jr. 

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/zk51vk467

Analysis of January to March samples of gaper clam larvae from Yaquina Bay.
https://ir.library.oregonstate.edu/concern/technical_reports/qv33rx12b

Frenkel, Robert E., and H. Peter Eilers. 1976. Tidal Datums and Characteristics of the Upper Limits of Coastal Marshes in Selected Oregon Estuaries. 93 p. Department of Geography, Oregon State University (Corvallis, Or.) "Based on field work conducted during the months of July and August 1976, the following report describes the characteristics of vegetation at the upper limit of intertidal wetland in five Oregon coastal marshes and relates vegetation characteristics to marsh zonation, elevations above Mean Sea Level and various tidal datums." (from the Preface)
https://ir.library.oregonstate.edu/concern/technical_reports/jh343s762

https://ir.library.oregonstate.edu/concern/technical_reports/79407x89g

Gaumer, Thomas F., Oregon. Dept. of Fish and Wildlife, and National Marine Fisheries Service. 1976. Methods of Supplementing Clam and Abalone Production. Completion Report July 1, 1973 to June 30, 1976. 13 p. Oregon Department of Fish and Wildlife. "Completion report: July 1, 1973 to June 30, 1976." "Clam surveys have been conducted in Oregon's estuaries since 1973. During this project period primary objectives were (1) to locate suitable intertidal and subtidal clam planting sites and to determine the feasibility of planting laboratory spawned clams; (2) to determine the potential for a subtidal clam fishery in Oregon; (3) to develop techniques for spawning and rearing clams, (4) to refine techniques for aging clams, (5) to develop appropriate subtidal clam management schemes applicable on a coastwide basis, and (6) to determine the feasibility of purchasing and planting juvenile red abalone along the Oregon coast." (Introduction). Includes maps of subtidal clam beds in Tillamook, Yaquina and Coos bays.
https://ir.library.oregonstate.edu/concern/technical_reports/6395w758c

Hartman, M. C., and I. Pratt. 1976. "Infection of the heart cockle, Clinocardium nuttallii, from Yaquina Bay, Oregon, with an endosymbiotic alga." Journal of Invertebrate Pathology. 28, no. 3: p. 291-299. Is it symbiosis or parasitism? "The thick layers surrounding the algal cells in situ, the dense colonies, and the in vitro reaction to host extract suggest the alga is parasitic. However, the presence of chloroplasts, the location of the algal cells only in illuminated tissue, the seemingly unhampered reproduction in situ, and the eventual adaptation to mineral medium suggest the alga is a facultative parasite." (from
the Abstract)

Hauck, Arthur K. 1976. "Infection, Histopathology and Migration of *Anisakis* sp. (Nematoda: Heterocheiloidea) in Pacific Herring (*Clupea harengus pallasi*) from Yaquina Bay, Oregon." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was Richard A. Tubb. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/sf2687201](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/sf2687201)


Link, Terry, and Oregon. Dept. of Fish and Wildlife. 1976. The 1975 razor clam fishery. *Shellfish Investigation Information Report*. no.76-9, 5 p. Oregon Department of Fish and Wildlife. Gives data on recreational and commercial clam fisheries. Total harvest, age composition data, survey of clam diggers. South Beach is one of 16 Oregon beaches sampled south of Tillamook Head. [https://ir.library.oregonstate.edu/concern/technical_reports/ms35t915t](https://ir.library.oregonstate.edu/concern/technical_reports/ms35t915t)

Lumley, Perry E., and Oregon. Division of State Lands. 1976. State Ownership, Yaquina Bay - Port of Newport North Shore Moorage Basin and Waterfront of Newport (Submerged and Submersible Lands). 3 p. Oregon Division of State Lands (Salem, Or.) This memorandum describes reference material used to document changes in land ownership in Yaquina Bay from 1895 through 1973. The supporting documentation is not included. [https://ir.library.oregonstate.edu/concern/technical_reports/cz30pt222](https://ir.library.oregonstate.edu/concern/technical_reports/cz30pt222)


McMahon, Ellen, and [University of Oregon. Biology Department]. 1976. A Survey of the Great Blue Heron Rookeries on the Oregon Coast: 143 p. [University of Oregon Biology Department] ([Eugene, Or.] Maps of nesting and feeding sites. "A Student Originated Studies Project Funded by the National Science Foundation Based at the Oregon Institute of Marine Biology under the Direction of University of Oregon Biology Department." [https://scholarsbank.uoregon.edu/xmlui/handle/1794/3828](https://scholarsbank.uoregon.edu/xmlui/handle/1794/3828)

McMurray, Gregory R. 1976. "Species-Specific Phytoplankton Production Rates During a Spring Diatom Bloom in Yaquina Bay, Oregon." Ph. D., School of Oceanography, Oregon State
University. Studied population dynamics, particularly phytoplankton succession during a diatom bloom in Yaquina Bay. Drew samples from the dock at the Marine Science Center at five depths and incubated the samples on site. "Species-specific production rates were estimated for 22 consecutive days: 16 April to 7 May 1974. Three taxa, Chaetoceros debilis Cleve, Thalassiosira decipiens (Grun.) Jorg., and unidentified flagellates were responsible for over 65% of the community biomass and over 85% of the primary production after 20 April 1974." Major professor was Lawerence F. Small. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/s4655k78n


Niem, Wendy A. 1976. "Drainage Basin Morphology in the Central Coast Range of Oregon." M.S., Dept. of Geography, Oregon State University. This is a fascinating look back at the origins of the ancestral Siletz-Luckiamute and Yaquina-Mary’s Rivers. “The wind gaps, barbed drainages, valley sizes, and scale of the large meanders suggest that each pair of streams in the central Coast Range (one pair consists of one westward-flowing stream and one eastward-flowing stream) represents a single ancient stream system which was severed during uplift of the Coast Range.” (from the Abstract). Maps, color photographs. The major professor was James F. Lahey. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/q811kn699

Noble, Scott Morgan. 1976. "Use of Benthic Sediments as Indicators of Marina Flushing." Masters of Ocean Engineering, Dept. of Civil Engineering, Oregon State University. “This study is an attempt to unfold the important functions of small scale estuarine circulation patterns by using benthic sediments as indicators of marina flushing. Specifically, the research has tried to identify physical parameters that are influential in providing the flushing necessary to preserve a high state of water quality within small estuarine marina basins” (from the Abstract.) The author took sediment samples from 13 marinas along the Oregon coast, and used the sediments to show how well pollutants were being flushed out of the various estuaries. The author ranks the marinas to show which had acceptable and unacceptable levels of pollution. Masters of Ocean Engineering thesis. The major professor was Larry S. Slotta. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/dj52w739f


Oregon. Dept. of Fish and Wildlife. 1976. Informational Report: [Recreational Clamming Regulations]. 13 p. In the mid-1970s, it became clear to fisheries managers that there was too much pressure on some recreational bay clam fisheries, and the sizes of clams taken was becoming too small, endangering future production. This document is a draft
of a report on the problem submitted to the Oregon Fish and Wildlife Commission in 1976. Statistics include size and age data for Tillamook, Yaquina and Netarts Bays. [Link](https://ir.library.oregonstate.edu/concern/technical_reports/bc386j95d)

Oregon. Fish Commission. 1976. Biennial Report 1975-1976. 56 p. Fish Commission of Oregon. July 1, 1974-June 30, 1976. The first biennial report following the merging of the Wildlife Commission and the Fish Commission. This report summarizes fish and game resources for the biennium, as well as research conducted and an outline of activities to educate the public on operations. It still contains information on game such as elk, deer, and game birds, and now includes information on commercial fisheries as well as sport fisheries. Not all issues mention Yaquina Bay, years 1921, 1923, 1925, and 1935 are not included [Link](https://ir.library.oregonstate.edu/concern/technical_reports/9593tv94k)


Pfister, Robert E., and Oregon. State Marine Board. 1976. Pleasure boating in Oregon : a report to the Oregon State Marine Board. WRRI (Series). no.42, 73 p. Oregon State University. Water Resources Research Institute (Corvallis, Or.) Gives the status of recreational boating in Oregon circa 1975. The Willamette and Columbia Rivers were the most heavily used waterways in the state. Most pleasure boats were used for recreational fishing, with waterskiing and cruising as other major activities. The size of pleasure boats was increasing. Problems included overcrowding at boating facilities, a lack of law enforcement, and a need for more public restrooms. [Link](https://ir.library.oregonstate.edu/concern/defaults/76537521k)

Ray, Clayton E. 1976. "Fossil marine mammals of Oregon." Systematic Zoology. 25, no. 4 p. 420-436. This article gives a history of the discovery of marine mammal fossils in Oregon. Most of the article is concerned with a remarkable and extensive collection of fossils amassed by Douglas Emlong, of Lincoln City, Oregon, “who has already secured a special place in the history of vertebrate paleontology by collecting more marine mammal
fossils of more kinds and more ages than anyone,” (p.433) and who gave his collection to the Smithsonian.


Samuelson, Donald F., and United States. Environmental Protection Agency. Office of Research and Development. 1976. Water Quality: Western Fish Toxicology Station and Western Oregon Rivers. 56 p. Environmental Protection Agency, Office of Research and Development, Environmental Research Laboratory (Duluth, Minn.) Main focus is the Willamette River with limited comparative data with other rivers including the Yaquina. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=9100T24D.txt

Smoker, Janet Van Dusen. 1976. "A Mendelian Study of Crassostrea gigas." M.S., Dept. of Fisheries and Wildlife, Fisheries, Oregon State University. The major professor was James Lannan. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6m311s71s


U.S. Army. Corps of Engineers. Portland District. 1976. Draft Yaquina Small-Boat Basin (South Beach Marina): Detailed Project Report, Section 197 Study. U.S. Department of the Army (Portland, Or.) This report is the same as the draft EIS.


VanderHart, Archie L. 1976. "Factors Influencing Sex Ratio in the Estuarine Copepod Genus Eurytemora." M.S., School of Oceanography, Oregon State University. The major Professor was Charles B. Miller. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/rf55zb585

This article was reprinted in Oregon State University Sea Grant's reprint series, ORESU-R, no. 76-013. It describes "a method for measuring nearshore ocean wave characteristics with a land-based, long-period vertical seismometer." (from the Abstract)

https://ir.library.oregonstate.edu/concern/technical_reports/jm214w120

Amspoker, Michael C. 1977. "The Distribution of Intertidal Diatoms Associated with the Sediments of Yaquina Estuary, Oregon." Ph. D., Dept. of Botany and Plant Pathology, Oregon State University. Good figures and graphs. Includes microphotographs of diatoms. The major professor was C. David McIntire.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/hx11xk098

Bayer, Range D., and Yaquina Birders. 1977. Birds of Lincoln County, Oregon. 19 p. Sea Grant Marine Advisory Program (Newport, Or.) "Range Bayer, editor; Sally Booth, illustrator; prepared by Yaquina Birders." Gives directions to local birding areas, a checklist of Lincoln County birds, lists accidental and offshore species, and gives arrival and departure dates.

https://ir.library.oregonstate.edu/concern/technical_reports/gt54kn398

Bennett, Donald E., and Richard S. Wydoski. 1977. Biology of the Redtail Surfperch (Amphistichus rhodoterus) from the Central Oregon Coast. Technical Papers of the U.S. Fish and Wildlife Service. no.90, 23 p. (Washington, D.C.) Redtail surfperch live in the Oregon surf zone from October through March and are found in bays from April through September. The authors studied the fish in Alsea and Yaquina Bays and the surf zone between the two estuaries. Gives some life history information. Emphasis is on reproductive biology. Also looked at food, particularly in the surf zone, and parasites. Recommended promoting a surf fishery, but thought the species was vulnerable to overexploitation in estuaries.

https://babel.hathitrust.org/cgi/pt?id=uc1.31822006841605&view=1up&seq=461


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3f4628563

Breed, Gail M. 1977. "Biology of the Microsporidan Parasite, Pleistophora sp., in Three Species of Crangonid Sand Shrimp." M.S., Dept. of Zoology, Oregon State University. A common parasite of sand shrimp, Pleistophora species, was examined in Yaquina Bay. The parasite infects skeletal muscle tissue in the shrimp. The seasonal prevalence and intensity of the infection was noted. Discusses aspects of the biology of this parasite and its effect on the sand shrimp. Major professor was Dr. Robert E. Olson. BW photographs of slides.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6h440x13v


Cummings, T. Edwin, and Oregon. Dept. of Fish and Wildlife. Fish Division. 1977. Private Salmon Hatcheries in Oregon, 1977. 11 p. Oregon Department of Fish and Wildlife Describes private Chinook, chum and coho hatcheries in Oregon. Includes map, bw photographs, statistics. "This review of developments in Oregon's private salmon industry includes information on experimental development, progress of private permit holders, and current regulations governing private salmon hatchery operations in Oregon. A brief review of Oregon State University's experimental facility at Netarts Bay is appended." (from the Introduction)  https://ir.library.oregonstate.edu/concern/technical_reports/0k225b83b


Frey, Bruce E. 1977. "Effects of Micro-Nutrients and Major Nutrients on the Growth and Species Composition of Natural Phytoplankton Populations." Ph. D., School of Oceanography, Oregon State University. "Large-volume (20-liter) bioassays were carried out in order to
assess the effects of major nutrients and micro-nutrients on natural phytoplankton populations in water collected eroni a site close to the mouth of Yaquina Bay, Oregon" (from the Abstract.) The major professor was Lawrence F. Small.

Gabriel, Stephen R. 1977. "Oregon Port Districts: 1977, an Economic Profile " M.S. Capstone Project, School of Oceanography. Marine Resource Economics Program, Oregon State University. "Internship: State of Oregon Department of Economic Development." This was a capstone project produced in lieu of a Masters thesis. A look at Oregon port districts in the mid-1970s - how they contribute to economic development, activities, statistics. For the Oregon Coast, Coos Bay and Astoria get the most in-depth treatment, but there is some information about the smaller ports. Newport was the fifth-largest port in total payroll, with most activity coming from fishing and fish processing. The port of Toledo was noted as having limited shipping activity due to shallow channel depths, but was an important shipping port for lumber producers.


King, Alan R. 1977. "Acute Effects of Sedimentation on Cumella vulgaris Hart 1930 (Cumacea)." M.S., School of Oceanography, Oregon State University. The major professor was Dr. James E. McCauley. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3n2042142

Lewis, Steven L., Robert E. McQueen, Malcom H. Zirges, Oregon. Dept. of Fish and Wildlife. Fisheries Division, and National Marine Fisheries Service. 1977. Management of the Troll Salmon Fishery. Annual and Completion Report. July 1, 1976 - September 30, 1977. 13 p. Oregon Department of Fish and Wildlife ([Portland, Or.]) "The Troll Salmon Investigation is responsible for obtaining fishery and biological data, analyzing these data, and recommending appropriate management options for the troll fishery. Proposed management options are designed to achieve the optimum use of the salmon resource on a sustained basis. Activities pursued during FY 1977 included the sampling and analysis of catch statistics, chinook age composition, mark recovery data, and coded wire tag data. We were also involved with the ocean sport sampling data processing. Short term work was conducted to study chinook maturity, to evaluate a troll season extension off southern Oregon, and to obtain salmon length frequency data." (Introduction)
https://ir.library.oregonstate.edu/concern/technical_reports/vh53ww540

https://ir.library.oregonstate.edu/concern/technical_reports/cj82k811p


Malouf, Robert Edward. 1977. "The Effects of Temperature and Food Availability on Energy Partitioning and Growth in the Pacific Oyster Crassostrea gigas (Thunberg) " Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. In this dissertation, the author contrasted experimental open and closed systems for culturing Pacific oysters. Raw Yaquina Bay water was pumped into the “open system.” Carbon and nitrogen-bearing particles were monitored for two years to indicate seasonal nutrient fluctuations. This data was contrasted with experiments in a “closed system” that allowed control of water flow, water temperature, and food availability. The author discusses these experiments, factors affecting Pacific oyster culture and implications for research. The major professor was Charles E. Warren.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5q47rr990


Miller, Richard Leo. 1977. "The Biology of Two Species of *Echinorhynchus* (Acanthocephala) from Marine Fishes in Oregon." Ph. D., Dept. of Zoology, Oregon State University. The major professor was Dr. Robert E. Olson. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/t148fk340](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/t148fk340)


Mix, Michael C., and Ronald T. Riley. 1977. "A pericardial tumor in a native (Olympia) oyster, *Ostrea lurida*, from Yaquina Bay, Oregon." *Journal of Invertebrate Pathology*. 30, p.104-107. This article was reprinted in the Sea Grant series ORESU-R, no.77-017. [https://ir.library.oregonstate.edu/concern/technical_reports/f1881s966](https://ir.library.oregonstate.edu/concern/technical_reports/f1881s966)


Oregon. Dept. of Fish and Wildlife. Marine Region. 1977. The Dungeness Crab Fishery in Oregon Estuaries. 13 p. "Oregon's estuaries are focal points in an important recreational and commercial fishery for Dungeness crab. This report describes crabbing in Oregon's estuaries and includes brief notes on crab biology, catch statistics, major fishing areas, fishing regulations, problems, and proposed solutions." (Introduction) Internal discussion paper. https://ir.library.oregonstate.edu/concern/technical_reports/4f16c371f

Pearson, Walter H. 1977. "The Effects of PCB Exposure on the Behavior of the Shore Crab Hemigrapsus oregonensis." Ph. D., School of Oceanography, Oregon State University. Studied changes in behavior in yellow shore crabs caused by exposure to polychlorinated biphenyls (PCBs). "The Yaquina Bay crab population differs from both California and Washington populations by not being totally synchronized in reproduction as evidenced by the occurrence of brooding females in Yaquina Bay throughout the year (Batie, 1974)." (p.8) Includes bw photographs showing some behaviors. Major professor was Dr. Robert L. Horton. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1z40kx325


Reed, John Cooper. 1977. "An Application of a Mathematical Hydraulics Model to Yaquina Bay, Oregon." M.S., School of Oceanography, Oregon State University. The major professor was Charles B. Miller. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/s7526g38x

Richardson, Sally L. 1977. Larval fishes in ocean waters off Yaquina Bay, Oregon: abundance, distribution, and seasonality January 1971 to August 1972. ORESU-T. no.77-003, 73 p. Oregon State University SeaGrant College Program (Corvallis, OR) "This report summarizes data on planktonic fish larvae from 2 to 111 km off Yaquina Bay, Oregon
during a 1 1/2-year survey from January 1971 to August 1972. Data came from 287 bongo net plankton samples which contained 23,578 fish larvae in 90 taxonomic groups, 78 identified at the species level. Data on larval fish occurrences, given as number of larvae under 10m² sea surface, are presented for each of the 90 taxa separately and for all fish larvae combined." (from the Abstract)

https://repository.library.noaa.gov/view/noaa/35036


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/x920g083x

Slotta, Larry S., and Scott M. Noble. 1977. Use of benthic sediments as indicators of marina flushing. ORESU-T. no.77-07, 56 p. Oregon State University, Sea Grant College Program (Corvallis, Or.)

https://repository.library.noaa.gov/view/noaa/39785


Sullivan, Barbara K., and Danil Hancock. 1977. "Zooplankton and dredging: research perspectives from a critical overview." Water Resources Bulletin. 13, no. 3: p.461-468. Examines effects of dredging on a foundation of the estuarine food chain, zooplankton. Compares Yaquina and Netarts Bays, noting that Yaquina Bay has a zooplankton bloom in the summer, while Netarts Bay does not. Most animals in Netarts Bay are flushed out daily with the tides. Notes that dredging would probably be less harmful in Netarts Bay. "In regions where plankton are continually renewed from ocean sources as in the Netarts Bay example there is little likelihood of harming an important part of the population [by dredging]." (p.462)


Wilsey & Ham, ed. 1977. Yaquina Bay and River Dredged Material Disposal Plan. Lincoln County, OR: Wisley & Ham. Page 112 seems to have been skipped by the publisher in page numbering. No page is missing. Discusses dredging methods and possible options for disposing of dredging spoils from Yaquina Bay. Includes maps of river segments showing possible disposal sites. Maps. https://ir.library.oregonstate.edu/concern/technical_reports/wd375w66b


Barton, Michael G. 1978. "Influence of Temperature and Salinity on the Adaptation of Anoplarchus purpurescens and Pholis ornata to an Intertidal Habitat." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was Carl Bond. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/k0698b16s


https://ir.library.oregonstate.edu/concern/defaults/g158bh973


Gaumer, Thomas F., and Oregon. Dept. of Fish and Wildlife. 1978. Summary Report on Releases of Laboratory Produced Clams. 24 p. "In 1968 the Oregon Fish Commission (now Oregon Department of Fish and Wildlife) initiated P.L. 88-309 funded studies to develop techniques to spawn and rear several species of bay clams. After our successful spawning and rearing studies, we planted the laboratory-produced juvenile clams on various tideflats of several estuaries to evaluate their growth and survival. . . This report summarizes the results of our field work on Yaquina, Netarts, Tillamook, Alsea, Coos and Coquille estuaries" (from the Introduction) Although spawning and rearing clam larvae was successful, efforts to plant clam larvae in various estuaries mostly failed. A glimmer of hope involved successful planting of Manila littleneck clams (Venus clams) in Netarts Bay. Includes maps of planting areas.
https://ir.library.oregonstate.edu/concern/technical_reports/6h440t226

Gentile, John Richard. 1978. "The Delineation of Landslides in the Lincoln County, Oregon Coastal Zone." M.S., Dept. of Geography, Oregon State University. "A study conducted along the Lincoln County, Oregon coast delineated the exact location of 153 landslides. The landslides were found through the interpretation of aerial photographs." The slides were mapped, analyzed and classified as ancient, historic or recent. "It was found that most landslides occur in conjunction with silt stone materials of Tertiary age. Areas with similar morphology but of sandstone materials are less likely to have landslides. Structurally, landslides occur in areas with steeply dipping Tertiary bedding planes or in areas with steep slopes such as river valleys. A large portion of the landslides in the study area occur at contact zones between Tertiary and Quaternary materials. Most of these slides are ancient, stable slides and are larger than other slides in the study area. The only active ancient landslides in the coastal zone take place in the Nye mudstones near Beverly Beach State Park." (from the Abstract) Appendices list slides, summarize their characteristics and show them on a map of the county. This is a research paper taking the place of a thesis, "in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE."

Guin, Marylin P. 1978. "The Role of Stridulation in the Behavior of the Shore Crab Hemigrapsus oregonensis." M.S., School of Oceanography, Oregon State University. The major professor was Robert Holton.


Psychrotrophic Kanagawa Positive Marine *Vibrio.*" M.S., Dept. of Microbiology, Oregon State University. Hundreds of Americans suffer from food poisoning from shellfish every year. Dozens die. This 1978 Master’s thesis investigates Vibrios from Yaquina Bay and is an example of the kind of pure research that has improved our understanding of these bacteria. “The object of this research was to isolate Kanagawa positive psychrotrophic vibrios from a marine environment and partially purify a hemolysin to determine its chemical and physical characteristics. These characteristics would then be compared to known properties of exotoxin from *V. parahaemolyticus*” (p.2.) The author isolated 235 *Vibrio* strains from molluscs in Yaquina Bay, 11% of which were Kanagawa positive. The partially purified hemolysin was from a different species of *Vibrio* than *Vibrio parahaemolyticus.*

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9880vv073


https://ir.library.oregonstate.edu/concern/technical_reports/4t64gn98p


https://ir.library.oregonstate.edu/concern/technical_reports/wh246s89w

Lukas, Jerry. 1978. 1977 Oregon shrimp season. *Informational Report (Oregon Dept. of Fish and Wildlife).* no.78-2, 10 p. Oregon Department of Fish and Wildlife

https://ir.library.oregonstate.edu/concern/technical_reports/8336h2734

McClammer, James Upsher, Jr. 1978. "Paleobotany and Stratigraphy of the Yaquina Flora (Latest Oligocene-Earliest Miocene) of Western Oregon." M.S., Dept. of Botany, University of Maryland. The Yaquina Formation was deposited in Western Oregon at the end of the Oligocene period and the beginning of the Miocene. There were three major depositional events, two in shallow marine environments, and one on land. Later deposits were formed on a delta of the ancestral Yaquina River and provide a unique look at what life was like on land about 25 million years ago. Although there are a few animal fossils in this Middle Non-Marine Member, the overwhelming majority of fossils are of plants, and they are the subject of this most interesting Master’s thesis. The fossil record points to a major warming event at the time, and the author finds the Yaquina flora resembles “a marginally subtropical evergreen broad-leaved forest” with abundant
climbing vines (p.65).


Murray, R. J. 1978. Application of Landsat-2 Data for an Inventory of Eelgrass and Kelp Beds on the Oregon Coast. Oregon State University (Corvallis, Or.)

Nishikawa-Kinomura, Katsuo A. 1978. "Trace Elements in Oyster Biodeposits." M.S., School of Oceanography, Oregon State University. Major professor was Norman H. Cutshall. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/t435gg33z

Nunez Dupre, Jose D. 1978. "Numerical Classification Analysis of Infaunal Composition and Distribution on Two Oregon Coast Beaches." M.S., School of Oceanography, Oregon State University. "This investigation examined the community structure of two intertidal sedimentary environments on the Oregon coast in terms of species composition and vertical distribution. A coring device was used to obtain samples from two levels above MLLW in each beach on four occasions. Of the 54 taxa found, 46.2% were crustaceans, 35.2% polychaetes, 11.1% molluscs and 7.6% were of other phyla." (from the Abstract) Major professor was Jefferson J. Gonor. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/dn39x380g


----. 1978. Pounds and Value of Commercially Caught Fish and Shellfish Landed in Oregon. Oregon Department of Fish and Wildlife (Portland, Or.) Although this has not been printed since the 2000 issue, ODFW has the data. Commercial landing statistics in recent years are available on the Internet by searching at: https://www.dfw.state.or.us/MRP/regulations/commercial_fishing/index.asp

Habitat Map. Oregon Department of Fish and Wildlife [Newport, Or.].
https://oregondigital.org/catalog/oregondigital:df70nf328

Oregon. Dept. of Fish and Wildlife. Marine Region. 1978. Oregon's Oyster Resources, Industry and Management. 9 p. "Oregon's oyster industry is almost as old as the state. In the early 1860's, schooner loads of native oysters were taken from Yaquina Bay and transported to markets in San Francisco. Over the years, the industry and resource have changed drastically. This report briefly reviews the status of Oregon's oyster resources and discusses some issues that the Department of Fish and Wildlife and the oyster industry need to address." (Introduction) Includes statistics for oyster landings from 1966-1977.
https://ir.library.oregonstate.edu/concern/technical_reports/sx61dn00d


Richard, Gentile. John. 1978. geological, Agate Beach, Yaquina Head, Nye Beach, coastal hazards Research paper as part of a Master’s degree in the Geography Department of Oregon State University. Dr. Charles Rosenfeld as advisor.
https://ir.library.oregonstate.edu/dspace/handle/1957/7420


Scarnecchia, Dennis Leslie. 1978. "Factors Affecting Coho Salmon Production in Oregon." M.S., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. In the first chapter, the author investigated if scale analysis could be used to tell if a coho salmon was of wild or hatchery origin. It could. “Eighty-two percent of the hatchery and 89% of the wild fish were correctly identified” (from the Abstract.) Discusses the ratio of wild to hatchery salmon found and proper scale analysis techniques. In the second chapter, the author addressed the relationship of streamflow and the abundance of coho salmon. “I found that for catch in the Siletz River and Tillamook Bay, and for the troll fishery, total flows in the stream during the period of residency of the juveniles correlated significantly with number of adults resulting from these smolts; annual flows also correlated significantly. There was no indication that summer flows determined production of adult fish 2 years later, except for a significant relationship for the Siletz
River.” (p.68) Major professor was Harry H. Wagner. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/fq977x13n

https://ir.library.oregonstate.edu/concern/defaults/tx31qn68b


Swartz, Richard C., Donald W. Schults, Waldemar A. DeBen, and Faith A. Cole. 1978. Benthic Macrofauna, Sediment and Water Quality Near Seafood Cannery Outfalls in Yaquina Bay, Oregon. 55 p. Marine and Freshwater Ecology Branch, Corvallis Environmental Research Laboratory, Environmental Protection Agency (Newport, Or.) "Seafood canneries in lower Yaquina Ray, Oregon process shrimp (Pandalus jordani), Dungeness crab (Cancer magister), a variety of bottom fish and several salmon species. The shrimp wastes are screened and discharged directly into the Ray beneath the cannery docks. During the shrimp processing season about 3.8 million liters of wastes are discharged daily. We conducted a survey of the macrobenthos, sediment, and water quality in Yaquina Bay in May 1978. The effects of the cannery wastes were restricted to the immediate vicinity of the cannery docks. The effluent plume was quite turbid and had high nutrient concentrations. Because of its initial low salinity, it was restricted to the surface layer where it mixed with estuarine water and was rapidly dispersed by strong tidal currents. Dissolved oxygen concentrations were 7.0 mg/1 or greater in the plume. The strong currents and screening treatment of the effluent minimized deposition of solids on the sea bed. Bottom water quality was not adversely affected." (from the Abstract) Includes species list. 
https://ir.library.oregonstate.edu/concern/technical_reports/c534fp83q

Sweet, Diane Ruth. 1978. "Myxosporidans of Rainbow and Cutthroat Trout Broodstocks from Oregon Hatcheries." M.S., Dept. of Fisheries and Wildlife, Oregon State University. This is a thorough look at various myxosporidian parasites of Oregon trout. Includes recommendations to prevent the spread of infections. Includes photographs of microscopic slides of the parasites and maps of their distribution in the late 1970s. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3n204196b

Anonymous. 1979. "Electrofishing on coastal rivers part of wild fall Chinook research." Oregon Wildlife. 34, no. 11: p.12-13. News item about electrofishing to collect Chinook salmon eggs by ODFW in 1979. The effort to collect over 1 million eggs was funded by private
salmon hatcheries. 
https://ir.library.oregonstate.edu/concern/technical_reports/9593tw31h


----. 1979. Intertidal Shallow-Water Fishes and Selected Macroinvertebrates in the Yaquina Estuary, Oregon. Unpublished manuscript


Boese, Bruce L. 1979. "Heart Rate, Survivorship, Oxygen Consumption, and Metabolic end Product Accumulations in the Intertidal Limpets *Collisella pelta* and *Collisella digitalis* in Relation to Desiccation and Hypoxia." Dept. of Zoology, Oregon State University. Major professor was Austin Pritchard. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/n009w448c

https://ir.library.oregonstate.edu/concern/defaults/fx719s684


Caldwell, Richard S., David V. Buchanan, David A. Armstrong, Michael H. Mallon, and Raymond E. Millemann. 1979. "Toxicity of the herbicides 2,4 D, DEF, Propanil and Trifluralin to the
Dungeness crab, *Cancer magister.* "Archives of Environmental Contamination and Toxicology.* 8, 383-396.

https://ir.library.oregonstate.edu/concern/technical_reports/7w62f868g


https://ir.library.oregonstate.edu/concern/technical_reports/8s45q966j

https://ir.library.oregonstate.edu/concern/technical_reports/08612p853


Gaumer, Thomas F., Gregory P. Robart, Anne Geiger, Oregon. Dept. of Fish and Wildlife, and U.S. National Marine Fisheries Service. 1979. Oregon Bay Clam Distribution, Abundance, Planting Sites and Effects of Harvest. Annual Report. October 1, 1978 to September 30, 1979. 47 p. Oregon Department of Fish and Wildlife ([Portland, Or.]) "The objectives of this study were: (1) to continue mapping the distribution of bay clams in Oregon's estuaries, (2) to assess the effects of mechanical harvest on subtidal claws and habitat, and (3) to evaluate the success of planting hatchery produced and released juvenile clams in selected Oregon estuaries." (p.1) Maps show clam, shrimp, eelgrass, and algae distribution in Umpqua and Coos Bays, and areas approved for commercial clam harvesting in Yaquina and Coos bays, Gives biomass estimates for Yaquina Bay,
commercial clamming statistics and sediment changes after clam harvest.  
https://ir.library.oregonstate.edu/concern/technical_reports/rn3012042


Klingeman, Peter C. 1979. A resource survey of river energy and low-head hydroelectric power potential in Oregon. Appendix 18: mid-coast basin. WRRI. no.61, appendix 18, 71 p. Water Resources Research Institute (Corvallis, Or.) https://ir.library.oregonstate.edu/concern/defaults/m900nz718

---. 1979. Synopsis report. A resource survey of river energy and low-head hydroelectric power potential in Oregon. WRRI. no.61. Water Resources Research Institute (Corvallis, OR) https://ir.library.oregonstate.edu/concern/defaults/m900nz718


Mix, Michael C., Joyce W. Hawkes, and Albert K. Sparks. 1979. "Observations on the ultrastructure of large cells associated with putative neoplastic disorders of mussels, Mytilus edulis, from Yaquina Bay, Oregon." Journal of Invertebrate Pathology. 34, no. 1: p.41-56. Slide photographs


Ransom, David P. 1979. "Bacteriologic, Immunologic and Pathogenic Studies of Vibrio spp. Pathogenic to Salmonids." Ph. D., Dept. of Microbiology, Oregon State University. Major professor was Dr. J. L. Fryer. "Fish diseases and various parameters associated with disease caused mortality of fish were monitored at the Oregon State UniversityMarine Science Center and at a private mariculture facility on Yaquina Bay during a period of five years. Nearly all disease problems observed were caused by Vibrio anguillarum and Vibrio spp." (from the Abstract) https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9880vt12r


Tresierra-Aguilar, Alvaro. 1979. "Life History of the Snake Prickleback *Lumpenus sagitta* Wilimovsky, 1956." M.S., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Howard F. Horton. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/4q77ft80d


Donaghay, Percy L. 1980. "Experimental and Conceptual Approaches to Understanding Algal-Grazer Interactions." Ph. D., School of Oceanography, Oregon State University. The major professor was Dr. Lawrence F. Small.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/9880vt05b


Gaumer, Thomas F., Gregory P. Robart, and Oregon. Dept. of Fish and Wildlife. 1980. Commercial Clam Development: Annual Report, October 1, 1979 to September 30, 1980. 24 p. Oregon Department of Fish and Wildlife. U. S. National Marine Fisheries Service. "We continued our studies on the clam resources in Oregon's estuaries. Our objectives were: (1) to monitor the commercial harvest of subtidal clams in Yaquina and Coos bays and evaluate the effects of mechanical harvest on subtidal clam populations and habitat; (2) to calculate natural mortality of gaper clams in Yaquina Bay and; (3) to monitor growth of laboratory reared Manila littleneck clams released in Netarts Bay." (Introduction) Includes list of species occurring in a subtidal clam commercially harvested plot in Yaquina Bay.  
https://ir.library.oregonstate.edu/concern/technical_reports/st74cr226

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/qn59q685z


Lincoln County Historical Society, ed. 1980. Lincoln County Lore: a Reprinting of Five Early Publications of the Lincoln County historical society. Newport, Or.: Lincoln County Historical Society. Includes an account of Theodore Talbot's 1849 trip through the area. This account is digitized at [https://ir.library.oregonstate.edu/concern/defaults/bz60cx72m](https://ir.library.oregonstate.edu/concern/defaults/bz60cx72m).

Link, Terry, and Oregon. Dept. of Fish and Wildlife. 1980. The 1979 razor clam fishery. *Shellfish investigation Information Report*. no.79-3, 6 p. Oregon Department of Fish & Wildlife Gives data on recreational and commercial clam fisheries. Gives total harvest, age composition data, survey of clam diggers. South Beach is one of 16 Oregon beaches sampled south of Tillamook Head. [https://ir.library.oregonstate.edu/concern/technical_reports/qz20st17z](https://ir.library.oregonstate.edu/concern/technical_reports/qz20st17z)


Muranaka, Michael S. 1980. "Broodstock Management of the Pacific Oyster *Crassostrea gigas* (Thunberg)." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was James Lannan.


Powell, Sara H. 1980. "Decomposition of Organic Matter in Estuarine Sediments by Sulfate Reduction: a Field Study from Yaquina Bay and Sediment Incubation Experiments." M.S., School of Oceanography, Oregon State University. Major professors were Dr. E. Suess and Dr. R. Y. Morita.


Rohrberg, Vicki. 1980. "Five Months as a Coastal Port Manager." M.S., College of Oceanography, Marine Resource Management Program, Oregon State University. “A Marine Resource Management Internship Report.” This report took the place of a Master’s thesis. It describes an internship with the Port of Toledo to see if the Port needed a manager (it does not have a manager today). It gives an interesting and charming picture of a young person stretching to meet a variety of challenges.
Rosenberg, Andrew A. 1980. "Growth of Juvenile English Sole, Parophrys vetulus, in Estuarine and Open Coastal Nursery Grounds." M.S., School of Oceanography, Oregon State University. Estuaries are nursery grounds for juvenile English sole. This thesis contrasts English sole larvae in Yaquina Bay with larvae in the open ocean, at Moolack Beach. Patterns of growth and time of settlement to the benthos are discussed.


Sower, Stacia. 1980. "Sexual Maturation of Coho Salmon (Oncorhynchus kisutch): Induced Ovulation, In Vitro Induction of Final Maturation and Ovulation, and Serum Hormone and Ion Levels of Salmon in Seawater and Fresh Water." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was Carl Schreck.


the Yaquina River from the river mouth to river mile 14, and from Depoe Slough at river mile .25 and 1.5 were tested. While sediments near the river mouth were "extremely clean," and main-channel sediments were relatively clean, Depoe Slough sediments were more polluted. Alternatives for dredged material disposal are discussed. https://ir.library.oregonstate.edu/concern/technical_reports/3n203z65r

U.S. Federal Insurance Administration. 1980. Flood Insurance Study: Lincoln County, Oregon, Unincorporated Areas. 71 p., 44 folded leaves of plates. ([Washington, D.C.]: Dept. of Housing and Urban Development. Federal Insurance Administration) "March, 1980." Studies three reaches of the Yaquina River: the estuary, Depot Creek, Olalla Creek and West Olalla Creek. "The flood of November 16, 1973, on the Yaquina River was the most recent, as well as the maximum, during the 6 years of recorded data. This flood had an estimated recurrence interval of 3 years."


Zirges, Malcolm H., and Jack G. Robinson. 1980. The Oregon pink shrimp fishery, management history and research activities. Informational Report (Oregon Dept. of Fish and Wildlife). no.80-1, 15 p. Oregon Department of Fish and Wildlife. Gives basic life history information on the Oregon pink shrimp (Pandalus jordani), as well as histories of management and research on this species. Digitized by an ODFW employee. This report has the same numbering as that of the 1979 Oregon shrimp fishery report. Information report no.80-1. https://ir.library.oregonstate.edu/concern/technical_reports/qv33rx53k

Anonymous. 1981. "Orca visits are annual event." Oregon Wildlife. 36, no. 5: 1981, May. Describes the annual spring visit to Yaquina Bay (generally in April) of transient killer whales. "Five Orcas entered Yaquina Bay in early April and were seen killing at least five sea lions before heading back out to sea. The group included one female over 20 feet long and weighing an estimated 20 tons." While the whales were allowed to linger in the 1980s, this is no longer the case. Today, the Coast Guard escorts the killer whales out of the bay, to prevent harassment or a disastrous accident involving excited boaters. https://ir.library.oregonstate.edu/concern/technical_reports/kd17ct965


Cardon, Nanette C. 1981. "Effect of Nutrient Enrichment on Marine Benthic Diatoms in Yaquina Bay, Oregon." M.S., Dept. of Botany, Oregon State University. The major professor was Harry K. Phinney. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/n296x2709


Cummins, T. Edwin, and Oregon. Dept. of Fish and Wildlife. Fish Division. 1981. Private Salmon Hatcheries in Oregon. 20 p. Oregon Department of Fish and Wildlife. Describes private Chinook, chum and coho salmon hatcheries in Oregon in the early 1980s. Map, statistical tables. "As hatchery diets and rearing techniques improved in recent years, private citizens again became interested in propagating salmon. Research at Oregon State University (OSU) in hatching chum salmon using inexpensive streamside incubators increased public interest, and Oregon laws were enacted in 1971 to allow salmon propagation by private citizens. This review of Oregon's private salmon industry includes information on experimental development by private operators, progress of permit holders, and current regulations governing private salmon hatchery operations in Oregon." (from the Introduction) https://ir.library.oregonstate.edu/concern/technical_reports/1544bq08m


Farnell, James E., and [Oregon] Division of State Lands. 1981. Lincoln County Rivers Navigability Study. .36 p. [Oregon Division of State Lands] (Salem, Or.) An 1859 law makes navigational waterways in Oregon the property of the State. The 1973 state legislature required the Division of State Lands to study state waterways with an emphasis on navigational waterways. "This report deals with those rivers in Lincoln County which had significant navigation: the Alsea, Yaquina and Siletz" (from the Introduction). Color photographs, historical b/w photographs. Excellent source of historical information on use of rivers. Original available at the Lincoln County Surveyor's office

Gladson, Jim. 1981. "Anatomy of a bay." *Oregon Wildlife*. 36, no. 12: p.8-9. Brief overview of Yaquina Bay in 1981 from the era of log rafting. "The first clue that here is a river made to be used comes at Toledo, about 12 miles upstream from the mouth. A variety of lumber mills process timber from throughout the mid-coast forests. Log rafts are common along the river as logs and finished products are moved to and from the mills by way of the river" (p.8) [https://ir.library.oregonstate.edu/concern/technical_reports/r781wh144](https://ir.library.oregonstate.edu/concern/technical_reports/r781wh144)

---. 1981. "Estuaries." *Oregon Wildlife*. 36, no. 12: p.3-8. Popular overview of the state of Oregon's estuaries in the early 1980s. Uses Tillamook Bay as an example of "estuary evolution accelerated by man," documents filling in of the bay due to logging, forest fires. Paragraph descriptions of each of the major estuaries. [https://ir.library.oregonstate.edu/concern/technical_reports/r781wh144](https://ir.library.oregonstate.edu/concern/technical_reports/r781wh144)


La Touche, Yves David. 1981. "Trace Metal Levels in a Population of Mytilus edulis from Yaquina Bay, Oregon." Ph. D., Dept. of General Science (Radiation Biology), Oregon State University. Major professor was Dr. Michael C. Mix. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/v692t8920](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/v692t8920)


McQueen, Robert K., David W. Loomis, Stephen L. Lewis, U. S. National Marine Fisheries


Sigismondi, Linda A. 1981. "The Accumulation of Cadmium, Copper and Nickel in Freshwater
Mussels (*Margaritifera margaritifera*), Algae (*Cladophora* sp.), and Sediment from Elk Creek, Oregon." M.S., Dept. of General Science, Oregon State University. “This study examined how metal levels in three components of a relatively unpolluted freshwater ecosystem varied seasonally. Mussels, algae and sediment were collected during a ten-month period from Elk Creek in the Oregon Coastal Mountain Range. The samples, consisting of whole soft parts of mussels, whole algae and total sediments, were prepared by acid digestion and then analyzed for copper, cadmium and nickel using flame atomic absorption” (from the Abstract.) Heavy metal levels were low, but varied seasonally. The freshwater mussel was an excellent indicator, due to its large size, geographic ubiquity, and sedentary habit. The major professor was Michael C. Mix. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/c534fr91t


Winton, James R. 1981. "Isolation and Characterization of a New Reovirus from Chum Salmon (*Oncorhynchus keta).*" Ph. D., Dept. of Microbiology, Oregon State University. Major professor was John Fryer. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/k0698c20k


141


Cummings, T. Edwin, and Oregon. Dept. of Fish and Wildlife. Fish Division. 1982. Private Salmon Hatcheries in Oregon, 1982. 18 p. Oregon Department of Fish and Wildlife. Provides information on private Chinook, chum and coho salmon hatcheries in Oregon. Includes statistics and a map showing hatchery locations. Mentions Oregon State University's involvement with the Whiskey Creek hatchery in Netarts Bay. "This report provides information on recent developments, progress in 1981, with summaries of production and return information." (from the Introduction) https://ir.library.oregonstate.edu/concern/technical_reports/gt54kn82j

Davis, Michael W. 1982. "Production Dynamics of Sediment Associated Algae in Two Oregon Estuaries." Ph. D., Dept. of Botany and Plant Pathology, Oregon State University. Major professor was Dr. C. David McIntire. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1j92g975p


Our objectives were: to collect data for developing a scientifically sound clam management data base and to refine techniques for assessing the potential for a commercial clam fishery in several of Oregon's estuaries. In addition we continued to monitor the growth of laboratory reared Manila littleneck clams (Tapes japonica) released in Netarts Bay. (from the Introduction)
https://ir.library.oregonstate.edu/concern/technical_reports/wp988k57b

---. 1982. Commercial Clam Production. Completion Report. October 1, 1979 to December 31, 1981. 16 p. Oregon Department of Fish and Wildlife, ([Portland, Or.]) "We completed our assessment of commercial clam harvest potential in Tillamook, Yaquina and Coos bays. All three bays contained commercial quantities of clams. Detailed studies in Yaquina Bay in 1981 revealed a biomass estimate of 2.6 million pounds (1,179.1 mt) of gaper clams (Tresus capax) in the study tract." (from the Abstract)
https://ir.library.oregonstate.edu/concern/technical_reports/kk91fm31s

Gentile, John Richard. 1982. "The relationship of morphology and material to landslide occurrence along the coastline in Lincoln County, Oregon." Oregon Geology. 44, no. 9: p.99-102. "The exact locations of 153 landslides were delineated within a 2.1-km-wide strip along the Lincoln County, Oregon, coastline." (from the Abstract) Map, tables, bw photographs of landslides, mostly from the Newport area. A good read for anyone considering buying property on the coast.

https://ir.library.oregonstate.edu/concern/technical_reports/x633f204t


Lewis, Mary J. 1982. "Conditions in the Oregon Commercial Fishery Based on the Salmon, Crab and Shrimp Industries from 1967 to 1980." M.A.I.S., Interdisciplinary Studies: Fisheries and Wildlife, Anthropology, Education, Oregon State University. "Changes in the Oregon salmon, crab and shrimp fisheries were documented from 1967 to 1980. The related socio-economic conditions in fishing communities were described." (from the Abstract) Includes descriptions of the Ports of Coos Bay and Newport at the beginning of the 1980s, and their fisheries. Master’s thesis in interdisciplinary studies. Major professor was Richard A. Tubb. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/0g354k561

Lincoln County Planning Department. 1982. Lincoln County Estuary Management Plan. 196 p. Lincoln County, Oregon ([Newport, Or.]) https://www.co.lincoln.or.us/documentcenter/view/1077


Nicholas, J. W., Lisa Van Dyke, Robert C. Buckman, and Oregon. Dept. of Fish and Wildlife Fish Division. 1982. Straying by hatchery-reared coho salmon released in Yaquina Bay, Oregon. Information Reports / Fish Division, Oregon Department of Fish and Wildlife. no.82-6, 22 p. Oregon Department of Fish and Wildlife (Portland, Or.)
https://digital.osl.state.or.us/islandora/object/osl%3A18314

Nicholas, J. W., Lisa Van Dyke, and Oregon. Dept. of Fish and Wildlife. Fish Division. 1982. Straying of adult coho salmon to and from a private hatchery at Yaquina Bay, Oregon. Information Reports / Fish Division, Oregon Department of Fish and Wildlife. no.82-10, 16 p. Oregon Department of Fish and Wildlife ([Portland, Or.]) This report identifies early concerns about the straying of fish from the Ore-Aqua hatchery.
https://digital.osl.state.or.us/islandora/object/osl%3A18312

Oregon. Dept. of Fish and Wildlife. Fish Division. 1982. Comprehensive Plan for Production and Management of Oregon's Anadromous Salmon and Trout. Part II. Coho Salmon Plan. [Oregon Department of Fish and Wildlife.] Due to the extremely large size of Part II, it has been broken into many files for digitizing. The whole report is given in 9 sections. Part II consists of sections 2-9. Just below the title is a navigation link for moving through the report on previous or next screens. Click on the link to navigate through the document. https://digital.osl.state.or.us/islandora/object/osl%3A35606


https://ir.library.oregonstate.edu/concern/technical_reports/sq87bv73f


Stuart, Robert E. 1982. "Physiological and Pharmacological Investigation of the Vascularized and Nonvascularized Teleost Heart with Adrenergic, Cholinergic and Coronary Dilating Agents." M.S., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Lavern J. Weber. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2n49t4000


Sutherland, G. Bruce, and Oregon. Dept. of Environmental Quality. 1982. A Plan for Protecting the Natural Resources of Yaquina Bay, Oregon from Oil Spills. G0781. 60 p. [Oregon Department of Environmental Quality] "... the major thrust of this study is to: 1. Identify and rank by priority all vulnerable resources in the study area, 2. Designate specific areas for protection and determine how physical processes will affect their vulnerability, 3. Suggest suitable protective and cleanup response measures, 4. Map resource locations, boom sites, containment areas, and access points, 5. Suggest data needs and technical improvements, and 6. Supplement present oil spill contingency plans." (p.2) https://ir.library.oregonstate.edu/concern/technical_reports/js956g29n


Zontek, Terry. 1982. "Aboriginal Fishing at Seal Rock (35-LC-14) and Neptune (35-LA-3) : Late-
Prehistoric Archaeological Sites on the Central Oregon Coast.” M.A.I.S., Interdisciplinary Studies: Dept. of Anthropology, Dept. of Zoology, Oregon State University. What did ancient Oregonians eat? This thesis looks at fish remains at two sites – Seal Rock and Neptune. The major professor was Richard E. Ross. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/v118rj73r


---. 1983. "Seasonal occurrences of ten waterbird species at Yaquina estuary, Oregon." The Murrelet. 64, p.78-86.


Boehlert, George W., John B. Morgan, and Mary A. Yoklavich. 1983. Effects of volcanic ash and estuarine sediment on the early life history stages of the Pacific herring, Clupea harengus pallasi. WRRI. no.87, 72 p. Water Resources Research Institute, Oregon State University (Corvallis, Or.) The research upon which this report is based was financed in part by the U.S. Department of the Interior, Washington, D.C., under the Mt. St. Helens Research and Development Program. https://ir.library.oregonstate.edu/concern/defaults/rj430848h


Butler, Jerry, and C. Dale Snow. 1983. "Fish or eat bait!" Oregon Wildlife. 38, no. 6: p.12-13. Describes herring fishery in Oregon, including recreational fishery and commercial fishery in Yaquina Bay. "The mature adults generally show in Yaquiina Bay in January, later in the Coos, and even later (April and May) in the Umpqua." https://ir.library.oregonstate.edu/concern/technical_reports/xg94hq51s


Fencsak, Richard, and Bill Hastie. 1983. "Thar she blows!" Oregon Wildlife. 38, no. 5: p.10-12. Gives history of whaling on the West Coast. Includes photograph of a 40-foot whale that washed ashore on Bay Beach in 1924. "It had been taken by whale hunters who anchored it temporarily at a mooring station near Agate Beach..." https://ir.library.oregonstate.edu/concern/technical_reports/m039k5870


Gaumer, Thomas F., and Oregon. Dept. of Fish and Wildlife. Fish Division. 1983. Clam studies: 1982. Information Reports / Fish Division, Oregon Department of Fish and Wildlife. no. 83-11, 29 p. Oregon Department of Fish and Wildlife ([Portland, Or.]) "This report summarizes the results of our bay clam studies in 1982. Activities summarized include the recreational clam fishery, commercial clam fishery, hatchery stock enhancement studies, natural recruitment studies, and miscellaneous other project." (Introduction) https://ir.library.oregonstate.edu/concern/technical_reports/8g84mm89v

Handoyo, Nitimulyo Kamiso. 1983. "Host Parasite Relationships between Gyrodactylus stellatus and the English Sole (Parophrys vetulus)." M.S., Dept. of Fisheries and Wildlife, Oregon State University. "The results of these experiments suggest that both physical factors
such as temperature and host density per unit area and the physiological state of the host play a role in the host-parasite relationship between *P. vetulus* and *G. stellatus*" (from the Abstract.) Robert Olson was the major professor.

Henderson, Bruce A. 1983. "Handling and Remote Setting Techniques for Pacific Oyster Larvae *Crassostrea gigas.*" M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was W.P. Breese.


Johnson, Karen. 1983. A history of coho fisheries and management in Oregon through 1982. *Information Reports / Fish Division, Oregon Department of Fish and Wildlife.* no.84-12, 78 p. Fish Division, Oregon Dept. of Fish and Wildlife (Corvallis, Or.) Good overview of the history of the Oregon coho salmon fisheries, their management, and attempts to improve returns. Many charts and tables.


McGie, Alan M., and Oregon. Dept. of Fish and Wildlife. 1983. Spawning Salmon Surveys and Straying of Private Hatchery Coho Salmon from Yaquina Bay in Coastal Watersheds of Oregon, 1982. 56 p. Oregon Department of Fish and Wildlife (Charleston, Or.) Gives standard spawning data for salmon in Oregon and adds information "to document straying of private hatchery coho salmon from Oregon Aqua-Foods'(OAF) facility at Yaquina Bay. . . The program was conducted in response to concerns by fisheries managers and the public on the possible long-term effects of interbreeding wild and stray hatchery stocks in district streams." (p.2)


Ripley, James Douglas. 1983. "Description of the Plant Communities and Succession of the Oregon Coastal Grasslands." Ph. D., Dept. of Botany and Plant Pathology Oregon State University. "In an effort to describe the plant communities and succession of the Oregon coastal grasslands, vegetation and environmental data were collected from 75 stands at 24 separate locations ranging from Cape Falcon in Tillamook County to Cape Ferrelo in Curry County." The author analyzed environmental variables in the different sites, found several previously unidentified plant communities, and identified 249 different species at the different locations. Latitude was a factor in determining plant communities, but the absence of fire was the most important factor in plant succession. Includes color photographs of studied sites, and interesting paired photographs illustrating plant succession by showing the sites decades earlier and contrasting the same view with conditions in the early 1980s. The major professor was William W. Chilcote. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/z029p717g](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/z029p717g)

Rudy, Paul Jr., Lynn Hay Rudy, and Jay F. Watson. 1983. *Oregon estuarine invertebrates: an illustrated guide to the common and important invertebrate animals*. *FWS-OBS*. no.83/16, 224 p. A classic. Excellent line drawings of animals. Section on what species might be confused with is quite useful. A bit old now, and many species names have changed, but still a useful resource. [https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/1070/estuarine_invertebrates.pdf?sequence=3](https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/1070/estuarine_invertebrates.pdf?sequence=3)


Amandi, Antonio. 1984. "Physical, Biochemical, and Biological Characteristics of *Myxobolus insidiosus*, a Myxosporidan Parasite of Salmonid Fishes." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. This thesis showed that the range of the myxosporidian parasite *Myxobolus insidiosus* had extended to the Yaquina River (coho salmon and rainbow trout) and Coos/Millicoma River systems (rainbow trout). Intermediate hosts and conditions for contracting infections of the parasite were noted. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/w0892d985](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/w0892d985)

Bayer, Range D. 1984. "Foraging ground displays of great blue herons at Yaquina estuary,
Oregon." Colonial Waterbirds. 7, p.45-54.

https://sora.unm.edu/sites/default/files/journals/wb/v15n01/p0035-p0036.pdf


clam fisheries, hatchery stock enhancement studies, natural recruitment studies, and miscellaneous other projects." (Introduction)
https://ir.library.oregonstate.edu/concern/technical_reports/12579s92p

https://digital.osl.state.or.us/islandora/object/osl%3A14433/datastream/OBJ/download
Estuarine_mitigation.pdf

https://ir.library.oregonstate.edu/concern/technical_reports/qj72p809d


Miller-Way, Christine A. 1984. "The Response of a Marine Meiofaunal Assemblage to Experimental Manipulations of Sediment Microtopography." M. S., School of Oceanography, Oregon State University. The author surveyed the distribution of meiofauna in a small embayment in Yaquina Bay near the Hatfield Marine Science Center. She then studied the distribution of meiofaunal organisms in response to minor changes in the topography and postulated a driving mechanism ("the micro-flow regime over a rippled sediment surface") for the changes. (from the Abstract)
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/td96k595x


Table 2 shows the Yaquina River as having a "moderate to high percent of eelgrass." (p.7) https://digitalmedia.fws.gov/digital/collection/document/id/1734/rec/2


Wilson, Christopher D. 1984. "The Effects of Different Otolith Ageing Techniques on Estimates of Growth and Mortality for Two Species of Rockfishes, Sebastes pinniger and Sebastes diploproa." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was George Boehlert. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/4m90f0180


Bottom, D. L., P. J. Howell, and J. D. Rodgers. 1985. The Effects of Stream Alterations on Salmon and Trout Habitat in Oregon. 70 p. Portland, Or.: Oregon Department of Fish and Wildlife. Photocopy in ESA files, West Coast coho. [https://ir.library.oregonstate.edu/concern/technical_reports/r494vk98q](https://ir.library.oregonstate.edu/concern/technical_reports/r494vk98q)

Brooker, D.L., R.C. Worrest, and U.S. Environmental Protection Agency. 1985. Response of Estuarine Diatom Assemblages to Ultraviolet-B Radiation (290-320 nm). EPA/600/D-85/016, 14 p. U.S. Environmental Protection Agency (Corvallis, Or.) "Artificial substrates colonized by diatoms from Yaquina Estuary, Oregon, were exposed to solar visible radiation and three levels of ultraviolet radiation (UV-B, 290-320 nm). . . The results indicated that daily exposure to enhanced levels of UV-B radiation was associated with a decrease in species diversity of benthic diatom assemblages during all experiments after four weeks of growth. However, changes in taxonomic structure were not accompanied by a significant depression in chlorophyll a concentration, biomass, or radiocarbon uptake. In fact, in some experiments enhanced levels of UV-B radiation appeared to have a stimulatory effect on the latter parameters." *from the Abstract* [https://ir.library.oregonstate.edu/concern/technical_reports/qj72p771p](https://ir.library.oregonstate.edu/concern/technical_reports/qj72p771p)


where oysters were grown. The report states that the oyster plots endured "sporadic poor water quality," and that "fecal coliform levels were substantially above national program criteria." The sources of pollution were concluded to be "point and nonpoint human, and nonpoint animal." “The Toledo sewage treatment plant does not have the reliability factors built into the plant that are designed to protect shellfish growing waters.” (p. ii-iv)

Gaumer, Thomas F., and Oregon. Dept. of Fish and Wildlife. 1985. Clam studies: 1984. *Information Reports (Oregon. Fish Division).* no.85-8, 56 p. Oregon Department of Fish and Wildlife (Newport, Or.) "This report summarizes the results of our bay clam studies in 1984. Activities summarized include monitoring of the recreational and commercial clam fisheries, hatchery stock enhancement studies, natural recruitment studies, and miscellaneous other projects." (Introduction)

Heres E., Allan A. 1985. "Implications of Dietary Lipid and Carbohydrate Intake on the Liver and the Susceptibility of Hatchery-Reared Rainbow Trout (*Salmo gairdneri*) to Vibriosis." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was James Lannan.


Snow, C. Dale. 1985. "Winter smorgasbord." Oregon Wildlife. 40, no. 6: p.14, 16. The Pacific herring is an important food source for many marine animals. In this popular article, the run in Yaquina Bay is discussed, as well as the animals that depend on it. http://ir.library.oregonstate.edu/concern/technical_reports/d217qq67z


Thompson, Edward F., Gary L. Howell, Jane M. Smith, and U.S. Army. Corps of Engineers. Waterways Experiment Station 1985. Evaluation of seismometer wave gage and


https://ir.library.oregonstate.edu/concern/defaults/44558f558


Butler, James H. 1986. "Cycling of Reduced Trace Gases and Hydroxylamine in Coastal Waters." Ph. D., College of Oceanography, Oregon State University. The major professor was Louis I. Gordon. "The distributions and fluxes of methane, carbon monoxide, nitrous oxide, hydrogen, and hydroxylamine were examined in Yaquina Bay, a relatively unpolluted estuary on the coast of Oregon, and Big Lagoon, a meromictic, coastal lagoon in Northern California." (from the Abstract)

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/7s75dg30x


158

Demory, Darrell, and Oregon. Dept. of Fish and Wildlife. 1986. Bay Crab Management. 19 p. Oregon Dept. of Fish and Wildlife. "The sport/commercial interaction concerning Dungeness crab in our estuaries is heating up again...There are currently two issues that need to be resolved: 1) The sport/commercial interaction, and 2) the wise use of available crabs by the sport fishery" (p.1.) Discusses the history of the fishery in Yaquina Bay, and gives catch and effort statistics for Yaquina Bay commercial crabs for 1971-1985.


Gaumer, Thomas F., and Oregon. Dept. of Fish and Wildlife. Fish Division. 1986. Clam Studies: 1985. 61 p. Oregon Department of Fish and Wildlife ([Newport, Or.]) In addition to fisheries statistics and interviews with recreational clam diggers, this report also includes information on natural recruitment studies and addresses ODFW efforts to introduce the Manila littleneck clam (Venerupis phillipinarum) into Oregon bays. This is the best possible copy.

Handoyo, Nitimulyo Kamiso. 1986. "Differences in Pathogenicity and Pathology of Vibrio anguillarum and Vibrio ordalii in Chum Salmon (Oncorhynchus keta) and English Sole (Parophrys vetulus) under Laboratory Conditions." Ph. D., Department of Fisheries and Wildlife, Oregon State University. The major professor was Dr. Robert E. Olson.


Nickelson, Thomas E., Mario F. Solazzi, and Steven L. Johnson. 1986. "Use of hatchery coho salmon (Oncorhynchus kisutch) presmolts to rebuild wild populations in Oregon coastal streams." Canadian Journal of Fisheries and Aquatic Sciences. 43, no. 12: p.2443-2449. This study found that 44% of wild juvenile presmolts "were replaced by hatchery presmolts" (p.2447.) Hatchery fish were larger, and seem to have dominated the streams, to the detriment of the wild fish. The larger size of the hatchery fish was ascribed to earlier spawning and hatchery feeding. "As a result of our study, the release
of hatchery presmolts in Oregon coastal streams is currently being concentrated in areas without wild populations." (p.2448)

O'Brien, Margaret C. 1986. "Nitrogen and Phosphorus Uptake by Enteromorpha prolifera (Mull.) J. Ag." M.S., College of Oceanography, Oregon State University. The major professor was Patricia A. Wheeler. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/pk02cd29g


Savidge, William B. 1986. "Factors Affecting the Rates of Infaunal Recolonization of Small-Scale Disturbance on the Intertidal Sandflat." M.S., College of Oceanography, Oregon State University. The major professor was Gary L. Taghon. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/8910jx94m

https://sora.unm.edu/sites/default/files/journals/condor/v088n02/p0194-p0199.pdf


Cummings, T. Edwin, and Oregon. Dept. of Fish and Wildlife. Fish Division. 1987. Private Salmon Hatcheries in Oregon 1986. 27 p. Oregon Department of Fish and Wildlife Reports on private Chinook, chum and coho salmon hatcheries (PSHs)in Oregon in the mid-1980s. Includes a map of hatchery operation sites, and statistical tables. Oregon State University's facility at Whiskey Creek, Netarts Bay, was back in operation. Suspected
impacts of a private hatchery on the run of coho salmon on the Yaquina River are discussed. "In this report I will discuss the development of the PSH regulations, status of current permits, those which have been terminated, applications which were turned down, and the outlook for the future. Various tables of supporting or often requested information are attached to this report." (from the Introduction) 
https://ir.library.oregonstate.edu/concern/technical_reports/x920fx644


https://ir.library.oregonstate.edu/concern/defaults/6q182q07g


https://ir.library.oregonstate.edu/concern/defaults/f1881r340

Harvey, James T. 1987. "Population Dynamics, Annual Food Consumption, Movements, and Dive Behaviors of Harbor Seals, Phoca vitulina richardsi, in Oregon." Ph. D., College of Oceanography, Oregon State University. The major professor was Bruce R. Mate.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/0c483n00q

Earth Sciences. 24, no. 8: p.1652-1667. The period from 66-23.03 million years ago is known as the Paleogene. It is the time when mammals underwent rapid evolution. So did the Pacific Northwest. This article summarizes the recent evolution of the region, from plate collisions to vulcanism, from faulting to sedimentation.


Oregon. Dept. of Fish and Wildlife. 1987. Commercial Crab Fishing in Oregon's Estuaries. 23 p. Oregon. Dept. of Fish and Wildlife. Should commercial crabbing be banned in Oregon bays in order to eliminate potential conflict with recreational bay crabbers? In answering this question, this report summarizes the state of the commercial bay crab fishery in the mid-1980s and examines esthetic and economic aspects of the issue. Includes statistics. This is a staff report for the Oregon Fish and Wildlife Commission. https://ir.library.oregonstate.edu/concern/technical_reports/x633f172r

---. 1987. The Impact of Oregon Aqua-Foods Operation on the Wild Coho Salmon in the
Yaquina River. 17 p. Oregon Department of Fish and Wildlife (Portland, Or.) By 1987, wild coho salmon runs on the Yaquina River were sharply reduced compared to other coastal streams. Could the private coho hatchery of Oregon-Aqua Foods be responsible? Oregon Dept. of Fish and Wildlife staff thought so. This report outlines issues and staff recommendations.

https://ir.library.oregonstate.edu/concern/technical_reports/1g05fc10f


Swartz, Richard C., Peter M. Chapman, Robert C. Barrick, and Jerry M. Neff. 1987. "Four independent approaches to developing sediment quality criteria yield similar values for model contaminants." Environmental Toxicology and Chemistry. 6, 723-725.


Arnold, Forest D., Jamison A. Lowe, Daniel R.G. Farrow, and National Coastal Pollutant Discharge Inventory. 1988. Analysis of Pollutant Discharges from West Coast Point Sources. 61 p. National Oceanic and Atmospheric Administration, Strategic Assessment Branch (Rockville, MD)

Boehlert, George W., and Bruce C. Mundy. 1988. "Roles of behavioral and physical factors in larval and juvenile fish recruitment to estuarine nursery areas." *American Fisheries Society Symposium*. no.3, p.51-67. Many marine fish spend parts of their early lives in estuaries. This paper examines species that spawn at sea and later enter estuaries “as late larvae or early juveniles.” (p.51) Which physical and behavioral factors enable these fish to find the estuary and stay there? This excellent review includes a list of offshore, coastal and bay species found in Yaquina Bay in particular developmental stages.


Cerda, Arcadio Alberto. 1988. "Analyzing a Port Economic Impact Model: Application to the Port of Newport." M.S., Dept. of Agricultural and Resource Economics, Oregon State University. Major professor was Dr. Frederick Smith. This thesis compares different methodologies for estimating a port’s economic output, focusing on the Port of Newport in the mid-1980s. Some demographic information for the area is included. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2z10ws808


Courtney, E. Wayne. 1988. Dunlins and Sanderlings under the Winds of Yaquina [Estuary]: a Philosophical Treatise.65 p. Corvallis, Or.: Sanderling Press. His personal, non-ornithological impressions of waterbirds at Yaquina Estuary

sediment features on survival of the phoxocephalid amphipod, *Rhepoxynius abronius*.


Goetze, Brigitte. 1988. "Contextual Systems Description of an Oregon Coastal Watershed." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Charles E. Warren

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/4t64gg96j


Jacobs, Steven E., and Oregon. Dept. of Fish and Wildlife. Fish Division. 1988. Fishery Contribution of Coho Salmon Released from Oregon Coastal Private Hatcheries. 87 p. Fish Division, Oregon Department of Fish and Wildlife ([Portland, Or.])


---. 1988. Straying in Oregon by adult salmon of hatchery origin, 1985. *Information Reports (Oregon. Fish Division)* no.88-5, 43 p. Oregon Department of Fish and Wildlife ([Portland, OR]) Many marine fish spend parts of their early lives in estuaries. This paper examines those species that spawn at sea and later enter estuaries "as late larvae or early juveniles." (p.51) Which physical and behavioral factors enable these fish to find the estuary and stay there? This excellent review includes a list of offshore, coastal and bay species found in Yaquina Bay in particular developmental stages. https://digital.osl.state.or.us/islandora/object/osl%3A44560


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/w3763b19z


Oregon. Natural Heritage Advisory Council, and Oregon State Land Board. 1988. *Oregon Natural Heritage Plan.* 141 p. The Council (Salem, Or.)


Sayre, William O., and Paul D. Komar. 1988. "The Jump-Off Joe landslide at Newport, Oregon: history of erosion, development and destruction." *Shore and Beach* 56 no. 3: p.15-21. In the winter of 1942-1943, a block of about 15 acres of land on which 15 houses were located slumped and slid towards the sea. It happened in the “Jump-Off Joe” area of Newport, a location that has the highest rate of erosion on the Oregon Coast. In 1982, developers built a condominium in the same area. The project was approved by Newport city government, and some geologists claimed that it was safe, although it was next to an active landslide. Environmentalists objected. Nature settled the argument. This article is an excellent cautionary tale. Good map, lots of photographs.


Benkendorf & Associates, and Oregon. Ports Division. 1989. Study of Justification for and Benefits from Combined Appropriation for Maintenance Dredging. 45 p. Benkendorf Associates Corporation (Portland, Or.) In light of potential budget cuts at the Army Corps of Engineers, the Oregon Ports Division commissioned this study to get the most out of available funding for harbor maintenance through dredging. Among the consultants' recommendations were to combine all Oregon port maintenance, and to reduce expenditures by reducing dredging targets for some harbors. Includes data on expenditures, summary of dredging by port for 1983-1988, and information on Coast Guard stations.


CH2M Hill. 1989. Update of Port Development Elements of City of Newport's Comprehensive Plan. Corvallis, Or: CH2M Hill. For the Newport Urban Renewal Agency and the Port of Newport. Aerial photographs


Kenaston, K.R., and Oregon. Dept. of Fish and Wildlife. Fish Division. 1989. Estimated run size of winter steelhead in Oregon coastal streams, 1980-85. Information reports (Oregon. Fish Division) no. 89-1, Oregon Department of Fish and Wildlife ([Portland, OR]) https://digital.osl.state.or.us/islandora/object/osl%3A18408

Langdon, Christopher J. 1989. "Comparison of two capsule types for the delivery of dietary


---. 1989. Species profiles: life histories and environmental requirements of coastal fishes and invertebrates (Pacific Northwest): Pacific herring *Biological Report (Washington, D.C.)* no. 82-11.126, 18 p. This classic overview of Pacific herring biology has a good bibliography, if a bit dated. Yaquina Bay is the only Oregon bay that supports a commercial roe fishery, but Coos, Umpqua, and Tillamook Bays support smaller bait and recreational fisheries..." (p.9) [https://archive.org/details/DTIC_ADA224836](https://archive.org/details/DTIC_ADA224836)

Li, Judith Lew. 1989. "Foraging Behavior of the Limnephilid Caddisfly, *Dicosmoecus gilvipes,* and Co-Occurring Herbivores in Streams of the Pacific Northwest." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. This is an in-depth look at the life of an aquatic insect on Big Elk Creek. The author looked for microhabitat preferences, abundance and distribution of the giant orange sedge caddisfly and compared its preferences with other grazing animals in the creek. She developed a behavioral catalog in order to have a context in which she could interpret behavior under different conditions. In the laboratory, she used time-lapse photography to study foraging behavior. Includes charts, tables, a schematic diagram of a 50-meter stretch of Big Elk Creek, and scanning electron microphotographs of the caddisfly. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/kd17cw12j](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/kd17cw12j)

McCrae, Jean, Laimons Osis, and Oregon. Dept. Of Fish And Wildlife. 1989. Plants and Animals of Oregon's Rocky Intertidal Habitat. 32 p. Oregon Dept. of Fish and Wildlife, (Newport, Or.) Color photographs with descriptions to help you identify what you see on the rocky shore. Maps. A good introduction to Oregon tidepools. [https://ir.library.oregonstate.edu/concern/technical_reports/j67314445](https://ir.library.oregonstate.edu/concern/technical_reports/j67314445)

artifacts. Seasonal availability of dominant species found is given.

Nicholas, Jay W., David G. Hankin, Oregon State University. Extension Service, Oregon. Fish Division, and Oregon. Dept. of Fish and Wildlife. Research and Development Section. 1989. Chinook salmon populations in Oregon coastal river basins: description of life histories and assessment of recent trends in run strengths. *EM (Oregon State University, Extension Service) no.8402, Information Reports (Oregon. Fish Division); no. 88-1, 359 p.* Oregon State University Extension Service (Corvallis, Or.) "This is a reprint of Oregon Department of Fish and Wildlife Information Reports 88-1, with the same title. The Addendum, pages vii-xx, was prepared for this edition." -- p.4 of cover. It was republished by the OSU Extension Service in its EM (Extension Memorandum) series. Nice life history data. Estimates catch, run strength, population size, run timing. A trend noted in the addendum was for "Greater average abundance since 1977." (p. x) https://digital.osl.state.or.us/islandora/object/osl%3A35565


Specht, David T. , and H. II. Lee. 1989. "Direct measurement technique for determining ventilation rate in the deposit feeding clam *Macoma nasuta* (Bivalvia, Tellinaceae)."


Yaquina Bay Water Quality Task Force. 1989. Minutes of the Yaquina Bay Water Quality Task Force. 2 p. Reports on a 1989 outbreak of Hepatitis A believed to have been associated with consumption of oysters from Yaquina Bay. Discusses highly unusual dry-season water monitoring showing fecal contamination in the river. https://ir.library.oregonstate.edu/concern/technical_reports/4x51hj34c


[https://ir.library.oregonstate.edu/concern/technical_reports/7d278t54w](https://ir.library.oregonstate.edu/concern/technical_reports/7d278t54w)

[https://ir.library.oregonstate.edu/concern/technical_reports/p5547s11k](https://ir.library.oregonstate.edu/concern/technical_reports/p5547s11k)

[https://ir.library.oregonstate.edu/concern/technical_reports/j9602153c](https://ir.library.oregonstate.edu/concern/technical_reports/j9602153c)

[https://ir.library.oregonstate.edu/concern/technical_reports/d791sg99g](https://ir.library.oregonstate.edu/concern/technical_reports/d791sg99g)


Jamerlan, Saturnino J. 1990. "Nitrogen Fluxes through Microbial Communities from Yaquina Bay (Oregon)." M.S., College of Oceanography, Oregon State University. The major professor was Patricia A. Wheeler. 
[https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/cn69m6678](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/cn69m6678)

Levin, John-Eric M. 1990. "Land-Based Polyculture of Marine Macroalgae and Pacific Salmon." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was


Oregon. Dept. of Fish and Wildlife. Marine Region. 1990. Status of Stocks: Bay Clams, Bait Shrimp. 20 p. Internal discussion paper. Numerous statistical tables and charts. [https://ir.library.oregonstate.edu/concern/technical_reports/3484zh72x](https://ir.library.oregonstate.edu/concern/technical_reports/3484zh72x)


----. 1990. Yaquina Bay Sediment Evaluation.2 p. Portland, Or.: U.S. Army Corps of Engineers. Portland District. Eleven sediment samples were taken in Yaquina Bay prior to dredging, in July, 1986 "at various locations from the mouth of the Yaquina River to the turning basin at river mile 2.4." This document is just a record that sediment sample were taken. No evaluation of the samples was written. [https://ir.library.oregonstate.edu/concern/technical_reports/c821gk26b](https://ir.library.oregonstate.edu/concern/technical_reports/c821gk26b)

Yates, Kenneth R. 1990. "The Feeding Ecology of the Gumboot Chiton, Cryptochiton stelleri (Middendorff, 1846)." Ph. D., Dept. of Zoology, Oregon State University. The major professor was Bruce Menge.  
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/k930c122n


https://ir.library.oregonstate.edu/concern/technical_reports/f4752m98k

Darienzo, Mark Edward. 1991. "Late Holocene Paleoseismicity along the Northern Oregon Coast." Ph. D., Environmental Sciences and Resources: Geology, Portland State University. Maps, drawings of core samples. Describes studies on Necanicum, Nestucca, Siletz and Yaquina bays, which were correlated with earlier work he did on Netarts and Alsea Bays. Found up to six paleo-seismic events in the last 2600 years, most of which could be correlated from bay to bay. This work suggests that the magnitude of prehistoric earthquakes in the region was around 8.1.  
https://pdxscholar.library.pdx.edu/open_access_etds/1147/

https://ir.library.oregonstate.edu/concern/technical_reports/rx913q63t

https://ir.library.oregonstate.edu/concern/technical_reports/8p58pd79c


Moore, Michelle M. 1991. "Host Responses of English Sole (Parophrys vetulus) to Infection by the Monogenetic Trematode Gyrodactylus stellatus." M.S., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Dr. Robert E. Olson. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/f1881p186](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/f1881p186)


Sediment Evaluation: June, 1991. 68 p. Portland, Or.: U.S. Army Corps of Engineers. Portland District. "This evaluation covers the approximately 30,000 cubic yards of material to be excavated from the South Beach Marina Federal project channel. . . The authorized South Beach Marina Federal project channel is 10 feet deep, 100 feet wide and 2,035 feet long. . . The channel has not been dredged since its construction in 1978, and will be dredged to a depth of -11 feet MLLW to ensure that the authorized depth is maintained for as long as possible between dredging events." (p.1)


Gomez, Douglas M. 1992. "Small Mammal and Herpetofauna Abundance in Riparian and Upslope Areas of Five Forest Conditions." M.S., Dept. of Fisheries and Wildlife, Wildlife Management, Oregon State University. The author compared species composition and relative abundance of small mammals and amphibians in different riparian and upslope habitats, mostly in the Alsea Basin. This is a look at animals such as shrews, moles, mice, salamanders and frogs in the watershed. “The results suggested that small (second-, third- and fourth-order) riparian systems and adjacent upslope areas may provide important habitat to some small mammals and herpetofauna on the Oregon Coast Ranges. It is vital that these systems be considered in management plans which include the protection of at least some of these areas from timber harvest.” (from the Abstract) Major professor was Robert G. Anthony.

Coast. The purpose of the workshop was to develop advocacy and methods to preserve the Kumamoto oyster and its genetic diversity.


Kreeger, Daniel A. 1992. "Utilization of Dietary Protein by the Mussel, *Mytilus edulis trossulus* (Linnaeus 1758)." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was Christopher J. Langdon.


Monaco, Mark E., Tony A. Lowery, and Robert L. Emmett. 1992. "Assemblages of U.S. west coast estuaries based on the distribution of fishes." *Journal of Biogeography*. 19, p. 251-267. The authors reviewed 28 West Coast estuaries to see if any of 360 possible fish species were present. They then grouped the 28 estuaries into six classifications. This estuary falls into the Northern Estuarine Group. Important species are given.


Nickelson, Thomas E., Mario F. Solazzi, Steven L. Johnson, and Jeffrey D. Rodgers. 1992. "Effectiveness of selected stream improvement techniques to create suitable summer and winter rearing habitat for juvenile coho salmon (*Oncorhynchus kisutch*) in Oregon coastal streams." *Canadian Journal of Fisheries and Aquatic Sciences*. 49, 790-794.


Bayer, Range D. 1993. "Waterbird records for West and East ponds, South Beach peninsula, Lincoln County." *Journal of Oregon Ornithology*. 1, p.35-70. photographs, data tables https://ir.library.oregonstate.edu/concern/conference_proceedings_or_journals/nc580s144


Oregon. State Land Board. 1993. Oregon Natural Heritage Plan. 158 p. The Board (Salem, Or.)

Oregon. State Marine Board. 1993. Statewide Boating Survey, 1993. This is part of a longstanding series of publications. (Pleasure boating in Oregon, Statewide boating survey, Oregon recreational boating survey) surveying recreational boating in Oregon and published every three years. It examines the type, extent and locality of recreational boating and identifies issues faced by boaters, from poor infrastructure to illegal practices (or "jerks on the water"). The Colombia and Willamette Rivers were the most heavily used waterways, followed by the Pacific Ocean. Tillamook Bay was the most heavily used estuary, followed by Alsea Bay.


Priest, George R., Ingmar Saul, and Julie Diebenow. 1993. Pilot erosion rate data study of the central Oregon coast, Lincoln County: Final report to the Federal Emergency Management Agency. *Open-File Report / State of Oregon, Department of Geology and Mineral Industries.* no. O-93-10, 228 p. Oregon Department of Geology and Mineral Industries (Portland, Or.) This report is related to Open-file reports nos. 94-11 - 94-30, the Chronic geologic hazard maps of coastal Lincoln County, Oregon. It also relates to a follow-up series of erosion and flood control maps, Open-file reports no.97-12 – 97-30. Each segment of the coastline from Cascade Head to Seal Rock is described, along with the rate of erosion for that segment. Appendices address the use of historical photographs to document shoreline change. Maps, charts, photocopies of b+w photographs. [https://library.state.or.us/repository/2015/201511241155082/index.pdf](https://library.state.or.us/repository/2015/201511241155082/index.pdf)

Ticknor, Robert. 1993. "Late Quaternary Crustal Deformation on the Central Oregon Coast as Deduced from Uplifted Wave-Cut Platforms." M.S., Western Washington University. This thesis examines marine terraces on the central Oregon Coast for uplift and deformation processes. “The primary purpose of this project is to study the characteristics, age, and distribution of uplifted marine terraces along 65 km of the central Oregon coast between Otter Rock and Searose beach. . . Quaternary deformation of marine terraces is used to determine the rate and variability of uplift.” (p.1) Includes geologic maps.


183
Bayer, Range D. 1994. "Harlequin Duck records mostly from Lincoln County, Oregon." *Journal of Oregon Ornithology*. 3, p.243-260. “612 Harlequin Duck records are given for Lincoln County, and another 74 records are listed for other coastal counties. In Lincoln County, Harlequins are found mostly in winter, there were often more males than females, the most ever counted was 14, and there is no indication that they nested.” (Abstract) https://ir.library.oregonstate.edu/concern/conference_proceedings_or_journals/dj52w9646


Childers, Richard K. 1994. "Prevalence, Geographic Distribution, and Biology of a Dungeness Crab, *Cancer magister*, Microsporidian Parasite." M.S., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. Sampled Dungeness crabs at seven northwest estuaries and three sites in Puget Sound from October, 1991 through June, 1993 for presence of a microsporidian parasite, Nadelspora canceri. "The overall infection prevalence in male crabs (19.2%) was more than twice that of female crabs (8.0%), and of the 821 infected crabs found, 629 (76.6%) were males. The mortality of laboratory-held Dungeness crabs naturally infected with *N. canceri* was compared to that of uninfected crabs in two separate experiments and in both cases a significantly higher mortality was observed for infected crabs." (from the Abstract) Yaquina Bay had a low infection rate at 2.0%. Robert Olson was the major professor. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/t722hd456


Fox, David, Arlene Merems, Bruce Miller, Michele Long, Jean McCrae, June Mohler, and Oregon Dept. of Fish and Wildlife. 1994. Oregon Rocky Shores Natural Resource Inventory: in Support of the Oregon Territorial Sea Plan, Ocean Policy Advisory Council. 168 p. Oregon Dept. of Fish and Wildlife. Marine Region (Newport, Or.) This is a useful look at the state’s rocky shores. Each site comes with a map and site description, including natural resources, human use, management jurisdictions and potential opportunities for education and interpretation. Includes a section on river mouth jetties.


Johnson, John A., and Oregon. Dept. of Fish and Wildlife. 1994. Bay Clam Data Series Report: 1993. 17 p. Oregon Department of Fish and Wildlife (Newport, Or.) Mentions work to re-establish native (Olympia) oysters in Netarts Bay. [https://ir.library.oregonstate.edu/concern/technical_reports/db78tc82t](https://ir.library.oregonstate.edu/concern/technical_reports/db78tc82t)


Osterman-Sussman, Irene. 1994. "Informal Education on an Estuary Nature Trail: a Study of Visitor Knowledge, Attitudes and Behavior." M.A.I.S., Dept. of Fisheries and Wildlife, Dept. of Zoology, Oregon State University. Describes the public’s interactions with the nature trail along Yaquina Bay at the Hatfield Marine Science Center. Major Professor was Lavern J. Weber. Master of Arts in Interdisciplinary Studies (MAIS) degree. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/d217qt89m](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/d217qt89m)
Priest, George R. , and Oregon. Dept. of Geology and Mineral Industries. 1994. Chronic geologic hazard map of the Newport area, coastal Lincoln County, Oregon *Open-File Report / State of Oregon, Dept. of Geology and Mineral Industries*. no.94-26, Oregon Department of Geology and Mineral Industries (Portland, Or.) Valuable information on coastal erosion. The Jump-Off Joe area has the highest rate of erosion on the Oregon Coast. “Oregon Department of Geology and Mineral Industries Open-File Report 0-94-11 should be utilized with this map to provide detailed information on the hazard mapping techniques and appropriate use of the information.”
https://digital.osl.state.or.us/islandora/object/osl%3A73090


Schroeder, Kirk. 1994. "Evaluation of straying by coastal stocks of hatchery winter steelhead." In *Proceedings of the Steelhead Management Workshop*, p.10-12. Portland, Or.: Oregon Dept. of Fish and Wildlife. This study was based on creel surveys from 1992-1994. The authors looked for salmon bred in a hatchery that strayed to spawn in a different stream than their natal stream. The Alsea was the stream that had the most spawning salmon hatched in different streams, however, most of these fish were raised from stock that originated in the Alsea River.
https://ir.library.oregonstate.edu/concern/technical_reports/02870w697

Taghon, Gary L., F. G. Prahl, M. Sparrow, and C.M. Fuller. 1994. "Lipid class and glycogen content of the lugworm *Abarenicola pacifica* in relation to age, growth rate and reproductive condition." *Marine Biology*. 120, p.287-295. How do animals allocate food supplies? If food is abundant, do animals store food for future needs, or do they use the abundant supplies to facilitate reproduction? In this study, the authors studied lipids and glycogen in the Pacific lugworm for a year, in order to account for seasonal variability and reproductive cycles. They did not find seasonal variations, but the data showed that storage lipids, especially triacylglycerides, “were strongly elevated” when eggs were formed. “We doubt that A. pacifica is ever food-limited in Yaquina Bay. The biochemical composition and nutritive value of surface sediments in Yaquina Bay change little throughout the year...” (p.294)

Tilloston, Kevin J. 1994. "Wave Climate and Storm Systems on the Pacific Northwest Coast." M.S., College of Oceanography, Oregon State University. Major professor was Paul D.


---. 1994. Yaquina River Sediment Evaluation. 17 p. Portland, Or.: U.S. Army Corps of Engineers. Portland District. This report describes sediment testing done on the Yaquina River benthos between river miles 6 and 11 (a section between Yaquina and Toledo). The sediments were found to be safe for in-water disposal, thus enabling dredging to proceed. https://ir.library.oregonstate.edu/concern/technical_reports/6h440s91d

U.S. Department of Agriculture. Economic Research Service. 1994. United States Department of Agriculture Aerial Photographs of Linn, Benton, and Lincoln Counties, Oregon, 1972-1994 (bulk 1994). Covers 1972-1994. These are aerial photographs assembled and used by the USDA field office in Tangent, Oregon for soil conservation and other purposes. The photographs were made by the National Aerial Photography Program. For 1994, the collection includes detailed index maps and large (24x24 inch prints) as well as smaller (10x10 inch) photo proofs. Index maps are also available for the 1990 and 1985 photographs. The 1985 images only include Lincoln County. For all other years, there are no indexes available and all of the images are 9x9 inch or 10x10 inch photo proofs. However, a small subset of the 1972 images have descriptions of the locations depicted in the photographs and the collection includes one 24x24 inch print of the 1972 flights. The OSU Libraries has an historical aerial photograph collection with images primarily of the Willamette Valley and western Oregon taken in the mid-1930s through 1970s. Current aerial photographs are available through the University of Oregon Libraries Aerial Photography Collection and Research Service and the Oregon Imagery Explorer http://oregonexplorer.info/imagery

U.S. Fish and Wildlife Service. 1994. 1994 Proposed Coastal Barrier Resources System Maps [cartographic resource]: State of Oregon. 31 p. U.S. Fish and Wildlife Service, Region 1 (Portland, Or.) Coastal barriers are landforms that protect mainlands and aquatic habitats against the worst effects of coastal storms. Coastal barriers include estuaries, inlets, marshes, wetlands and nearshore waters and can include islands, sandspits, sandbars and broad beaches. The protective value of these landforms can be degraded by development. In 1994, a proposal was made to expand the Coastal Barrier Resources System to include the West Coast of the United States. These maps were drafted to show areas that should be protected. The proposed expansion, however, did not take place. Nevertheless, the maps have value in showing what should not be developed.


Coontz, Julie, Oregon Coastal Zone Management Association, and Oregon State University. Sea Grant College Program. 1995. Legislative Fellowship Final Report, 1995. 59 p. Oregon Coastal Zone Management Association, (Salem, Or.) Shows work done by the 1995 Oregon Sea Grant / Oregon Coastal Zone Management Association Legislative Fellow. “The Oregon Sea Grant/OCZMA Legislative Fellowship Program began in 1987 primarily to provide students from the Oregon State University Marine Resource Management Program (MRM) with a means with which to apply academic knowledge gained in science or public policy to the real-world arena of legislative politics.” (p.1.) The author was assigned to State Senator Stan Bunn’s office, and worked for him, Sea Grant and OCZMA. Summarizes legislation important to coastal communities, and brief interviews with Oregon legislators. https://ir.library.oregonstate.edu/concern/defaults/8910jz376


Hall, Bill. 1995. "Yaquina Bay oysters: yesterday, today, and tomorrow." The News-Times,
Heitstuman, Thomas M. 1995. "Aspects of the Biology and Culture of Scyphomedusae of the Oregon Coast." M.S., College of Oceanography, Oregon State University. The major professor was Charles B. Miller. 
[https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3j3334717](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3j3334717)


[https://ir.library.oregonstate.edu/concern/technical_reports/9593tv921](https://ir.library.oregonstate.edu/concern/technical_reports/9593tv921)

Kreeger, Karen Young. 1995. "Differences in the onset of salinity tolerance between juvenile chinook salmon from two coastal Oregon river systems." Canadian Journal of Fisheries and Aquatic Sciences. 52, no. 3: 623-630.

[https://ir.library.oregonstate.edu/concern/defaults/6m311t753](https://ir.library.oregonstate.edu/concern/defaults/6m311t753)

[https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/pr76f5621](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/pr76f5621)

Oregon Coastal Zone Management Association, Inc. 1995. Salmon Operational Plan for the Release and Recapture Facility at South Beach, Oregon. [The Assn.] ( [Newport, Or.])
Oregon. Dept. of Fish and Wildlife. 1995. Abalone and Salmon Culture at Former Oregon Aqua Site. 20 p. Oregon Dept. of Fish and Wildlife (Newport, Or.) Proposes using the old Oregon Aqua-Foods facility as a public salmon release/recapture facility, and allowing a private company to cultivate red abalone at the site. Includes a history of the red abalone fishery, and a timeline for the Oregon Aqua-Foods facility. [Source: https://ir.library.oregonstate.edu/concern/technical_reports/3t945r247]


U.S. Army. Corps of Engineers. Portland District. 1995. Newport North Marina Jetty Sediment Evaluation. 54 p. Portland, Or.: U.S. Army Corps of Engineers. Portland District. The Newport North Marina Jetty was built "to dissipate the energy of incoming waves and offer some protection to boats and moorings facilities located in Newport. Unfortunately, the jetty is under-protecting the area so that modifications are needed to improve its efficiency. Plans call for dredging around the western end of the jetty in conjunction with construction improvements." (from the Introduction) Before dredging could begin, the sediments had to be examined to assure the safe disposal of dredged materials. [Source: https://ir.library.oregonstate.edu/concern/technical_reports/v979v3460]


Watershed Analysis. 98 p. Alsea Ranger District, Siuslaw National Forest (Alsea, Or.)

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/47429d64w


Weitkamp, Laurie A., Thomas C. Wainwright, Gregory J. Bryant, George B. Milner, David J. Teel, Robert G. Kope, and Robin S. Waples. 1995. Status review of coho salmon from Washington, Oregon, and California. *NOAA Technical Memorandum NMFS-NWFS* no.24, 258 p. U.S. National Marine Fisheries Service, Northwest Fisheries Science Center (Seattle, Wash.) The Biological Review Team concluded that "coho salmon in this ESU are not at immediate risk of extinction but are likely to become endangered in the future if present trends continue." They noted that "spawning escapements have declined substantially during this century and may now be at less than 5% of their abundance in the early 1900s." (p.128)
https://www.nwfsc.noaa.gov/assets/25/5585_06172004_123333_coho.pdf

Yaquina Bay Economic Foundation. 1995. An Inventory of Vacant Commercial and Industrial Land in Toledo and Newport.

Bayer, Range D. 1996. "Censuses of black brant at Yaquina estuary, Lincoln County, Oregon." *Journal of Oregon Ornithology*. 6,p.723-780. Black Brant (*Branta bernicla nigricans*) had two different seasonal patterns of occurrence at Yaquina Estuary. At embayment areas with eelgrass (*Zostera marina*), Brant typically arrived between October 22 and November 4, Brant numbers progressively climbed in November, Brant abundance in December-January was relatively constant, and Brant numbers often fluctuated greatly during spring migration in February-April. At a site near the estuary mouth where there was little eelgrass, Brant customarily only appeared during spring migration. About 300-500 Brant wintered at Yaquina Bay in the 1980's, and usually fewer than 700 Brant were counted during spring migration.
https://ir.library.oregonstate.edu/concern/conference_proceedings_or_journals/df65vd31d

https://ir.library.oregonstate.edu/concern/conference_proceedings_or_journals/wh246x921


Connolly, Patrick J. 1996. "Resident Cutthroat Trout in the Central Coast Range of Oregon: Logging Effects, Habitat Associations, and Sampling Protocols." Ph. D., Dept. of fisheries and Wildlife, Oregon State University Major Professor: Dr. Jim Hall. "Populations of coastal cutthroat trout, *Oncorhynchus clarki clarki*, were sampled in 16 headwater streams from logged (20-30 and 40-60 years ago) and unlogged (stand age 125-150 years) basins. Basins logged 20-30 years ago supported the widest range of mean biomass of age 1+ or older cutthroat trout (g/m2) and the widest range in frequency of large woody debris (number of pieces/100 m) and pools (number/100 m), including the lowest and highest levels of these variables encountered in the study." (From the abstract.)


Moosapanah, G. Reza. 1996. "Land-Based Polyculture of Chinook Salmon, *Oncorhynchus tshawytscha*; Manila Clams, *Tapes japonica* (Deshyes); and Red Macroalgae, *Palmaria mollis*." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was William McNeil. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/z603r169q](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/z603r169q)

Nelson, Alan R., and Stephen F. Personius. 1996. "Great-earthquake potential in Oregon and Washington – an overview of recent coastal geologic studies and their bearing on segmentation of Holocene ruptures, Central Cascadia Subduction Zone." In *Assessing Earthquake Hazards and Reducing Risk in the Pacific Northwest*, v.1. no.1560 v.1. edited by A.M. Rogers, Timothy J. Walsh, William J. Kockelman and George R. Priest, In U.S. Geological Survey Professional Paper, p.91-114. Washington, D.C.: U.S. G.P.O. This article gives a good overview of the discovery of the Pacific Northwest’s past earthquake history and what was known about this history. Unfortunately, at the time this article was written, while studies were being done on 27 estuaries in the region, only half of the work had been completed. There is good information about Netarts, Salmon River, Siletz and Alsea Bays. [https://pubs.usgs.gov/pp/1560vol1/report.pdf](https://pubs.usgs.gov/pp/1560vol1/report.pdf)


---. 1996. Tsunami hazard map of the Newport South quadrangle, Lincoln County, Oregon.

Smith, Matt D. 1996. "Manila Clam Aquaculture in Shrimp-Infested Mudflats." M.S., Department of Fish and Wildlife, Fisheries Science, Oregon State University. The author found that it is possible to grow Manila clams on mud shrimp infested tidelands, provided the clams were grown in cages to protect them from predators. Adding a layer of oyster shell on top of the mudflats did make the substrate firmer, although it didn’t seem to affect the overall survival of the clams. Clams grew more slowly than sites in Washington State. Chris Langdon was his major professor. [link]


Wetzel, David J. 1996. "Brant use of Yaquina Estuary, Lincoln county, Oregon in the Spring of 1976." Journal of Oregon Ornithology. 6,p.715-722. Black Brant (Branta bernicla nigricans) distribution was monitored, and eelgrass beds (Zostera marina) were mapped during the spring migration of 1976. Brant used eelgrass areas significantly, and human disturbance and tide height were important factors influencing Brant distribution and activity. [link]

Wray, Pat. 1996. "Mid-coast stream restoration project." Oregon Wildlife. 53, no. 1: p.5-6. This
popular article describes a habitat-restoration project in the Oregon Coast Range that was funded by timber companies in partnership with the Federal Government. The goal was to increase stream complexity and to improve over-wintering habitat for juvenile coho salmon. [https://ir.library.oregonstate.edu/concern/technical_reports/sb3979445](https://ir.library.oregonstate.edu/concern/technical_reports/sb3979445)

Angel, Tiah, Zasha Bassett, Brian Chipman, Kimberly Cleveland, Tamisha Cronick, Janette Ehlig, Dan Frerich, Chris Hunt, Todd Ison, Angela McGuire, Jennifer Oliver, Anja Schmelter, and Jennifer Whitsett. 1997. The European Green Crab (*Carcinus maenas*) in Oregon: A Preliminary Survey of Yaquina, Coos, Winchester and Siletz Bays. Oregon State University (Corvallis, Or.) Accessed by opening a .zip file. “During the summer and fall of 1997, the students and instructors of an Oregon State University Zoology class (Zoology 401/Research) searched for the presence of the European Green Crab (*Carcinus maenas*) in Coos, Winchester, Yaquina and Siletz Bays, Oregon and also took inventories of common intertidal species...All the green crabs retrieved in Coos Bay have been large adults between 58 and 86 mm. We searched gravel substrates below boulders and algal blades, but never recovered any young-of-the-year-green crabs in Coos, Winchester, Yaquina or Siletz Bays. These findings suggest that one year class (perhaps 1995) established itself in Coos Bay, but at present is not abundant enough to perpetuate itself.” (from the Abstract) [https://ir.library.oregonstate.edu/concern/defaults/xg94hv61v](https://ir.library.oregonstate.edu/concern/defaults/xg94hv61v)


Connolly, Thomas J., and Robert Scott Byram. 1997. "Oregon wet site basketry: a review of structural types." In Contributions to the Archaeology of Oregon, 1995-1997. no.6. edited by Albert C Oetting, In Occasional Papers / Association of Oregon Archaeologists, p.185-204. Eugene, Or.: Association of Oregon Archaeologists. This article is not about baskets, as much as it is about woven plant materials used for many purposes. At Yaquina Bay, the Ahnkuti Site is a fish-trapping weir on Yaquina Bay, and the "basketry" here consists of twined structures that may have been weir panels or parts of cylindrical fish traps. Two other sites on Yaquina Bay are mentioned.

Fuji, Takashi. 1997. "Biotic and Abiotic Factors Influencing the Bioavailability of Sediment-Associated Phenanthrene to Marine Amphipods." Ph. D., Toxicology Program, Oregon State University. The major professor was Lavern Weber. Some amphipods studied, Eohaustorius estuarius, were collected near the Marine Science Center. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vh53wz534


House, Marcia. 1997. "Transmission of Disseminated Neoplasia in the Soft Shell Clam, Mya arenaria." Ph. D., Dept. of Microbiology, Oregon State University. The major Professor was Paul W. Reno. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1g05fg145


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/41687k514

https://www.researchgate.net/publication/283734404_Guide_to_Oregon%27s_Rocky_Intertidal_Habitats

Northwest Area Committees (Portland, Or.) This planning document is aimed at coping with an oil spill, but could be applied to other types of toxic spills. It gives shoreline types, protection/collection strategies, wildlife and logistical information for sensitive North Coast areas. Tillamook and Yaquina Bays have separate geographic response plans. This report has been superseded by a 2004 edition:
https://www.oregon.gov/deq/FilterDocs/NOregonCoastGeoResponsePlan.pdf

https://digital.osl.state.or.us/islandora/object/osl:817


Schindler, Eric, Tom Loynes, Rodney J. Kaiser, and Oregon. Dept. of Fish and Wildlife. Fish


Tuininga, Chris R. 1997. "Contending with Risk in the Seafood Processing Industry: a Bioeconomic Portfolio Analysis of the Pacific Whiting Fishery." M. S., Agricultural and Resource Economics, Oregon State University. Study of fish processing of whiting on the West Coast. Indicates possible mixes of products to reduce economic risk for seafood processors, and the order in which products should be processed to maximize profits. Interestingly, putting whiting processing off until the end of the fishing season maximized profits. Newport is the most important port in Oregon for this fishery. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/cf95jd91k


Water Resources Support Center (U.S.), and Institute for Water Resources (U.S.). 1997.

Baillie, Michael W. 1998. "Scourability of Weak Rock in the Oregon Coast Range." M.S., Dept. of Civil Engineering, Oregon State University. Bridges over streams can be undermined by erosion from river scour. In this thesis, the author examined 11 bridges in the Oregon Coast Range. "A preliminary model has been proposed wherein the degradation of the stream channel is related to the abrasive resistance of the bedrock and the area under the daily stream power. This method provides an estimate of the degradation of the stream bed due to abrasion by bedload and flood events, not necessarily local or contraction scour.” (from the Abstract) Two bridge sites on the Yaquina and three on the Alsea are discussed. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/cv43p044f](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/cv43p044f)


Chilcote, Mark W. 1998. Conservation status of steelhead in Oregon. Information Reports (Oregon. Fish Division). no.98-3, 108 p. The Oregon Coast ESU was given a "Sensitive" status. The Coast showed good resistance to stress and long-term survival, but many streams had more than 50% hatchery spawners. ODFW was revising estimate of percentage of hatchery spawners in the Yaquina at the time this report was written. Their interim estimate was that 60% of spawning steelhead in the Yaquina were of hatchery origin. Criticizes the methodology of the Busby, et al. (1996) study. Charts. [https://digital.osl.state.or.us/islandora/object/osl%3A35569](https://digital.osl.state.or.us/islandora/object/osl%3A35569)

Gless, J. Douglas, and Christopher C. Humphrey. 1998. "Formula-based hazard assessment methodologies for coastal bluff-backed and slide-backed shorelines, Yaquina Head to Seal Rock, Lincoln County, Oregon." In Environmental, Groundwater and Engineering Geology: Applications from Oregon, no.11. edited by Scott Burns, In Special Publication / Association of Engineering Geologists, p.451-463. Belmont, Cal. Gives a formula for calculating how far developments should be set back from the cliff edge in order to account for expected erosion and slides. The area north of Grant Creek had a much higher rate of erosion.


Regional Study Workshop." Troutdale, Oregon. no.11. 342 p. NOAA Coastal Ocean Program Decision Analysis Series "This document presents the results of a workshop conducted during August, 1996, to better define a research agenda to study the combined effects of natural variability and anthropogenic change in Pacific Northwest coastal ecosystems." (p.3.) Meeting held August 3-4,1996. https://repository.library.noaa.gov/view/noaa/1668


Midcoast Watersheds Council. 1998. MidCoast watershed information system. CD Rom


What made a successful homesteader? Two homesteads are examined in depth. Maps, photographs, oral histories, much source material. Master of Arts in Interdisciplinary Studies. Major professor was David Brauner.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/db78tj125

Reckendorf, Frank. 1998. "Geologic hazards of development on sand dunes along the Oregon Coast." In Environmental, Groundwater and Engineering Geology: Applications from Oregon, no.11. edited by Scott Burns, in Special Publication / Association of Engineering Geologists, p.429-438. Belmont, Cal. “There are many geologic hazards associated with development on sand dunes. These include wind erosion and deposition, water erosion and flooding from storm waves and rip currents, water erosion and flooding from tsunamis, and contamination of freshwater aquifers with associated pollution of beaches and rivers.” (p.436) Lists areas vulnerable to coastal hazards due to unwise development in dune areas.


U.S. National Oceanic and Atmospheric Administration. 1998. NOAA's Estuarine Eutrophication Survey: Volume 5: Pacific Coast Region. 75 p. Office of Ocean Resources Conservation and Assessment (Silver Spring, MD) "In Yaquina Bay, chlorophyll a and turbidity concentrations are medium. Nuisance and toxic algal bloom events are not observed. Concentrations of nitrogen and phosphorus are medium. Biological stress is observed in the system but not anoxia or hypoxia. SAV [submerged aquatic vegetation] spatial coverage is low." (p.49) Trends were either unchanged or unkown at the time this report was written.

https://archive.org/details/noaasestuarineeu00unit/mode/2up?ref=ol&view=theater


Brooks, Christopher. 1999. "Is the Laboratory Growth of Pacific Oyster Spat, Crassostrea gigas, Exposed to Varying Salinities, Predictive of Their Growth in the Estuary?" M.S., Dept. of Fisheries and Wildlife, Fisheries, Oregon State University. Major professor was Chris Langdon.

Brophy, Laura, Oregon. Governor's Watershed Enhancement Board, and MidCoast Watersheds Council., eds. 1999. Yaquina and Alsea River Basins Estuarine Wetland Site Prioritization Project: Final Report for MidCoast Watersheds Council. Corvallis, Or,: Green Point Consulting,. This project, commissioned in 1998, is part of the MidCoast Watersheds Council's efforts to better understand the status and condition of the area's natural resources and to work with interested landowners to enhance and protect important areas. https://ir.library.oregonstate.edu/concern/defaults/5x21tk796

Callaway, Richard J. , and David T. Specht. 1999. Physical and Chemical Characteristics of the Yaquina Estuary, Oregon.104 p. Newport, Or.: [U.S. Environmental Protection Agency]. "After a brief description of the setting of the Yaquina Estuary, estuarine dynamics and classification, and estuarine chemistry are presented. Then, temperature-salinity relations are reviewed using the Rattray-Officer model in simulating variable distributions reported by Callaway and Specht (1982) and Callaway (1991). Finally, the numerical models DynHyd and WASP are reviewed, some output for each model are shown and the results discussed." (from the Introduction)

Conway, Flaxen D. L., Sheila Cordray, Lori Cramer, Carmel Finley, Jennifer Gilden, Ginny Goblirsch, Court Smith, and Oregon State University. Sea Grant College Program. 1999. Oregon’s Changing Coastal Fishing Communities. ORESU-O. ORESU-O-99-001, 73 p. Oregon State University. Oregon Sea Grant (Corvallis, Or.) This publication looks at
Oregon fishing communities in the late 1990s, a period of stress and rapid change. It gives an overview of applicable legislation, explores the concept of sustainability, and reviews community resources. Appendices compare trolling and trawling, profile fishing towns, and present an extensive bibliography of fishing community studies.

https://seagrant.oregonstate.edu/sites/seagrant.oregonstate.edu/files/sgpubs/onlinepubs/o99001.pdf


Johnson, Orlay W., Mary H. Ruckelshaus, W. Stewart Grant, F. William Waknitz, Ann M. Garrett, Gregory J. Bryant, Kathleen Neely, Jeffrey J. Hard, and U.S. Northwest Fisheries Science Center. 1999. Status review of coastal cutthroat trout from Washington, Oregon, and California. NOAA Technical Memorandum NMFS-NWFS. no.37. [Seattle, Wash.]. Northwest Fisheries Science Center. The Biological Review Team concluded that coastal stocks of cutthroat trout were not presently at risk of extinction. Appendix 1-A gives the known history of hatchery releases in streams and lakes. https://repository.library.noaa.gov/view/noaa/3066


Oregon Governor's Watershed Enhancement Board, and Oregon Plan for Salmon and Watersheds. 1999. Oregon Aquatic Habitat: Restoration and Enhancement Guide. 103 p. Oregon Plan for Salmon and Watersheds ([Corvallis, Or.]) This guide includes many activities intended to improve the health of watersheds. “Some measures are directly targeted at restoring stream channels by upgrading culverts to expand the amount of
stream miles that can support fish. Other measures reintroduce structure to stream channels that have been simplified due to past management practices and/or disturbance events. Measures are also included that address riparian and upland restoration needs” (from the Introduction)


Pacific Fishery Management Council. 1999. Identification and Description of Essential Fish Habitat, Adverse Impacts, and Recommended Conservation Measures for Salmon. Amendment 14 to the Pacific Coast Salmon Plan. 146 p. Pacific Fishery Management Council (Portland, Or.) An important guide to essential habitats and requirements of three species of salmon, and the challenges facing them. Illustrated. At head of title: Appendix A. "August 1999." This document was updated in 2014:


Pozarycki, Scott V. 1999. "Sublethal Effects of Estuarine Carbaryl Applications on Juvenile English Sole (Pleuronectes vetulus)." Ph. D., Dept. of Environmental and Molecular Toxicology, Oregon State University. Major professor was Lavern Weber.


Appy, Marcus, and P. J. Collson. 2000. Draft Oregon Coastal Juvenile Rockfish Study. 18 p. Oregon Dept. of Fish and Wildlife. Marine Resources Division. Estuarine Habitat. This paper describes a pilot project to develop a recruitment index for rockfish. Rockfish bear live young in the winter. "The larvae live in the plankton for three to five months before settling to the benthos, usually near some sort of structure." Juvenile rockfish live in estuaries before migrating to the ocean. For this study, beach seines were conducted in the summer of 2000. Boiler Bay had the most rockfish, followed by Yaquina Bay. Shiner perch were the most abundant juvenile fish (5610) in Yaquina Bay. Black rockfish were the most abundant rockfish (402), and some copper rockfish (18) were also caught. https://ir.library.oregonstate.edu/concern/defaults/p2676w099


Builder, Tonya L. 2000. "Feasibility of Supplementary Sampling of the Commercial Groundfish Landings in Oregon Using Seafood Plant Workers." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor was David Sampson. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/hm50tv08s

Castillo, Gonzalo C. 2000. "Benthic Biological Invasions in Two Temperate Estuaries and Their Effects on Trophic Relations of Native Fish and Community Stability." Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Hiram Li. Investigated nonindigenous benthic invertebrates in Yaquina and Alsea bays, especially as prey for two native species of flatfish. Found 11 nonindigenous benthic invertebrate species in Yaquina Bay, and 8 in Alsea Bay. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/mc87pt10t


professor was Kathryn A. Higley.


Finley, Carmel. 2000. "Fish Tales: Salmon Stories, 1945-1980." M.A.I.S., Interdisciplinary Studies: History, Political Science, Speech Communication, Oregon State University. A needed look at the forces that influenced fisheries management on the West Coast in the postwar period. Among the author's findings are, "that science was vastly too optimistic in its assessment of how much food could be wrung from the ocean on a sustainable basis," and "that salmon policy tended to be grounded in political, social, economic considerations, not what was known about the biology of the fish." (p.168) https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/wp988q02k


Hauck, Laura L. 2000. "Use of Tethered Prey for Estimating the Impact of the Invasive European Green Crab." B.S., Dept. of Biology, Oregon State University. Feeding methods can be hallmarks of different species. Crabs, for example, eat snails, but different crabs take different approaches for getting snail meat. The Dungeness crab uses its powerful claws to crush its prey, while the invasive European green crab was most likely to pull its prey from the shell. In this study, snails were epoxied to monofilament lines that were placed in various sampling sites around Coos and Yaquina bays. When the lines were pulled up, the fate of the snails was determined and scored according to the method of predation. The study showed a high (65-68%) rate of predation on gastropods at Yaquina Bay sites by the European green crab, which the author calls, “a red flag that should alert us to the potential impact of this voracious predator on native mollusks.” (p.46) Senior thesis for the Bachelor of Science in the Department of Biology, Oregon State University, Corvallis, Oregon. https://ir.library.oregonstate.edu/concern/undergraduate_thesis_or_projects/12579t005


Parrish, Julia K., Kathleen Bell, Elizabeth Logerwell, and Curtis Roegner. 2000. Indicators of west coast estuary health. *Pacific Northwest Coastal Ecosystems Regional Study Annual Report*. p.1-20. Coastal Ocean Programs, NOAA In this chapter, we attempt to lay out a conceptual framework for indicator selection germane to the West Coast estuaries, including those studied extensively by PNCERS researchers. In the latter half of the chapter we offer an annotated list of candidate indicators for each of the three system components: the physical environment, the socio-economic system, and the the biological system. A concurrent table presents all candidate indicators, their constituent
measures and proxies (if appropriate) and the relevant estuarine types within which the indicators are valuable. (Author excerpt)

https://ir.library.oregonstate.edu/concern/defaults/x346d5217


https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/d217qq04p

Quigley, Kate, and Gilbert Sylvia. 2000. Municipal Water Management In Oregon Coastal Communities: Surmounting the "Conservation Paradox".89 p. Newport, Or.: Coastal Oregon Marine Experiment Station. Oregon Sea Grant. "The municipalities of Newport, Garibaldi, and Port Orford serve as case studies to illustrate a range of coastal municipal water issues. Each study discusses the characteristics of the municipal population, water management goals and objectives, the types and amounts of water supplies, problems associated with expanding water supplies, and opportunities for conservation. Together the case studies are used to determine the common problems and issues." (from the Executive Summary) https://ir.library.oregonstate.edu/concern/defaults/n009w616h

Spencer, Mara L. 2000. "Behavioral and Physiological Indicators of Stress in Sablefish, Anoplopoma fimbria." M.S., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Carl Schreck.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/mp48sh156

Stanfield, Brooks J. (Brooks Jameson). 2000. "Land Ownership and Forest Cover in the Oregon Coast Range: Spatial Pattern and Social Ground-Truthing." M.S., Dept. of Forest Resources, Oregon State University. Studied the changing patterns of land ownership in several areas in Western Oregon and used the Big Elk Creek watershed as a case study. Complex historical, social and economic factors each affected the relationship between the extent of forest cover and land ownership. The extent of riparian areas owned was noted in the study.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/mp48sh156

U.S. Army. Corps of Engineers. Portland District. 2000. Yaquina Bay and South Beach Marine Sediment Sampling Evaluation.10 p. Portland, Or.: U.S. Army Corps of Engineers. Portland District. "Nine (9) sediment samples and 1 QC duplicate were collected from Yaquina Bay and South Beach Marina (see Figures 1) on May 31, 2000. All samples were submitted for physical analyses, with 4 samples analyzed for metals (9 inorganic), total organic carbon (TOC), pesticides / polychlorinated biphenyls (PCBs), phenols, phthalates, miscellaneous extractables, polynuclear aromatic hydrocarbons (PAHs) and
3 samples submitted for organotin (TBT) analysis." (from the Abstract)

https://ir.library.oregonstate.edu/concern/technical_reports/nz806017m


https://www.ncei.noaa.gov/access/metadata/landing-page/bin/iso?id=gov.noaa.ngdc.mgg.dem:yaquina_bay_p210_30m


https://ir.library.oregonstate.edu/concern/defaults/n583xv76d

Bell, Kathleen, Christopher Farley, Daniel Huppert, Rebecca Johnson, and Thomas Leschine. 2001. Socio-economic dynamics of Pacific Northwest estuaries. Pacific Northwest Coastal Ecosystems Regional Study Annual Report, 2000. p.58-75. Coastal Ocean Programs, NOAA In this chapter, we begin by describing the regional economies and human populations of the areas surrounding five Pacific Northwest estuaries: Grays Harbor and Willapa Bay in Washington, and Coos Bay, Yquina Bay and Tillamook Bay in Oregon. Recognizing the nature of the local economies and the demographic characteristics of residents is fundamental to establishing the socio-economic baseline. In the second and third sections, we build on the baseline descriptions and focus on important findings from the Coastal Resident Survey and Coastal Visitor Survey.

https://ir.library.oregonstate.edu/concern/defaults/n583xv76d


Environmental Protection Information Center, Center for Biological Diversity, WaterKeepers Northern California, and U.S.. National Marine Fisheries Service. 2001. Petition to List the North American Green Sturgeon (Acipenser medirostris) as an Endangered or Threatened Species under the Endangered Species Act. 81 p. (Garberville, Calif.) This is a petition to the National Marine Fisheries Service. The species was ultimately not listed as "threatened" or "endangered." Good biological data, summaries of what is known

211
about sturgeon in each estuary.
https://www.biologicaldiversity.org/species/fish/North_American_green_sturgeon/pdfs/PETITION.PDF


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/wd375z26s


Lindsay, Robert B., Ken R. Kenaston, and R. Kirk Schroeder. 2001. Reducing Impacts of Hatchery Steelhead Programs. Information Reports / Fish Division, Oregon Department of Fish and Wildlife. no.2001-01. Oregon Dept. of Fish and Wildlife, Fish Division (Portland, Or.) Attempts to determine how many hatchery steelhead were straying into other rivers to spawn, also if the timing of their spawning increased the risk of hatchery steelhead interbreeding with wild fish. Investigated the use of local broodstock in hatcheries, and some methods of reducing interbreeding between hatchery and wild steelhead. https://digital.osl.state.or.us/islandora/object/osl%3A18493

https://ir.library.oregonstate.edu/concern/technical_reports/q524jp57v


Ogut, Hamdi. 2001. "Biological and Mathematical Modeling of Dynamics of Furunculosis in Chinook Salmon (Onchorhynchus tshawytscha) and Infectious Hematopoietic Necrosis (IHN) in Rainbow Trout (Onchorhynchus mykiss)." Dept. of Fisheries and Wildlife, Fisheries, Oregon State University. Major professor was Paul Reno. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/v692t936v

Onal, Ebru. 2001. "Evaluation of Spray-Dried Microalgae in Diets for Juvenile Manila Clam Tapes philippinarum." M.S., Dept. of Fisheries and Wildlife, Oregon State University. Major professor was Chris Langdon https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5m60qw25w


Ruggiero, Peter, Paul D. Komar, William G. McDougal, John J. Marra, and Reggie A. Beach. 2001. "Wave runup, extreme water levels and the erosion of properties backing beaches." Journal of Coastal Research. 17, no. 2: p.407-419. Water level and beach morphology and size are the major factors determining erosion of beachfront properties. "This paper reports on a model that has been developed to evaluate the susceptibility of coastal properties to erosion to waves..." (p.407)

Communities." M.S., Environmental Sciences Program, Oregon State University. Surveyed commercial fishers concerning social values about their fishing heritage. Surveyed fisheries managers regarding how they understood these values and how their understanding is integrated into fisheries management. Managers indicated that they could use more information about social and cultural values of fishers, but the means for integrating such information into management decisions is unclear. Both managers and fishers expressed a desire to maintain Oregon's commercial fishing heritage. Interesting data, especially on fishers' estimates of the importance of their industry in the local economy, and their future expectations. The major professor was Denise Lach.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/mg74qp513

Sigleo, Anne C. 2001. "Stable isotopic indicators for the biogeochemical cycling of organic matter in a temperate North Pacific estuary, Oregon, USA." *Eos, Transactions - American Geophysical Union.* 82, suppl,


Boese, Bruce L. 2002. "Effects of recreational clam harvesting on eelgrass (*Zostera marina*) and associated infaunal invertebrates: in situ manipulative experiments." *Aquatic Botany.* 73, no. 1: p.63-74. "The effect of recreational clam harvesting on eelgrass (*Zostera marina* L.) was experimentally tested by raking or digging for clams in experimental 1m² plots located in a Yaquina Bay (Newport, OR) eelgrass meadow...Approximately 10% of the eelgrass of Yaquina Bay is subjected to recreational claming and as this activity is generally less intense than that employed in this study, it is unlikely that recreational claming has a major impact on eelgrass beds in the Yaquina estuary. This conclusion should be viewed with caution as multi-year disturbances were not investigated and there are differences in sediment characteristics and clam abundances between experimental sites and those sites that are intensively harvested by the public.” (from the Abstract)

Byram, Robert Scott. 2002. "Brush Fences and Basket Traps: the Archaeology and Ethnohistory of Tidewater Weir Fishing on the Oregon Coast." Ph.D. Dept. of Anthropology, University of Oregon. Focuses on Coquille River and Yaquina Bay sites. Chapter 6 covers the Ahnkuti site on Yaquina Bay, where there are the remains of a large and elaborate weir. Ahnkuti was actively used from about 100 B.C.E. to the 19th century, making it one of the longest human-occupied sites on the Oregon Coast. 
https://works.bepress.com/cgi/viewcontent.cgi?article=1004&context=byram


Fordyce, R. Ewan. 2002. "Simocetus rayi (Odontoceti: Simocetidae, New Family): a bizarre new archaic Oligocene dolphin from the Eastern North Pacific." Smithsonian Contributions to Paleobiology. no.93, p.185-222. Describes a fossil skull of an unusual archaic dolphin, which "was perhaps a bottom feeder that preyed through suction feeding on soft-bodied invertebrates." This species is believed to have had echolocation abilities. The specimen was found "[near the] intersection of North Yaquina Bay Road and Toledo Road, Lincoln County, USA."

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/g732dd14f

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6q182q45w

meet EPA 303(d) water quality standards.
https://ir.library.oregonstate.edu/concern/technical_reports/7d278t113

Johnson, Rebecca, Christopher Farley, Kathleen Bell, Daniel Huppert, Washington Sea Grant, and Pacific Northwest Coastal Ecosystems Regional Study. 2002. Yaquina Bay living: profile of a community in transition: a report on residents' attitude about their environment. WSG-MR. no.02-09, Washington Sea Grant (Seattle, WA)
https://repository.library.noaa.gov/view/noaa/44109

Kostow, Kathryn Eileen. 2002. Oregon lampreys: natural history, status and analysis of management issues. Vol. no. 2002-01. 80 p. Information Reports (Oregon. Fish Division). [Portland, Or.]. Oregon Dept. of Fish and Wildlife. Lampreys have been declining in Oregon. This report looks at what is known about the species and possible causes for the decline. Colored maps, charts and photographs. "This paper concludes with a Problem Analysis for Oregon lampreys. Our biggest problem is poor information, ranging from not knowing basic species identity to having inefficient or no systematic monitoring of lamprey abundance and distribution." (Executive Summary, p.2)
https://digital.osl.state.or.us/islandora/object/osl%3A18613


Wood, Nathan J. 2002. "Vulnerability of Port and Harbor Communities to Earthquake and Tsunami Hazards in the Pacific Northwest." Ph. D., Dept. of Geosciences, Geography, Oregon State University. Major professor was Jim Good. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/sj139493s


Benedict, Rae T. 2003. "Evaluating Oregon's Beach Sites and Assessing Twenty-Six Coastal Beach Areas for Recreational Water Quality Standards." M.S., Dept. of Public Health, Environmental Health Management, Oregon State University. 26 Oregon beaches were monitored for E. coli and Enterococci bacteria. This thesis discusses the monitoring results. Proximity to sewage treatment plant outfalls was frequently related to bacterial contamination. “Within a five mile radius, seven of the nine (78%) Oregon beach sites with bacterial water quality exceedances have a STP [sewage treatment plant] effluent pipe. Cannon Beach, Siletz Bay, and D-River have one STP within a five mile radius. Two STPs are located within five miles of Harris, Rockaway, Nelscott, and Otter Rock at South Cove. The Cannon Beach STP releases wastewater into Ecola Creek, so it was not a surprise that a sample at the mouth of this creek exceeded both bacterial standards.” Major professor was Catherine M. Neumann. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5x21tj71s

Bio-Surveys LLC, and Sialis Company. 2003. Limiting Factors Assessment and Restoration Plan:


Huppert, Daniel D., Rebecca L. Johnson, Jessica Leahy, and Kathleen Bell. 2003. "Interactions between human communities and estuaries in the Pacific Northwest: trends and implications for management." Estuaries. 26, no. 4B: 994-1009. From the PNCERS Study, a seven-year program that focused on four estuaries in Washington and Oregon: Gray's Harbor, Willapa Bay, Yaquina Bay and Coos Bay. In addition to these four
estuaries, this paper addresses Tillamook Bay and Tillamook County residents.


Leschine, Thomas M., Bridget E. Ferriss, Kathleen P. Bell, Krista K. Bartz, Sarah MacWilliams, Michelle Pico, and Andrew K. Bennett. 2003. "Challenges and strategies for better use of scientific information in the management of coastal estuaries." *Estuaries*. 26, no. 4B: 1189-1204. From the PNCERS Study, a seven-year program that focused on four estuaries in Washington and Oregon: Gray's Harbor, Willapa Bay, Yaquina Bay and Coos Bay. This article also considers Tillamook Bay. Examines environmental indicators, environmental threats, and information management.

Magnusson, A., and R. Hilborn. 2003. "Estuarine influence on survival rates of coho (Oncorhynchus kisutch) and Chinook salmon (Oncorhynchus tshawytscha) released from hatcheries on the U.S. Pacific Coast." *Estuaries*. 26, no. 4B: 1094-1103. From the PNCERS Study, a seven-year program that focused on four estuaries in Washington and Oregon: Gray's Harbor, Willapa Bay, Yaquina Bay and Coos Bay. This paper compared 20 estuaries in Oregon and Washington. "This study demonstrates for the first time a direct link between estuarine condition and survival of salmon..." Pristine (less developed) estuaries have better fall chinook salmon survival rates.


Moritz, Heidi P., Alan C. Jeffries, and Hans R. Moritz. 2003. "Broad toe berm jetty head design,
Yaquina North Jetty." Coastal Structures 2003: Proceedings of the Conference, August 26-30, 2003, Portland, Oregon, Portland, Or., p.1199-1211. This paper details 2001 repairs to restore the Yaquina Bay North Jetty to its authorized length. This repair brought together two different design concepts to stabilize the crest and strengthen the toe berm. “The first jetty system on the Pacific Coast was built at Yaquina Bay in Oregon..." (p.1199)

Oregon. Natural Heritage Advisory Council, and Oregon. State Land Board. 2003. Oregon Natural Heritage Plan. 168 p. Oregon State Land Board (Salem, Or.) The Jumpoff Joe area in Newport is regarded as a significant example of a landslide. [https://digital.osl.state.or.us/islandora/object/osl:14339]


Pacific Northwest Coastal Ecosystems Regional Study, Oregon State University. Sea Grant College Program, and U.S. Coastal Ocean Program. 2003. Estuary management in the Pacific Northwest: an overview of programs and activities in Washington, Oregon, and Northern California. ORESU-H. no.03-001, 126 p. Oregon State University (Corvallis, Or.) Useful information tables and brief descriptions. This report has been prepared in support of the Pacific Northwest Coastal Ecosystems Regionals Study (PNCRS) to provide a summary and compendium of the management of estuaries in the Pacific Northwest of the United States. Federal, state and local government management programs and any significant special programs are summarized, and the management of each major estuary is referenced. (From Introduction) [https://repository.library.noaa.gov/view/noaa/41484/noaa_41484_DS1.pdf]


Strong, Craig S. 2003. "Decline of the marbled murrelet population on the central Oregon Coast during the 1990s." *Northwestern Naturalist*. 84, no. 1: p.31-37. This article gives the results of surveys of marbled murrelets on the central Oregon Coast from 1992 to 1999. "Population estimates of roughly 9,750 birds ... in 1992-93 decreased to 4,100 ... in 1997-99... Removal of nesting habitat during the 1980s, low overwinter survival and poor productivity associated with decreased marine productivity are possible factors contributing to the decline." (from the Abstract)


Fire. Major professor was Kurt M. Peters.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/0p096972r


Evans III, Sanford 2004. "Improving Pacific Oyster (*Crassostrea gigas*) Production through Selective Breeding." Ph. D., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. This dissertation describes efforts to assess the importance of nursery conditions and genetics on Pacific oyster production. Environmental conditions in Yaquina Bay and Yaquina River, including water temperature and salinity, are discussed. Major professor was Christopher J. Langdon.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1v53k0335

Ford, Michael J., David J. Teel, Donald M. Van Doornik, David Kuligowski, and Peter W. Lawson. 2004. "Genetic population structure of central Oregon Coast coho salmon (*Oncorhynchus kisutch*)." *Conservation Genetics*. 5, no. 6: p.797-812. The "Alsea complex" includes the Alsea, Siletz and Yaquina Rivers, along with Devil Creek and Beaver Creek. These coho populations are closely related.


Kagan, James S., John A. Christy, Michael P. Murray, Jonathan A. Titus, Oregon Natural Heritage Information Center, and Institute for Natural Resources. 2004. Classification of Native Vegetation of Oregon. 52 p. Oregon Natural Heritage Program (Portland, Or.) “This classification lists the native plant associations known to occur in Oregon, and includes both successional and climax vegetation types that were an important part of the presettlement landscape of Oregon. It serves as an index to the diversity, distribution and relative rarity of the state's native plant associations, and as a guide to their literature. Plant associations are listed by scientific name, followed by common name and acronym. Listings include the global and state rank of each association, the ecoregion in which it occurs, its status as wetland or upland, and references describing the association.” (from the introduction)
https://ir.library.oregonstate.edu/concern/defaults/kw52jd11x
Northwest Area Committees. 2004. North Coast Oregon Geographic Response Plan (GRP). 90 p. Northwest Area Committees (Portland, Or.) This planning document is aimed at coping with an oil spill but could be applied to other types of toxic spills. It gives shoreline types, protection/collection strategies, wildlife and logistical information for sensitive North Coast areas.


https://ir.library.oregonstate.edu/concern/defaults/kd17cx459

Query, Charles Floyd. 2004. "Yaquina Bay." In Oregon Ferries: a History of the Ferries on Oregon's Major Waterways Since 1826. p.57-58. Santa Cruz, CA? Lists 16 ferries that worked on the Yaquina River from 1869 to 1936. In some cases, only the name of the boat is given. Sources given and locations of photographs, when available. Index, bibliography.


https://ir.library.oregonstate.edu/concern/graduate_projects/5999n7779


"This document describes the development and technical basis for the hydrogeomorphic (HGM) method for assessing tidal wetlands of the Oregon coast... Drawing from approximately 500 published sources and databases, this document reviews scientific literature on tidal wetland functions, especially as it pertains to the
presented HGM method and the Pacific Northwest. Data are summarized on dozens of variables that were measured or estimated in 120 tidal wetlands during summer 2003."
(From Summary, p.i.) Includes details about the method and scoring. Has bibliography for all three volumes. 


Clough, Charles M. 2005. "Geologic Model and Geotechnical Properties of Stratified Paleodune Deposits, Central Oregon Coast, Oregon." M.S., Dept. of Geology, Portland State University. This study found a significant number of weak cements in paleodune deposits, which has significant implications for slope stability for those building on ancient dune deposits. Pleistocene dune strata were characterized as "brittle." Numerous color photographs, charts and tables. 


Giannico, Guillermo R., Jon A. Souder, and Oregon State University Sea Grant College Program. 2005. Tide gates in the Pacific Northwest: operation, types, and environmental effects. ORESU-T. no.05-001, 28 p. Sea Grant Oregon, Oregon State University (Corvallis, Or.) This is a very helpful document, guiding landowners and interested parties in understanding how tide gates work, how to upgrade them, and whether to remove
them. This well illustrated report includes information about environmental effects of tide gates, design types, manufacturers and relevant legislation.
https://seagrant.oregonstate.edu/sites/seagrant.oregonstate.edu/files/sgpubs/onlinepubs/t05001.pdf


Hennessey, Jennifer Taylor. 2005. "A Historical Reconstruction and Land Use history of Six Tidal Wetlands in Oregon." M.S., College of Oceanic and Atmospheric Sciences, Marine Resource Management Program, Oregon State University. "This Master’s degree Capstone project is intended to document historical ecological conditions and land use histories during the past 150 years for selected Oregon watersheds and tidal wetland sites. The sites are the subject of current research into the ability of tidal wetlands to provide rearing habitat and prey for juvenile salmonids." The author studied two wetland sites per estuary: one close to the ocean entrance, and one upstream. A good resource for historical research on estuary use.
https://ir.library.oregonstate.edu/concern/graduate_projects/vh53x113r

MdCrae, Jean, and Oregon Dept. of Fish and Wildlife. Developmental Fisheries. 2005. Bay Clam Dive Fishery. 28 p. This exhibit was prepared by ODFW for the Oregon Fish and Wildlife Commission. Before Nov. 2005, ODFW managed a developmental fishery program for commercial harvest of bay clams by scuba divers. This report recommends removing bay clams from developmental fisheries and setting up a limited entry system for the commercial bay clam divers.
https://ir.library.oregonstate.edu/concern/technical_reports/sj139262c

Meengs, Chad C. 2005. "The Size of the Oregon Coastal Salmon Runs in the Mid-1800s " M.S., Environmental Sciences Program, Oregon State University. "Presented July 12, 2004. Commencement June 2005." Attempts to reconstruct data regarding salmon populations circa 1850 and contrast that data with contemporary statistics. Tables give estimated run sizes and loss of lands in estuaries. Suggests that ocean conditions are the most significant factor affecting salmon runs, and that improving habitats in estuaries and lowlands would be a way to improve salmon runs. Includes historical photographs. The major professor was Robert T. Lackey.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3r074x21m

Part 1: Synthesis of the Coastal Coho ESU Assessment 69 p. "May 6, 2005" -- date from front cover. This report is important because it identifies winter habitat for coho ("stream complexity") as the most important limiting factor for the Oregon Coast Evolutionary Significant Unit coho recovery and production. Other limiting factors include hatchery impacts, water quantity, water quality, and exotic fish species. Identifies viable populations. Distinguishes between populations that can persist when marine and freshwater conditions are unfavorable and populations dependent on reproductive contributions from strays from other basins. Preliminary analysis "suggests that winter habitat (i.e. stream complexity) is a higher priority for restoring coho populations across the ESU than water quality." (p.20)

Northwest Area Committees. 2005. Yaquina Bay, Oregon Geographic Response Plan (GRP). 60 p. (Portland, Or.) "1 September 2005." This is an emergency response plan for an oil spill in or near Yaquina Bay. "This plan prioritizes resources to be protected and allows for immediate and proper action. By using this plan, the first responders to a spill can avoid the initial confusion that generally accompanies any spill." (p.iv) Added Idaho Flats

Oregon. Dept. of Fish and Wildlife. Fish Division. 2005. 2005 Oregon Native Fish Status Report. Volume 1: Species Management Summaries. (Salem, Or.) Fall Chinook: Although hatchery Chinook are released into the Yaquina, spawning surveys indicate that "very few hatchery fish are spawning naturally." Chum salmon: the run is holding steady. Winter steelhead: over 10% of spawning steelhead in the Yaquina come from hatcheries, thus compromising the wild run.

Petrie, Megan E. 2005. "Habitat Associations and Determinants of Refuge Use in Post-Settlement Lingcod (Ophiodon elongatus) " M.S., Dept. of fisheries and Wildlife, Oregon State University. Juvenile lingcod were radio-tagged and monitored as they spent time in Yaquina Bay. All preferred complex habitat such as rocks, shells or seagrass, including
habitats modified by humans such as docks, pilings or a bridge, over bare sands. Major professors were Cliff Ryer and David Sampson
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/6q182p167


Schwager, Tad W. 2005. "Movement and Abundance of Lingcod (Ophiodon elongatus) in Yaquina Bay Estuary, Oregon: Movement and Abundance of Lingcod (Ophiodon elongatus) in Yaquina Bay Estuary, Oregon: Evidence for Essential Habitat Designation" M.S., Dept. of Fisheries and Wildlife, Oregon State University. The major professor is Scott Heppell. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/df65v9896


Sigleo, Anne C., C. W. Mordy, P. Stabeno, and Walter E. Frick. 2005. "Nitrate variability along the Oregon coast: Estuarine–coastal exchange " Estuarine, Coastal and Shelf Science. 64, no. 2-3: p.211-222. 10.1016/j.ecss.2005.02.018 Summer upwelling in the Eastern North Pacific Ocean brings nutrient-rich waters to the surface and is a major source of nutrients for bays and estuaries. This paper examines the effects of summer upwelling events on the nitrate concentrations in Yaquina Bay and the effects of river flow on nearshore waters.

the conditions of Oregon coastal wetlands and estuaries. Short bibliography, with a more extensive bibliography in part 2 of this handbook. Many color photographs of Oregon wetlands. https://digital.osl.state.or.us/islandora/object/osl%3A14026

Buckley, Anna. 2006. Estuarine Habitat Mitigation in Oregon: Policy Review, Analysis, and Recommended Improvements. *Master of Environmental Management Project Reports*. no.5, 200 p. https://doi.org/10.15760/mem.33 Portland State University. Dept. of Environmental Science and Management (Portland, Or.) This work is a Master’s degree graduate project written for the Oregon Department of State Lands. In this excellent overview of Oregon’s estuarine mitigation policy, the author summarizes the current state of knowledge about estuarine ecology and the process of estuarine mitigation or restoration; describes Oregon’s current (2006) policy; lists recently permitted projects and their related estuarine resource replacements; discusses assessment tools and mitigation options; examines compensatory mitigation in the watershed setting; and concludes with recommendations. https://pdxscholar.library.pdx.edu/mem_gradprojects/5/

Courter, Ian I. 2006. "Salmon Recovery in the Pacific Northwest: Defining What Constitutes a Wild Salmon." M.S., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. Attempts to define the concept of "wild" salmon as a continuum including hatchery fish. Asserts that criticism of the effects of hatcheries on wild salmonids is influenced by values, not science. Includes statistics on hatcheries, wetland loss and runs. Major professor was Robert T. Lackey. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/2227ms50f

Davidson, Timothy Mathias. 2006. "The Invasion of the Australasian Burrowing Isopod (*Sphaeroma quoianum*) in Coos Bay, Oregon." M.S., Dept. of Biology, University of Oregon. "During an intertidal survey of Yaquina Bay, Oregon, a single adult Sphaeroma specimen was discovered burrowed into a piece of decayed wood in Boone Slough on March 2, 2005... In a subsequent survey (August 29, 2005), numerous burrows were found in a marsh bank in the same location. Several adult and juvenile Sphaeroma were found within the burrows, suggesting the establishment of a reproducing population ..." (p.127) https://scholarsbank.uoregon.edu/xmlui/handle/1794/3774


Hart, Stephanie K. 2006. "Riparian Litter Inputs to Streams in the Central Oregon Coast Range." M.S., College of Forestry, Forest Science, Oregon State University, (David E. Hibbs Steven S. Perakis). "Riparian zone vegetation can influence terrestrial and aquatic food webs through variations in the amounts, timing, and nutritional content of leaf and other
litter inputs. Differences in vegetation composition and density, as well as riparian topography, may modulate the strength and quality of these inputs. Changes in inputs to small order streams affect the processes and condition of adjacent and downstream reaches based on the amount of particulate organic matter that is intercepted, retained, or exported. The central Oregon Coast Range provides an ideal opportunity to study how deciduous dominated and coniferous dominated riparian forests influence small streams within a matrix of managed riparian forests” (from the Abstract.) Co-major professors were David E. Hibbs and Steven S. Perakis. 

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/k930c156g


Meengs, Chad C., and Robert T. Lackey. 2006. "Estimating the size of historical Oregon salmon runs." Reviews in Fisheries Science. 13, no. 1: p.51-66. "Compared to our estimates of mid-1800s coho salmon levels, early 2000 runs (during favorable ocean conditions), were 11-19% of the historical level. During poor ocean conditions (1990s), current coho salmon runs were 3-6% of the historical size." (from the Abstract)

Oxford, Jeremiah. 2006. "Early Oligocene Intrusions in the Central Coast Range of Oregon : Petrography, Geochemistry, Geochronology and Implications for the Tertiary Magmatic Evolution of the Cascadia Forearc." M.S., Dept. of Geology, Oregon State University. An interesting and thorough look at some of the basalt formations on the Oregon Coast. “The OCRI [Oregon Coast Range Intrusions] represent the final episode of widespread forearc magmatism in Cascadia and record significant changes in tectonic interactions between the Farallon and North America plates. The new data acquired in this study have aided the evaluation of existing hypotheses on the tectonic origins of the OCRI suite and have identified new questions in determining their mantle sources. In future work, isotopic data (SR, Nd, Pb) will be necessary to further evaluate the distinctions in mantle sources between the alkaline and gabbroic OCRI.” (p.177) Includes maps, charts, color photographs of thin-sections of rocks. Major professor was Adam Kent.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/4j03d165r

Petersen, Christine. 2006. "Range expansion in the northeast Pacific by an estuary mud crab -- a molecular study." Biological Invasions. 8, no. 4: p.565-576. 10.1007/s10530-005-0160-1 Authors checked for signs of presence of the introduced Harris mud crab. Adults closely resemble the Oregon shore crab, Hemigrapsus oregonensis. First found in Yaquina Bay in 1978. "R. harrisii was discovered in ... Yaquina River 12 km from the
ocean near the town of Toledo, approximately where the 10 ppt salinity isocline occurs. In Oregon, *R. harrisii* always occurred at salinities below 15 ppt, and rarely could be found to co-occur with *H. oregonensis*.

Petrie, M. E., and C. H. Ryer. 2006. "Laboratory and field evidence for structural habitat affinity of young-of-the-year lingcod." *Transactions of the American Fisheries Society*. 135, no. 6: p.1622-1630. 10.1577/T05-164.1 Juvenile lingcod were captured in Yaquina Bay. Their habitat preferences were studied in the laboratory, then fish were radio-tagged and released in the bay, and those habitat preferences were studied. Juvenile lingcod seem to prefer relatively deep water and structurally complex sites that provide refuge from predators.

Rooper, Christopher N., Donald R. Gunderson, and David A. Armstrong. 2006. "Evidence for resource partitioning and competition in nursery estuaries by juvenile flatfish in Oregon and Washington." *Fishery Bulletin*. 104, no. 4: p.616-622. Estuaries can provide important nursery areas for juvenile fish. Juvenile flatfish often congregate in areas that are distinct from adult populations. In this study, juvenile fish from four flatfish species were found to use different parts of Pacific Northwest estuaries during the summer. Temperature, salinity, and sediment type may affect distribution. The authors did find evidence of competition for food between English sole and Pacific sanddab. [https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/2006/1044/rooper.pdf](https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/2006/1044/rooper.pdf)

Schlosser, Susan, and Jennifer Bloeser. 2006. The Collaborative Study of Juvenile Rockfish, Cabezon, and Kelp Greenling Habitat Associations between Morro Bay, California and Newport, Oregon: Final report to: Pacific States Marine Fisheries Commission Summarizing Data for 2003, 2004 and 2005. 13 p. "California Sea Grant and Pacific Marine Conservation Council Cooperative Research Project." Various juvenile rockfish, kelp greenling and cabezon were trapped both offshore and in various bays and ports in Oregon and California. Port Orford, Coos Bay and Newport were the Oregon sites. Trapping took place between June, 2003 and December, 2005. The goal was to identify the habitat associated with each species. The most abundant trapped juvenile species in Yaquina Bay was the black rockfish (181), followed by kelp greenling (69), copper rockfish (58) and cabezon (27). Yaquina Bay rockfish and cabezon preferred pilings and mud sites in deeper water in channels near eelgrass. Yaquina Bay kelp greenling preferred mud and sand sites, with over 90% found near piling. [https://escholarship.org/uc/item/35m8147x](https://escholarship.org/uc/item/35m8147x)

United States. Environmental Protection Agency. Region X, and United States. Environmental Protection Agency. Region X. Office of Environmental Assessment. 2006. Ecological Condition of the Estuaries of Oregon and Washington. EPA-910-R-06-001, 73 p. U.S. Environmental Protection Agency, Region 10, Office of Environmental Assessment (Seattle, Wa.) For the layperson, this is an overview that does not go into any detail on specific estuaries. Problem locations are marked with colored dots on a map and are not
labelled. This deliberate lack of specificity on EPA's part is baffling and disappointing. [link]


Berry, Richard L., and Ashley A. Rowden. 2007. "An examination of the spatial and temporal generality of the influence of ecosystem engineers on the composition of associated assemblages." Aquatic Ecology. 41, no. 1: p.129-147. 10.1007/s10452-006-9053-3 Examined the manner and mechanisms by which ghost shrimp and eelgrass influenced associated benthic assemblages. Compared temperate estuaries in New Zealand and the U.S. Studied Otago Harbour, Blueskin Bay and Papanui Inlet in New Zealand and Tillamook Bay, Yaquina Bay and Netarts Bay in Oregon. Transplanted shrimp into low- and high-density plots of eelgrass and eelgrass into low- and high-density plots of ghost shrimp. Noted which associated benthic species were sensitive to the differences in density. Also noted seasonal factors: seagrass has a competitive advantage in spring, while ghost shrimp are most active and have a greater advantage in summer. "Most discriminating taxa generally showed a strong prevalence for treatment sites that contained seagrass, implying that seagrass is the dominant ecosystem engineer in the systems studied."

Bio-Surveys LLC, Mary Holbert, and Sialis Company. 2007. Limiting Factors Assessment and Restoration Plan: Buttermilk, Spilde, and Yaquina Headwaters, Sixth Fields Tributaries to the Yaquina Basin. 130 p. Mid-Coast Watersheds Council (Newport, Or.) “This document provides watershed restoration actions proposed to enhance the coho salmon population within the Buttermilk, Spilde and Yaquina Headwaters Sixth Field basins in Lincoln County, Oregon. . . The goal of the restoration effort has been to identify the dominant processes and habitat characteristics that currently limit the production of coho salmon smolts in the subbasins, and to develop a prioritized list of actions (‘prescriptions’) for removing the limitations in ways that normalize landscape and stream channel function” (from the Introduction). [link]


Oregon State University. Libraries, and Oregon State University. Institute for Natural Resources. 2007. "Oregon Explorer: Natural Resources Digital Library." Began in June 2007. "The Oregon Explorer is envisioned to use the power of today's cutting edge information technology to create a state-of-the-art web-accessible natural resources digital library by way of accessing and integrating data from state and federal agencies, local governments, university scientists and citizens to support informed decisions and actions by people concerned with Oregon's natural resources and environment." (Vision) An invaluable resource. https://oregonexplorer.info/


Sigleo, Anne C., and Walter E. Frick. 2007. "Seasonal variations in river discharge and nutrient export to a Northeastern Pacific estuary." Estuarine, Coastal and Shelf Science. 73, no. 3-4: p.368-378. 10.1016/j.ecss.2007.01.015 Examined nitrate and silica loading in the Yaquina River from 1999-2002. Looked at the effect of storm events. Strong seasonality of nutrient transport was shown. Interestingly, alder seems to be the primary source of nitrogen in the Yaquina basin. "Modern logging practices, urban growth and fish harvesting have resulted in the expansion of alder cover along with a decrease in returning fish. The result has changed the primary nitrogen source in the Yaquina River from anadromous fish to alder." (p.377)

Sin, Yongsik, Anne C. Sigleo, and Eunsook Song. 2007. "Nutrient fluxes in the microalgal-dominated intertidal regions of the lower Yaquina estuary, Oregon (USA)." Northwest Science. 81, no. 1: p.50-61. https://doi.org/10.3955/0029-344X-81.1.50 This study was launched to learn how important microalgae were to the productivity of Yaquina Bay, and to determine “sediment nutrient fluxes in the microalgal dominated sediments” (p.51). Microalgae on sediment are an important food source for benthic dwellers, and contribute nutrients to the water column when they decompose. The study examined seasonal nutrient fluxes, compared Yaquina Bay to other estuaries, and characterized the relationship between silica and nitrate in the Bay. The study suggests that “suggesting that benthic microalgae control the nutrient fluxes to the water column (p.59).”


Almasi, Kama N., and Peter M. Eldridge. 2008. "A dynamic model of an estuarine invasion by a non-native seagrass." Estuaries and Coasts. 31, no. 1: p.163-176. 10.1007/s12237-007-9024-5 The authors model an invasion of an introduced seagrass in Yaquina Bay. They predict it will grow rapidly for the first 20 years. "This rapid expansion is followed by apparent cycles around an equilibrium point and is unaffected by spatial scale differences." The authors believed that the Japanese eelgrass in Yaquina Bay was, at the time the article was written, in a cycle of "high population growth." (p.173)

Boese, Bruce L., and Bradley D. Robbins. 2008. "Effects of erosion and macroalgae on intertidal eelgrass (Zostera marina) in a northeastern Pacifid estuary (USA)." Botanica Marina. 51, no. 4: p.247-257. 10.1515/BOT.2008.034 This study is concerned with the natural
factors that limit the distribution and growth of inter-tidal eelgrass. The authors suggest that dessication from exposure to the air, along with macroalgae and erosion all limit eelgrass, "and that these factors operate in an acute rather than a chronic manner."
(from the Abstract)


Why were there so few Native Americans in Yaquina Bay when white settlers arrived? One possible answer is that many of them were murdered in 1832 by staff of the Hudson’s Bay Company. The attack was in retaliation for the killing by Alsea Indians of two Hudson’s Bay trappers. Many inhabitants of a large village near Oysterville were killed. “Diminished as a nation and displaced from their homelands, Yaquina survivors memorialized their losses in oral narrative that reveals the depth of impacts throughout the colonization process, and the injustice of colonial power relations.” (p.382)

https://works.bepress.com/byram/1/

Cassidy, Katelyn M. 2008. "Use of Extractable Lipofuscin As an Age Biomarker to Determine Age Structure of Ghost Shrimp (*Neotrypaea californiensis*) Populations in West Coast Estuaries." M.S., Dept. of Fisheries and Wildlife, Oregon State University. "The data presented here show that biochemical-based aging can now be widely used to assess age in *N. californiensis*, facilitating more in-depth investigations of basic biological and ecological processes for this species." (from the Abstract) Major professors were Brett R. Dumbauld and Christopher J. Langdon.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/wh246v95f


Davidson, Timothy M., and Catherine E. de Rivera. 2008. Regional Surveys and Outreach for the Non-Indigenous Burrowing Isopod, *Sphaeroma quoianum*. 19 p. ([Portland, Or.]) "Report Submitted to the Western Regional Panel on Aquatic Nuisance Species, U.S. Fish and Wildlife Service." "While *S. quoianum* has not spread to these new areas, ... the populations in Yaquina Bay appear to have expanded since 2005. *S. quoianum* was found in 42% (21/50) of surveyed sites in Yaquina Bay and some sites hosted very high densities of the isopod... In addition, *S. quoianum* is now potentially impacting the local economy of Yaquina Bay: Oregon Oyster replaced their dock floats recently and nearly every one of the 60 one-meter long newly removed Styrofoam billets were riddled with *S. quoianum* burrows..." (p.10) Includes photographs of damaged floats at Oregon

DeWitt, Theodore H., Anthony F. D’Andrea, Blaine D. Griffen, Peter Eldridge, and Timothy G. O’Higgins. 2008. "Measuring the contribution of benthic ecosystem engineering species to the ecosystem services of an estuary: a case study of burrowing shrimps in Yaquina Estuary, Oregon [abstract only]." ACES: A Conference on Ecosystem Services. p.32. This is a brief summary of EPA’s studies on burrowing shrimp in the Yaquina River estuary. [https://tinyurl.com/q2w3ua2](https://tinyurl.com/q2w3ua2)

Elston, Ralph A., Hiroaki Hasegawa, Karen L. Humphrey, Ildiko K. Polyak, and Claudia C. Hase. 2008. "Re-emergence of *Vibrio tubiashii* in bivalve shellfish aquaculture: severity, environmental drivers, geographic extent and management." *Diseases of Aquatic Organisms*. 82,p.119-134. An outbreak of vibriosis that appeared on the West Coast in the summer of 2006 and peaked in 2007 is described, along with methods of reducing contamination. Relationships between oyster die-offs and severe upwellings and El Nino are suggested. "We first recorded a severe outbreak of vibriosis, for which the etiological agent was later confirmed to be toxigenic *Vibrio tubiashii*, in 1998 from a hatchery on Netarts Bay. The SST [sea surface temperature] during this period was unusually elevated and remarkably similar to the elevated temperature regime observed in 2007, when severe vibriosis re-emerged." [https://www.intres.com/articles/dao_oa/d082p119.pdf](https://www.intres.com/articles/dao_oa/d082p119.pdf)

Hanson, Erik, and Mark Sytsma. 2008. "The potential for mitten crab *Eriocheir sinensis* H. Milne Edwards, 1853 (Crustacea: Brachyura) invasion of Pacific Northwest and Alaskan Estuaries." *Biological Invasions*. 10, no. 5: p.603-614. The estuaries of the Pacific Northwest are generally too small, too cold, and have too short flushing times to permit mitten crabs to thrive in them. Coos Bay and Yaquina Bay were studied in Oregon.

Hoffert-Hay, Denise, and Oregon Watershed Enhancement Board. 2008. Small Dam Removal in Oregon: A Guide for Project Managers. 70 p. Oregon Watershed Enhancement Board (Salem, Or.) “As a result of changing technology and values, many small dams in Oregon have out-lived their original purpose due to changes in Oregon’s economic and resource landscape. These relic dams that have out-lived their useful lives are good candidates for removal. The financial burden of maintaining an aging structure can far outweigh the benefits of keeping it” (p.1). Color illustrations. [https://digital.osl.state.or.us/islandora/object/osl%3A16500/datastream/OBJ/view](https://digital.osl.state.or.us/islandora/object/osl%3A16500/datastream/OBJ/view)

health is to count the aquatic insects in it. "This report summarizes macroinvertebrate
data collected in cooperation with the ODFW in the twenty-one independent coho
populations units from 2006-2007. These data were collected by ODFW crews and
analyzed by ODEQ staff. Biological integrity, temperature stress and fine sediment stress
were evaluated for each of the twenty-one population units." (p.4) There are good
data here. https://library.state.or.us/repository/2009/200902091133141/

Johnson, Marc A., and Michael A. Banks. 2008. "Genetic structure, migration, and patterns of
allelic richness among coho salmon (Oncorhynchus kisutch) populations of the Oregon
coast." Canadian Journal of Fisheries and Aquatic Sciences. 65, no. 7: p.1274-1285.
10.1139/F08-044 Studied genotypic data from eight microsatellite loci to characterize
Oregon coastal coho salmon. "The Coos, Umpqua, Smith and Coquille rivers appear to
form a southern group, whereas the Nehalem, Tillamook, Wilson, Necanicum, Nestucca,
Trask, and Salmon rivers form a loosely defined northern group." (p.1278) Major
sources of migrating (straying) coho are the Coos River in the south and the Nehalem
River in the north. "Consequently, populations of the central coast ... receive relatively
balanced immigrant contributions from the major source populations." (p.1280) This
gives central coast populations such as the Yaquina River higher levels of allelic richness.

Biological Sciences, San Jose State University. https://tinyurl.com/6f4ypbu

Case Study: Yaquina Bay Conservation Opportunity Area, Oregon. 39 p. Defenders of
Wildlife (Washington, D.C.) What is undeveloped land in estuaries worth? This study,
based on 2004 data, couldn’t quantify the value of every service performed by
undeveloped land and open spaces, but does list what can be quantified. “Recreational
fishing is the activity that generates the single largest value, followed by commercial
crabbing and oyster harvests. Carbon sequestration, the only ecosystem service
included in our analysis, generates substantial economic value as well, although the
current uncertainties surrounding access and credit prices on emerging carbon markets
make this estimate somewhat less reliable than those for the other uses we examine.”
(p.1-2) https://ir.library.oregonstate.edu/concern/technical_reports/8s45q9195

Leal, D. R. 2008. "A fishermen's agreement and co-op in Yaquina Bay roe herring." In Case
Studies in Fisheries Self-Governance, edited by R. Townsend, R. Shotton and H. Uchida,
In FAO Fisheries Technical Paper, no.504. p.415-423. Rome, Italy: Food and Agriculture
Organization of the United Nations. This paper describes an agreement between
fishermen participating in a limited-entry commercial fishery for herring roe in Yaquina
Bay. The co-operative formed by this agreement gives the fishermen greater flexibility,
allowing them to fish when roe is likely to likely to be more abundant, and the
agreement "has proven resilient to widely fluctuating resource and market conditions..."


Yamada, Sylvia Behrens, and Graham E. Gillespie. 2008. "Will the European green crab (Carcinus maenas) persist in the Pacific Northwest?" ICES Journal of Marine Science: Journal du Conseil. 65, no. 5: p.725-729. After the strong 1997/1998 El Nino, young green crabs appeared in several West Coast estuaries. Would European green crabs maintain viable populations in their new environments once ocean conditions became less favorable to their survival? This paper covers a study of European green crabs during their first ten years in the Pacific Northwest. Their populations declined as the 1997/1998 El Nino ebbed and less favorable conditions resumed. The downward trend was reversed in 2005 and 2006, however, and it now seems likely that "if winters remain mild and green crabs continue to recruit well, it is highly likely that they will spread to northern British Columbia and Alaska."

Boese, Bruce L., James E. Kaldy, Patrick J. Clinton, Peter M. Eldridge, and Christina L. Folger. 2009. "Recolonization of intertidal Zostera marina L. (eelgrass) following experimental shoot removal." Journal of Experimental Marine Biology and Ecology 374, no. 1: p.69-77. This paper studies the time it takes for eelgrass meadows to recover from disturbances, in particular the difference between continuous lower intertidal meadows as opposed to higher intertidal patches of eelgrass. Areas of eelgrass in Yaquina Bay were denuded and the time of recovery was studied. The lower continuous meadows recovered within 24 months, but recovery for the patchy higher intertidal eelgrass plots was much slower. Charts, aerial photographs. Summarizes current state of eelgrass beds in Yaquina Bay.
Brophy, Laura S. (Green Point Consulting). 2009. Effectiveness Monitoring at Tidal Wetland Restoration and Reference Sites in the Siuslaw River Estuary: a Tidal Swamp Focus. 125 p. Green Point Consulting (Corvallis, Or.) Two wetland restoration sites in the Siuslaw Estuary were monitored and compared with two reference sites in the Siuslaw Estuary, and with one reference site in the Yaquina Estuary. While documenting conditions, comparing restoration sites to reference sites, establishing a baseline to note future change, and providing data on tidal swamps, the project also developed data to guide future tidal restoration projects. The study found that both restoration sites are subject to "natural processes and controlling factors" "and tidal wetland restoration is well underway." https://ir.library.oregonstate.edu/concern/defaults/1v53k2397

Brown, Cheryl A., and Robert J. Ozretich. 2009. "Coupling between the coastal ocean and Yaquina Bay, Oregon: importance of oceanic inputs relative to other nitrogen sources." *Estuaries and Coasts*. 32, no. 2: 219-237. 10.1007/s12237-008-9128-6 Shows that the ocean (through seasonal upwelling) is the dominant source of nitrogen in Yaquina Bay during the dry (May-October) season, while the river is the dominant source of nitrogen for the rest of the year. Modeled nitrates, phosphates and chlorophyll a in the bay.


Groth, Scott, and Steve Rumrill. 2009. "History of Olympia oysters (Ostrea lurida Carpenter 1864) in Oregon estuaries, and a description of recovering populations in Coos Bay." *Journal of Shellfish Research*. 28, no. 1: p.51-58. 10.2983/035.028.0111 "Historical evidence indicates that Olympia oysters (Ostrea lurida) are indigenous to at least three of Oregon's estuaries. Populations of O. lurida occur in Yaquina Bay, Netarts Bay, and Coos Bay, although only the population in Yaquina Bay seems likely to have been continuous since prewestern settlement."

Johnson, Marc Aaron. 2009. "Patterns of Natural Selection and Demography in Coastal Oregon Coho Salmon (Oncorhynchus kisutch) Populations: Evidence from Neutral and Olfactory Receptor Gene-Linked Markers " Ph. D., Dept. of Fisheries and Wildlife, Oregon State University. "For Pacific salmon, the evolution of local adaptations depends upon the species' propensity to return, or “home”, to natal streams at time of reproduction. Pacific salmon use olfactory cues to guide homing behavior, yet little is known about the genetics of olfaction in salmon. In this study, I use putatively neutral microsatellite markers to estimate demographic parameters and describe the population genetic structure of Oregon Coastal coho salmon (Oncorhynchus kisutch). . . I then used genomic sequence data from nine species of salmon and trout to infer the evolutionary history for eight olfactory receptor genes. . . Finally, I used molecular markers linked to olfactory receptor genes to test for a signal of selection among coho salmon populations from different rivers." (from the Abstract) Found the Coos Bay salmon were the major source of straying in the south coast, while Nehalem River salmon did most of the straying on the north coast. Major professor was Michael A. Banks. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/gh93h230k](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/gh93h230k)

Lincoln County (Or.). Dept. of Planning and Development, University of Oregon. Community Service Center, and Oregon Partnership for Disaster Resilience. 2009. Lincoln County : Multi-Jurisdictional Natural Hazards Mitigation Plan 501 p. “Prepared for: Lincoln County, Depoe Bay, Lincoln City, Newport, Siletz, Toledo, Waldport and Yachats” Maps, charts, tables, appendices. “This natural hazard mitigation plan is intended to assist Lincoln County, Lincoln City, Depoe Bay, Newport, Toledo, Waldport and Yachats to reduce the risk from natural hazards by identifying resources, information, and strategies for risk reduction. It will also help guide and coordinate mitigation activities throughout the County.” (p.4) [https://scholarsbank.uoregon.edu/xmlui/handle/1794/9439](https://scholarsbank.uoregon.edu/xmlui/handle/1794/9439)

Lincoln Soil & Water Conservation District. 2009. Conserved Lands of Yaquina Bay [cartographic material]. Lincoln Soil & Water Conservation District, Newport, Or. Overlay on aerial photograph. “The Lincoln County Soil and Water Conservation District produced this map to illustrate existing conservation easements as of 2009. The largest ownerships on the map are 8000 acres owned by Pacific Forest Trust and being managed for older forest conditions with revenue generation from thinning and selective logging, the Van
Eck Trust Lands, and land owned by The Wetlands Conservancy. The Central Coast Land Conservancy owns two parcels and 2 conservation easements.” (Abstract)

National Health and Environmental Effects Research Laboratory (U.S.). Western Ecology Division. 2009. Classification of Regional Patterns of Environmental Drivers and Benthic Habitats in Pacific Northwest Estuaries. EPA 600/R-09/140, "This report describes a pilot effort at classifying PNW estuaries with regards to landscape attributes and their susceptibility to nutrient enrichment." Much data is presented. Although the report focuses on seven estuaries (Alsea, Coos Bay, Nestucca, Salmon River, Tillamook Bay, Umpqua and Yaquina), many other estuaries are mentioned, and basic statistical data is given for all PNW estuaries. https://tinyurl.com/3rd376k

Nedeau, Ethan Jay, Allan K. Smith, Jen Stone, and Sarina Jepsen. 2009. Freshwater Mussels of the Pacific Northwest. 2nd ed.51 p. Portland, Or. Xerxes Society for Invertebrate Conservation. 2nd edition. Freshwater mussels are among the most endangered animals on earth. Over 70% of all freshwater mussel species in North America are considered threatened or endangered, and 35 species are believed to be extinct. Freshwater mussels serve as important bioindicators, being sensitive to stream temperatures, dissolved oxygen, sedimentation and pollution. This valuable guide will aid in awareness of the value of these species, as well as in identification. https://xerces.org/sites/default/files/2018-05/09-002_02_XercesSoc_Freshwater-Mussels-of-the-PNW_web.pdf


Package, Christina. 2009. "Improving Community Profiles for Oregon Fisheries and Coastal Communities through Collaboration." M.A., Dept. of Anthropology, Applied Anthropology, Oregon State University. This thesis describes a collaborative ethnographic project in which "members of the fishing community" interviewed "their own peers." Data gathered is meant to supplement community profiles done by NOAA in 2007. The thesis discusses methodology and results, and includes profiles of Garibaldi, Newport and Port Orford. Good quotes from the fishing community. Major professor was Bryan Tilt. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vh53wx899


U.S. Federal Emergency Management Agency. 2009. Flood Insurance Study: Lincoln County,
Oregon and Incorporated Areas. 107 p. “Effective December 18, 2009.” Discusses areas susceptible to flooding, gives peak flows, includes selected floodplain profiles.

Vance, Mitch, Justin Ainsworth, and Oregon. Dept. of Fish and Wildlife. Marine Resources Program. 2009. Estuarine Crab Resource Monitoring and Assessment Project: Yaquina Bay and Alsea Bay, Oregon. 1 p. [internet poster]. Oregon Dept. of Fish and Wildlife (Newport, Or.) This is a poster-style presentation. Describes the beginning of a crab sampling program in 2008 and 2009. Sampling was done at 3 sites in Alsea Bay and 4 sites in Yaquina Bay. "Yaquina and Alsea bays are distinctly different estuarine ecosystems due to the differences in their size and drainage, their level of marine dominance, and anthropogenic alterations. Differences between the crab populations in these two estuaries may be related to the differences in the bays themselves. For example, the fact that we do not catch any red rock crab in Alsea Bay is probably due to the lack of rocky habitat that they prefer." (from the Discussion section) https://www.birdresearchnw.org/Final%20Report_Adkins%20et%20al_2010_DCCO_StatusAssessment.pdf

Adkins, Jessica Y., Daniel D. Roby, U.S. Geological Survey., Oregon. Cooperative Fish and Wildlife Research Unit, and Oregon State University. 2010. A Status Assessment of the Double-Crested Cormorant (Phalacrocorax auritus) in Western North America: 1998-2009. 69 p. (Corvallis, Or.) "Based on the best available data for the three Pacific coastal states and British Columbia during the periods ca. 1992 ... and ca. 2009, our best estimate of the average annual population growth rate (λ) for this population is 1.03, indicating that the population has grown at an average annual rate of about 3% per year over the last two decades. This overall trend apparently reflects continued recovery of the Western Population due to various statutory and ecological factors during the latter half of the 20th Century, including inclusion of the species in the Migratory Bird Treaty Act, the banning of DDT, and the shift by the species toward increased use of artificial nesting habitats. Most of this population increase, however, can be attributed to increases in the numbers of breeding pairs in the Columbia River estuary and at a few inland sites, which currently account for approximately 41% and 29% of breeding pairs in the Western Population, respectively. Concurrently, numbers of breeding pairs in coastal British Columbia, northern Washington, and southern California have declined since 1987-1992." (from the Executive Summary) https://www.birdresearchnw.org/Final%20Report_Adkins%20et%20al_2010_DCCO_StatusAssessment.pdf

Boedeker, Christian, and Gayle I. Hansen. 2010. "Nuclear rDNA sequences of Wittrockiella amphibia (Collins) comb. nov. (Cladophorales, Chlorophyta) and morphological characterization of the mat-like growth form." Botanica Marina. 53, no. 4: p.351-356. 10.1515/BOT.2010.040 "Cladophora amphibia was found in Yaquina Bay (Oregon, USA) for the first time since the type collection from California in 1903. Vegetative plants were buried in the top centimeter of intertidal mud, partially covered by mats of
Rhizoclonium and Chaetomorpha."

https://ir.library.oregonstate.edu/concern/defaults/n870zx01m

Buncic, Michael. 2010. "Interannual Differences in the Estuarine Ghost Shrimp, Neotrypaea californiensis." M.S., Dept. of Biological Sciences, San Jose State University. The author studied genetics of ghost shrimp collected off the Oregon and Washington coasts. Ghost shrimp at Yaquina Bay are included "to compare differences with the ocean-bound larvae and possibly infer a relationship to any resulting recruitment." (from the Abstract) The study did find that Yaquina Bay ghost shrimp formed "a genetically distinct group" from the oceanic population. (p.32) 
https://scholarworks.sjsu.edu/etd_theses/3749/

Cordell, Jeffery R., Lucinda M. Tear, and Stephen M. Bollens. 2010. "Modelling physico-chemical factors affecting occurrences of a non-indigenous planktonic copepod in northeast Pacific estuaries." Biological Invasions. 12, no. 5: p.1427-1445. 10.1007/s10530-009-9558-5 The invasive copepod Pseudodiaptomus inopinus has become established from the Coquille River in Oregon to the Chehalis River in Washington. Although the species was introduced before 1992, it had not spread beyond its 1992 distribution by 2004, indicating that it might have reached "a distributional limit." By characterizing estuaries with and without this copepod, it might be possible to identify estuaries vulnerable to future invasions. Salinity and stratification of water column temperature seem to be good predictors. The authors also identified several estuaries that might be vulnerable to this particular invader.

Dauble, Alison D. 2010. "Young-of-the-Year Rockfish (Sebastes spp.) Settlement Dynamics in Oregon Estuaries." M.S., Dept. of Fisheries and Wildlife, Oregon State University. Established that larval and young black rockfish (Sebastes melanops) use estuaries as nursery grounds in "multiple estuaries on the Oregon coast from spring through late fall, and may be present in highly developed estuaries through their first winter before moving to deeper habitats." More developed estuaries seem to have structures that provide protection for the young fish. Studied rockfish in the Nehalem, Siletz, Yaquina, Alsea, Coos and Coquille estuaries. The major professor was Scott A. Heppell. 
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/qf85nd73d

Ferguson, Jayde A. 2010. "Impacts of Multispecies Parasitism on Coho Salmon (Oncorhynchus
Ferraro, Steven P., and Faith A. Cole. 2010. "Ecological periodic tables for nekton usage of four US Pacific Northwest estuarine habitats." Canadian Journal of Fisheries and Aquatic Sciences. 67, no. 12: p.1957-1967. 10.1139/F10-114 The authors take the interesting approach of using the periodic table of elements as a model for summarizing species richness and biomass in an estuary, as related to habitat. Eelgrass and 2 kinds of burrowing shrimp holes were used as habitat types. Yaquina Bay was the study site and is used as an example of this approach.

Gallagher, M. Brett, and Selina S. Heppell. 2010. "Essential Habitat Identification for Age-0 Rockfish along the Central Oregon Coast." Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science. 2, p.60-72. 10.1577/C09-032.1 The authors seek to identify essential habitat for black rockfish and blue rockfish. Nearshore reefs were essential for blue rockfish, while estuaries provided essential fish habitat for black rockfish. "Settlement patterns suggest that black rockfish had a strong preference for anthropogenic habitat (docks, pilings, jetties) within the Yaquina Bay estuary... Small sample sizes of juvenile yellowtail rockfish S. flavidus and widow rockfish S. entomelas suggest that estuaries are also important for these species." [from the abstract]


Hitchman, James H. 2010. The Port of Toledo, Oregon, 1910-2010.75 p. [Toledo, Or.] Port of Toledo. "Because of gaps in the evidence, this is not intended as a detailed chronology... It is an attempt to form a plausible narrative of salient trends and events through 100 years." (Preface) Map, aerial photograph, photographs. A valuable resource for local history.


no. 1: p. 5-15. On the central Oregon coast, terrestrial fossils are rarely found. This article describes the dominant flora species that seems to have flourished about 28 million years ago, on land on a deltaic plain of the ancestral Yaquina River. The fossils of this extinct species were found between the upper and lower marine tongues of the Yaquina Formation. The article discusses the taxonomy and worldwide distribution of the Platanus genus and mentions associated flora. The fossils recovered on Yaquina Bay are now housed in the U.S. National Museum.


Miller, Rebecca R. 2010. "Is the Past Present? Historical Splash-Dam Mapping and Stream Disturbance Detection in the Oregon Coastal Province." M.S., Dept. of Fisheries and Wildlife, Oregon State University. "Severe scouring from splash damming was one of the earliest reported forms of widespread anthropogenic disturbance in streams of the Pacific Northwest, USA. Splash damming was a common method of log transport in western Oregon from the 1880s through the 1950s. Before being released in large freshets to downstream lumber mills, water and logs were stored in reservoirs behind splash dams." (from abstract) The author located known splash dams in the Oregon Coast region and comments on their lasting ecosystem effects, noting that an understanding of the history of human use of a stream is necessary to accurately evaluate present conditions. Detailed work was done on Camp Creek in the Umpqua Basin, the East Fork of the Millicoma River, and the East Fork of the Coquille River. Co-major professors were Joseph L. Ebersole and Kelly M. Burnett. [link to abstract]

O'Higgins, Timothy G., Steven P. Ferraro, Darrin D. Dantin, Steve J. Jordan, and Marnita M. Chintala. 2010. "Habitat scale mapping of fisheries ecosystem service values in estuaries." Ecology and Society. 15, no. 4: article 7. Attempts to quantify economic values of recreational and commercial fisheries in three different estuaries and thereby assign economic values to habitats. Economic values for the subtidal, intertidal and eelgrass areas of Yaquina Bay are given. [access link to online file]

Oregon. Department of Land Conservation and Development. 2010. "Goal 16: estuarine resources." In Oregon's Statewide Planning Goals and Guidelines. Oregon Department of Land Conservation and Development. Gives the text of Oregon Administrative Rule OAR 660-015-0010(1) (Goal 16). Goals 16, 17, and 18 are three of Oregon's 19 statewide planning goals, which constitute the framework for a statewide program for land-use planning. These goals address the coastal resources of Oregon and are included in the Tillamook County Comprehensive Plan.

https://library.state.or.us/repository/2010/201007021428415/

---. 2010. "Goal 17: coastal shorelines." In Oregon's Statewide Planning Goals and Guidelines. Oregon Department of Land Conservation and Development. Gives the text of Oregon Administrative Rule OAR 660-015-0010(2) (Goal 17). Goals 16, 17, and 18 are three of Oregon's 19 statewide planning goals, which constitute the framework for a statewide program for land-use planning. These goals address the coastal resources of Oregon and are included in the Tillamook County Comprehensive Plan.

https://library.state.or.us/repository/2010/201007021428415/

---. 2010. "Goal 18: beaches and dunes." In Oregon's Statewide Planning Goals and Guidelines. Oregon Department of Land Conservation and Development. Gives the text of Oregon Administrative Rule OAR 660-015-0010(3) (Goal 18). Goals 16, 17, and 18 are three of Oregon's 19 statewide planning goals, which constitute the framework for a statewide program for land-use planning. These goals address the coastal resources of Oregon and are included in the Tillamook County Comprehensive Plan.

https://library.state.or.us/repository/2010/201007021428415/

Oregon. Dept. of Environmental Quality. 2010. "Oregon's 2010 Integrated Report." Website includes: an assessment database with information on water quality for waters in Oregon (includes water quality limited waters and 303(d) list waters), the assessment methodology used to evaluate data, and a schedule to develop TMDLs for waters identified in the Section 303(d) list.

https://www.deq.state.or.us/wq/assessment/rpt2010/search.asp


Package, Christina, and Flaxen D. L. Conway. 2010. Long Form Fishing Community Profile: Newport, Oregon. ORESU-S no.10-002, 16 p. Oregon Sea Grant (Corvallis, Or.) This is a community profile of the fishing industry in Newport, Oregon. "The project took an innovative approach and involved members of the fishing community interviewing their own peers, providing a depth of information not frequently available to scientists. The data gathered was intended to supplement NOAA Fisheries “short form” community profiles..." Good quotes from members of the fishing industry.
Parker, D. F., F. N. Hodges, M. E. Mitchener, M. A. Barnes, and M. Ren. 2010. "Geochemistry and petrology of late Eocene Cascade Head and Yachats Basalt and alkalic intrusions of the central Oregon Coast Range, U.S.A." *Journal of Volcanology and Geothermal Research*. 198, no. 3-4: p.311-324. Did the volcanic rocks in the Oregon Coast Range originate from “magmetism associated with extension of the coast ranges” or did they come from “hot spots associated with mantle plumes,” possibly even related to the Yellowstone hot spot? (p.311) The authors of this paper use geochemical and isotopic data to inform their discussion of the probable origins of these deposits.

Port of Newport, and Pacific Habitat Services. 2010. Joint Permit Application [NOAA Marine Operations Center - Pacific Relocation]. 102 p. This is the application filed by the Port of Newport with the Army Corps of Engineers for permission to alter Yaquina Bay in order to allow the NOAA Marine Operations Center for the Pacific fleet to relocate from the Seattle area to Newport. "The construction of the MOC-P includes the demolition of existing structures (in-water as well as upland structures), pile installation, wharf and access pier construction, as well as the construction of the upland facilities, including an administrative building and warehouse. The use of steel piles will require the installation of a cathodic protection system. Dredging and excavation to provide appropriate depths for NOAA ships to berth, as well as the placement of riprap for slope stabilization is also necessary." (p.4) Includes timeline, maps, tables, architectural drawings and construction schematics.

Righi, Dylan, Diego Arrcas, and Pacific Marine Environmental Laboratory. 2010. A tsunami forecast model for Newport, Oregon. *PMEL Tsunami Forecast Series*. 5, 80 p. This document reports on the development of a tsunami forecast model for Yaquina Bay. The authors used 11 past Pacific basin earthquakes, from the 1946 Unimak to the 2007 Chile events, to generate a model that would explain the wave heights experienced at Yaquina Bay and to predict future wave heights. Although this publication does not make any predictions about "The Big One," it does report on past wave heights. Extensive color illustrations show how the waves affected the Bay. "NOAA OAR Special Report." This publication is also numbered as Contribution No. 3344 from NOAA/Pacific Marine Environmental Laboratory and Contribution No. 1771 from Joint Institute for the Study of the Atmosphere and Ocean (JISAO).

Sigleo, Anne C., Walter E. Frick, and Lourdes Prieto. 2010. "Red alder (Alnus rubra) distribution influences nitrate discharge to coastal estuaries: comparison of two Oregon watersheds." *Northwest Science*. 84, no. 4: p.336-350. 10.3955/046.084.0403 The Yaquina River typically carries almost twice as high a rate of dissolved nitrogen into its bay as does the Alsea River, although the total volumes are similar, because the Alsea River Basin is about twice as large as the Yaquina Basin. The difference in nitrogen load seems to be derived from the heavy alder stands in the upper Yaquina basin. Gives a model for rapid estimate of nitrogen export based on hardwood cover and water discharge data.

van Staveren, John, Amy Hawkins, Craig Tumer, Dale Groff, Gregg Lomnicky, and Pacific Habitat Services Inc. 2010. Biological Assessment and Essential Fish Habitat Assessment for the Construction of NOAA's Marine Operations Center-Pacific in Newport, Oregon (Township 11 South, Range 11 West, and Section 17 6th field HUC 171002040303). 643 p. Pacific Habitat Services, Inc. (Wilsonville, Or.) "This is a Biological Assessment (BA) addressing the potential effects on aquatic species currently listed or proposed for listing under the Federal Endangered Species Act (ESA) from the construction of the National Oceanic and Atmospheric Administration's (NOAA) Marine Operations Center – Pacific (MOC-P) in Newport, Oregon." (from the Introduction) Includes maps, charts, aerial photographs, colored illustrations, architectural drawings and construction schematics. https://ir.library.oregonstate.edu/concern/technical_reports/t722h939f
Wilkinson, Charles. 2010. The People Are Dancing Again: the History of the Siletz Tribe of Western Oregon. 582 p. Seattle, Wa.: University of Washington Pr. The story of the Confederated Tribes of Siletz Indians moves from tragedy to triumph, from Oregon’s own Trail of Tears to the diminution and dissolution of the Coast Indian Reservation, to the eventual reinstatement of the Siletz Tribe. This work tells that story. It contains an excellent account of the economic and political forces that whittled away the Oregon Coast Indian Reservation and the seizing of its land.

Woods, Pamela J. 2010. "Geographic variation in lower pharyngeal jaw morphology in the Shiner Perch Cymatogaster aggregata (Embiotocidae, Teleostei)." Environmental Biology of Fishes. 88, no. 2: p.153-168. 10.1007/s10641-010-9626-9 Shows that variations in jaw and body shape have more to do with habitat and prey than geographic location in the subject species. Studied shiner perch from Friday Harbor, Washington to Humboldt Bay, California. The biggest contrast in jaw morphology seemed to be between Coos Bay, Oregon and Friday Harbor specimens, and these differences are frequently referenced in the article. "Recognizing ecological patterns via morphology is an important first step in understanding how and when ecological mechanisms influence the functional role of an organism within its environment."

Yamada, Sylvia Behrens, and P. Michael Kosro. 2010. "Linking ocean conditions to year class strength of the invasive European green crab, Carcinus maenas." Biological Invasions. 12, no. 6: p.1791-1804. 10.1007/s10530-009-9589-y. The authors correlate recruitment strength in the introduced European green crab in the Pacific Northwest with certain prevailing ocean conditions. "Once a non-native species arrives and survives in an area, its long-term persistence depends on its recruitment success. If conditions are not favorable for recruitment it will ultimately disappear. . . . Right now, green crabs are still too rare to exert a measurable effect on the native benthic community and on shellfish culture in Oregon and Washington. However, if their numbers were to increase, we would be able to predict the arrival of strong year classes from ocean conditions and alert managers and shellfish growers of possible increases in predation pressure from this invader. " [from the abstract]


challenges for Oregon coast archeology. The surviving record is strongly biased to
within the last ca. 1,500 years, and it is certain that scores of ancient occupation sites
have disappeared due to erosion and rising sea levels. Human presence along the
Oregon coast is confirmed by at least 8,000 years ago, but evidence from Pacific coasts
to the north and south (and possible evidence from the Oregon coast itself) assures us
that people were present thousands of years earlier." (p.282) A valuable summary of
current knowledge of ancient peoples. Maps, line drawings, photographs of artifacts.

Bohaby, Spencer, and Oregon. Dept. of Environmental Quality. 2011. Oregon Bacteria Rule:
Bacteria Criteria for Marine and Estuarine Waters. 19 p. Oregon Department of
Environmental Quality ([Portland, Or.]) This document describes state water quality
standards for bacteria in marine and estuarine waters and compares and reconciles
Oregon's standards with U.S. EPA standards. Finally, it describes how the reconciled
standards may be applied to various permit scenarios. It includes maps of major
estuaries showing the dividing line where the freshwater estuary yields to marine

in the Yaquina Estuary (Oregon, USA): Importance of anthropogenic activities and
oceanic conditions." Estuarine, Coastal and Shelf Science. 92, no. 3: p.446-455.
10.1016/j.ecss.2011.01.018 Dissolved oxygen (DO) levels in estuaries can drop due to
human activities. They can also fall due to upwelling events offshore."This paper
assesses whether there have been long-term changes in DO levels in the Yaquina
Estuary, Oregon (USA) and the effect of ocean conditions on DO levels within that
estuary. In addition, it compares recent DO levels in the Yaquina Estuary to historical
data from other estuaries in the region and the inner Oregon shelf to evaluate whether
the hypoxia recently observed on the inner shelf has previously occurred." (from the
Introduction)

change on water quality in the Yaquina Estuary, Oregon [PowerPoint presentation]."
The Oregon Water Conference 2011: Evaluating and Managing Water Resources in a
Climate of Uncertainty. PowerPoint presentation discussing the effects climate change
will have on the Yaquina Estuary. Maps, aerial photographs, charts.
https://ir.library.oregonstate.edu/concern/conference_proceedings_or_journals/d217g q309

Dumbauld, Brett R., John W. Chapman, Mark E. Torchin, and Armand M. Kuris. 2011. "Is the
collapse of mud shrimp (Upogebia pugettensis) populations along the Pacific Coast of
North America caused by outbreaks of a previously unknown bopyrid isopod parasite
(Orthione griffenis)?" Estuaries and Coasts. 34, no. 2: 336-350. 10.1007/s12237-010-
9316-z “A dramatic increase in prevalence of the recently discovered bopyrid isopod
parasite, Orthione griffenis, likely introduced in the 1980s from Asia to the Pacific coast
of North America, coincided with the 2002 collapse of a population of its burrowing mud shrimp host, Upogebia pugettensis, in Willapa Bay, Washington that had been stable since monitoring began in 1988. An examination of whether O. griffenis infections were sufficient to cause this decline and other recently noted U. pugettensis population collapses in Pacific Coast estuaries was conducted.” (from the Abstract)

Eardley, Christopher S., and Flaxen D. L. Conway. 2011. Oregon’s Non-Consumptive Recreational Ocean User Community: Understanding an Ocean Stakeholder. ORESU-S no.11-001, 38 p. Oregon Sea Grant (Corvallis, Or.) This is a study of “the non-consumptive recreational ocean user NROU) community. The NROU group includes surfers, kayakers, boaters, divers, and many others..." Who are marine recreationists who are not hunters or fishers? Where do they go? What factors motivate their recreational choices? How do they contribute to local economies? How do they relate to marine renewable energy such as wind or tidal power generation? https://seagrant.oregonstate.edu/sites/seagrant.oregonstate.edu/files/sgpubs/onlinepubs/s11001.pdf


Gleason, Mary G., Sarah Newkirk, Matthew S. Merrifield, Jeanette Howard, Robin Cox, Megan Webb, Jennifer Koepcke, Brian Stranko, Bethany Taylor, Michael W. Beck, Roger Fuller, Paul Dye, Dick Vander Schaaf, and Jena Carter. 2011. A Conservation Assessment of West Coast (USA) Estuaries. 65 p. The Nature Conservancy (Arlington, Va.) “Funded by: The David and Lucile Packard Foundation” “This assessment outlines an enhanced planning approach for West Coast estuaries that incorporates an evaluation of the regional context for estuarine conservation and recommends an approach to site-scale planning with more focus on ecological processes and functions.” (p.1) “A hierarchical classification system was developed for West Coast estuaries that identified three regions (based on climate, latitude, and oceanography) and four estuary types distinguished by the relative degree of influence of the hydrodynamic forcing mechanisms of waves, tides, and rivers.” (p.2) https://ir.library.oregonstate.edu/concern/defaults/1r66j546d

Hatfield Marine Science Center, and Oregon State University. 2011. Joint Permit Application to Stabilize Portion of Yaquina Bay Shoreline at Hatfield Marine Science Center (area of rosion along eastern edge of HMSC property). Hatfield Marine Science Center (Newport, Or.) These four items document the 2010-2011 permitting process to stabilize the eastern edge of the Hatfield Marine Science Center property. During late 2006, erosion forced the closure of the HMSC public estuary trail. In March 2007, an erosion control project using a gravel beach or "dynamic revetment" resulted in the stabilization of approximately 200 linear feet of shoreline. This remains stable since that
time. Erosion continued at a slower rate south the original project. In the winter of 2009-2010, weather conditions resulted in rapid erosion of up to 13 feet along approximately 500 feet of the shoreline. This erosion moved the shoreline to the edge of the HMSC nature trail in one location and with 25 feet of the 800,00 gallon seawater storage facility. To address the erosion, the HMSC applied for a permit to extend the 'dynamic revetment'. The permit was granted with limitations. The permit application, public comments and final approval are included. Includes documents from the U.S. Army Corps of Engineers and comments from the Oregon Dept. of Fish and Wildlife. https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/6682x4405

Hessing-Lewis, Margot. 2011. "Eelgrass-Macroalgae Interactions: Context-Dependency in Upwelling-Influenced Estuaries." Ph. D., Dept. of Zoology, Oregon State University. "Throughout these studies I demonstrated that the mechanisms determining context-dependency in upwelling-influenced estuaries are informed by physical and biogeochemical conditions, coupled with high ambient marine-derived nutrient concentrations. These findings are important to coastal management because they suggest that the strength, direction and mechanisms of interactions are shaped by local abiotic conditions and long-term nutrient regimes, rather than high nutrient concentrations per se." (p.iii) Major professors were Sally Hacker and Bruce Menge. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/mp48sg67r

Komar, Paul D., Jonathan Allan, and Peter Ruggiero. 2011. "Sea level variations along the U.S. Pacific Northwest Coast: tectonic and climate controls." Journal of Coastal Research. 27, no. 5: p.808-823. 10.2112/JCOASTRES-D-10-000116.1 "Analyses of the progressive multidecadal trends and climate-controlled annual variations in mean sea levels are presented for nine tide-gauge stations along the coast of the U.S. Pacific Northwest: Washington, Oregon, and Northern California. The trends in relative sea levels are strongly affected by the tectonics of this region..." The two Oregon sites are Yaquina and Coos bays. Tectonic processes such as subsidence and uplift can affect trends in relative sea levels. In the Yaquina Bay area, the land is slowly sinking, and the area has seen more sea level rise than an area such as Neah Bay, where the land is rising. Significant climate events such as El Nino are noted. This work has shown a trend for progressively higher wave heights in large storms, and the size of the largest waves is increasing at the highest rate, which has significant implications for coastal erosion.

abundance. The addition of herons/egrets, rails (i.e. coots), and pelicans/cormorants comprised just over 98% of all birds observed. The remaining birds consisted of songbirds, loons/grebes, raptors and alcids." (p.3) 

https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=503895&Lab=HEERL


Stick, David A. 2011. "Identification of Optimal Broodstock for Pacific Northwest Oysters." Ph. D., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. With the goal of identifying optimal broodstock, the author mapped microsatellites on genes of Olympia oysters and identified the genetic structure of surviving remnant populations of the native oyster. He used microsatellite and AFLP markers to develop an integrated linkage map for the Pacific oyster, and attempted to identify and map genetic sites that influence growth in the Pacific oyster. Co-major professors were Mark D. Camara and Christopher J. Langdon. 

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/g732dc75z


Barney, Bryan Thomas. 2012. "Microsatellite and Mitochondrial DNA Analysis of Dungeness Crab (Cancer magister) from California to Northern British Columbia." M.S., Dept. of Biological Sciences, San Jose State University. In the summer of 2009, the author did genetic sampling on 20-25 crabs at each of 14 locations along the U.S. West Coast, from Iceberg Bay, British Columbia to San Luis Obispo, California. Both mitochondrial DNA and microsatellite nuclear markers were sampled. “The objective of this study was to investigate the genetic connectivity of Dungeness crab between central California and northern British Columbia using both mitochondrial DNA and nuclear markers (microsatellites). We sampled adult Dungeness crab across ~2500 km of the Pacific coastline to test for signals of population substructure and limitations to gene flow across the ecological range.” (p.3) https://scholarworks.sjsu.edu/etd_theses/4222/

Biology. 81, no. 6: p.1891-1914. 10.1111/j.1095-8649.2012.03417.x Describes the phylogenetic relationships between West Coast lamprey populations. The Siuslaw River brook lamprey population was among the most genetically distinct.

Chapman, John W., Ralph Arthur Breitenstein, and Marine Bioinvasions Lab. 2012. "Estuary Inhabitants Species List." The Marine Bioinvasions Lab is located at Oregon State University's Hatfield Marine Science Center. A major focus is identification of native, introduced and invasive species found in Oregon's estuaries. This spreadsheet is the most up to date list of the marine algae and invertebrates in the Yaquina and Coos Bays. This list is not complete and will never be done. It is a combination of prior inventories of estuary species and observations by active taxonomists. The date at the top of the spreadsheet is the most recent version. References are included. A valuable resource in tracking introduced species in Yaquina and Coos Bay. Includes charts.
https://ir.library.oregonstate.edu/concern/datasets/h415pf72z

Chapman, John W., Brett R. Dumbauld, Gyo Itani, and John C. Markham. 2012. "An introduced Asian parasite threatens northeastern Pacific estuarine ecosystems." Biological Invasions. 14, p.1221-1236. 10.1007/s10530-011-0151-3 The non-indigenous isopod Orthione griffenis effectively castrates the mud shrimp Upogebia. The spread of the invasive parasite has dramatically depleted mud shrimp populations along the northwestern coast of North America. "All previously known abundant Upogebia populations were either absent or at greatly reduced abundances in all California, Oregon and Washington estuaries examined." (p.1225) "[U]rgent, immediate responses, including captive breeding programs for the most impacted Upogebia populations and species are warranted." (p.1234)
https://ir.library.oregonstate.edu/concern/articles/nc580n174

Constable, Ronald J., Jr., Erik Suring, Sharon Tippery, and Oregon. Department of Fish and Wildlife. Western Oregon Rearing Project. 2012. Juvenile Salmonid Monitoring in Coastal Oregon and Lower Columbia Streams, 2011. Monitoring report / Oregon Plan for Salmon and Watersheds. 25 p. (Salem, Or.) These reports give broad trends only. Since we don't know what streams are monitored and cannot contrast the water quality trends of those streams with the population data, these reports are of limited utility.
https://digital.osl.state.or.us/islandora/object/osl%3A43834

Dauble, Alison D., Scott A. Heppell, and Mattias L. Johansson. 2012. "Settlement patterns of young-of-the-year rockfish among six Oregon estuaries experiencing different levels of human development." Marine Ecology Progress Series. 448,p.143-154. 10.3354/meps09504 "The goal of this study was to investigate natural and anthropogenic influences on the estuarine settlement process of rockfishes, with a focus on black rockfish S. melanops. Trap surveys conducted in 6 Oregon estuaries indicate that young-og-the-year (YOY; age 0) rockfish utilize ..multiple Oregon estuaries from spring through late fall... Catches were higher in the more developed estuaries,
suggesting that the continued development of Oregon estuaries may not adversely affect the rockfish settlement process." (from the Abstract) This study is the first documentation of juvenile rockfish in the Nehalem, Siletz, Alsea and Coquille estuaries. https://www.int-res.com/articles/meps2011/448/m448p143.pdf

Davidson, Timothy M. 2012. "Boring crustaceans damage polystyrene floats under docks polluting marine waters with microplastic." Marine Pollution Bulletin. 64, no. 9: p.1821-1828. http://dx.doi.org/10.1016/j.marpolbul.2012.06.005 A nonindigenous boring isopod, S. quoianum, bores into Styrofoam floats commonly used in docks, especially at aquaculture facilities. The process of boring out burrows in the plastic caused microplastic pollution, which can harm species that eat it, and release persistent pollutants. Floats at an oyster farm in Yaquina Bay and a similar facility at Tainan, Taiwan were severely damaged by the borers. A survey of the shoreline around Yaquina Bay was made looking for microparticles from damaged floats. Includes photographs of damaged floats from Yaquina Bay. The type of plastic influenced the boring: while the softer Styrofoam floats were ideal habitat, the isopods avoided harder XPS foam in the laboratory. Coos Bay was also surveyed.

Defenders of Wildlife. 2012. Floodplain Habitat Metric: User’s Guide. 38 p. Defenders of Wildlife. The metric is encompassed in two documents, this Floodplain Habitat Metric User’s Guide and a Floodplain Habitat Calculator (in Excel). The evaluation procedure is meant for or inland wetlands, not for tidal wetlands. “This assessment can be used to evaluate areas that are flooded seasonally by overbank surface water from a non-tidal water body (river, stream, lake, etc.) at least once a century.” (p.10) The metric may be found at https://ir.library.oregonstate.edu/concern/defaults/rn3015245 (Excel file) or a calculator version at https://ir.library.oregonstate.edu/concern/defaults/8336h5830. https://ir.library.oregonstate.edu/concern/defaults/kd17cx49d

Gille, Daphne Anne. 2012. "Genetic Population Structure and Cryptic Speciation of Ghost Shrimp (Neotrypaea californiensis) in North American West Coast Estuaries." M.S., Dept. of Biological Sciences, San Jose State University. Surveyed the West Coast from Puget Sound to San Diego to study the genetics of the ghost shrimp population and thereby infer the potential for larval dispersal in ghost shrimp. “Multiple haplotypes were shared among 346 adult ghost shrimp specimens collected from estuaries in Washington, Oregon, and California indicated that larvae of this species are transported across great distances during the pelagic dispersal phase of development.” The author also found the population structure was influenced by “the presence of three putative cryptic species that were deeply divergent from N. californiensis.” (from the Abstract) Paper 4232. https://scholarworks.sjsu.edu/etd_theses/4232/

Sustainability, and for All Who Are Interested in the Welfare of Wildlife That Inhabit Our Coast and Its Estuaries. 79 p. Oregon State University (Corvallis, Or.) "We begin this report with a chapter reviewing archaeological, ethnographic, and historic materials to provide a picture of Oregon’s coastal resources before 1750. Subsequent chapters consider salmon, sea otters, and sub-tidal sea urchins." (p.7) https://ir.library.oregonstate.edu/concern/defaults/6d56zx411

Hankin, Shanon L., Christine L. Weilhoefer, James E. Kaldy, and Theodore H. DeWitt. 2012. "Sediment diatom species and community response to nitrogen addition in Oregon (USA) estuarine tidal wetlands." Wetlands. 32, no. 6: p.1023-1031. https://doi.org/10.1007/s13157-012-0332-6 Tested responses of sediment diatom communities in tidal wetlands of Yaquina Bay to nitrogen addition in the summers of 2009 and 2010. Identified 88 diatom taxa in the area. The four individual plots showed high species richness, of about 32-42 different species per plot. A strong response to nitrogen addition was found. Suggests that “the sediment diatom community is a strong candidate for use as an aquatic bioassessment tool in tidal wetlands...” (p.1029)

Johnson, Orlay W., Anna Elz, Jeffrey J. Hard, and David Stewart. 2012. "Why did the chum cross the road? Genetics and life history of chum salmon in the southern portion of their range." International Workshop on Explanations for the High Abundance of Pink and Chum Salmon and Future Trends, Nanaimo, B.C., v. no.8. p.135-137. 2011, Oct.30-31. Technical report (North Pacific Anadromous Fish Commission) This paper reports on a study of the genetics of chum salmon populations south of the Columbia River. "Preliminary analysis indicates there are few unique or private alleles in the coastal populations, and this suggests there are not "unique populations" from further south migrating into northern regions, but that these coastal fish are natural, indigenous populations." (p.136) https://npafc.org/wp-content/uploads/TechReport8.pdf

Jordan, Stephen J., Timothy O'Higgins, and John A. Dittmar. 2012. "Ecosystem services of coastal habitats and fisheries: multiscale ecological and economic models in support of ecosystem-based management." Marine and Coastal Fisheries: Dynamics, Management and Ecosystem Science. 4, p.573-586. 10.1080/19425120.2012.703162 This work addresses problems of scale in ecosystem-based management -- balancing small critical habitats within larger ecosystems and economic systems. The economic valuation of the Yaquina Bay recreational salmon fishery is one of the examples given. The fishery was valued using two methods -- travel cost of anglers and willingness to pay to preserve salmon. The total value of the fishery was estimated at $540,817. https://www.tandfonline.com/doi/pdf/10.1080/19425120.2012.703162

There’s an excellent discussion of historic problems, a good look at current issues, and a chilling discussion of the implications of rising sea levels and climate change. Charts, b+w and color photographs. Anyone considering purchasing property at the coast should read this first.

Lee II, Henry, and Deborah A. Reusser. 2012. *Atlas of Nonindigenous Marine and Estuarine Species in the North Pacific*. EPA/600/R/12/631, 1,943 p. National Health and Environmental Effects Research Laboratory. Office of Research and Development, “The Atlas of Nonindigenous Marine and Estuarine Species in the North Pacific ... provides maps of native and invaded ecoregions for all the reported marine/estuarine nonindigenous species (NIS) in the North Pacific, exclusive of marsh plants. Additionally, environmental and habitat information for each species is summarized in two-page species profiles, along with an analysis of the extent of invasion at the ecoregion and regional scales across the six North Pacific Marine Science Organization (PICES) member countries (United States, Canada, Russia, Japan, Korea, and China). The information in the NIS Atlas is from the PICES Nonindigenous Species Information System.” (from publisher’s website) “With Contributions by Katie Marko, Emily Saarinen, Tad Larsen, Caroline Emch-Wei, Meredith Payne, and PICES WG21 members” (from title page) https://tinyurl.com/ywb357p2

Miller, Aileen Kilpatrick. 2012. "Site Selection by Migratory Shorebirds in Oregon Estuaries Over Broad and Fine Spatial Scales." M.S., Environmental Science and Management, Portland State University. “My goal in this research was to identify environmental features or habitat characteristics that predict shorebird abundance in Oregon estuaries.“ The author found differences in preferred habitat between spring and fall migrations. In the spring, shorebirds have a relatively narrow window in which to make it to their Arctic breeding grounds. In this intensely social time, the birds preferred larger estuaries. On the other hand, in the fall, shorebird preference was more strongly influenced by habitats. Marsh habitats and grasslands for roosting sites were good fall density predictors. Estuarine channels were preferred feeding sites. In Oregon, the Coquille River estuary, Coos Bay and Siletz Bay were the preferred fall sites. This most interesting and enlightening work can help wildlife managers better understand the relative importance of various habitats.
https://pdxscholar.library.pdx.edu/open_access_etds/443/

Oregon. Dept. of Environmental Quality. 2012. "Oregon’s 2012 Integrated Report." Website includes: an assessment database with information on water quality for waters in Oregon (includes water quality limited waters and 303(d) list waters), the assessment methodology used to evaluate data, and a schedule to develop TMDLs for waters identified in the Section 303(d) list.
https://www.deq.state.or.us/wq/assessment/rpt2012/search.asp

Ramsay, Jessica. 2012. "Ecosystem Services Provided by Olympia Oyster (*Ostrea lurida*) Habitat
and Pacific Oyster (*Crassostrea gigas*) Habitat; Dungeness Crab (*Metacarcinus magister*) Production in Willapa Bay, WA "M.S., Dept. of Environmental Sciences, Oregon State University. "A final report submitted to Oregon State University in partial fulfillment of the requirements for the degree of Professional Science Master’s." "Oyster reefs provide an array of ecosystem services. Specifically, they provide structurally complex habitat for fish and invertebrate species such as the commercially important Dungeness crab, *Metacarcinus magister*. This ecosystem service, once provided by the native oyster *Ostrea lurida*, is now provided by the commercially cultured oyster *Crassostrea gigas* in many estuaries on the U.S west coast. An economic investigation was conducted examining the ecosystem services provided by oyster habitat, common economic valuation theories and techniques, and tradeoffs between oyster restoration and aquaculture expansion. A scientific investigation, comprised of three studies, was also conducted to examine Dungeness crab production as an ecosystem service provided by oyster habitat." (from the Abstract)

https://ir.library.oregonstate.edu/concern/graduate_projects/fj236741w


https://digital.osl.state.or.us/islandora/object/osl%3A45171

U.S. Federal Geographic Data Committee. Marine and Coastal Spatial Data Subcommittee. 2012. Coastal and Marine Ecological Classification Standard. FGDC-STD-018-2012, 343 p. (Washington, D.C.) This document represents an effort to transform many different ecological descriptions into one standard. It employs two settings (Aquatic and Biogeographic) and four components (Water Column, Geoform, Substrate and Biotic). Combinations of these can describe any setting. The State of Oregon is adopting it to replace the standard in the Oregon Estuary Plan Book (1987). It is the definitive national standard for describing coastal and marine sites.


Young, David R., Patrick J. Clinton, David T. Specht, Chris Mochon Collura, and Henry Lee II. 2012. "Determining bathymetric distributions of the eelgrass Zostera marina L. in three turbid estuaries on the eastern North Pacific coast." Botanica Marina. 55, no. 3: p.229-240. 10.1515/bot-2011-0011 This paper describes a method for mapping estuarine eelgrass beds that can be applied to other subsurface aquatic vegetation, and to give a method for estimating the part of the eelgrass that is too deep to be detected by this method. Bathymetric models of three estuaries were made and then compared with eelgrass distribution.

Boehlert, George, Walt Nelson, Jonathan Allan, Erica Harris, Shawn Stephensen, Vincent Politano, and Christina L. Folger. 2012 Hatfield Marine Science Center Dynamic Revetment Report DSL Permit #45455-FP Monitoring Report February, 2012. 31 p. Oregon State University. Hatfield Marine Science Center (Newport, Or.) This is the first of a series of five annual reports concerning control of erosion along Yaquina Bay next to the Hatfield Marine Science Center. Parts of the shoreline were stabilized in 2007 and 2011. A 5-year study is required before more dynamic revetments will be permitted. “A Dynamic Revetment (gravel beach) was installed in November 2011 on the shoreline along the northeastern edge of the HMSC to mitigate erosion that threatened HMSC critical infrastructure. Shoreline topographic and biological monitoring was initiated before and continued after the project completion. Monitoring of beach profiles along the project area showed that a Dynamic Revetment installed in 2007 had been successful in stabilizing further retreat of the beach. As of January 2012, the 2011 project also appears to have stabilized the shoreline, while rapid erosion has continued in the adjacent Reference beach area. “ (from the Abstract) https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/xd07gt292
Brophy, Laura S., Deborah A. Reusser, Christopher N. Janousek, Green Point Consulting, U.S. Geological Survey, and U.S. Environmental Protection Agency. 2013. Tidal wetlands of the Yaquina and Alsea River estuaries, Oregon: Geographic Information Systems layer development and recommendations for National Wetlands Inventory revisions. Open-File Report (Geological Survey (U.S.)) no.2012–1038, 60 p. U.S. Geological Survey (Reston, Va.) “Geographic Information Systems (GIS) layers of current, and likely former, tidal wetlands in two Oregon estuaries were generated by enhancing the 2010 National Wetlands Inventory (NWI) data with expert local field knowledge, Light Detection and Ranging-derived elevations, and 2009 aerial orthophotographs. Data were generated for two purposes: First, to enhance the NWI by recommending revised Cowardin et al. (1979) classifications for certain NWI wetlands within the study area; and second, to generate GIS data for the 1999 Yaquina and Alsea River Basins Estuarine Wetland Site Prioritization study…. The GIS products of this project improve the accuracy and utility of the NWI data, and provide useful tools for estuarine resource management.” (from the Abstract) Appendix A includes excellent color photographs of wetland sites and plants. https://pubs.usgs.gov/of/2012/1038/pdf/ofr2012-1038.pdf


E., Kaldy James, Brown Cheryl A., and Andersen Christian P. 2013. "In situ 13C tracer experiments elucidate carbon translocation rates and allocation patterns in eelgrass Zostera marina." Marine Ecology Progress Series. 487,p.27-39. 10.3354/meps10354 In this project, native seagrass was studied in summer and in winter using carbon-13 as a tracer to monitor changes in carbon uptake. “The results provide important estimates of carbon uptake and translocation that can be used to better understand whole plant carbon budgets as well as the transfer of seagrass-derived carbon to other trophic communities.” (from the Abstract) https://www.int-res.com/articles/meps2013/487/m487p027.pdf

Hansen, Gayle I. 2013. "Some Marine Algae on Tsunami Debris [poster]." Oregon State University. Dept. of Botany and Plant Pathology. On March 11, 2011, the great Tōhoku earthquake shook Japan. The subsequent tsunami swept approximately 5 million tons of debris into the Pacific Ocean, some of which made its way across the Pacific and washed up on the North American West Coast. The debris carried hundreds of species, a surprising number of which survived the trip. To understand the potential for biological invasions, it was necessary to document these species. This poster documents some of the first algae identified. It is beautifully photographed. https://ir.library.oregonstate.edu/concern/defaults/ns064b84v

Hart, Stephanie K., David E. Hibbs, and Steven S. Perakis. 2013. "Riparian litter inputs to
streams in the central Oregon Coast Range " *Freshwater Science*. 32, no. 1: p. 343–358. The type of vegetation on a stream bank influences the stream’s ecosystem. Coniferous vegetation provides logs and year-long shade. Deciduous vegetation supplies nutrients to streams and supports aquatic invertebrate populations. While Oregon’s current forest management practices stress conifer-dominated riparian areas, the authors suggest that each type of vegetation contributes to its streams, and that ecosystems might benefit from occasional interruptions of different streamside vegetation types.

Heidmann, Sarah, and Erin Jaco. 2013. Comparing *Metacarcinus magister* Settlement Preferences among the Seagrasses *Zostera marina* and *Zostera japonica*. 13 p. Oregon State University (Corvallis, Or.) This is a student project report. Juvenile crabs need protection from predators as well as easily available prey. Complex habitats such as eelgrass beds meet these needs. This raises the issue of effects of invasive Japanese eelgrass on the crabs, compared to native eelgrass. This undergraduate research paper describes settlement patterns of Dungeness crabs. Bags of oyster shells were placed in beds of native and Japanese eelgrass and on mud. The number of juvenile crabs were counted after two weeks. “Overall, M. magister abundance varies widely over the habitats we studied, and was highest in seagrass habitats, especially seagrass with a large biomass, as well as at a low tidal height.” Results indicated that Japanese eelgrass might be beneficial for crab larvae.

https://ir.library.oregonstate.edu/concern/undergraduate_thesis_or_projects/ms35t990c


https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/xw42nb92g

Henkel, Sarah, Scott Heppell, Selina Heppell, Kristin Politano, Vincent Politano, and Oregon State University. 2013. 2012 Ocean Bioaccumulation Survey: Final Report. 77 p. “Prepared for the City of Newport, Oregon.” “Oregon State University collected and analyzed coastal marine species for concentrations of heavy metals and organic pollutants August to October 2012. . . . Animals were collected from stations around the Georgia Pacific (G--P) outfall pipe adjacent to Nye Beach, OR (mixing zone stations) as well as stations north of Yaquina Head and south of Yaquina Bay. . . . Organisms were processed for trace metals, PCBs & congeners, phenolics, and PBDEs. There was little evidence for bioaccumulation of contaminants of concern associated with the G--P outfall pipe.” (from the Executive Summary)

Hessing-Lewis, Margot L., and Sally D. Hacker. 2013. "Upwelling-influence, macroalgal blooms, and seagrass production; temporal trends from latitudinal and local scales in northeast Pacific estuaries." *Limnology and oceanography*. 58, no. 3: p,1103-1112. doi:10.4319/lo.2013.58.3.1103 “In coastal marine systems worldwide, land-based nutrient inputs are often correlated with blooms of macroalgae, which can negatively affect seagrass habitats... Among ocean upwelling-influenced estuaries along the northeastern Pacific, we documented a negative correlation between annual production of ulvoid macroalgae and the seagrass, Zostera marina L., at a regional scale that included four estuaries along a 400 km distance. While macroalgal biomass was 30 times greater in southern (Yaquina Bay and Coos Bay, Oregon) compared to northern (Willapa Bay, Washington, and Netarts Bay, Oregon) estuaries, no temporal patterns of eelgrass decline were observed within the estuaries over a 5 yr period...” (from the Abstract)

Isaak, D. J., S. J. Wenger, E. E. Peterson, J. M. Ver Hoef, S. Hostetler, C. H. Luce, J. B. Dunham, J. Kershner, B. B. Roper, D. Nagel, D. Horan, G. Chandler, S. Parkes, S. Wollrab, and Water & Aquatic Environments Program U.S. Rocky Mountain Research Station. Air. 2013. "NorWeST Stream Temp: Regional Database and Modeled Stream Temperatures [web page]." U.S. Rocky Mountain Research Station. Air, Water & Aquatic Environments Program. This website gives water temperature data coupled with climate scenarios for western U.S. streams. The database contains over 200,000,000 hourly stream temperature readings at more than 20,000 stream sites. The data were used to develop 36 historical and future climate scenarios at 1-kilometer resolution for over 1,000,000 stream kilometers. The website includes an interactive stream temperature viewer. https://www.fs.usda.gov/rm/boise/AWAE/projects/NorWeST.html

Janousek, Christopher N., and Christina L. Folger. 2013. "Inter-specific variation in salinity effects on germination in Pacific Northwest tidal wetland plants." *Aquatic Botany*. 111, p.104-111. 10.1016/j.aquabot.2013.06.009 The authors used 162 reference plots in Yaquina, Coquille, Netarts and Alsea Bays to look at the distribution of marsh plants and establish the salinity ranges for their distribution. “The effects of future climate change on coastal estuaries are yet unknown, but changes such as sea-level rise and reduced precipitation in coastal watersheds are likely to increase salinity in high intertidal marshes and swamps. . . . Our data show that elevated salinity may lower germination rates in a number of common Pacific Northwest wetland species, suggesting potential changes in plant composition through impacts on seed germination and establishment.”

Janousek, Christopher N., and Cara Mayo. 2013. "Plant responses to increased inundation and salt exposure: interactive effects on tidal marsh productivity." *Plant Ecology*. 214, p. 917–928. 10.1007/s11258-013-0218-6 Climate change is projected to bring heavier seasonal rainfall and higher sea levels, causing more inundation events and potential exposure to higher salinities. What might the effect of these changes be on salt marsh vegetation? The authors tested transplanted plants in three marshes in the Yaquina estuary with different degrees of brackishness. “Our results suggest that inundation and
salinity stress individually and (often) interactively reduce productivity across a suite of common marsh species.” (from the Abstract)

Johnson, Courtney B., and Steven R. Schell. 2013. "Adapting to climate change on the Oregon coast: lines in the sand and rolling easements." *Journal of Environmental Law and Legislation*. 28, p.447-514. In this important article, the authors argue that Oregon should be working to strengthen its laws now to have the flexibility and legal framework to enable it to adapt to a changing climate and sea level rise. “Processes are needed to decide what infrastructure will be replaced and what will not before these inevitable events occur... Planning can ensure that shoreline armor does not eliminate public access along the shore or total loss of sand on Oregon’s beaches. Planning tools can make clear that the public access boundary does migrate inland, even if the shoreline migrates onto an inland parcel across which the public does not currently have access.” (p.514) [https://scholarsbank.uoregon.edu/xmlui/handle/1794/17378](https://scholarsbank.uoregon.edu/xmlui/handle/1794/17378)


Lewis, Nate S. 2013. "Characterization of Ecosystem Structure and Function Recovery within the NOAA MOC-P Mitigation Basin, Newport, Oregon." M.S., College of Earth, Ocean, and Atmospheric Sciences. Marine Resource Management, Oregon State University. The native seagrass Zostera marina plays a vital role in Oregon estuaries, producing oxygen and organic matter, trapping sediment, offering shelter and habitat to many species. When the NOAA Marine Operations Center – Pacific (MOC-P) was moved to Newport, the bay was dredged to put in docks for NOAA research vessels. In the process, an eelgrass bed was destroyed. To mitigate this damage, the original eelgrass was replanted nearby. In this thesis, the author compares the new site to two reference sites, noting ecological diversity, sediment and species abundance. “The re-planted eelgrass bed within the NOAA MOC-P mitigation area was not observed to be a failed ecosystem during this study, but rather an expanding eelgrass bed that was adequately performing the functions associated with eelgrass ecosystems in the Pacific Northwest.” (from the Abstract). Nicely written. The major professor was Sarah K. Henkel. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/v118rh33k](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/v118rh33k)

Applied Economics, Oregon State University. The invasive New Zealand mud snail has been found in the Wilson, Trask, Nestucca, Siletz, Yaquina, Alsea, Siuslaw, Umpqua and Coos Rivers. The snail is a bio-fouling organism that blocks water intake pipes and threatens aquatic industries and tools from boat motors to hydroelectric plants. In this thesis, the author assesses possible ways to manage this invasion, and counts the costs of different management strategies. Major professor was Munisamy Gopinath.

Mayr, Gerald, James L. Goedert, and Samuel A. McLeod. 2013. "Partial skeleton of a bony-toothed bird from the late Oligocene/early Miocene of Oregon (USA) and the systematics of neogene Pelagornithidae." *Journal of Paleontology*. 87, no.5: p. 922-929. https://doi.org/10.1666/13-025. If you were able to go back in time 23-25 million years, you might see a toothed bird like this specimen found near Newport in the Nye Mudstone formation.


---. 2013. Tsunami inundation maps for Toledo, Lincoln County, Oregon. *Tsunami Inundation Map*. No. TIM-Linc-08, Oregon. Dept. of Geology and Mineral Industries (Portland, Or.) 2 maps: col.; 84 x 133 cm., on sheet 86 x 135 cm. Plate 1. Local source (Cascadia Subduction Zone) tsunami inundation map Toledo, Oregon -- Plate 2. Distance source (Alaska-Aleutian Subduction Zone) tsunami inundation map Toledo, Oregon. May also be viewed at the NANOOS website (click on DOGAMI to access). [https://pubs.oregon.gov/dogami/tim/p-TIM-Linc-08.htm](https://pubs.oregon.gov/dogami/tim/p-TIM-Linc-08.htm)

includes a description of the local seismic hazard, a description of the building’s lateral force resisting system, a description of the methods employed to evaluate the building, evaluation findings, a preliminary schematic design for mitigation of deficiencies and preliminary construction cost estimates to implement the schematic design.” (p.1) https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/8w32r613r


Schlechter, S. M., M. W. Greenfield, and M. W. Reed. 2013. "Newport dock remediation and geotechnical risk mitigation in variably weathered rock conditions " Ports 2013: Success through Diversification, Seattle, Wa., p.929-938. "Proceedings of the thirteenth triennial international conference, April 25-28, 2013, Seattle, Washington." Discusses the removal of the WWII-era concrete ship Pasley and the stabilization of the Port of Newport’s International Terminal. “In 1948, the Port of Newport sank two reinforced-concrete cargo ships on the north shore of Yaquina Bay to serve as wharves for cargo handling. Over time, the ships cracked and moved up to 3 ft toward the bay, resulting in ground settlement, damage to structures near the ships, and an increased risk of releasing petroleum contaminants stored inside the ships into the bay. Through an extensive analysis of alternatives to make the best use of available funds, the selected alternative was to construct a temporary cofferdam and remove the western ship, stabilize the eastern ship with anchors and ballast, and construct a new 800-ft-long, 40-ft-wide dock with an anchored bulkhead wall.” (from the Abstract) Engineering challenges and solutions are discussed. Color photographs, schematic drawings.

Sealy, Spencer G., Harry R. Carter, Richard E. Thomson, and Scott F. Pearson. 2013. "Far-South ancient murrelet family groups: rapid long-distance movements or local breeding?" Northwestern Naturalist. 94, no. 3: p.227-239. 10.1898/12-36.1 Ancient murrelets (not to be confused with marbled murrelets) are known to breed in British Columbia, at Haida Gwaii. Yet, family groups, including chicks, can be found as far south as the central Oregon coast. Are some ancient murrelets breeding south of B.C.? Or are they finding a way to travel with unfledged chicks to their feeding grounds? This article attempts to answer this question. The furthest south family group in this study, which includes data from 1998-2011, was found offshore, just south of Newport.

U.S. Geological Survey. 2013. "Non-Indigenous Aquatic Species." A great resource, but slow to
update. The European green crab, for example, does not show as a problem in Oregon. Can search by species name, common name, state, even down to the watershed area. Color photographs. https://nas.er.usgs.gov/

Webster, Janet G., Walt Nelson, Jonathan Allan, Shawn Stephensen, Vincent Politano, and Christina L. Folger. 2013. Hatfield Marine Science Center Dynamic Revetment Report DSL Permit #45455-FP Monitoring Report February 2013. 41 p. Oregon State University. Hatfield Marine Science Center (Newport, Or.) This is the second in a series of five annual reports concerning control of erosion along Yaquina Bay next to the Hatfield Marine Science Center. Parts of the shoreline were stabilized in 2007 and 2011. Before more dynamic revetments will be permitted, a five-year study of nearby unmodified shorelines is required. “Monitoring of beach profiles indicated that as of December 2012, the 2011 Dynamic Revetment Project (DRP) has successfully stabilized the shoreline in the project area, while rapid erosion has continued in the adjacent Reference beach area. Erosion in the unprotected Reference area in the period 2009-2012 has been as great as 9 m (29.5 ft).” (from the Abstract) Aerial photograph, color photographs. https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/4x51hj35n

Belanger, Christina L., and Marites Villarosa Garcia. 2014. "Differential drivers of benthic foraminiferal and molluscan community composition from a multivariate record of early Miocene environmental change." *Paleobiology*. 40 no. 3 p. 398-416. 10.1666/13019 This is a study of the early Miocene Newport member of the Astoria Formation, which was deposited about 20.26-18 million years ago. It offers an approximately 2 million year “time series of benthic foraminifera and molluscs from continental shelf depths, allowing investigation of both groups in the same record.” (p.399) Since there was an interval of global warming in this era, the authors wondered what the sediments would tell researchers about how marine environments reacted to climate change. The answer is … complicated. As the authors observe, “Environmental changes are multivariate in nature” (p.414.) A most interesting look at a complex subject.

Coastal & Estuarine Research Federation. 2014. "CERF-Lit." Coastal & Estuarine Research Federation. "CERF-Lit is the web-based Coastal and Estuarine Science Reference Series. The site provides reference lists of summary papers, classic papers, and contributions prepared by experts to help direct students, teachers and new researchers to the quintessential literature on important estuarine and coastal ocean science topics." Information about estuaries around the world, with some emphasis on the U.S, Atlantic Coast. Topics range from algae to hypoxia to zooplankton. Lots of good links. https://www.cerf.science/cerf-lit

Cowan, Robert, Walt Nelson, Jonathan Allan, Scarlett Arbuckle, Heppell Laboratory, and Christina L. Folger. 2014. Hatfield Marine Science Center Dynamic Revetment Report
DeWitt, Ted. 2014. EPA’s Benthic Habitat Data for Yaquina Estuary [PowerPoint Presentation]. 15 slides. This is a .pdf of a PowerPoint presentation highlighting various datasets on Yaquina Bay that are maintained by the scientists at EPA’s National Health and Environmental Effects Research Laboratory, Western Ecology Division (WED). A number of maps of Yaquina Bay featuring this data are shown. https://ir.library.oregonstate.edu/concern/technical_reports/w66344146

Dumbauld, Brett R., Dacey M. Mercer, and Mark Camara. 2014. "Isolation and characterization of novel microsatellite loci in two species of burrowing shrimp, Neotrypaea californiensis and Upogebia pugettensis." Conservation Genetics Resources. 6, no. 2: p.353-356. 10.1007/s12686-013-0092-5 The authors characterized 31 microsatellite loci for the two West Coast shrimp species. “These are the first microsatellites characterized for these species and provide a useful tool for further characterization of population structure and diversity.” (from the Abstract)

Erhardt, Andrea M., Clare E. Reimers, David Kadko, and Adina Paytan. 2014. "Records of trace metals in sediments from the Oregon shelf and slope: Investigating the occurrence of hypoxia over the past several thousand years." Chemical Geology 382, p.32–43. In recent years, strong coastal winds have caused strong upwelling events, so strong that a layer of low-oxygen seawater has been brought closer to the surface, leading to mass die-offs of marine life, and affecting estuarine waters as well. A current question about these hypoxic events has to do with whether or not they are related to climate change. “A record of past hypoxia occurrence frequency would help distinguish human-induced causes from those related to natural climate changes. . . Determining trends in trace metal abundances can serve as an indicator for changes in oxygenation conditions over time.” (p.33) The authors look at trace metals in sediments from the Yaquina, Alsea and Siuslaw Rivers and consider other factors possibly influencing their data. “Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.chemgeo.2014.05.029 .” (p.42)

utilization patterns of birds in a Northeast Pacific estuary." *Wetlands Ecology and Management.* 22, p.451–466. 10.1007/s11273-014-9346-6 The authors conducted bird censuses for five major habitats in the Yaquina River Estuary. “Zostera marina (eelgrass), Upogebia (mud shrimp)/ mudflat, Neotrypaea (ghost shrimp)/ sandflat, Zostera japonica (Japanese eelgrass), and low marsh.” They studied spatial and temporal variation within habitats and found that the native eelgrass, Zostera marina, was “an important habitat based on nearly all metrics of bird use...” (from the Abstract)

Greathouse, Effie A., Jana E. Compton, and John Van Sickle. 2014. "Linking landscape characteristics and high stream nitrogen in the Oregon Coast Range: red alder complicates use of nutrient criteria." *Journal of the American Water Resources Association.* 50 no. 6 p.1383-1400. Red alder fixes nitrogen, and in the fall when it sheds its leaves, it sheds nitrogen into coastal streams. The result is that many coastal streams have at certain times of the year more nitrogen than is unacceptably high, according to conventional environmental standards. Current nutrient models for Oregon coast streams fail to adequately account for this natural process. “Our results provide evidence, at a regional scale, that background sources and processes cause many Coast Range streams to exceed proposed nutrient criteria, and that the prevalence of a single tree species (N-fixing red alder) exerts a dominant control over stream N concentrations across this region.” (from the Abstract)

Heady, Walter N., Kevin O’Connor, Jennifer Kassakian, Kate Doiron, Charles Endris, Daniel Hudgens, Ross P. Clark, Jena Carter, and Mary G. Gleason. 2014. An Inventory and Classification of U.S. West Coast Estuaries. 81 p. The Nature Conservancy (Arlington, Va.) “To support restoration, enhancement and conservation of the ecosystem values of U.S. West Coast estuaries, we need first to inventory and classify those estuarine systems using a common scheme. Previous efforts have noted this need and responded with inventories, assessments and classifications of estuaries along the West Coast, but generally only for a subset, and often focused on larger estuaries.” This document provides classification data for 691 estuaries in Washington, Oregon and California. [https://www.scienceforconservation.org/assets/downloads/West-Coast-Estuary-Inventory-2014.pdf](https://www.scienceforconservation.org/assets/downloads/West-Coast-Estuary-Inventory-2014.pdf)

Hughes, Brent B., Matthew D. Levey, Jennifer A. Brown, Monique C. Fountain, Aaron B. Carlisle, Steven Y. Litvin, Correigh M. Greene, Walter N. Heady, and Mary G. Gleason. 2014. Nursery Functions of U.S. West Coast Estuaries: The State of Knowledge for Juveniles of Focal Invertebrate and Fish Species. 168 p. The Nature Conservancy (Arlington, Va.) This report summarizes what is known about the role of estuaries as nurseries for important aquatic species. The authors inventoried 303 West Coast estuaries and categorized each by class (lagoonal, riverine, embayment and sound) and subclass (estuarine coastal subtidal, tidal channel/creek, slough and lagoon). They examined 15 different species that used estuaries and noted what is known and not known about their life cycles and use of estuaries. “Together with the estuary inventory and the geodatabase, this report
represents the first stage in a larger effort to better understand the nursery functions of West Coast estuaries for fish and invertebrates.” (p.3)

https://www.scienceforconservation.org/products/nursery-functions-of-estuaries

Janousek, Christopher N. and Christina L. Folger. 2014. "Variation in tidal wetland plant diversity and composition within and among coastal estuaries: assessing the relative importance of environmental gradients." *Journal of Vegetation Science: Official Organ of the International Association for Vegetation Science*. 25, no. 2: p.534–545. The authors ask, “What is the relative importance of topographic (elevation), edaphic (soil salinity, nitrogen and particle size) and hydrologic (estuarine river flow) gradients for variation in tidal wetland plant composition and diversity?” (from the Abstract) To answer this question, they analyzed wetland vegetation in four Oregon estuaries. They conclude that elevation and salinity are the most important factors affecting species distribution and note that sea level rise should change distributions and reduce wetland plant diversity. Supporting documentation in four appendices is available online.

Kaldy, James E. 2014. "Effect of temperature and nutrient manipulations on eelgrass *Zostera marina* L. from the Pacific Northwest, USA." *Journal of Experimental Marine Biology and Ecology* 453, p.108–115. "Global climate change will impact the three dominant drivers of estuarine seagrass productivity, temperature, light and nutrients. The response of Pacific Northwest (PNW) *Z*. marina to interactive effects of temperature and nitrogen conditions was experimentally evaluated. . . This work highlights the complex nature of *Z*. marina response to environmental conditions; additional multifactor experiments will be required to tease apart these interactions." (from the Abstract)

Lee II, Henry, Deborah A. Reusser, Melanie R. Frazier, Lee M. McCoy, Patrick J. Clinton, Jonathan S. Clough, and U.S. Environmental Protection Agency. Western Ecology Division. 2014. Sea Level Affecting Marshes Model (SLAMM) - New Functionality for Predicting Changes in Distribution of Submerged Aquatic Vegetation in Response to Sea Level Rise. Version 1.0. no. EPA/600/R-14/007: 50 p. (Newport, Or.) This is a technical document discussing how to use a computer program to model the effects of sea-level rise on native seagrass. “Because of the ecological importance of SAV [submerged aquatic vegetation] habitats, U.S. EPA, USGS, and USDA partnered with Warren Pinnacle Consulting to enhance the SLAMM modeling software to include new functionality in order to predict changes in *Zostera* marina distribution within Pacific Northwest estuaries in response to sea level rise.” (from the Introduction). The Yaquina River estuary and Willapa Bay are used as examples. While the emphasis of the document is on GIS, there are some good maps of Yaquina Bay. Clearly, a sea-level rise would have an impact on native seagrass distribution, with *Zostera* present in fewer areas. https://warrenpinnacle.com/prof/SLAMM6/SLAMM_6.3_final_release.pdf

Lemagie, Emily P., and James A. Lerczak. 2014. "A comparison of bulk estuarine turnover timescales to particle tracking timescales using a model of the Yaquina Bay Estuary."
Water flows in and out of Oregon estuaries with the tides. The Oregon coast enjoys two high tides and two low tides daily. With new water coming in twice a day, and old water flowing out, how long does it take for the water in an estuary to be replaced by new seawater and freshwater inflow? In this technical paper, the authors compare different theoretical models of estuarine turnover with particle tracking methods.

Lutz, Andrew P. 2014. "Recovery of Oregon Coast Coho Salmon (Onchorhynchus kitsutch) through Restoration of Freshwater Habitats." M.S., Dept. of Environmental Management, University of San Francisco. M.S. Thesis. Millions of dollars have been spent in enhancing habitats to aid recovering populations of salmon on the Oregon Coast. How well have enhancement projects done? Does there seem to be a relationship between restoration projects and salmon recovery? “My analysis showed that from 1994 to 2012 only 3 of the 21 independent populations from the ESU, the Alsea, Salmon, and Tillamook had statistically significant recovery. To evaluate the relationship between habitat restoration and coho recovery, I ran a correlation between the rate of recovery and the amount spent on restoration for each ESU population. The rate of recovery increased as total dollars spent on restoration increased, but it was a very weak relationship...” (from the Abstract.) The author suggests ways to improve restoration efforts.  
https://repository.usfca.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1014&context=capstone

Mach, Megan E., Sandy Wyllie-Echeverria, and Kai M. A. Chan. 2014. "Ecological effect of a nonnative seagrass spreading in the Northeast Pacific: A review of Zostera japonica." Ocean & Coastal Management. 102, no. Part A: p. 375–382. doi:10.1016/j.ocecoaman.2014.10.002 This review article examines studies of Japanese eelgrass to see if this invasive species harms native species or damages habitats. While the literature is not extensive enough to permit solid conclusions, the data suggest that Z. japonica harms large invertebrate species and the native eelgrass, Z. marina, while providing advantageous habitat for smaller marine invertebrates. The authors urge that “rigorous scientific investigation is needed” to develop the best policies for managing the species.

Miller, Stacey D. 2014. "Indicators of Social Vulnerability in Fishing Communities along the West Coast Region of the U.S." M.P.P., School of Public Policy, Oregon State University. This is a final essay by a candidate for a Master’s degree in Public Policy. The author examined Pacific Northwest coastal communities to learn which were economically dependent on the fishing industry and might be vulnerable to changes in fishing policies and regulations. “Place-based data . . . are included in a factor analysis to identify communities engaged in and reliant on commercial fishing, and to derive indicators of social vulnerability. Using these indicators, 18 communities along the west coast were identified as having high levels of both commercial fishing dependence and social
vulnerability, although the drivers varied among communities.” (from the abstract)  
https://ir.library.oregonstate.edu/concern/graduate_projects/mp48sf60m

Nishizawa, Ryogo , Masanori Sato, Toshio Furota, and Hiroaki Tosuji. 2014. "Cryptic invasion of northeast Pacific estuaries by the Asian polychaete, *Hediste diadroma* (Nereididae." *Marine Biology*. 161, no. 1: p.187–194. 10.1007/s00227-013-2328-z An invasive polychaete worm was found in all six sites in Oregon and Washington that were sampled. The Yaquina Bay samples were found near the Toledo Airport. “The widespread distribution of *H*. diadroma indicates that it is a successful invader of the North American Pacific and it may have long escaped detection because of its morphological similarity to the native species, *H*. limnicola. The long pelagic life of *H*. diadroma larvae could have facilitated its successful transocean dispersal with ballast water of ships.” (from the Abstract)

O’Malley, Kathleen, Curtis Roegner, Oregon. Wave Energy Trust, and Oregon. Dungeness Crab Commission. 2014. Evaluating the Population Genetic Structure of Dungeness Crab (*Cancer magister*) off the Oregon Coast. 20 p. Oregon Wave Energy Trust, (Portland, Or.) “The goal of this study was to evaluate the genetic diversity and population genetic structure of Dungeness crab off the Oregon coast and provide baseline data that could be used to help inform decisions on marine spatial planning. From a conservation and management standpoint, it is critical to determine the population genetic structure and genetic diversity within subpopulations to ensure the long-term viability of a species.” (p.4-5) There are clear and helpful explanations of the concepts and issues involved in this study. Nicely done.  
https://ir.library.oregonstate.edu/concern/technical_reports/w0892g295

Oregon Department of Fish and Wildlife. 2014. Oregon Coast Coho Conservation Plan Annual Report. 7 p. [Oregon Dept. of Fish and Wildlife] ([Salem, Or.]) In 2014, the amount of naturally produced coho salmon significantly increased on the Oregon Coast. “Wild spawner abundance in 2014 was the highest for the OC coho salmon ESU since random surveys were implemented in 1990” (p.1). North Coast and Mid-Coast basins showed the best habitat quality, while the Umpqua Basin had the lowest habitat quality.  
https://www.dfw.state.or.us/fish/CRP/docs/coastal_coho/economic_reports/OCCCP_Annual_Report-2014.pdf

Oregon Department of Fish and Wildlife. Shellfish and Estuarine Assessment of Coastal Oregon (SEACOR). 2014. "SEACOR Findings – Yaquina Bay [web page]." Oregon Department of Fish and Wildlife. This is an excellent guide to what clams are where in Yaquina Bay based on a 2012 survey. Maps show the number of clams by species and by volume. Includes links to printable claming maps and driving directions to clamping spots.  
https://www.dfw.state.or.us/MRP/shellfish/Seacor/findings_yaquina_bay.asp

Pacific Fishery Management Council. 2014. Appendix A to the Pacific Coast Salmon Fishery
Priest, George R., Yinglong Zhang, Robert C. Witter, Kelin Wang, Chris Goldfinger, and Laura L. Stimely. 2014. "Tsunami impact to Washington and northern Oregon from segment ruptures on the southern Cascadia subduction zone." *Natural Hazards. 72*, no. 2: p.849-870. 10.1007/s11069-014-1041-7 All West Coast residents should be aware that a major earthquake might occur. But what if only a part of the subduction zone ruptures? This article examines a possible rupture in the southern half of the Cascadia Subduction Zone (south of Alsea Bay, Oregon). How quickly does tsunami wave height decline north of the southern rupture areas? How much time do communities north of the southern rupture areas have to evacuate before the first inundation and the largest inundation occur? How far north of the southern rupture areas will felt shaking likely trigger evacuation of a populace trained to evacuate for a local earthquake? Using a 10,000-year record of offshore turbidite deposits and a ~4,600-year record of tsunami deposits at Bradley Lake, the authors tackle these questions.

Sericano, José L., Terry L. Wade, Stephen T. Sweet, Juan Ramirez, and Gunnar G. Lauenstein. 2014. "Temporal trends and spatial distribution of DDT in bivalves from the coastal marine environments of the continental United States, 1986–2009." *Marine Pollution Bulletin. 81*, no. 2: p.303-316. "While the use of DDT in the United States was banned or rigorously restricted forty years ago, this compound and breakdown products continue to be available to bivalves at virtually every location in the continental U.S. coastal areas sampled during the NOAA’s NS&T “Mussel Watch” Program. The concentration in the coastal areas, as a whole, is decreasing with a half-life of about 10–14 years; faster in the south, slower in the north. Under these dissipation rates, average concentrations along the East, Gulf, and West coasts will decrease below 10% of today’s concentrations by approximately 2050.” (p.315) Oregon sites showed relatively low levels of ΣDDT (below the national 15th percentile) (p.315).

Shafer, Deborah J., and James E. Kaldy. 2014. "Comparison of photosynthetic characteristics of the seagrass congeners Zostera marina L. and Zostera japonica Ascher. & Graeb." *Aquatic Botany* 112, no. 1: p.91-97. "On the Pacific coast of North America two seagrass species in the genus Zostera co-exist; the native species, Zostera marina, and an introduced species, Zostera japonica. These two species typically occupy separate tidal elevations, with Z. marina occupying the lower intertidal and shallow subtidal zones, and Z. japonica occupying the mid- to upper intertidal zone. This study was designed to compare the photosynthetic characteristics of Z. japonica and Z. marina after exposure to high and low light. . . “
Shafer, Deborah J., James E. Kaldy, and Jeffrey L. Gaecke. 2014. "Science and management of the introduced seagrass *Zostera japonica* in North America." *Environmental Management* 53, no. 1: p.147-162. The Pacific Coast of North America is home to two species of eelgrass: the native *Zostera marina*, and the introduced *Zostera japonica*. This review looks at the two species, which are managed very differently in different parts of the West Coast. Should the invader be driven out and destroyed? Should it be ignored? The authors identify gaps in knowledge that limit resource managers’ ability to decide and make recommendations for management and future research.


Wall, Colleen McKay. 2014. “Autonomous *in situ* Measurements of Estuarine Surface PCO2: Instrument Development and Initial Estuarine Observations." M. S., College of Ocean, Earth and Atmospheric Sciences, Oregon State University. Understanding the carbon cycle is increasingly important in a world feeling the effects of anthropogenic climate change. While oceans absorb carbon dioxide, estuaries release CO2 into the atmosphere, so understanding estuarine processes is particularly important. The carbon cycle in estuaries, however, is complex. In this thesis, the author describes a new instrument that can be used to measure the partial pressure of carbon dioxide and details how it was used in the Yaquina Bay estuary, and in the Pacific Ocean. Measurements of CO2 in Alsea Bay and Netarts Bay are also discussed. The thesis gives a good overview of carbon chemistry and dynamics in the estuarine environment. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/zg64tr497](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/zg64tr497)

Wild Salmon Center. 2014. Economic Implications of the Coastal Multi-Species Conservation and Management Plan. 94 p. Wild Salmon Center, (Portland, Or.) This is a good source of recent statistics on the economic contributions of commercial and recreational fisheries, as well as hatcheries. [https://www.wildsalmoncenter.org/wp-content/uploads/2016/03/WSC-CMCMPC-study-report-Ver-1.10-FINAL.pdf](https://www.wildsalmoncenter.org/wp-content/uploads/2016/03/WSC-CMCMPC-study-report-Ver-1.10-FINAL.pdf)

Wofsy, S.C., and A. Dayalu. 2014. "NACP Greenhouse Gases Multi-Source Data Compilation, 2000-2009." U.S. Oak Ridge National Laboratory. Distributed Active Archive Center. The North American Carbon Program is a multidisciplinary research program designed to obtain scientific understanding of North America's carbon sources and sinks and to provide tools for decision makers. This data set is a collection of measurements of carbon dioxide (CO2) and non-CO2 greenhouse gases made across North America by nine independent atmospheric monitoring networks from 2000 - 2009. The Oregon data was collected by the Irvine Latitude Network at the University of California, Irvine.
Allan, Jonathan C., Peter Ruggiero, Nick Cohn, Gabriel Garcia, Fletcher E. O’Brien, Laura L. Stimely, and Jed T. Roberts. 2015. Coastal flood hazard study, Lincoln County, Oregon. *Open-File Report (Oregon. Department of Geology and Mineral Industries)* no. O-15-06, 351 p. This is a technical document giving factors and assumptions behind the flood hazard study. “The objective of the Lincoln County coastal flood hazard project is to develop a digital flood insurance rate map (DFIRM) and flood insurance study (FIS) report for Lincoln County, Oregon. . . DOGAMI has been contracted to perform detailed coastal flood hazard studies for the entire length of the Lincoln County shoreline of the Pacific Ocean....” (p.1) [https://www.oregongeology.org/pubs/ofr/O-15-06_Lincoln.pdf](https://www.oregongeology.org/pubs/ofr/O-15-06_Lincoln.pdf)

Bancroft, Morgan P. 2015. "An Experimental Investigation of the Effects of Temperature and Dissolved Oxygen on the Growth of Juvenile English Sole and Juvenile Dungeness Crab." M.S., College of Earth, Ocean, and Atmospheric Sciences, Marine Resources Management, Oregon State University. This thesis describes laboratory simulations of summertime oceanographic conditions typically found in Yaquina Bay and Moolack Beach, two nursery habitats used by juvenile English sole and Dungeness crab. The author sought to explore different effects of temperature and dissolved oxygen levels on these two species, particularly as related to upwelling-driven hypoxia. Young English sole were more resilient and were able to handle lower oxygen levels than Dungeness crabs. Very interesting work. The thesis also describes a public exhibit established at the Hatfield Marine Science Center in Newport, Oregon to explain hypoxia to the public. The major professor was Lorenzo Ciannelli. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/js956k41j](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/js956k41j)

Beal, Suzy (compiler). 2015. Yaquina Bay Dock & Dredge and Yaquina Bay Harbor improvements from 1947-1960.135 p. Bend, Or.: Paper Trails Publishing. This book is essentially a compilation of newspaper clippings, documents and family photographs. It tells the story of a leader in the development of Newport’s harbor: the Yaquina Bay Dock & Dredge Company. The company was founded by Frank Chamberlain and the book gives a history of the Chamberlain family. The book is almost all clippings; it suffers from a lack of narrative or editorial commentary. It is an interesting approach to the history of a family that contributed to the development of one of Oregon’s major ports.

Brown, Cheryl A., and Walter G. Nelson. 2015. "A method to identify estuarine water quality exceedances associated with ocean conditions." *Environmental Monitoring and Assessment*. 187, no. Article 133: 14 p. Coastal upwelling events bring water that is low in oxygen and high in nutrients closer to the surface, at times killing marine animals. Upwelled waters enter estuaries. Is there a way to distinguish poor water quality in estuaries that results from upwelling events from poor water quality derived from other causes? The authors introduce logistic regression models “to predict the probability of exceedance of a water quality threshold...” Yaquina Bay is used as an example.
Cowen, Robert, Walt Nelson, Scarlett Arbuckle, Christina Folger, Jonathan Allan, and Heppell Laboratory. 2015. Hatfield Marine Science Center Dynamic Revetment Project DSL permit # 45455-FP: Monitoring Report, February 2015. 43 p. Oregon State University. Hatfield Marine Science Center, (Newport, Or.) This is the fourth in a series of five annual reports concerning control of erosion along Yaquina Bay next to the Hatfield Marine Science Center. Parts of the shoreline were stabilized in 2007 and 2011. Before more dynamic revetments will be permitted, a five-year study of nearby unmodified shorelines is required. “Monitoring of beach profiles indicated that as of January 2015, the 2011 Dynamic Revetment Project (DRP) has generally successfully stabilized the shoreline in the project area. . . Rapid erosion has continued in the adjacent Reference beach area and over the period 2009-2015 has been as great as 11 m (36 ft)” (p.2.) Aerial photograph, color photographs.  
https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/1z40kt28z

Crozier, Lisa, and U.S. National Marine Fisheries Service. Northwest Fisheries Science Center. Fish Ecology Division. 2015. Impacts of Climate Change on Salmon of the Pacific Northwest: A Review of the Scientific Literature Published in 2014 39 p. U.S. National Marine Fisheries Service. Northwest Fisheries Science Center. Fish Ecology Division, (Seattle, Wa.) Impacts of climate change on Pacific Northwest salmonids are reviewed. 2014 was the warmest year on record, on land and in the ocean. This paper summarizes the literature, the issues and educated projections of a warmer future.  

Dornhoffer, T. M., G. G. Waldbusser, and C. Meile. 2015. "Modeling lugworm irrigation behavior effects on sediment nitrogen cycling." Marine Ecology Progress Series. 534, p.121-134. 10.3354/meps11381 “Benthic infauna in marine sediments have well-documented effects on biogeochemical cycling, from individual to ecosystem scales, including stimulation of nitrification and nitrogen removal via denitrification. However, the effects of burrowing depth and irrigation patterns on nitrogen cycling have not been as well described. Here we examined the effects of lugworm behavior on sediment nitrogen cycling...” (from the Abstract)  

Emel, Sarah L., and Andrew Storfer. 2015. "Landscape genetics and genetic structure of the southern torrent salamander, Rhyacotriton variegatus." Conservation Genetics 16, p.209–221. doi 10.1007/s10592-014-0653-5  Rhyacotriton variegatus is a Pacific Northwest salamander notable for its low tolerance for desiccation. Its need for a moist environment has caused it to be listed as Vulnerable in the Oregon Sensitive Species List. In this study, the authors used landscape genetics techniques to identify the best conservation measures for this animal. The southern torrent salamander needs
streamside canopies for the best genetic dispersal, and unfortunately the streamside habitat is often fragmented and broken. The authors suggest that “Maintaining stream corridors with buffers of dense canopy cover may maximize connectivity despite the pressures of timber harvest and urbanization.” (from the Abstract)

Engelhart, Simon E., Matteo Vacchi, Benjamin P. Horton, Alan R. Nelson, and Robert E. Kopp. 2015. "A sea-level database for the Pacific coast of central North America." *Quaternary Science Reviews*. 113, p.78-92. When the glaciers melted at the end of the last ice age, sea levels along the Pacific Coast of North America did not rise uniformly. Areas where the earth had been pressed down by the weight of glaciers saw relatively little sea level rise, as the land rebounded when the weight was removed. Sites further away from the great glaciers saw higher sea levels. In this paper, the authors describe a database of sea levels and reference points for the last 16,000 years in our area. Alsea Bay in Appendix 1 is spelled “Alsey Bay.”

Gladics, Amanda J., Robert M. Suryan, Julia K. Parrish, Cheryl A. Horton, Elizabeth A. Daly, and William T. Peterson. 2015. "Environmental drivers and reproductive consequences of variation in the diet of a marine predator." *Journal of Marine Systems* 146 p.72–81. “Ocean conditions can greatly impact lower trophic level prey assemblages in marine ecosystems, with effects of ocean state propagating to higher trophic levels. In many regions throughout their range, common murre (Uria aalge) exhibit narrow dietary breadth in feeding chicks and therefore are vulnerable to recruitment failures of dominant prey species during the breeding season. Contrastingly, common murres nesting in the northern California Current off Oregon, exhibit high species diversity and variability in dominant prey consumed. We studied the diets of common murres over 10 years between 1998 and 2011, a period in which the northern California Current experienced dramatic interannual variability in ocean conditions.” (from the Abstract)

Graehl, Nicholas A., Harvey M. Kelsey, Robert C. Witter, Eileen Hemphill-Haley, and Simon E. Engelhart. 2015. "Stratigraphic and microfossil evidence for a 4500-year history of Cascadia subduction zone earthquakes and tsunamis at Yaquina River estuary, Oregon, USA." *Geological Society of America Bulletin*, 127, no. 1-2: p.211-226. There’s a freshwater spruce swamp buried near the northeastern shore of Sally’s Bend in Yaquina Bay. Sediment cores show 8-10 different soil sequences buried there, going back about 4500 years before the present. Each sequence terminates abruptly with a sandy deposit and then over 10 centimeters of mud. The authors of this paper infer that “each buried soil represents a Cascadia subduction zone earthquake...” (from the Abstract) The article includes maps of the bay and show locations of previous research by other scientists. The Yaquina Bay sequence is compared with sequences from other Oregon estuaries.

examines how Japanese eelgrass responds to disturbances in its environment that result in increased sedimentation. The more sediment disturbance, the more likely the plants were to reproduce sexually, and produce seeds. “If disturbance increases sexual reproduction, it may facilitate the invasion by increasing propagule pressure and genetic diversity. This could create an increased likelihood that Z. japonica reaches new sites, and, as has been shown in other invasive grasses, could allow this species to successfully proliferate across a wider range of environmental conditions…” (p.135)
https://www.int-res.com/abstracts/meps/v532/p123-136/

Hiller, Tim L. 2015. Feasibility Assessment for the Reintroduction of Fishers in Western Oregon, USA. 86 p. U.S. Fish and Wildlife Service (Portland, Or.) This report examines the history of native fisher populations in Oregon and conditions necessary to reintroduce them to western Oregon. Currently, there are two resident populations, one in the Kalmiopsis, and another reintroduced population in the southern Oregon Cascades. This report indicates that there is habitat in the northern Coast Range and in the northern Cascades that could provide good sites for reintroduction. https://tinyurl.com/ynsts4vw

Kaldy, James E., Deborah J. Shafer, M. Stephen Ailstock, and A. Dale Magoun. 2015. "Effects of temperature, salinity and seed age on induction of Zostera japonica germination in North America, USA." Aquatic Botany. 126, p.73–79. doi:10.1016/j.aquabot.2015.06.006 This paper examines seed germination in the invasive Japanese eelgrass. “Our results suggest that seasonal pulses of cold temperatures coupled with low salinity may stimulate Z. japonica seed germination. . . However, prolonged exposure to freshwater is likely to result in increased incidence of rotten seeds and poor subsequent seedling survival. Consequently, it would appear that optimum conditions for Z.japonica seed germination consist of cold temperature stratification with brief pulses of low salinity (<10) conditions followed by a gradual return to higher salinity conditions that favor the development of seedlings and adult plants. This is similar to estuarine salinity dynamics following significant storm events during the wet season in Oregon coastal systems.” (p.77-78)

Kaldy, James E., Deborah J. Shafer, and A. Dale Magoun. 2015. "Duration of temperature exposure controls growth of Zostera japonica: Implications for zonation and colonization." Journal of Experimental Marine Biology and Ecology. 464, p.68–74. doi:10.1016/j.jembe.2014.12.015 This study looks at the distinct zonation of the native eelgrass (Z. marina) and the introduced Japanese eelgrass (Z. japonica). None of the “usual suspects” (dessication tolerance, light limitation, interspecific competition) adequately explain the different estuarine zones occupied by the two species. The authors “hypothesize that differences in thermal optima may be responsible for the observed zonation patterns.” (p.68) This interesting paper has important implications for the possible future spread of Japanese eelgrass.

Kelley, Amanda L., Catherine E. De Rivera, Edwin D. Grosholz, Gregory M. Ruiz, Sylvia Behrens
Yamada, and Graham Gillespie. 2015. "Thermogeographic variation in body size of Carcinus maenas, the European green crab." *Marine Biology*. 162, p.1625–1635. [https://doi.org/10.1007/s00227-015-2698-5](https://doi.org/10.1007/s00227-015-2698-5) For many ectotherms, or “cold-blooded” animals, a warmer environment leads to a smaller body size, and these animals grow larger in cooler temperatures. “Here, we test whether biogeographic differences in size (carapace width) exist for a recent invasion of the non-native European green crab, Carcinus maenas, along the west coast of North America. . . Forces that shape the phenotypic trajectory of species may play an important role in both invasion dynamics and subsequent ecological impacts.” (from the Abstract)

McCormick, J. L., and M. R. Falcy. 2015. "Evaluation of non-traditional modelling techniques for forecasting salmon returns." *Fisheries Management and Ecology*. 22 no. 4: p.269–348. 10.1111/fme.12122 Natural resource managers need to be able to forecast salmon runs, but this can be difficult without enough data to compensate for “potential explanatory variables.” This paper compares three traditional modeling techniques with five non-traditional methods. The authors used data from 1997 to 2012 for 18 coho salmon and seven fall-run Chinook salmon populations to predict run sizes. Positive aspects and potential dangers of non-traditional modeling techniques are discussed.

Oregon Department of Fish and Wildlife. 2015. Oregon Coast Coho Conservation Plan Annual Report. 7 p. [Oregon Dept. of Fish and Wildlife] ([Salem, Or.]) “Abnormally warm ocean conditions persisting since 2014 contributed to a significant decrease in OC coho ESU abundance, resulting in the lowest level recorded since 1999. . . Wild OC coho spawner abundance decreased between 2014 and 2015, from the highest to the eighth lowest observed during 26 years of monitoring” (p.1). [https://www.dfw.state.or.us/fish/CRP/docs/coastal_coho/economic_reports/OCCCP%20Annual%20Report-2015.pdf](https://www.dfw.state.or.us/fish/CRP/docs/coastal_coho/economic_reports/OCCCP%20Annual%20Report-2015.pdf)

Oregon Department of Geology and Mineral Industries, Oregon Emergency Management, Virginia Institute of Marine Science, and National Tsunami Hazard Mitigation Program (U.S.). 2015. Ports of Newport and Toledo, Lincoln County, Oregon. *Oregon Maritime Tsunami Response Guidance*. no. 2015-OR-01, 14 p. Oregon Department of Geology and Mineral Industries (Portland, Or.) Unless a boat is at sea, if there is a nearshore earthquake triggering a tsunami, there is no time for the owner to get the boat to safer waters. If the earthquake is distant, however, there will be a minimum of about 4 hours to move the boat offshore. This publication offers a thorough discussion of issues boat owners face, and what they should do. Colored maps, colored pictures. [https://www.oregongeology.org/pubs/mtrg/MTRG-2015-OR-01_Newport-Toledo.pdf](https://www.oregongeology.org/pubs/mtrg/MTRG-2015-OR-01_Newport-Toledo.pdf)

Oregon State University. Libraries and Press, and Oregon State University. Institute for Natural Resources. 2015. "Oregon Explorer: Rural Communities Explorer." “Information to help local residents and policymakers make decisions about rural communities including vitality and changes in Oregon’s communities.” This is where to go to find the latest
census information, as well as other reports on small-town Oregon. Tools to help users visualize information make this an invaluable resource.
https://oregonexplorer.info/topics/rural-communities?ptopic=140

Oregon. Parks and Recreation Department, Oregon. Natural Areas Program, Oregon Biodiversity Information Center, and Portland State University. Institute for Natural Resources. 2015. Oregon Natural Areas Plan. 189 p. (Portland, Or.: Oregon Parks and Recreation Dept.) This plan is intended to “1. Create a discrete and limited system of natural areas representing the full range of Oregon’s natural resources. These areas are to be used for scientific research, education and nature interpretation. 2. Establish a method for public and private sector voluntary cooperation in the development of a system of natural areas. 3. Provide advice to managers of natural areas on the management and conservation of natural resources within Oregon.” (p.2) https://inr.oregonstate.edu/sites/inr.oregonstate.edu/files/2015_or_natural_areas_plan.pdf


Summers, Lynn. 2015. "P.I.B. Ping: A Kansan in 1880s Oregon." Oregon Historical Quarterly. 116, no. 1 p. 110-129. This article describes early work on the jetty at Yaquina Bay and includes a photograph of the tramway by which rocks were hauled to form a jetty. “[We] were shown around, walked out on the tramway where the main work was going on, that of driving piling, the waves underneath dashing and throwing spray in every direction, and fairly shaking the very foundations of the earth as a swell comes in and breaks on striking the cause-way.” (p.121)

Sund, Daniel M. 2015. "Utilization of the Non-Native Seagrass, Zostera japonica, by Crab and Fish in Pacific Northwest Estuaries." M.S., College of Earth, Ocean, and Atmospheric Sciences. Marine Resource Management, Oregon State University. This thesis describes a study of the invasive Japanese eelgrass beds in Willapa Bay and Yaquina Bay. “The goals of this project were to 1) examine the community composition of a variety of available estuarine habitats in Willapa Bay, Washington, and Yaquina Bay, Oregon, via paired deployment of cameras and small fish traps; and 2) to explore the different
management strategies used in the PNW and identify strengths and weaknesses associated with invasive species management, as indicated by short interviews with professionals working on Z. japonica.” (from the Abstract) Co-major professors were Brett R. Dumbauld and Flaxen Conway.


U.S. Army Corps of Engineers. Portland District. 2015. Yaquina Bay and River Maintenance Dredging Environmental Assessment. 121 p. US Army Corps of Engineers. Portland District (Portland, Or. ) This is an environmental assessment of ongoing dredging performed by the Army Corps of Engineers. The Bay has been dredged annually since 1919. Although the Corps is authorized to dredge from the harbor entrance to 14 river miles upstream, currently dredging is only performed at the harbor entrance, at an access channel to South Beach Marina, and every five to eight years at Depot Slough in Toledo. A good historical account of Federal activities in Yaquina Bay is given. https://usace.contentdm.oclc.org/digital/collection/p16021coll7/id/2679/

Weilhoefer, Christine L., Walter G. Nelson, and Patrick Clinton. 2015. "Tidal channel diatom assemblages reflect within wetland environmental conditions and land use at multiple scales." Estuaries and Coasts 38, no. 2: p.534-545. 10.1007/s12237-014-9826-1 The authors examined diatom assemblages collected from surface sediment in tidal channels of 47 tidal wetlands on the Oregon coast during the summer of 2007. They found some interesting differences between the different groups of diatom species. “The tidal channel benthic diatom community was most strongly correlated with variables related to human disturbance at all scales surrounding the wetland and not with any tidal channel water quality parameter, including salinity. . .  The sensitivity of the tidal creek benthic diatom assemblage to both wetland and landscape level factors indicates that it might be a useful bioindicator of human disturbance to tidal wetland ecosystems.” (from the Abstract)

We present an analytical framework for understanding community-level vulnerability to tsunamis that integrates population exposure, demographic sensitivity, and evacuation potential. We identify three types of communities along the US Pacific Northwest coast that are directly threatened by tsunamis associated with a Cascadia subduction zone earthquake: (i) demographically diverse with low numbers of exposed people, (ii) high numbers of exposed populations but sufficient time to evacuate, and (iii) moderate numbers of exposed populations but insufficient time to evacuate. (p.5354) The authors identified Seaside as the most vulnerable community on the Oregon Coast.

Young, David, Patrick Clinton, David Specht, and T. Chris Mochon Collura. 2015. "Comparison of non-native dwarf eelgrass (Zostera japonica) and native eelgrass (Zostera marina) distributions in a northeast Pacific estuary: 1997-2014." Botanica Marina. 58 no. 4: p.239-250. doi: 10.1515/bot-2014-0088 “In this study, we investigated the rate and pattern of expansion of a non-native eelgrass, Zostera japonica, in relation to the distribution of the native eelgrass Zostera marina in a coastal estuary of the northeastern Pacific Ocean. The distributions of the Zostera congeners were monitored between 1997 and 2014 in Yaquina Estuary on the central Oregon coast, USA, using digital classification of color infrared aerial photographs and ground surveys.” (Abstract)

Ackerman, Richard, Rachel Neuenfeldt, Theo Eggermont, Mike Burbidge, Joanna Lehrman, Nathan Wells, and Xi Chen. 2016. Resilience of Oregon Coastal Communities in Response to External Stressors. 236 p. University of Michigan. Dept. of Natural Resources and the Environment. Oregon’s coastal communities have seen sweeping changes, from environmental conditions to economic and regulatory developments. “This report tells the story of six Oregon coastal communities and how they have perceived and tried to respond to the myriad stressors they are experiencing. . . The results of this study provide a glimpse into the day-to-day, season-to-season struggles in these communities, and the array of responses, some effective and others not.” (p.1) Those who care about Oregon’s coastal communities will find this report valuable. “A project submitted in partial fulfillment of the requirements for the degree of Master of Science (Natural Resources and Environment) at the University of Michigan” “Client: Oregon Dept. of Fish and Wildlife” https://tinyurl.com/y5za7urw

Bosley, Katelyn Marie. 2016. "An Integrated Approach to the Investigation of Age, Growth and Population Dynamics of Burrowing Thalassinidean Shrimps in a U.S. West Coast Estuary." Ph.D., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. “Two indigenous species of burrowing shrimp inhabit and often dominate the intertidal zone of estuaries along the US West Coast, the ghost shrimp, Neotrypaea californiensis, and the blue mud shrimp, Upogebia pugettensis. Both species are considered ecosystem engineers and play a role in maintaining estuarine health and ecosystem function. They also have a negative interaction with oyster production in Pacific Northwest (PNW) estuaries, which has necessitated a better understanding of
their ecology and population dynamics in order to try to manage their impacts” (Abstract). Laboratory and field experiments explored growth and aging in the two species, and population simulations explored shrimp density. Major professors were Christopher J. Langdon and Brett R. Dumbauld.

Brown, Cheryl A., Darrin Sharp, and T. Chris Mochon Collura. 2016. "Effect of climate change on water temperature and attainment of water temperature criteria in the Yaquina Estuary, Oregon (USA)." *Estuarine, Coastal and Shelf Science*. 169, p.136-146. doi:10.1016/j.ecss.2015.11.006 This paper examines the effects of climate change, which will bring warmer air temperatures and higher sea levels to Yaquina Bay. “Temperature is the most common cause of water quality impairments in Oregon coastal streams and estuaries (US EPA, 2006) and climate change is likely to increase the frequency and duration of these water quality impairments.” (p.137) Data for this study was gathered from 2000-2004 and supplemented by historical data from 1970-2010. It was used to model changes in the estuary based on projected sea level rises of 0-90 cm and projected air temperature increases of 0-4° C to show potential changes from the present to the year 2100. The upper estuary was shown to be the most vulnerable to climate change. Rising sea level, a factor not considered in previous studies, may moderate the effect of climate change on the lower estuary.

Cowen, Robert, Walt Nelson, Scarlett Arbuckle, Christina Folger, Jonathan Allan, and Heppell Laboratory. 2016. Hatfield Marine Science Center Dynamic Revetment Project DSL permit # 45455-FP: Final Monitoring Report February, 2016. 51 p. Oregon State University. Hatfield Marine Science Center, (Newport, Or.) This is the fifth and final document in a series of five annual reports concerning control of severe erosion along Yaquina Bay next to the Hatfield Marine Science Center. Parts of the shoreline were stabilized in 2007 and 2011. Severe erosion in the unmodified Reference area led to extension of the dynamic revetment into the Reference area in 2015. The 2015 work “has largely stabilized shoreline erosion within the project area” (p.32). Concerns remain about the need for more gravel and high-water events, including king tides. Aerial photograph, color photographs.

Cross, M.E., C. R. Bradley, T. F. Cross, S. Culloty, S. Lynch, P. McGinnity, R. M. O’Riordan, S. Vartia, and P. A. Proдобhl. 2016. "Genetic evidence supports recolonization by Mya arenaria of western Europe from North America." *Marine Ecology Progress Series*. 549, p.99-112. doi: 10.3354/meps11672 The softshell clam is found in North America and in Europe. Its origin has been debated. We know that this clam was transplanted by humans to western North America. But where did it come from? Were there refuges in southern Europe where the clam survived the hardships of the Ice Ages? Did it migrate
to North America from Europe, or was the migration in the other direction? In this article, the authors report on genetic analysis and conclude that the species originated in eastern North America and subsequently colonized Europe. Specimens from Alsea Bay and Yaquina Bay were part of the analysis. 
https://www.int-res.com/articles/meps2016/549/m549p099.pdf

David, Aaron T., Pascale A. L. Goertier, Stuart H. Munsch, Brittany R. Jones, Charles A. Simenstad, Jason D. Taft, Jeffrey R. Cordell, Emily R. Howe, Ayesha Gray, Michael P. Hannam, William Matsubu, and Erin E. Morgan. 2016. "Influences of natural and anthropogenic factors and tidal restoration on terrestrial arthropod assemblages in West Coast North American estuarine wetlands." Estuaries and Coasts. 39, p.1491-1504. doi: 10.1007/s12237-016-0091-3 This article reviews studies on arthropod assemblages from 87 wetland sites in 13 West Coast estuaries. What are the distribution and abundance of these animals? How does environmental change affect them? It turns out that restoring wetlands, such as those in the Salmon River Estuary, causes arthropod abundance to increase rapidly. “These results suggest that restoration of tidal influence to leveed wetlands can rapidly restore some components of estuarine wetland ecosystems, but that recovery of other components will take longer and may depend on the extent of anthropogenic modification of the surrounding landscape.” (Abstract)

Gray, Matthew W. 2016. "Ecophysiology of Marine Bivalves: Physiological Rate Processes in Dynamic Environments." Ph.D., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. The five chapters of this doctoral dissertation address a wide range of issues related to the cultivation of bivalves. Much work is concerned with bivalve feeding and ecosystem services in adult and larval bivalves. There are interesting comparisons between the feeding behavior of the native Olympic oyster and the introduced Pacific oyster. The effects of ocean acidification on feeding physiology are also explored. The major professor was Christopher J. Langdon.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/4q77fv426

Hughey, Jeffery R., and Ga Hun Boo. 2016. "Genomic and phylogenetic analysis of Ceramium cimbricum (Ceramiales, Rhodophyta) from the Atlantic and Pacific Oceans supports the naming of a new invasive Pacific entity Ceramium sungminbooi sp. Nov." Botanica Marina. 59A p.211-222. doi 10.1515/bot-2016-0036 The flow of introduced species across the Pacific Ocean is from East to West: most introduced species on the U.S. West Coast come from Asia. This is true in the case of Ceramium sungminbooi, a red alga from Korea. This article describes the distinction between the Asian type of Ceramium as opposed to the European species, Ceramium cimbricum and calls for the Asian species now on the American West Coast to be recognized as a new species. “It is unknown whether C. sungminbooi was introduced to Oregon as a result of oyster mariculture or if it was hull-borne.” (p.219)

from beach wrack in Yaquina Bay, Oregon, USA, with comments on opisthonotal plasticity and cribral development in the family." *Journal of Natural History*. 50, no. 29-30: p. 1797-1812.  [http://dx.doi.org/10.1080/00222933.2016.1170904](http://dx.doi.org/10.1080/00222933.2016.1170904) This article describes a new species of mite, Halolaelaps hatfieldi, found in the summer of 2013 on decomposing sea lettuce (*Ulva*) and eelgrass in a backwater of Yaquina Bay near the Hatfield Marine Science Center. The author discusses anatomical features and hypotheses about their possible functions. The species is named after the Hatfield Marine Science Center.

Lee, Kessina. 2016. "Stranding Mortality Patterns in California Sea Lions and Steller Sea Lions in Oregon and Southern Washington, 2006 to 2014." M.S., College of Liberal Arts and Sciences. Department of Biology, Portland State University. This thesis examines marine mammals found dead on the Oregon Coast from 2006-2014: where and when they were found, and how they died. The author correlates animal deaths with climate conditions and human activities. Human beings were shown to cause far more deaths than disease or other causes. “Spatial analysis shows that stranding hot spots occur near major coastal estuaries: the mouth of the Columbia River, Siletz Bay, Yaquina Bay, and Coos Bay (p.60).”  [https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4011&context=open_access_etds](https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4011&context=open_access_etds)

Lewis, Nathaniel S., and Sarah K. Henkel. 2016. "Characterization of ecosystem structure within transplanted and natural eelgrass (*Zostera marina*) beds," *Northwest Science*. 90, no. 3: p.355-375.  [http://dx.doi.org/10.3955/046.090.0314](http://dx.doi.org/10.3955/046.090.0314) The native seagrass Zostera marina plays a vital role in Oregon estuaries, producing oxygen and providing valuable habitat for many species. In 2010, NOAA moved its Marine Operations Center – Pacific to Newport, Oregon. It was necessary to dredge the bay to put in new docks for NOAA research vessels, and in the process an eelgrass bed was destroyed. To mitigate the damage, eelgrass was replanted in a new site. In this paper, the authors report on the results of the transplantation, noting ecological diversity, sediment characteristic and species abundance throughout the year.

Lindsley, Amy J. 2016. "Juvenile Rockfish (*Sebastes* spp.) Community Composition and Habitat use of Yaquina Bay, Oregon." M.S., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. Estuaries offer important habitats for many species of fish. Rockfish are among the fishes that use estuaries as nurseries for their young. Most West Coast estuaries have recently undergone extensive development. How has human-caused environmental change affected fish habitats? In this thesis, the author explored Yaquina Bay to determine what species of rockfish were in Yaquina Bay, how their abundance changed with the seasons, and contrasted the use of natural habitat (eelgrass beds) with anthropogenic habitat (piers). Several previously undocumented species of rockfish were found to use the bay, and patterns of juvenile rockfish use of the estuary are shown. Valuable new information on important species is presented.
The major professor was Scott Heppell.

Mabardy, Becky, Flaxen D. L. Conway, George G. Waldbusser, Christine S. Olsen, and Oregon State University. 2016. The U.S. West Coast shellfish industry’s perception of and response to ocean acidification: understanding an ocean stakeholder. *ORESU-S*. no.16-001, 28 p. This is an excellent introduction to an important issue. Shellfish growers were surveyed to understand how the West Coast shellfish industry is responding to ocean acidification. 86 oyster growers responded, most from Washington State. Over half of respondents had personally experienced the effects of ocean acidification; the vast majority believed that ocean acidification was happening; and the industry as a whole had a fairly sophisticated understanding of the issue. The subject is well illustrated and clearly explained.

Mendoza, Maritza. 2016. "The Effects of Artificial Structures on Estuarine Infaunal Communities and Offshore Biofouling Communities." M.S., College of Earth, Ocean and Atmospheric Sciences. Marine Resource Management Program, Oregon State University. One promising source of renewable energy now being studied on the Oregon Coast is wave energy. The artificial structures used to generate wave energy will necessarily affect the marine environment and the plants and animals that live near them. In this thesis, the author investigates “the spatial effect of artificial structures on the surrounding infaunal communities in an estuarine environment after the artificial structures have been in the water for 8 years.” The artificial structures were deployed in soft sediments in Yaquina Bay. The author also sought to “[t]o identify and quantify the biofouling communities present on offshore surface and bottom artificial structures after a period of two years.” Good discussion of issues, possible applications of this research and areas where more research is needed. The major professor was Sarah K. Henkel

Moore, Jacob L., Romuald N. Lipcius, Brandon Puckett, and Sebastian J. Schreiber. 2016. "The demographic consequences of growing older and bigger in oyster populations." *Ecological Applications*. 26, no. 7: p.2206-2217. doi: 10.1002/eap.1374 Modeling populations of marine animals, particularly animals that reproduce through broadcast spawning, is . . . complicated. In the case of oysters, there is great variation between size and age. Large female oysters hold more eggs and produce many more young than smaller females, but despite their difference in size, they can be the same age. Older oysters are more susceptible to disease, while younger oysters are more vulnerable to predation. Thus, a good population model must take both age and size into account. “To better understand how population structure, particularly that of age and size, impacts restoration and management decisions, we developed and compared a size-structured integral projection model (IPM) and an age-and size structured IPM, using a
population of Crassostrea gigas oysters in the northeastern Pacific Ocean” (Abstract).


Steelquist, Robert. 2016. The Northwest Coastal Explorer: Your Guide to the Places, Plants, and Animals of the Pacific Coast.283 p. Portland, Or.: Timber Pr. Here’s a guidebook with a difference. Although suggested Pacific Northwest trips are included, this book is less about destinations and much more about the journey and what will be found along the way. Packed with beautiful photographs and page-long descriptions of the plants and animals of the Northwest Coast, this book will inform and delight. For succinct descriptions of the life of the region, from the sea palm to the brown pelican, from the mole crab to the Roosevelt elk, this is the place to go for succinct species descriptions at a popular level.

Susa, Tyler M., Peter Ruggiero, Dylan L. Anderson, and Nicholas T. Cohn. 2016. "Morphological change and sand transport mechanisms in the dynamic dune complex of South Beach State Park, Oregon." Shore and Beach. 82, no. 4: p.24-34. The dune field at South Beach State Park has undergone changes in recent years that have led to increased sand deposition in the Yaquina River channel. The 1997-1998 El Niño caused three sand corridors to develop, through which sand is deposited into the ocean and brought into the inlet. After the 2009-2010 El Niño, sand fields expanded, and dunes grew. The result is that the volume of sand blown into the navigation channel has increased, and shoaling has grown by 30% since 2011. In response, the Army Corps of Engineers is looking into putting sand fences into the dune fields at South Beach. This article examines history, recent trends and environmental forces driving change.

U.S. National Marine Fisheries Service. 2016. Recovery Plan for Oregon Coast Coho Salmon Evolutionarily Significant Unit. National Marine Fisheries Service, West Coast Region, Portland, Oregon 230 p. (Portland, Or.) This document is NOAA’s plan for threatened coho salmon on the Oregon coast. The goal is clear. “NMFS estimates that if the strategies and actions identified in this Plan are implemented in a timely manner, and marine survival is not too low, we will be able to delist Oregon Coast coho salmon within the next 10 years.” (p.S-10) Current limiting factors include poor water quality in streams and estuaries, lack of stream complexity (loss of wetlands, side channels and floodplains), loss of vegetation, and invasive species. The plan involves continuing work on habitat improvement, monitoring, and a new policy encouraging public-private partnerships in individual watersheds (Chapter 8).

Anthropogenic increases in carbon dioxide in the atmosphere have led to acidification of the oceans. More acidic ocean water profoundly affects shellfish development. The Pacific oyster, which originates in Japan, and has historically been the most grown species, seems to be particularly sensitive to ocean acidification. The native Olympia oyster has a different life history and a slower rate of development than the Pacific oyster. In this paper, the authors explore the process of slow shell-building in Olympia oysters in acidic waters and consider implications for potential resiliency in adverse environmental conditions in this and other shellfish species.


A mathematical model is used to estimate suspended sediment loads for watersheds in western Oregon and northern California. Contemporary data is contrasted with historical data. Interestingly, the model shows less erosion today than in the recent past. Possible biases in the model as well as changes in forest management practices may explain this and are discussed. The authors recommend “intensive local analyses” in watersheds to overcome limitations of this study. A companion Excel file gives calibrated sediment data for Federal, California and Oregon stations. Interesting maps. [https://pubs.er.usgs.gov/publication/sir20165079](https://pubs.er.usgs.gov/publication/sir20165079)

BeCraft, Rianne. 2017. Learning from Oregon’s 2015 Drought: A Review of Documented Conditions, Impacts, and Response Strategies. 61 p. Oregon State University. Water Resources Policy & Management Program, (Corvallis, Or.) Climate change brings rising sea levels, increased erosion, stronger storms and ocean acidification. It also brings stronger and longer-lasting droughts. This report reviews the record-setting 2015 drought in Oregon. Subjects covered include a review of literature on drought monitoring and reporting, a description of the 2015 drought, a summary of the drought’s effects, and conclusions and recommendations. “Coastal hatcheries were predominantly impacted, with Rock Creek Hatchery being the most severely affected. . . Shallow and warm waters from the North Umpqua River fed Rock Creek, which led to disease and the loss of nearly all of the hatchery’s summer steelhead” (p.36). [https://aquadoc.typepad.com/files/learning_from_oregons_2015_drought_23june2017.pdf](https://aquadoc.typepad.com/files/learning_from_oregons_2015_drought_23june2017.pdf)

Brophy, Laura S., and Michael J. Ewald. 2017. Modeling Sea Level Rise Impacts to Oregon’s Tidal Wetlands: Yaquina Bay Estuary [cartographic material] Mid-Coast Watersheds Council Institute for Applied Ecology. Corvallis, Or. This map is associated with the report,
"Modeling Sea Level Rise Impacts to Oregon’s Tidal Wetlands: Maps and Prioritization Tools to Help Plan for Habitat Conservation into the Future." It depicts a possible sea-level rise scenario based on the West Coast Sea Level Rise Study (National Research Council, 2012). This map shows a possible rise in sea level of 4.7 feet by the year 2100. It shows what could happen to tidal wetlands: where they could expand, where they could be inundated. “Prepared for: MidCoast Watersheds Council, Newport, Oregon.” “With assistance from: Fran Recht, Pacific States Marine Fisheries Commission.”

https://ir.library.oregonstate.edu/concern/technical_reports/2801pn49k

---. 2017. Modeling Sea Level Rise Impacts to Oregon's Tidal Wetlands: Maps and Prioritization Tools to Help Plan for Habitat Conservation into the Future. 64 p. Institute for Applied Ecology. Estuary Technical Group (Corvallis, Or.) This study tracks possible conditions for Oregon coastal wetlands under six possible sea level rise scenarios between 2017 and 2160. “If tidal wetland plant communities are unable to survive the increased inundation associated with sea level rise, they will have to move to higher ground through dispersal of seeds, roots, or rhizomes. This process is called "landward migration," and the areas that could become future tidal wetlands are called “landward migration zones” (LMZs) in this study.” (p.5) Potential landward migration zones are mapped. Maps, charts, color photographs. This document is accompanied by maps, a PowerPoint presentation, a file of geospatial data, and a poster. “Prepared for: MidCoast Watersheds Council, Newport, Oregon.” “With assistance from: Fran Recht, Pacific States Marine Fisheries Commission.”

https://ir.library.oregonstate.edu/concern/technical_reports/tt44ps38k

---. 2017. Tidal Wetland Landward Migration Zones (LMZs) for 4.7 Ft Sea Level Rise for the Yaquina Bay Estuary [cartographic material]. Mid-Coast Watersheds Council Institute for Applied Ecology. Corvallis Or. This map is associated with the report, “Modeling Sea Level Rise Impacts to Oregon's Tidal Wetlands: Maps and Prioritization Tools to Help Plan for Habitat Conservation into the Future.” It depicts the upper end of a possible sea-level rise scenario based on the West Coast Sea Level Rise Study (National Research Council, 2012). This map shows a possible rise in sea level of 4.7 feet by the year 2100. It depicts possible migrations of wetland plants from inundated areas to new wetlands based on factors such as land use, zoning and built structures. “Prepared for: MidCoast Watersheds Council, Newport, Oregon.” “With assistance from: Fran Recht, Pacific States Marine Fisheries Commission.”

https://ir.library.oregonstate.edu/concern/technical_reports/70795d910

---. 2017. Yaquina Bay Estuary Current vs. 4.7ft SLR Map [cartographic material]. Mid-Coast Watersheds Council, Institute for Applied Ecology. Corvallis, Or. This map is associated with the report, “Modeling Sea Level Rise Impacts to Oregon's Tidal Wetlands: Maps and Prioritization Tools to Help Plan for Habitat Conservation into the Future.” It depicts the upper end of a possible sea-level rise scenario based on the West Coast Sea Level Rise Study (National Research Council, 2012) contrasted with the current extent of tidal
wetlands in the Yaquina River estuary. Areas projected to become open water or tidal mudflat are shown, as well as areas projected to become new tidal wetlands. "With assistance from: Fran Recht, Pacific States Marine Fisheries Commission." "Prepared for: MidCoast Watersheds Council, Newport, Oregon."
https://ir.library.oregonstate.edu/concern/technical_reports/5q47rt93r

https://digital.osl.state.or.us/islandora/object/osl%3A637579

Danilchik, Nikolai M., and Larkin Loewenherz. 2017. "Investigation of Crangon species assemblage and spawning patterns in Yaquina Bay, OR [PowerPoint Presentation]." Oregon State University. This PowerPoint presentation was part of a final project for the undergraduate class Biology 450, Marine Biology. The authors examined the distribution of four species of shrimp in different environments: in the main channel of Yaquina Bay, on a nearby beach, and offshore. The bay shrimp was the most prevalent species in the bay, while the Alaskan bay shrimp dominated offshore. The authors endeavored to learn where the most gravid Alaskan bay shrimp females were to be found, but found no difference in the percentage of gravid females between channel and offshore habitats. More research is needed.
https://ir.library.oregonstate.edu/concern/parent/6108vc83q/undergraduate_thesis_or_projects/9880vs43j

Farahani, R. J., J. Woessner, S. Bingi, I. Charvet, Ch. Williams, M. Nyst, and M. Masuda. 2017. "Tsunami risk for insurance portfolios from megathrust earthquakes in Cascadia Subduction Zone." World Conference on Earthquake Engineering (16th), Santiago, Chile, p.1-12. 2017, Jan.9-13. This paper is one step in a process to develop for the insurance industry “a comprehensive tsunami risk assessment for coastal cities on west of USA and [to] improve the risk management due to large tsunamis.” The authors developed tsunami hazard maps for the West Coast and modeled many different factors including subsidence and uplift. Colored maps, charts. https://tinyurl.com/ycmslwc8

Fuller, Emma C., Jameal F. Sambouri, Joshua S. Stoll, Simon A. Levin, and James R. Watson. 2017. "Characterizing fisheries connectivity in marine social-ecological systems." ICES Journal of Marine Science. 74, no. 8: p.2087-2096. doi:10.1093/icesjmfs/fsx128 How do fishers adapt to changes in ecosystems and/or fisheries management? They can change the area where they fish, they can find other income sources, they can leave fishing, or they can diversify and work multiple fisheries. West Coast fishers tend to be resilient generalists, able to switch from one fishery to another as the need arises, and cope with different management regimes. Interlinked networks of potential fisheries constitute
“fisheries connectivity,” and are the subject of this article. Networks of multiple fisheries in the California Current Large Marine Ecosystem in 2009-2010 were analyzed. The relative importance of fisheries is calculated, and modeling shows vulnerability to change. On the West Coast, either the Dungeness crab or the spiny lobster fisheries were the most important. The authors point out that species unconnected by food webs may be linked due to fisheries connectivity, and that understanding these relationships will be an important part of future resource management.

Gradoville, Mary Rose. 2017. "Ecology and Environmental Controls of Two Keystone Groups of Oceanic Microorganisms: Diazotrophs and Pathogenic Vibrio." Ph.D., College of Earth, Ocean and Atmospheric Sciences; Ocean, Earth and Atmospheric Sciences, Oregon State University. “Marine bacteria play vital roles in every niche of the ocean, from small-scale symbioses to large-scale productivity and the regulation of Earth’s climate. Recent advances in molecular tools now allow us to probe the genetic potential of entire microbial communities. The next step is linking these diverse communities to the critical functions they perform, in order to better understand how microbes regulate biogeochemical processes and predict how these processes may change as humans continue to alter the physical and chemical properties of the oceans” (from the Abstract.) Two chapters address nitrogen-releasing diazotroph bacteria, while the final chapter addresses infectious Vibrio populations in Netarts and Yaquina Bays. Includes supplementary material. The major professor was Angelique E. White. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/k930c143d


which survived the trip. To understand the potential for biological invasions, it was necessary to document these species. This report describes sampling and genetic sequencing of marine algae found on 42 items that washed up between June, 2012 and July, 2016. Beautifully illustrated with photographs, microphotographs and drawings. https://ir.library.oregonstate.edu/concern/articles/8049g9979

---. 2017. Benthic Marine Algae on Japanese Tsunami Marine Debris – a Morphological Documentation of the Species. Part 3. The Green Algae and Cyanobacteria. 43 p. http://dx.doi.org/10.5399/osu/1112 Oregon State University Libraries. The Scholars Archive, (Corvallis, Or.) On March 11, 2011, the great Tōhoku earthquake shook Japan. The subsequent tsunami swept approximately 5 million tons of debris into the Pacific Ocean, some of which made its way across the Pacific and washed up on the North American West Coast. The debris carried hundreds of species, a surprising number of which survived the trip. To understand the potential for biological invasions, it was necessary to document these species. This report describes sampling and genetic sequencing of marine algae found on 42 items that washed up between June, 2012 and July, 2016. Beautifully illustrated with photographs, microphotographs and drawings. https://ir.library.oregonstate.edu/concern/defaults/db78th95q

Hiebert, Terra C., Barbara Butler, Alan L. Shanks, and Paul Rudy. 2017. Oregon Estuarine Invertebrates: Rudy's Illustrated Guide to Common Species. 3rd ed. ed. Vol. v.1-3. 865 p. [Charleston, Oregon] University of Oregon Libraries, Oregon Institute of Marine Biology. "Original edition by Paul and Lynn Rudy." volume 1. Cnidaria, Nemertea, Annelida, Sipuncula, volume 2. Arthropoda, volume 3. Mollusca, Phoronida, Echinodermata, Chordata, appendices. Advances in genetics have revolutionized the classification of aquatic invertebrates. Many animals have been given new names that more accurately reflect their relationships with other species. For this reason, it was necessary to create a new edition of Paul and Lynn Rudy’s classic “Oregon Estuarine Invertebrates.” Rudy’s original line drawings have been retained. There is a new section on taxonomy, and most descriptive sections have been expanded. The bibliography section has been brought up-to-date with contemporary references. The invaluable “Possible Misidentifications” section has been expanded. This magnum opus is available on the internet and should be referenced by anyone wanting to learn more about these familiar and fascinating animals. https://scholarsbank.uoregon.edu/xmlui/handle/1794/18839

Hoelting, Kristin, and Nina Burkardt. 2017. Human Dimensions of Climate Change in Coastal Oregon. OCS Study BOEM no. 2017-052 216 p. U. S. Dept. of the Interior. Bureau of Ocean Energy Management, (Washington, D. C.) An attractive climate relative to the rest of the State and nation draws more people to the Oregon Coast. Longer, drier summers bring more tourists, more forest fires and less available freshwater. Heavier winter rains bring more flooding and erosion events. Higher water temperatures cause the ranges of animals (terrestrial and aquatic) to change, increase toxic algae blooms,
kill salmon and stress Dungeness crabs. Increasing ocean acidity stresses shellfish. More intense winter storms and higher sea levels threaten infrastructure. These are some of the consequences of climate change outlined in this excellent report. One of the more valuable aspects of this comprehensive look at climate change in our area is extensive quotations from local residents. Good information on the Coos Bay and Newport areas. This report is highly recommended. https://espis.boem.gov/final%20reports/5630.pdf

Hutchinson, Ian, and John J. Clague. 2017. "Were they all giants? Perspectives on late Holocene plate-boundary earthquakes at the northern end of the Cascadia subduction zone." *Quaternary Science Reviews*. 169, p.29-49. http://dx.doi.org/10.1016/j.quascirev.2017.05.015 This article is focused on the northern end of the Cascadia Subduction Zone, but offers a current look at research on West Coast prehistoric tsunamis. The authors attempt to match buried soils in southwest Washington showing seven tsunamis with deposits on Vancouver Island and note what can be correlated with earthquake evidence from the entire subduction zone. They found that three earthquakes were caused by a rupture of the entire plate margin. Three other earthquakes left tsunami evidence in the north, but the deposited soils are not yet accurately dated. One earthquake seems to have taken place in the north, but is not well correlated in the south, indicating a possible partial plate rupture.

Kendrick, Gary A., Robert J. Orth, John Statton, Renae Hovey, Leonardo Ruiz Montoya, Ryan J. Lowe, Siegfried L. Krauss, and Elizabeth A. Sinclair. 2017. "Demographic and genetic connectivity: the role and consequences of reproduction, dispersal and recruitment in seagrasses." *Biological Reviews*. 92, p.921-938. doi: 10.1111/brv.12261 The valuable ecological roles provided by seagrasses are well known. Population connectivity in seagrasses, however, is less well understood. “Accurate estimation of connectivity among populations is fundamental for determining the drivers of population resilience, genetic diversity, adaptation and speciation” (Abstract). This article reviews what is known about this aspect of seagrass ecology and includes a study of Yaquina Bay eelgrass. The authors point out what is known, gaps in knowledge, and potential directions for future research.

Lewis, Nathaniel S., and Theodore H. DeWitt. 2017. "Effect of green macroalgal blooms on the behavior, growth, and survival of cockles (*Clinocardium nuttallii*) in Pacific NW estuaries." *Marine Ecology Progress Series*. 582, p.105-120. https://doi.org/10.3354/meps12328 This paper examines the effects of algal blooms in Yaquina Bay on a population of cockle clams. Sediment under algal mats lacks dissolved oxygen, and decomposing algae release chemical compounds that affect the clams. The authors found that macroalgal mats caused cockles to emerge from sediment, and to move away from the algae. Clams atop the sediment were stressed, vulnerable to predation and particularly vulnerable to temperature stress. “Regardless of nutrient source, our research demonstrates that macroalgal mats pose a threat to the growth and survival of these intertidal bivalves” (p.118). The online link includes access to
supplemental videos illustration aspects of the cockle's biology.  https://www.int-res.com/articles/suppl/m582p105_supp/

McClees, Whitney, and Catherine de Rivera. 2017. "The limitation of spread of non-native marine invertebrates from artificial structures to natural habitats [poster]." *ESM Colloquium*. Portland State University. Environmental Science & Management Department. Human activities can cause invasive species to be introduced into estuaries, and anthropogenic structures can give them niches where they can establish themselves in new environments. In this poster, the authors explore the invasion risk inside and outside a marina that has been colonized with non-native species. 84 settling tiles were placed inside and outside a marina and given different treatments. There was much higher species diversity inside the marina than outside. The authors hypothesize that a combination of predation outside the marina, along with dispersal, is responsible for this difference. https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1006&context=esm_colloquium

Motley, Jennifer. 2017. "Local and Regional Patterns in Eelgrass (*Zostera marina* L.) Communities Along an Upwelling-Productivity Gradient in Oregon Estuaries, USA." M.S., College of Earth, Ocean, and Atmospheric Sciences. Marine Resource Management Program, Oregon State University. This Master’s thesis concerns factors affecting community structure in eelgrass beds. “Here I investigate the relationship between primary producers (eelgrass, ulvoid macroalgae, and epiphytes), epifauna mesograzers, and fish predators within and across three estuaries located on the Oregon Coast, USA (Netarts Bay, Yaquina Bay, and Coos Bay)” (Abstract.) The author found that regional conditions such as upwelling were more important than local conditions. Interestingly, the author found evidence that the eelgrass sea hare Phyllaplysia taylori had a dominant influence at one site in Netarts Bay. Co-major professors were Fiona Tomas Nash and Sally D. Hacker. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/wh246z218

Oregon Department of Fish and Wildlife. 2017. Oregon Coast Coho Conservation Plan Annual Report. 6 p. [Oregon Dept. of Fish and Wildlife] ([Salem, Or.]) “Still recovering from poor ocean conditions that created adverse effects on the OC Coho Salmon prey sources, survival, and fisheries, OC Coho spawner abundance estimates for the ESU decreased from 2016 estimates, resulting in the second lowest wild OC Coho Salmon spawner abundance estimate recorded since 1999” (p.1) https://www.dfw.state.or.us/fish/CRP/docs/coastal_coho/economic_reports/OCCCP%202017%20Annual%20Report%20draft.pdf

Boundaries (UGB), and Area Outside UGBs 2017-2067. *Oregon Population Forecast Program.* no.29, 42 p. Portland State University. Population Research Center (Portland) In-migration from areas outside Lincoln County, and mortality of an aging population are the major drivers of population levels in the area. “Lincoln County’s total population is forecast to grow by 12,684 persons (27 percent) from 2017 to 2067, which translates into a total countywide population of 60,628 in 2067. . . The population is forecast to grow at the highest rate — 0.7 percent per year — in the near-term (2017-2025). This anticipated population growth in the near-term is based on three core assumptions: (1) Lincoln County’s economy will continue to strengthen in the next 10 years; (2) middle-aged persons will continue to migrate into the county; (3) empty nesters and retirees will continue to migrate into the county, thus increasing deaths” (p.19)

https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1029&context=opfp


https://digital.osl.state.or.us/islandora/object/osl%3A814196/datastream/OBJ/download/2017.pdf


https://doi.org/10.1898/NWN16-05.1 Understanding diets of different species is essential for wildlife managers. This paper contributes to our understanding of the diet of harbor seals by reviewing over eighty years of scientific literature on this topic. Seasonal and spatial variations in diet are noted, and the issue of harbor seal predation on salmonids is explored.

Thompson, Sarah Ann, William J. Sydeman, Julie A. Thayer, Anna Weinstein, Katherine L. Krieger, and Doug Hay. 2017. "Trends in the Pacific herring (*Clupea pallasii*) metapopulation in the California Current Ecosystem." *California Cooperative Oceanic Fisheries Investigations, Progress Report.* 58, p.1-18. This paper examines population trends for Pacific herring on the West Coast. The authors find that overall populations have been declining since the 1980s, although there are areas such as Yaquina Bay that have not seen large declines. The data hints at cyclic fluctuations in population, but more study is needed. “We do not understand the drivers of changes occurring in the herring metapopulation, nor have the consequences to upper trophic levels in this marine ecosystem been investigated comprehensively. Expansion of current monitoring and new directed research on relationships between herring and the environment and higher-level consumers is therefore warranted and essential.” (p.11)

Weilhoefer, C. L., K. Jakstis, and C. Fischer. 2017. "Response of primary producer communities to short-term nutrient additions in a Pacific Northwest estuarine tidal wetland." *Wetlands*. 27, p.687-696. doi: 10.1007/s13157-017-0899-z As human populations in the Pacific Northwest continue to increase, wetlands have to absorb more nutrients from increased human activity. This article explains a study of a wetland in lower Yaquina Bay that was subjected to three different treatments of increased nitrogen, increased phosphorus, and increased nitrogen and phosphorus. Nutrient levels were selected to mimic projected nutrient loads impacted by human activity. This study is unique in that it addresses both changes in terrestrial vegetation as well as changes in algae in wetland sediments. This is important because, “Benthic macroalgae, particularly diatoms, are the referred food source of invertebrates and fish in these ecosystems” (p.694). This is a most interesting exploration of complex ecological relationships.

Aagesen, Alisha M., Sureerat Phuvaste, Yi-Cheng Su, and Claudia C. Häse. 2018. "Characterizing the adherence profiles of virulent *Vibrio parahaemolyticus* isolates." *Microbial Ecology*. 75, p.152-167. 10.1007/s00248-017-1025-8 *Vibrio parahaemolyticus* is a pathogen associated with shellfish poisoning caused by eating raw or undercooked oysters. Depuration is a standard method for making shellfish safe by placing live animals in clean seawater in order to reduce bacterial contaminants. Unfortunately, it is not very effective at removing this organism. Thus, it is important to understand how *V. parahaemolyticus* is associated with oysters. This article examines how Vibrios colonize surfaces. Eight different strains were examined to see how they adhered to surfaces, to see if motility could predict persistence in oyster tissues, and to see if examining genetic differences could provide insights. The authors observed “that the motility phenotype of a strain appeared to be a better indicator for persistence in the oyster.”

Brickley, Alan K., Steven R. Schell, and Edward J. Sullivan. 2018. "Climate change and Oregon law: What is to be done?" *Journal of Environmental Law & Litigation*. 33, no. [12] p.235-323. The legal system seems to change more slowly than the social and environmental milieu in which it functions. It is encouraging to find good minds looking at problems caused by climate change and their repercussions on the legal system. In this article, the authors offer practical advice Oregonians can use to adjust their laws to climate change. “We examine two aspects of that response. The first concerns planning and regulation of land, and the second concerns the effects of climate change on property law. We suggest that traditional property law doctrines, such as reliction, avulsion, property boundaries, and public easements should be reexamined in the light of this crisis” (p.239). If we are to adapt to climate change, our institutions must adapt, and forward-looking publications like this will help. https://scholarsbank.uoregon.edu/xmlui/handle/1794/23295

Carlton, James T., John W. Chapman, Jonathan B. Geller, Jessica A. Miller, Gregory M. Ruiz, Deborah A. Carlton, Megan I. McCuller, Nancy C. Treneman, Brian P. Steves, Ralph A.
Breitenstein, Russell  Lewis, David  Bilderback, Diane  Bilderback, Takuma Haga, and Leslie H. Harris. 2018. "Ecological and biological studies of ocean rafting: Japanese tsunami marine debris in North America and the Hawaiian Islands." Aquatic Invasions. 13, no. 1: p.1-9.  https://doi.org/10.3391/ai.2018.13.1.01  “This is one of the papers from the special issue of Aquatic Invasions on ‘Transoceanic Dispersal of Marine Life from Japan to North America and the Hawaiian Islands as a Result of the Japanese Earthquake and Tsunami of 2011.’” (Co-Editors’ Note). This article introduces a special issue of Aquatic Invasions. It summarizes the largest examples of tsunami debris found on the American Pacific coast and recounts the discovery of many new Japanese species identified through research. Includes color photographs. https://tinyurl.com/2pxmp6e8

Carroll, Lindsa. 2018.  HMSC high tide lesson plan: Salinity in the estuary. ORESU-E.  no.17-040, 5 p. Oregon State University. Sea Grant College Program and Hatfield Marine Science Center (Corvallis, Or.) This lesson plan introduces students to the concepts of salinity and density. In this lesson students create and test a hypothesis about how the distance from the mouth of an estuary influences salinity levels. https://ir.library.oregonstate.edu/concern/defaults/4j03d484k

Chock, Gary Y. K. , Lyle Carden, Ian Robertson, Yong Wei, Rick Wilson, and John Hooper. 2018. "Tsunami-resilient building design considerations for coastal communities of Washington, Oregon, and California." Journal of Structural Engineering. 144, no. 8: p.04018116-1-12.  DOI: 101061/(ASCE)ST.1943-541X.0002068 The American Society for Civil Engineering has issued a new standard on "Tsunami Loads and Effects" as part of the 2016 edition of the ASCE Standard, Minimum Design Loads and Associated Criteria for Buildings and Other Structures. This is a technical study examining the pressures and hydrodynamic lateral forces of tsunami and discusses options for planners such as strengthening buildings or changing zoning. "It is important that communities in tsunami hazard areas evaluate their risk associated with existing development and start to consider disaster resilience in community planning of future development" (p.04018116-11).

Cohn, Nicholas T. 2018. "From the Shoreface to the Foredunes: Coastal Morphodynamics Across the Land-Sea Interface." Ph. D., College of Earth, Ocean and Atmospheric Sciences, Geology, Oregon State University. “Coastal flooding and erosion are major concerns for low lying coastal communities—particularly in light of accelerated sea level rise and climate change. To improve quantitative understanding of the physical drivers of both flooding and coastal landscape change, this dissertation explores coastal morphodynamics bridging the land-sea interface on modally dissipative beaches throughout the U.S. Pacific Northwest (PNW).” (from the Abstract) Although this doctoral dissertation focuses most intently on the Oysterville area, beaches at the Netarts Littoral Cell, Agate Beach and South Beach, Oregon and their erosional trends are also discussed. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/1n79h955b

Fewer younger people are entering the commercial fishing industry, and the average age of commercial fishers is increasing. Obstacles to entry of younger persons include expensive fishing rights, few entry-level positions in the industry, and social issues such as drug and alcohol abuse. In this paper, the authors explore this issue by examining two coastal communities of different sizes, locations and economic diversity. Drivers of change and potential impacts of losses of fishing businesses are explored.


A planktonic copepod, *Pseudodiaptomus inopinus*, native to China, Korea and Japan, has invaded Pacific Northwest estuaries. This article addresses how the species spread in the northwestern Pacific. Did it migrate from one estuary to its neighbors? Did it spread from a migrant pool offshore? Or did it spread by irregular random pulses? The authors answer these questions with genetics and conclude that a pulsed model of spread by ballast water at irregular intervals fits the data. “The stochastic pattern of long-range dispersal observed in *P. inopus* suggests that planktonic invaders may spread across estuarine systems in a highly unpredictable manner.” (p.1592)


“A series of surveys were undertaken to characterize recruitment and post-settlement processes for two species of burrowing shrimps, Neotrypaea californiensis and Upogebia pugettensis in order to determine how they influenced broader adult populations in US west coast estuaries. . . Patterns in strong recruitment years amongst estuaries, particularly for *U. pugettensis*, suggest the presence of multi-estuary metapopulations linked via larval dispersal. These results have important implications for shrimp population management including control for shellfish aquaculture, but also conservation of estuarine habitats due to the strong influence of these ecosystem engineers on the benthic community.” (from the Abstract)


Oregon populations of wild coho salmon were in decline until they were listed by the Federal Government as threatened populations in 1998. Subsequent efforts to restore coho included reducing hatchery production, restoring habitats and cutting allowable
harvests. At the same time, ocean conditions improved, favoring adult salmon survival. In this paper, the authors’ objective “was to assess change in the freshwater production of juvenile production of juveniles (smolts) through time in order to determine if recent increases in adult abundance could be related to management affecting the freshwater juvenile production” (from the Abstract). Interestingly, the authors did not find any improvement in the survival of juvenile fish per spawning salmon. Instead, they attribute the rebound in coho population to improved ocean conditions.

Gradoville, Mary R., Byron C. Crump, Claudia C. Häse, and Angelique E. White. 2018. "Environmental controls of oyster-pathogenic Vibrio spp. In Oregon estuaries and a shellfish hatchery." Applied and Environmental Microbiology. 84 no. 9: e02156-17, 16 p. 10.1128/AEM.02156-17 Vibrio species present huge problems for oyster hatcheries. They can cause foodborne illnesses, and some species kill shellfish. This article gives the result of a study of the presence of Vibrios in Netarts Bay, Yaquina Bay and the Whiskey Creek Shellfish Hatchery in Netarts Bay. Efforts to reduce Vibrio species at the hatchery are described. These efforts met with success with many species, but not with regard to Vibrio coralliilyticus, a pathogen that kills larval oysters. Conditions in Netarts Bay that may favor this particular species are described. This is an open-access article. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5930336/

Krueger-Hadfield, Stacy A., Tiffany A. Stephens, Will H. Ryan, and Sabrina Heiser. 2018. "Everywhere you look, everywhere you go, there’s an estuary invaded by the red seaweed Gracilaria vermiculophylla (Ohmi) Papenfuss, 1967." BioInvasions Records 7, no. 4: p.343-355. 10.3391/bir.2018.7.4.01 The red algae Gracilaria vermiculophylla is a native of the northwestern Pacific region. Over the course of the last century, it has successfully invaded almost every temperate estuary on the other side of the ocean, in North America. This aggressive invader changes habitats, particularly by populating habitats that were formerly lacking algal cover. In this paper, the authors report on a survey of 61 sites, from Alaska to San Diego, and recorded 33 new sites where the species was found. https://www.reabic.net/journals/bir/2018/4/BIR_2018_KruegerHadfield_etal.pdf

Law, Karen H. 2018. "Comparison of Habitat Restoration and Enhancement Methods for Olympia Oysters (Ostrea lurida) in Yaquina Bay, Oregon." M.S., College of Earth, Ocean, and Atmospheric Sciences. Marine Resource Management, Oregon State University. The native Olympia oyster played an important role in the history and pre-history of Yaquina Bay, from sustaining Native Americans to providing an economic incentive for the development of the town of Newport. Due to pollution and over-fishing, the Olympia oyster came close to disappearing from Yaquina Bay. Now, thanks to restoration efforts, the delicious mollusk is back. This thesis explores three methods to encourage juvenile Olympia oyster settlement. “To determine the efficacy of different methods of oyster habitat restoration methods in enhancing juvenile life history traits, this study compared the settlement, growth, and mortality of wild juvenile Olympia oysters among three
Shell treatments: (1) bagged shells and (2) loose shells, which are commonly used methods of oyster habitat restoration, and (3) rafted-line shells . . . “ (from the Abstract) William C. Hanshumaker was the major professor. 

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/fj2367689

Lopes-Lima, Manuel, Ivan N. Bolotov, Van Tu Do, David C. Aldridge, Miguel M. Fonseca, Han Ming Gan, Mikhail Y. Gofarov, Alexander V. Kondakov, Vincent Prié, Ronaldo Sousa, Simone Varandas, Ilya V. Vikhrev, Amilcar Teixeira, Rui-Wen Wu, Xiaoping Wu, Alexandra Zieritz, Elsa Froufe, and Arthur E. Bogan. 2018. "Expansion and systematics redefinition of the most threatened freshwater mussel family, the Margaritiferidae." Molecular Phylogenetics and Evolution. 127, p.98-118. https://doi.org/10.1016/j.ympev.2018.04.041 In this article, the evolution, distribution and taxonomy of the freshwater pearl mussel family, Margaritiferidae, is explored. Fossils as well as genetic data were used to model the diversification of this family.

Loredo, Stephanie A. 2018. "Movement, Dive Behavior, and Habitat-Use of Common Murres (Uria aalge) in the Northern California Current System under Variable Ocean Conditions." M.S., Dept. of Fisheries and Wildlife, Wildlife Science, Oregon State University. This thesis concerns foraging and diving behavior of common murres off Oregon, Washington and British Columbia. The study covers 2013 and 2015—two years of unusually warm water (2013, the year of “the Blob” of warm water off the west coast), and 2015, a year with a more typical climate, were studied. Location trackers were affixed to non-breeding murres, and their patterns of foraging were studied. The author also studied diving behavior in murres. This is an interesting look at how predatory seabirds handle different oceanographic conditions in a changing world. Major professors were Robert M. Suryan and Donald E. Lyons. 

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/kk91fr63w

Nelson, Walter G. 2018. "An evaluation of factors controlling the abundance of epiphytes on Zostera marina along an estuarine gradient in Yaquina Bay, Oregon, USA." Aquatic Botany. 148, p.53-63. https://doi.org/10.1016/j.aquabot.2018.04.010 In layperson’s terms, epiphytes are plants that grow on other plants. Epiphytes growing on seagrass leaves increase productivity and add food for grazers to the ecosystem. Too many epiphytes, however, shade the host seagrass and interfere with its ability to absorb sunlight. This article reports on a 4-year study of seagrass epiphytes in the lower intertidal of Yaquina Bay, contrasting marine and riverine environments and dry and wet seasons.

Nelson, Walter G., and Gary Sullivan. 2018. "Effects of microtopographic variation and macroalgal cover on morphometrics and survival of the annual form of eelgrass (Zostera marina)." Aquatic Botany. 145, p.37-44. https://doi.org/10.1016/j.aquabot.2017.11.008 The native eelgrass, Zostera marina, plays a vital role in estuaries, sheltering and providing food for many estuarine inhabitants. The species has both annual and
perennial life cycles. This paper reports on a population of the annual form of the seagrass. Minor differences in topography, amounting to only a few centimeters in elevation, had large effects on this population: lower plants were more abundant, had more shoots per plant and more general biomass than the plants on higher elevations. Desiccation effects in higher elevations were suggested to be less significant than competition from macroalgae.

Nesbitt, Elizabeth A. 2018. "Cenozoic marine formations of Washington and Oregon: an annotated catalogue." PaleoBios. 35 p.1-20. Most of the geologic formations visible on the Oregon Coast date from the Cenozoic Era (66 million years ago – present). This article is a valuable guide to current knowledge and nomenclature about these formations. The author provides an annotated list of 70 fossiliferous formations. The history of name changes and time assignments for various formations is given. If you want to be sure you are using the currently accepted name for a formation, this is a great reference. This is an open-access article. https://escholarship.org/uc/item/04q5f9cr

Nuss, Kathryn F. 2018. "Finding Submerged Sites: An Exploration of Shoreline and Environmental Change in Oregon’s Yaquina River Basin using GIS Predictive Modeling." M.S., School of Language, Culture, and Society. Applied Anthropology, Oregon State University. Where is the evidence of early human occupation of coastal Oregon? Much of it is believed to be underwater, drowned as sea levels have risen. In this thesis, the author used GIS shoreline mapping and modeling to predict shoreline location at different times in the past 20,000 years. She found that the sea level was relatively constant from 20,000 to 11,000 years ago but underwent a dramatic change from 10,000 to 8,000 years ago, as sea levels rose. Change has been more incremental in the last 8,000 years. “By increasing our understanding of this landscape through time, this study will aid in our ability to protect submerged archaeological materials that may be contained in these currently offshore areas” (from the Abstract). The thesis is accompanied by a dataset for finding submerged sites using GIS predictive modeling at: https://ir.library.oregonstate.edu/concern/datasets/sn00b3861 Colored maps. The major professor was Loren G. Davis. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/5712mc48k

Oregon Department of Fish and Wildlife. 2018. Oregon Coast Coho Conservation Plan Annual Report. 7 p. [Oregon Dept. of Fish and Wildlife] ([Salem, Or.]) “In 2018, OC Coho abundance was still recovering from poor ocean conditions brought on by the marine heatwave termed “the blob” that created adverse effects on OC Coho Salmon prey sources, survival, and fisheries. With a slight increase from 2017 estimates, OC Coho wild spawner abundance for the ESU was 58% of the previous 28-year average” (p.1). https://www.dfw.state.or.us/fish/crp/docs/coastal_coho/economic_reports/OCCCP%20Annual%20Report%202018.pdf
Raposa, Kenneth B., Scott Lerberg, Craig Cornu, John Fear, Nina Garfield, Christopher Peter, Robin L. J. Weber, Gregg Moore, David Burdick, and Michelle Dionne. 2018. "Evaluating tidal wetland restoration performance using National Estuarine Research Reserve System reference sites and the Restoration Performance Index (RPI)." *Estuaries and Coasts*. 41, p.36-51. 10.1007/s12237-017-0220-7 Depending on the estuary, anywhere from 2% to 94% of Oregon’s native wetlands have been lost. Today, wetlands are being restored. But how do we know how successful wetland restoration projects may be? This article describes an analytical tool, the Restoration Performance Index, which compares different parameters between restored wetlands and unmodified reference sites. The authors compared 17 tidal wetland restoration projects in order to determine the level of restoration achieved, to compare excavation and hydrologic restoration projects, to identify key indicators for restoration effectiveness, and to evaluate the National Estuarine Research Reserve System as a source for reference sites.

Rodrigues De Melo, Claudio Manoel, Romain Morvezen, Evan Durland, and Christopher J. Langdon. 2018. "Genetic by environment interactions for harvest traits of the Pacific oyster *Crassostrea gigas* (Thunberg) across different environments on the West Coast, USA." *Journal of Shellfish Research*. 37, no. 1: p.49-61. [https://doi.org/10.2983/035.037.0104](https://doi.org/10.2983/035.037.0104) Oyster growers in the Pacific Northwest operate under a wide range of environmental conditions, from the sedate waters of Puget Sound to the dynamic coastal seas. How can Pacific oysters be bred to increase yields in such different conditions? This article describes a study of oysters grown in nine different test localities, describes the test results and outlines a strategy for increasing yield while maintaining genetic diversity.

Souder, Jon A., Londi M. Tomaro, Guillermo R. Giannico, Jeff R. Behan, and Oregon. Watershed Enhancement Board. 2018. Ecological Effects of Tide Gate Upgrade or Removal: A Literature Review and Knowledge Synthesis. 136 p. Institute for Natural Resources, Oregon State University (Corvallis, Or.) “This document reports on findings, conclusions and recommendations derived from scientific literature and knowledge regarding the effectiveness of tide gate removal or upgrade in improving conditions for Oregon’s native migratory fish species, particularly salmonids, and other plant and animal species that utilize estuarine ecosystems. The project was commissioned by the Oregon Watershed Enhancement Board (OWEB) to foster better understanding of the effectiveness of their past investments in estuary habitat restoration involving tide gates, and to aid in targeting future investments.” (from the Executive Summary). [https://www.oregon.gov/oweb/Documents/Tide-Gate-Ecological-Effects.pdf](https://www.oregon.gov/oweb/Documents/Tide-Gate-Ecological-Effects.pdf)

Strickland, Matt J., Kara Anlauf-Dunn, Kim Jones, and Charles Stein. 2018. Winter habitat condition of Oregon coast coho salmon populations, 2007-2014. *Information Reports (Oregon. Fish Division).* no.2018-01, 30 p. ODFW Aquatic Inventories Project (Salem, Or.) Winter habitat turns out to be an important limiting factor in coho salmon survival. Nicely complex habitat offers refuges that enable juvenile coho to survive winter freshets as well as providing “a large freshwater survival buffer that may help coho persist though extended periods of poor ocean survival” (p.2). It is troubling to note that agricultural land, private forest land and urban lands had the greatest lack of complexity, highlighting the need for more education and other efforts in these areas. https://tinyurl.com/3nsruf33

Sullivan, Edward J. 2018. "Protecting Oregon’s estuaries." *Ocean and Coastal Law Journal.* 23, no. 2: p.373-429. This paper reviews the history of the statewide land use planning Goal 16: Estuarine Resources. Although the plan did not live up to all the hopes for it, the author points out that, “Not only does it staunch the loss of productive habitat, act as natural filtration of sediment and pollutants, and provide for storage of floodwaters, but estuaries are an indicator of our commitment to the planet. Moreover, the Oregon Estuary program provides for land use benefits to estuary users” (p.428). https://digitalcommons.mainelaw.maine.edu/oclj/vol23/iss2/5/

Toft, Jason D., Stuart H. Munsch, Jeffery R. Cordell, Kiira Siitari, Van C. Hare, Brett M. Holycross, Lisa A. DeBruyckere, Correigh M. Greene, and Brent B. Hughes. 2018. "Impact of multiple stressors on juvenile fish in estuaries of the northeast Pacific." *Global Change Biology.* 24, no. 5. p.2008-2020. https://doi.org/10.1111/gcb.14055 “Here we provide one of the first studies for coastal ecosystems examining multiple stressor effects across broad scales, focused on the nursery function of 20 estuaries spanning 1,600 miles of coastline, 25 years of monitoring, and seven fish and invertebrate species along the northeast Pacific coast.” (from the Abstract) Chinook salmon were most susceptible to pollution, and English sole was most vulnerable to the loss of land cover. Some of the authors were Federal employees, making access of this article through ResearchGate permissible. https://www.researchgate.net/publication/322565172_Impact_of_Multiple_Stressors_on_Juvenile_Fish_in_Estuaries_of_the_Northeast_Pacific

U.S. National Marine Fisheries Service. 2018. Recovery Plan for the Southern Distinct Population Segment of North American Green Sturgeon (*Acipenser medirostris*). 120 p. National Marine Fisheries Service (Sacramento, Calif.) The Umpqua and Yaquina River estuaries are among those coastal bays and estuaries that host seasonal populations of green sturgeon, with the population peaking in summer and autumn. While the Umpqua and Yaquina River sturgeon are not the main focus of this publication, this
This document does make a number of points about problems these populations face, and the need for more information. Issues include competition from invasive species such as smallmouth bass, climate change, ocean acidification, increased stream temperatures, dredging and sedimentation.  

Yamada, Sylvia Behrens, Bree Yednock, Julia Indivero, Christina Geierman, Joel A. Prickett, Andrea Randall, and Adrianne Akmajian. 2018. Status of the European Green Crab, *Carcinus maenas*, in Oregon and Washington coastal Estuaries in 2017. 29 p. Pacific States Marine Fisheries Commission. Aquatic Nuisance Species Project. The invasive European green crab is a voracious predator of bivalve molluscs, small crustaceans and other organisms. It has been present in Oregon since the late 1990s. The population grows in warm winter waters, as they are during El Niños. “Prior to 2015, green crabs were too rare to exert measurable effects on the native benthic community and on shellfish culture in Oregon and Washington. Following the recent strong El Niño, however, we documented the arrival of three strong year classes in 2015, 2016 and 2017... Since green crabs live for 6 years, these three consecutive year classes will provide larvae until 2023” (from the Executive Summary.) Coos Bay, has experienced shocking growth of this population, going from 9 crabs captured in 2002 to 1,653 crabs captured in 2017. This report is accompanied by a dataset, available at: [https://ir.library.oregonstate.edu/concern/datasets/rn3016632](https://ir.library.oregonstate.edu/concern/datasets/rn3016632)  
[https://ir.library.oregonstate.edu/concern/technical_reports/rx913w156](https://ir.library.oregonstate.edu/concern/technical_reports/rx913w156)

Bohlen, Victoria L. 2019. "Evaluation of a Habitat Suitability Model to predict the geospatial distribution of Olympia oyster presence in Yaquina Bay, Oregon." M.S. Capstone Project, College of Earth, Ocean, and Atmospheric Sciences. Marine Resource Management Program, Oregon State University. This intriguing Capstone Project report takes the place of a Master’s thesis. The author explores Habitat Suitability Modeling, a way to predict how wild Yaquina oysters are distributed by understanding their environmental requirements. Colored maps. The major professor was Steven S. Rumrill. [https://ir.library.oregonstate.edu/concern/graduate_projects/0v838678g](https://ir.library.oregonstate.edu/concern/graduate_projects/0v838678g)

This article examines fisheries management in the Oregon Coast Range from the point of view of the entire riverscape, in order to identify critical fish-bearing streams and regulatory gaps that have impacts on the fisheries. Portions of streams that fall under fisheries management plans, as well as those that are unregulated, are identified. There are gaps in protection for riparian areas in private forest lands, and particularly in agricultural lands. An appendix identifies streams studied and percentages of stream length that fall under major fisheries management plans. This is an open-access publication.  
[https://www.ecologyandsociety.org/vol24/iss1/art22/](https://www.ecologyandsociety.org/vol24/iss1/art22/)
Bosley, Katelyn M., Thomas Wainwright, and Brett R. Dumbauld. 2019. "Application of the extractable lipofuscin aging method to estimate mortality and population dynamics of the burrowing shrimp, Neotrypaea californiensis." *Estuarine, Coastal and Shelf Science*. 219, p.33-44. [https://doi.org/10.1016/j.ecss.2019.01.015](https://doi.org/10.1016/j.ecss.2019.01.015) Burrowing shrimp play important roles in estuaries by moving sediment (bioturbation). They also create problems for oyster farmers by burying oyster seed and have been widely regarded as pests. In the past, the pesticide carbaryl was used on mudflats to exterminate burrowing shrimp. While less toxic methods are currently used, it is important for the oyster industry to understand the population and age of burrowing shrimp in the ecosystem. This article reports on a new method of aging the shrimp population and estimating its mortality using the cellular waste product lipofuscin and reports on implications of varying levels of burrowing shrimp populations.

Brophy, Laura S., Correigh M. Greene, Van C. Hare, Brett Holycross, Andy Lanier, Walter N. Heady, Kevin O’Connor, Hiromi Imaki, Tanya Haddad, and Randy Dana. 2019. "Insights into estuary habitat loss in the western United States using a new method for mapping maximum extent of tidal wetlands." *PLoS One*. 14, no. 8: [https://doi.org/10.1371/journal.pone.0218558](https://doi.org/10.1371/journal.pone.0218558) This article recounts the techniques that led to the production of the 2017 maps to model the effects of sea level rise. The authors used lidar digital elevation models and other elevation models to develop new maps of current and historical wetlands on the United States West Coast. Their work shows that about 85% of historical wetlands have been lost, with most losses near major river deltas. “The new maps will help interested groups improve action plans for estuarine wetland habitat restoration and conservation, and will also provide a better baseline for understanding and predicting future changes with projected sea level rise” (from the Abstract).

Cohn, Nicholas, Peter Ruggiero, Gabriel García-Medina, Dylan Anderson, Katherine A. Serafin, and Reuben Biel. 2019. "Environmental and morphologic controls on wave-induced dune response." *Geomorphology*. 329, p.108-128. [https://doi.org/10.1016/j.geomorph.2018.12.023](https://doi.org/10.1016/j.geomorph.2018.12.023) Coastal dunes defend against erosion and flooding. It is important to understand factors that affect dune formation and destruction such as the offshore shelf, nearshore slope and the dunes themselves. This article looks at coastal dunes at South Beach State Park, in the Netarts Littoral Cell, and at Oysterville, Washington. “…morphological features far from the dune face, including shelf geometries shaped in part by the regional historical sediment budget, may have important implications on the susceptibility of coastal foredune systems to storm impact.” (from the Abstraact)

critical for sustaining fish, fisheries, and ecosystem services." *Fisheries* 44, no. 2: p.73-91.  [https://doi.org/10.1002/fsh.10229](https://doi.org/10.1002/fsh.10229) In 2019, the Trump Administration proposed amending the Waters of the United States (WOTUS) Act to narrow the definition of wetlands, and to remove millions of acres from protection. In response, the American Fisheries Society published this article, an “AFS Special Report” on the value of headwaters and wetlands, particularly of streams that are dry part of the year. The Biden subsequently reversed the Trump amendment, but the U.S. Supreme Court, in Sackett vs. the Environmental Protection Agency, ruled in favor of narrowing the definition in 2023. Many aspects of this slow-moving environmental disaster are still in litigation. The article includes a photograph of Crowley Creek on Cascade Head. [https://ir.library.oregonstate.edu/concern/articles/n583z1008](https://ir.library.oregonstate.edu/concern/articles/n583z1008)

Crozier, Lisa G., Michelle M. McClure, Tim Beechie, Steven J. Bograd, David A. Boughton, Mark Carr, Thomas D. Cooney, Jason B. Dunham, Correigh M. Greene, Melissa A. Haltuch, Elliott L. Hazen, Damon M. Holzer, David O. Huff, Rachel C. Johnson, Chris E. Jordan, Isaac C. Kaplan, Steven T. Lindley, Nathan J. Mantua, Peter B. Moyle, James M. Myers, Mark W. Nelson, Brian C. Spence, Laurie A. Weitkamp, Thomas H. Williams, and Ellen Willis-Norton. 2019. "Climate vulnerability assessment for Pacific salmon and steelhead in the California Current Large Marine Ecosystem." *PLoS One*. 14, no. 7: e0217711. [https://doi.org/10.1371/journal.pone.0217711](https://doi.org/10.1371/journal.pone.0217711) This article reviews the vulnerability of Pacific Coast anadromous salmonids to climate change. “Nearly all listing units faced high exposures to projected increases in stream temperature, sea surface temperature, and ocean acidification. . . Anthropogenic factors, especially migration barriers, habitat degradation, and hatchery influence, have reduced the adaptive capacity of most steelhead and salmon populations. Enhancing adaptive capacity is essential to mitigate for the increasing threat of climate change. Collectively, these results provide a framework to support recovery planning that considers climate impacts on the majority of West Coast anadromous salmonids” (from the Abstract). Projections were made about Oregon coast coho salmon. [https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0217711](https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0217711)

Curran, Lorne S., Dominique V. Kone, and Benjamin J. Wickizer. 2019. Assessing the Feasibility of a Sea Otter Reintroduction to Oregon through a Coupled Natural-Human Lens. 57 p. Oregon State University (Corvallis, Or.) This report is the product of a National Science Foundation grant designed to encourage interdisciplinary studies among graduate students. The authors assess various locations on the Oregon Coast for suitable sites for reintroducing sea otters. An earlier attempt to reintroduce sea otters from Alaska to Oregon failed, perhaps because the historic Oregon population was more closely related to California sea otters than to the Alaskan otters. Public opinion, possible conflicts and habitat suitability are considered. [https://ir.library.oregonstate.edu/concern/technical_reports/c821gs71d](https://ir.library.oregonstate.edu/concern/technical_reports/c821gs71d)

Oregon State University. Sea Grant College Program (Corvallis, Or.) This field guide covers the flora and fauna you may see along the one-mile Yaquina Estuary nature trail. The trailhead is on the east side of the Visitor Center at the Hatfield Marine Science Center in Newport, Oregon. It was originally published in 1999; revised 2019. https://ir.library.oregonstate.edu/concern/defaults/0v8386491

Hayduk, Jennifer L., Sally D. Hacker, Jeremy S. Henderson, and Fiona Tomas. 2019. "Evidence for regional-scale controls on eelgrass (Zostera marina) and mesograzer community structure in upwelling-influenced estuaries." *Limnology and Oceanography*. 64, no. 3: p.1120-1134. https://doi.org/10.1002/lno.11102  “In estuaries of the U.S. Pacific Northwest coast, eelgrass (Zostera marina) ecosystems are exposed to latitudinally varying oceanographic inputs in the form of ocean upwelling. Previous research suggests that ocean upwelling is critical to eelgrass and ulvoid macroalgae abundance, but the degree to which secondary producers are controlled by processes at regional vs. local scales is unknown. Here, we consider the relationships among primary producers (eelgrass, ulvoid macroalgae, and epiphytic microalgae), epifaunal mesograzers, and mesopredator fish within and across three Oregon, U.S.A., estuaries during a spring–summer season to examine the role of multiple scales in structuring these communities.” (from the Abstract)

Kagan, James S., Rachel L. Brunner, and John A. Christy. 2019. Classification of Native Vegetation of Oregon - 2019 109 p. Oregon Biodiversity Information Center (Portland, Or.) “This classification is an update of the 2004 classification of native vegetation of Oregon by Kagan, Christy, Murray and Titus. As before, this classification lists the native plant associations known to occur in Oregon, and includes both successional and climax vegetation types that were part of the presettlement landscape of Oregon and can still be found in the state. It serves as an index to the diversity, distribution and relative rarity of the state’s native plant associations, and as a guide to their literature.” (from the introduction) https://ir.library.oregonstate.edu/concern/technical_reports/2r36v492k

Kieft, Brandon P. 2019. "The Influence of Microbial Communities on Spatiotemporal Elemental Cycling in Coastal Margins Revealed by Community- and Population-level Genomics and Proteomics." Ph. D., Dept. of Microbiology, Oregon State University. To understand carbon and nutrient cycling in rivers and on our coastal margins, we need to understand what is happening at the smallest levels, i.e., with microbes. This masterful doctoral dissertation examines the roles microbes play in carbon and nutrient cycling in Yaquina Bay, the Yaquina River plume, and nearby coastal margins. The author generated and interpreted several datasets for this work. The major professor was Ryan S. Mueller. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/7d279004w

Kone, Dominique V. . 2019. "An Ecological Assessment of a Potential Sea Otter (Enhydra lutris) Reintroduction to the Oregon Coast." M.S., College of Earth, Ocean and Atmospheric
Sciences. Marine Resource Management Program, Oregon State University. This thesis was written to address the concerns of groups working to bring sea otters back to Oregon. “Managers seek improved understanding of the potential for coastal habitats to support sea otter populations, factors likely to affect reintroduction success, and how sea otters may change nearshore ecosystems if brought back. These uncertainties were addressed by adapting and applying a recently developed model of habitat-specific carrying capacity for southern sea otters to estimate spatial variation in potential sea otter abundance (at equilibrium) in Oregon.” (from the Abstract). The major professor was Leigh G. Torres.

Lee, Elizabeth M. J. 2019. "Big Fishery, Big Data, and Little Crabs: Using a Genomic Approach to Examine Larval Recruitment Patterns of Dungeness Crab (Cancer magister) in the California Current Ecosystem." M.S., Dept. of Fisheries and Wildlife, Oregon State University. The California Current Ecosystem is a highly productive area of offshore waters extending from southern California to southern British Columbia. Its most valuable commodity is the Dungeness crab. Studies of Dungeness crabs in Coos Bay indicate that ocean conditions affect survival rate of larval crabs and their distribution. In this thesis, the author reports on studies of larval crabs in 2014, 1017 and 2018 in Coos Bay and Yaquina Bay. The author’s aim was “was to better understand how ocean conditions influence larval transport and the ultimate population connectivity of the Dungeness crab within and between the marine ecosystems along the west coast of North America. . .” (from the Abstract). Better understanding of genetics will help researchers better understand population connectivity, an important part of species’ resilience in a time of climate change. The major professor was Kathleen G. O'Malley.

Loredo, Stephanie A., Rachel A. Orben, Robert M. Suryan, Donald E. Lyons, Josh Adams, and Shawn W. Stephensen. 2019. "Spatial and temporal diving behavior of non-breeding common murres during two summers of contrasting ocean conditions." Journal of Experimental Marine Biology and Ecology. 517, p.13-24. https://doi.org/10.1016/j.jembe.2019.05.009 2013 and 2015 were poor breeding years for common murres in the Pacific Northwest. Instead of finding nest sites in breeding colonies, most murres dispersed to areas such as estuaries having greater concentrations of fish. Differing ocean conditions in the two years studied led to variations in diving behavior and foraging locations. This study has interesting implications for murre life history and conservation.

Markle, Douglas F. 2019. "Drainage evolution and freshwater fish zoogeography in coastal Oregon and Washington " Northwestern Naturalist 100 no. 2 p.71-89 https://doi.org/10.1898/NWN-18-18 Some of the major events that have affected the evolution of fishes on the Pacific Northwest Coast include Miocene basalt flows, the rise of the Coast Range, glaciation and geographic isolation. This most interesting article examines the evolutionary history and species richness (or lack of it) in freshwater fishes
in the region. “My purpose is to describe discrete geographic areas based on geological features, habitat, and distribution discontinuities in coastal freshwater fishes in Oregon and Washington” (p.73).


Oregon Department of Fish and Wildlife. 2019. Oregon Coast Coho Conservation Plan Annual Report. 6 p. [Oregon Dept. of Fish and Wildlife] ([Salem, Or.]) “Wild OC Coho Salmon spawner abundance estimates for the ESU increased from 74,060 fish in 2018 to 95,138 in 2019. The fishing harvest was less than the allowable harvest approved by the Pacific Fishery Management Council (PFMC) under Amendment 13 (A-13). Overall, overwinter rearing habitat likely continues to limit freshwater productivity” (p.1). https://www.dfw.state.or.us/fish/crp/docs/coastal_coho/economic_reports/OCCCP%20Annual%20Report-

Oregon. Department of Forestry. 2019. "[Forest] Laws and Rules." This website provides current laws on forest practice in Oregon, including general administrative rules, rules on water protection, reforestation, and using chemicals on forest lands. As they are periodically updated, it is best to refer to the web site rather than the print version previously published. https://www.oregon.gov/odf/pages/lawsrules.aspx

Portland State University. Oregon Biodiversity Information Center. Institute for Natural Resources. 2019. Rare, Threatened and Endangered Species of Oregon. 133 p. Oregon Biodiversity Information Center (Portland, Or.) This document is more than a list of threatened, sensitive and endangered species. The authors discuss the regulatory environment, provide access to resources for learning more about listed species, and give the bioregions where the species are found. A valuable resource. https://inr.oregonstate.edu/sites/inr.oregonstate.edu/files/2019-rte-book.pdf


Stern, Robert J., and Trevor A. Dumitru. 2019. "Eocene initiation of the Cascadia subduction zone: A second example of plume-induced subduction initiation?" *Geosphere.* 15 no. 3: p.659–681. https://doi.org/10.1130/GES02050.1 In this article, the authors postulate a scenario to explain the development of the Cascadia Subduction Zone. They theorize that the Yellowstone mantle plume head “destroyed the existing Cordilleran subduction zone and allowed the new Cascadia subduction zone to form by collapse of thermally weakened oceanic lithosphere over the hot western margin of the plume head.” (from the Abstract) This is an elegant approach that solves problems and answers questions. Nicely illustrated. https://pubs.geoscienceworld.org/gsa/geosphere/article/15/3/659/569925/Eocene-initiation-of-the-Cascadia-subduction-zone


Woods, Tiffany. 2019. "PSU researchers find suspected microplastics in Oregon oysters." *Confluence.* p.6-7. In April and July, 2017, Britta Baechler, a Portland State University doctoral student, purchased Pacific oysters each from six different oyster growers on Oregon’s Pacific coast. Out of the 120 oysters, she found on average 11 suspected microplastics, mostly tiny fibers, per oyster. The data is preliminary, pending analysis of the microparticles, but the implications of a world awash in plastic, are disturbing. https://ir.library.oregonstate.edu/concern/defaults/4j03d539z

Yamada, Sylvia Behrens, Shon Schooler, Bree Yednock, Julia Indivero, Christopher Carlson, Joel A. Prickett, and Andrea Randall. 2019. Status of the European Green Crab, *Carcinus maenas*, in Oregon and Washington Coastal Estuaries in 2018. 30 p. Pacific States Marine Fisheries Commission. Aquatic Nuisance Species Project (Portland, Or.) The invasive European green crab is a voracious predator of bivalve molluscs, small crustaceans and other organisms, and has been present in Oregon since the late 1990s. The population grows when winter waters are warm, as they are during El Niños. “Prior to 2015, green crabs were too rare to exert measurable effects on the native benthic community and on shellfish culture in Oregon and Washington. Following the recent strong El Niño, however, we documented the arrival of four strong year classes in 2015,
2016, 2017 and 2018. Average catch rates over the last four years steadily increased from 0.5 to 0.8 to 2.2 and to 3.2 crabs per trap. . . Since green crabs live for 6 years, these four consecutive year classes will produce larvae until 2024. ” (from the Executive Summary) Coos Bay has experienced shocking growth of this population, going from 9 crabs captured in 2002 to 1,280 crabs captured in 2018. This report is accompanied by a dataset, available at: https://ir.library.oregonstate.edu/concern/datasets/tt44pt057 https://ir.library.oregonstate.edu/concern/technical_reports/vt150q47j


Clemens, Benjamin J. , Kara Janaye Anlauf, Matt Weeber, Tom Stahl, and Oregon. Dept. of Fish and Wildlife. 2020. Final Coastal, Columbia, and Snake Conservation Plan for Lampreys in Oregon. 192 p. Oregon Dept. of Fish and Wildlife (Salem, Or.) The conservation plan described in this document is intended to “identify, acknowledge, and support actions needed to conserve lampreys in the service of the mission of the Oregon Department of Fish and Wildlife” (p.3) It gives management strategies and identifies areas needing monitoring, research and evaluation. ODFW acknowledges that it lacks the resources to fully address factors limiting lamprey populations and will need to coordinate with other groups working on natural resource issues. https://www.dfw.state.or.us/fish/CRP/docs/coastal_columbia_snake_lamprey/CPL%20-%20Final%202-14-20.pdf

Cramer, Steven P., and Lucius K. Caldwell. 2020. "Bias and consequences in attempts to estimate historical salmon abundance." Canadian Journal of Fisheries and Aquatic Sciences 77 no. 1: p.132-145. https://doi.org/10.1139/cjfas-2018-0467 Were salmon more abundant in the “good old days,” or have fisheries scientists over-estimated their abundance in the past? This article criticizes previous methods of estimating the abundance of coho salmon before the environmental stresses of recent years. The authors claim that “the revised simulations indicate that Oregon Coast coho abundance during 1892-1956 probably varied within a range similar to recent decades” (from the abstract). This work was primarily funded by the Oregon Forest Industries Council and
Dalton, Meghan M. 2020. Future Climate Projections. Lincoln County. 60 p. Oregon State University. Oregon Climate Change Research Institute (Corvallis, Or.) This is a report for the Oregon Department of Land Conservation and Development. In a complex environment, multiple factors influence the effects of climate change. “Climate change is expected to increase the occurrence of most climate---related risks considered in this report. The risks of heat waves are projected to increase with very high confidence due to strong evidence in published literature, model consensus, and robust theoretical principles for continued increasing temperatures.” (Abstract.) We learn here that the Yaquina River Estuary will probably lose wetlands, while the Yachats River Estuary will gain wetlands due to climate change. https://ir.library.oregonstate.edu/concern/technical_reports/z603r6081

Dexter, Eric, Stephen M. Bollens, Jeffery Cordell, and Gretchen Rollwagen-Bollens. 2020. "Zooplankton invasion on a grand scale: insights from a 20-yr time series across 38 Northeast Pacific estuaries." *Ecosphere*. 11, no. 5: e03040. https://doi.org/10.1002/ecs2.3040 This paper summarizes the results of over 20 years of observations of zooplankton invasions of Pacific Northwest estuaries, from 2006-2016. “Our results show that some estuaries across the region are invaded by multiple zooplankton species and that the geographic extent of invasion is far greater than previously reported for at least five species of copepods . . . We propose that the geographic distribution of these invaders is strongly constrained by geomorphic characteristics that define the salinity and mixing regimes in these estuaries, reflecting the strong role that physical forces play in structuring estuarine zooplankton communities.” (from the Abstract) This is an open-access publication. https://esajournals.onlinelibrary.wiley.com/doi/epdf/10.1002/ecs2.3040

Fox, Conner S. 2020. "Influence of Soil Texture on Carbon Storage of PNW Coastal Blue Carbon Ecosystems." Honors B.S., Dept. of Fisheries and Wildlife, Oregon State University. Interest in carbon sequestration has risen as concern about climate change has increased. “Blue carbon” refers to carbon captured by the oceans and intertidal areas adjoining the oceans. To understand the world’s carbon budget, one must understand the dynamics of blue carbon storage. In this Honors Bachelor of Science thesis, the author examines the relationship between soil texture and carbon storage at multiple West Coast sites. The advisor was J. Boone Kauffman. https://ir.library.oregonstate.edu/concern/honors_college_theses/qn59q9717

Gabel, Laura L. S., Fletcher O’Brien, and Jonathan C. Allan. 2020. GIS data and method for determining maximum-considered local and distant tsunami wave arrival data for the Oregon coast *Open-File Report (Oregon. Department of Geology and Mineral Industries)*. no. O-20-09, 23 p. Oregon Department of Geology and Mineral Industries (Portland, Or.) This is a technical report showing the methodology used to develop maps giving
arrival times for local and distant earthquake-generated tsunamis. The report discusses issues leading to misleading or untrue wave arrival times and the techniques used to correct these problems. https://www.oregongeology.org/pubs/oifr/O-20-09/O-20-09_report.pdf

Gustafson, Tarah N. 2020. "Are They What They Eat? A Stable GIT Microbiome Characterized in P. resecata." Honors Baccalaureate of Science, Department of Biochemistry & Biophysics. Biochemistry and Molecular Biology Program, Oregon State University. “Intertidal herbivores, such as isopods, help regulate and contribute to nutrient cycling and organic carbon flow through the trophic levels in estuaries and coastal ecosystems. Though much is known about the microbiomes of macrophyte leaves that serve as the primary food source for isopods, and (to a lesser extent) the microbiomes of herbivores themselves, little has been studied about the community assembly dynamics of herbivore microbial communities” (from the Abstract). This Honors Bachelor of Science thesis describes a project to better understand the microbiomes associated with these isopods. https://ir.library.oregonstate.edu/concern/honors_college_theses/47429h530

Haxel, Jesica. 2020. Murre populations in flux: what factors affect seabird reproductive success? ORESU-E. no.20-006, 5 p. Oregon State University. Sea Grant College Program (Corvallis, Or.) This lesson plan for 11th and 12th graders uses the common murre population at Yaquina Head to introduce students to important concepts such as food web processes, environmental change, biological monitoring practices, and population dynamics. “The reproductive success of common murrees at Yaquina Head Outstanding Natural Area varies from year to year. Students will learn how researchers monitor seabird populations and explore data to determine how seabird reproductive success is connected to environmental conditions and trophic relationships” (from the Overview). Use of scientific datasets and critical thinking skills are emphasized. https://ir.library.oregonstate.edu/concern/defaults/6w924k31d

Lee, Elizabeth M. J., and Kathleen G. O'Malley. 2020. "Fine-scale spatial and temporal genomic variation among Dungeness crab Cancer magister larval recruits in the California Current Ecosystem." Marine Ecology Progress Series. 649,p.67-81. https://doi.org/10.3354/meps13453 “Dynamic marine environments can shape complex spatial and temporal patterns in the population connectivity of marine species, and this is often exemplified in species with long larval phases. Here, we used a genotyping-by-sequencing (GBS) approach to examine fine-scale spatial and temporal genomic variation among Dungeness crab Cancer magister larval recruits sampled in the California Current Ecosystem.” (from the Abstract). This publication was re-printed online in the Sea Grant reprint series as ORESU-R-20-010. https://ir.library.oregonstate.edu/concern/articles/8910k215z

Magel, Caitlin L. 2020. "Ecosystem Functions of Pacific Northwest Estuaries: The Role of Ocean and Watershed Drivers in Eelgrass and Coho Salmon Dynamics." Ph. D., Dept. of
Integrative Biology, Oregon State University. This wide-ranging doctoral dissertation aims to “investigate ocean and watershed dynamics to better understand the key drivers and consequences of ecosystem change in Pacific Northwest (PNW) estuaries” (from the Abstract). Topics explored include eelgrass and macroalgae, coho salmon and the Dungeness crab catch.

https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/gt54kv37z

Marois, Darryl E., and Hilmar A. Stecher. 2020. "A simple, dynamic, hydrological model for mesotidal salt marshes." *Estuarine, Coastal and Shelf Science*. 233, no. 106486: 16 p. https://doi.org/10.1016/j.ecss.2019.106486 Marshes provide essential ecological services by cleaning water, preventing flooding, sequestering carbon and offering valuable habitats. To understand the physical parameters of marshes, natural resource managers need to understand their hydrology. In this article, the authors offer a simple model that has proven to be accurate that creates a rapid picture of a complex environment. The model can help with predicting marsh water levels, understanding soil chemistry, vegetation zonation and implications of sea level rise.

Peyer, Suzanne M., Brian R. Maricle, and David R. Young. 2020. "Effect of sulfide and the role of root mass on metabolic fluxes in the seagrass Zostera marina." *Environmental and Experimental Botany*. 180, no. 104267: 10 p. https://doi.org/10.1016/j.envexpbot.2020.104267 Eelgrass offer vital habitats for many species. Yet eelgrass populations around the world are declining. In this article, the authors examine the potential role of hydrogen sulfide in inhibiting eelgrass growth. This study showed that the size of eelgrass root mass was an important variable in understanding the plants' interactions with sulfides.


Schwartzkopf, Brittany D. 2020. "Function of Oregon Estuaries to Juvenile Fishes, with Focus on Juvenile Rockfishes (Sebastes spp.) in Yaquina Bay, Oregon " Ph. D., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. It has long been known that estuaries play an important role as nurseries for some marine fishes, including some of the 96 species of rockfish. This doctoral dissertation seeks to fill in some of the gaps in our understanding of this nursery function, by addressing the growth and feeding ecology of juvenile rockfish in estuaries. Learning how juvenile rockfish feed and grow shows how estuarine habitats are used and helps with evaluating habitat quality. Although the focus of the dissertation is on Yaquina Bay, rockfish in Alsea and Nehalem Bays were also studied. Scott A. Heppell was the major professor. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/sb397g047
Schwartzkopf, Brittany D., Alison D. Whitman, Amy J. Lindsley, and Scott A. Heppell. 2020. "Temporal and habitat differences in the juvenile demersal fish community at a marine-dominated northeast Pacific estuary." *Fisheries Research*. 227, no. 105557: 11 p. [https://doi.org/10.1016/j.fishres.2020.105557](https://doi.org/10.1016/j.fishres.2020.105557) A lack of systematic studies of fish communities in estuaries has hampered our understanding of estuaries' roles in the early life histories of many marine fish. In this article, the authors compare the community structure of juvenile fishes in the Yaquina Estuary for 2008-2009, 2012-2013 and 2016-2017. Sampling took place around docks and eelgrass beds. “Greater abundances and reduced change in communities over time at eelgrass sites suggests that maintaining these habitats is potentially critical for many estuary-rearing species and temporal changes in these communities highlights the importance of long-term monitoring.” (from the Abstract)

Sjostrom, Anja, Flaxen D. L. Conway, Lorenzo Ciannelli, and Waldo Wakefield. 2020. Lost in plain sight: the evolution of Oregon's nearshore groundfish trawl fleet. *ORESU-S*. no.20-002, 21 p. Oregon State University. Sea Grant College Program (Corvallis, Or.) In 2000, thanks to double troubles of strong El Niños and overfishing, the nearshore west coast groundfish fishery collapsed. This report documents how the fishery has come back from that disaster, and where it is headed now. Groundfish are longer-lived fish, slow to grow, and their populations do not replenish at the rapid rate characteristic of shorter-lived species. In this beautifully photographed report we meet the members of the “beach fleet” and learn how they have coped with increased regulation and the necessity of adapting to change. [https://ir.library.oregonstate.edu/concern/technical_reports/s1784t35f](https://ir.library.oregonstate.edu/concern/technical_reports/s1784t35f)

Souder, Jon A. and Guillermo R. Giannico. 2020. Tide gates: operation, fish passage and recommendations for their upgrade or removal. *ORESU-T*. no.20-001, 15 p. Oregon Sea Grant (Corvallis, Or.) This report is meant to help natural resource managers decide how to treat tide gates to help migratory fishes and other estuary residents. Should the gates be removed, or can they be upgraded to better allow fish passage? It gives technical information on tide gates, findings from a literature review and results from a consultation with experts. “Based on those findings, we’re also including recommendations to guide future investments in, and monitoring of, restoration projects associated with tide gates” (p.3). [https://ir.library.oregonstate.edu/concern/technical_reports/qv33s4263](https://ir.library.oregonstate.edu/concern/technical_reports/qv33s4263)

Souheim, Briana, Mark Lewis, and Matt Weeber. 2020. Western Oregon adult coho salmon spawning survey data report. *Oregon Plan for Salmon and Watersheds Monitoring Report* no. OPSW-ODFW-2021-3, 34 p. Oregon Adult Salmonid Inventory & Sampling Project, ODFW (Corvallis, Or.) The COVID-19 epidemic reduced the number of spawning surveys. Available data showed a strong skew based on geography: the Lower Columbia wild salmon runs were larger than normal, the Oregon Coast region had 88%
of the 30-year average, while wild salmon runs in southern Oregon were greatly reduced.
https://digital.osl.state.or.us/islandora/object/osl%3A972079/datastream/OBJ/download/2020.pdf

Wang, Lu. 2020. "Effects of Anthropogenic Stressors on Seagrass and Coral Microbiomes." Ph. D., Dept. of Microbiology, Oregon State university. Coral reefs and seagrass beds provide important habitats and perform vital ecosystem services to a variety of ocean life. Unfortunately, both corals and seagrasses are suffering population declines due to human-derived stressors. In this wide-ranging doctoral dissertation, the author examines how anthropogenic changes stress the microbiomes surrounding seagrasses and corals. Ryan S. Mueller was the major professor.
https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/nv9359526

Williams, Matt C., Christina A. Appleby, Lowell H. Anthony, and Fletcher E. O'Brien. 2020. Natural hazard risk report for Lincoln County, Oregon, including the Cities of Lincoln City, Depoe Bay, Siletz, Newport, Toledo, Waldport, and Yachats, and the Confederated Tribes of Siletz Indians, and the unincorporated communities of Otis-Rose Lodge, Salishan-Lincoln Beach, Otter Rock, Seal Rock-Bayshore, and Wakonda Beach. Open-File Report (Oregon. Department of Geology and Mineral Industries) no. O-20-11, 99p. Oregon. Department of Geology and Mineral Industries (Portland, Or.) This FEMA-funded report describes the methods and results of a natural hazard risk assessment performed by the Department of Geology and Mineral Industries for Lincoln County communities. “The purpose of this project is to provide communities within the study area a detailed risk assessment of the natural hazards that affect them to enable them to compare hazards and act to reduce their risk” (from the Abstract.) Detailed reports on each community’s predicted response to a major earthquake and tsunami.

Yamada, Sylvia Behrens, Shon Schooler, Renee Heller, Luke Donaldson, Graham T. Takacs, Andrea Randall, Chelsey Buffington, and Adrianne Akmajian. 2020. Status of the European Green Crab, Carcinus maenas, in Oregon and Washington Coastal Estuaries in 2019. 31 p. Pacific States Marine Fisheries Commission. Aquatic Nuisance Species Project (Portland, Or.) The invasive European green crab is a voracious predator of bivalve molluscs, small crustaceans and other organisms. It has been present in Oregon since the late 1990s. The population grows when winter waters are warm, as they are during El Niños. “Prior to 2015, green crabs were too rare (<0.2 per trap) to exert measurable effects on the native benthic community and on shellfish culture in Oregon and Washington. But after the 2015-2016 El Niño, we document the arrival of five strong year classes. Average catches steadily increased from 0.5 crabs per trap, in 2015 to around 3 crabs per trap in 2017 to 2019. . . Since green crabs live for 6 years, these five consecutive year classes can produce larvae until 2025.” (from the Executive Summary) Coos Bay has experienced shocking growth of this population, going from 9
crabs captured in 2002 to 1,397 crabs captured in 2019. This report is accompanied by a dataset, available at:  
[https://ir.library.oregonstate.edu/concern/datasets/028712995](https://ir.library.oregonstate.edu/concern/datasets/028712995)
[https://ir.library.oregonstate.edu/concern/technical_reports/xk81js14x](https://ir.library.oregonstate.edu/concern/technical_reports/xk81js14x)

[https://doi.org/10.3390/fishes5010004](https://doi.org/10.3390/fishes5010004)

The European green crab has been present in the Pacific Northwest for the past thirty years. The International Union for the Conservation of Nature considers it one of the top 100 worst invasive species in the world. This article reviews current knowledge about this species around the world. “This review provides an up-to-date account of the current published information on the life history and population dynamics of this very important species, including genetic differentiation, habitat preferences, physical parameter tolerances, reproduction and larval development, sizes of crabs, densities of populations, sex ratios, ecosystem dynamics and ecological impacts in the various established global populations of green crabs. This is an Open Access article.  
[https://www.mdpi.com/2410-3888/5/1/4](https://www.mdpi.com/2410-3888/5/1/4)

Allan, Jonathan C., and Fletcher E. O’Brien. 2021. Earthquake and tsunami impact analysis for coastal Lincoln County, Oregon. *Open-File Report (Oregon. Department of Geology and Mineral Industries)* no. O-21-02, 117p. Oregon. Department of Geology and Mineral Industries (Portland, Or.) This FEMA-funded report describes the methods and results of a natural hazard risk assessment performed by the Department of Geology and Mineral Industries for Lincoln County communities. “The purpose of this project is to provide communities within the study area a detailed risk assessment of the natural hazards that affect them to enable them to compare hazards and act to reduce their risk.” (from the Executive Summary). Detailed reports on each community’s predicted response to a major earthquake and tsunami.  

[https://www.portoftoledo.org/_files/ugd/bcfe89_3a93c1a11ede48cbaad53a7e0cf8cd7e.pdf](https://www.portoftoledo.org/_files/ugd/bcfe89_3a93c1a11ede48cbaad53a7e0cf8cd7e.pdf)

[https://doi.org/10.3391/ai.2021.16.4.09](https://doi.org/10.3391/ai.2021.16.4.09)

The blue mud shrimp, Upogebia pugettensis, is an ecosystem engineer, turning over and re-suspending, and aerating sediments (bioturbation), burrowing, and deposit feeding. Some of this activity creates difficulties for oyster growers, causing the application of pesticides in oyster growing areas in the 1950s. Perhaps the changes in the ecosystem caused by introduced oysters
and pesticides opened the doors for subsequent invasions. In 1999, a parasitic isopod was discovered to be infecting the native mud shrimp, and effectively sterilizing the shrimp. A related species, the Asian mud shrimp, Upogebia major, is less susceptible to the parasite, and has begun to fill in spaces formerly occupied by the blue mud shrimp. While this article concerns mud shrimp populations in California, the dynamics discussed are relevant to Oregon estuaries. If the ways our estuaries are engineered changes thanks to the double invasion, the way we manage our estuaries will also have to change. This is an open-access article, and it has been re-printed as no.21-021 in the ORESU-R series. [https://ir.library.oregonstate.edu/concern/articles/k643b826b]


Considine, Megan E. 2021. "Shell Boring Polychaetes and the Oregon Oyster Aquaculture Industry: Spatial Distribution, Regulatory Actions, and Stakeholder Engagement." M.S., College of Earth, Ocean, and Atmospheric Sciences. Marine Resource Management Program, Oregon State University. In 2020, an infestation of invasive shell-boring polychaete worms (mud-blister worms) was discovered in Puget Sound, providing the impetus for this study. While the boring done by the worms does not damage the quality of the oyster, it does affect its aesthetic appeal, and to some extent lowers productivity. In this thesis, the author endeavors to ascertain the distribution of mud blister worms in Oregon commercial oyster farms. The author also hoped to understand whether culture methods, seasonal changes and “oyster shell metrics” affect the prevalence of the worms. Finally, the author attempted to show if their findings and outreach could improve the management of oyster farms and resource management decisions. (p.10) Netarts Bay was found to be the most affected by the infestation. [https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/nz806657t]

Dalton, Meghan M., Erica Fleishman, and Oregon Climate Change Research Institute. 2021. Fifth Oregon Climate Assessment. 93 p. Oregon State University. Oregon Climate Change Research Institute (Corvallis, Or.) “Consistent with its charge under Oregon House Bill 3543, the Oregon Climate Change Research Institute (OCCRI) conducts a biennial assessment of the state of climate change science, including biological, physical, and social science, as it relates to Oregon and the likely effects of climate change on
Oregon. . . This Assessment is structured with the goal of serving as a resource for the state’s mitigation planning for natural hazards and implementation of the 2021 Oregon Climate Change Adaptation Framework.” (from the Abstract)

https://ir.library.oregonstate.edu/concern/technical_reports/pz50h457p


10.1111/eva.13289 Oyster aquaculture contributes over $10 million yearly to the Oregon economy. Most Oregon oyster growers cultivate the Pacific oyster, a non-native species. In this article, the authors examine the capacity of the Pacific oyster to adapt to oceanic acidification. The authors analyzed allele frequencies in wild (naturalized) and imported Pacific oysters in acidic waters. “These results indicate the potential for a rapid adaptive response of oyster populations to OA conditions; however, underlying genetic changes associated with larval development differ between these wild and domesticated oyster stocks and influence their adaptive responses to OA conditions” (from the Abstract). This article was reprinted in the Oregon Sea Grant reprint series ORESU-R as no.21-015. https://ir.library.oregonstate.edu/concern/articles/4b29bd88m


https://doi.org/10.1002/jwmg.22102 American beavers have often been moved from one location, where their dams and flooding might be a nuisance, to another, where they help with stream and water table restoration. The authors review the history of trapping and translocations of beavers in the Oregon Coast Range. “Management requires a better understanding of the ability of beaver to disperse and colonize empty habitat, and the distances or landscapes over which a beaver, if translocated, is unlikely to return.” (p.1464)


https://doi.org/10.1016/j.ocecoaman.2021.105965 In this article, the authors used two different methods to measure the impacts of Oregon’s marine reserve system. “We compared treatment and control units before and after marine reserve implementation using both difference-in-differences (DID) and synthetic control approaches. Each approach yielded different results, potentially providing a more complete picture of marine reserve impacts and long-term trends while also highlighting the need to consider the variability of ACS [American Community Survey] data collected from small communities.” (from the Abstract)

[https://doi.org/10.1016/j.ecolind.2020.107167](https://doi.org/10.1016/j.ecolind.2020.107167) In this work, the authors argue for a more comprehensive examination of factors that affect salmonids rather than examining one or two factors at a time. These include a range of scales, from very large to regional, and marine and freshwater regimes. The authors examined multiple indices parsed into 10-year units.

[https://doi.org/10.1016/j.quascirev.2021.106922](https://doi.org/10.1016/j.quascirev.2021.106922) “A new history of great earthquakes (and their tsunamis) for the central and southern Cascadia subduction zone shows more frequent (17 in the past 6700 yr) megathrust ruptures than previous coastal chronologies." (from the Abstract) The article contains a link to supplementary data, also accessible through U.S. Geological Survey data releases.

Pazdral, Rosemary. 2021. "Factors Influencing Streamflow Generation Processes in Rain-dominated, Coastal Watersheds in Oregon." Ph. D., Water Resources Science Program, Oregon State University. The water in Oregon coastal streams comes from rainfall. As climate change shifts the timing and quantity of rainfall, already threatened species will be further stressed. This impressive doctoral dissertation examines how factors such as slope, lithology and land cover affect streamflow in watersheds stressed by climate change. Many coastal watersheds were examined. Mary Santelmann and Rebecca Flitcroft were co-major professors.  
[https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/f7623k880](https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/f7623k880)

Peterson, Curt D., and Kara E.P. Kingen. 2021. "Pacific Northwest Littoral Data." “This document contains five data tables in PDF file formats, that are used to characterize littoral subcell (beach, river mouth, and inner-shelf) conditions in the Pacific Northwest (PNW) region . . . These data have been compiled from pre-existing data sets . . . for the purposes of predicting possible beach erosion from potential future sea level rise (SLR) . . . The five data tables include Heavy-mineral tracers (Table 1), Heavy-mineral data (normalized) (Table 2), Subcell beach profile settings (Table 3), Subcell beach profile parameters (Table 4), and Subcell shelf profile parameters (Table 5)” (p.1). The data supports the manuscript Peterson, C. D., Doyle, D. L., Rosenfeld, C. L., Kingen, K., (2020). Predicted Responses of Beaches, Bays, and Inner-Shelf Sand Supplies to Potential Sea Level Rise (0.5-1.0 m) in Three Small Littoral Subcells in the High-Wave-Energy Northern Oregon Coast, USA. Journal of Geography and Geology. v.12:.2.  
( [https://pdxscholar.library.pdx.edu/geology_fac/189/](https://pdxscholar.library.pdx.edu/geology_fac/189/) )  
[https://pdxscholar.library.pdx.edu/geology_data/1/](https://pdxscholar.library.pdx.edu/geology_data/1/)
Reyes-Santos, Alai, Cheyenne Holliday, Stacey Dalgaard, Taren Evans, and Kristiana Teige Witherill. 2021. Oregon Water Futures Project Report: 2020-21 Community Engagement. 106 p. University of Oregon (Eugene, Or.) This document is an interesting look at water quality concerns held by groups whose voices are often unheard. “The Oregon Water Futures Project is a collaboration between the University of Oregon, water and environmental justice interests, Indigenous peoples, communities of color, and low-income communities. Through a water justice lens, we aim to impact how the future of water in Oregon is imagined through storytelling, capacity building, relationship building, policymaking, and community-centered advocacy at the state and local level.” (from the Abstract). Well illustrated. https://scholarsbank.uoregon.edu/xmlui/handle/1794/26599

Scully-Engelmeyer, Kaegan, Elise F. Granek, Max Nielsen-Pincus, Andy Lanier, Steven S. Rumrill, Patrick Moran, Elena Nilsen, Michelle L. Hladik, and Lori Pillsbury. 2021. "Exploring biophysical linkages between coastal forestry management practices and aquatic bivalve contaminant exposure." Toxics 9, no. 3: article 46, 25 p. https://doi.org/10.3390/toxics9030046 Current forestry management practices do not keep herbicides and pesticides within the boundaries of the forest. In this important article, the authors describe a study of bivalves to look for contamination from pesticides and other chemicals used in forestry. They found pesticides in 38% of bivalves sampled, with some watersheds more contaminated than others, and with seasonal variations. The authors mildly note, “Details about types and levels of exposure provide insight into effectiveness of current forest management practices in controlling transport of forest-use pesticides” (from the Abstract). Good data visualization. This is an Open-Access article. https://www.mdpi.com/2305-6304/9/3/46

Yamada, Sylvia Behrens, Jennifer L. Fisher, and P. Michael Kosro. 2021. "Relationship between ocean ecosystem indicators and year class strength of the invasive European green crab (Carcinus maenas)." Progress in Oceanography. 196, no. 102618: 8 p. https://doi.org/10.1016/j.pocean.2021.102618 The link between invasive European green crab populations on the American west coast and warm oceanic conditions is well established. This article closely examines the link between ocean climate and these crab populations and probes aspects of this population’s increase.

Brockman, Joseph N. 2022. "Relationship between Ascarophis Sp. (Nematoda: Cystidicolidae), Sturgeon Feeding Pit Density and Ghost Shrimp Burrowing Behavior." M.S., Dept. of Fisheries and Wildlife, Fisheries Science, Oregon State University. One of the most challenging problems in biology is to map the life cycle of a parasite. Many parasites have more than one intermediate host, before the final host, and it can be very difficult to determine the life stages. This work is concerned with the use of a parasitic nematode worm as a possible biological control on ghost shrimp. Ghost shrimp burrow in mudflats and can disturb oyster grounds. They were formerly controlled by pesticides,
but this technique is no longer practiced. There is an economic incentive to find a way to limit their population around oyster beds. Sturgeon are bottom-feeders, and burrow in mud, creating feeding pits to find benthic prey. The author of this thesis sought to determine if sturgeon were the final hosts of the Ascarophis nematode, and if infection with the nematode changed burrowing patterns of ghost shrimp.

Hardisty, Sarah. 2022. "Morphology, Sediment Microbial Analysis, and Species Distribution Modeling of a New Offshore Population of Ghost Shrimp (Neotrypaea sp.)." M.S., Dept. of Integrative Biology, Oregon State University. Ghost shrimp (Neotrypaea spp.) are burrowing species in estuaries. In 2019, after years of abnormally warm offshore waters, a population of ghost shrimp was discovered about 7 miles offshore of Newport, Oregon. Was the new population a new species? The offshore ghost shrimp closely resembled the giant ghost shrimp, which is found in Yaquina Bay, except for the eyestalk. Could the sediment microbial communities in the new deep-water habitat support the shrimp? Researchers learned that “Bacteria of the genus Shewanella, which have been shown to induce oyster and mussel settlement and metamorphosis, were found in both the estuary and offshore locations and in five times greater abundance with Neotrypaea than without” (from the Abstract). Finally, the author attempted to predict where other offshore populations of ghost shrimp might be found and found clusters off Nehalem and Nestucca estuaries.

Henkel, Sarah K., Eugene C. Revelas, Stefan Wodzicki, and John Chapman. 2022. "Discovery of a large offshore population of the northeast Pacific burrowing shrimp Neotrypaea sp. (Decapoda: Axiidea)." *Estuarine, Coastal and Shelf Science*. 274, no. 107936: 11 p. https://doi.org/10.1016/j.ecss.2022.107936 The ghost shrimp, Neotrypaea spp., has long been known as a burrower in soft estuarine sediments. While scattered numbers of ghost shrimp were found on the continental shelf, they were believed to be strays from estuaries; that is, until 2019, when a large population was found on the continental shelf off Newport. The offshore population was thought to be giant ghost shrimp (Neotrypaea gigas), known to be present in Yaquina Bay, but not often written about. “This is the first report of a major burrowing shrimp population on the continental northeast Pacific coastal ocean” (from the Abstract). Is a native species expanding or shifting its habitats in response to climate or other anthropogenic change? Or does this find represent an introduction of a new species? Stay tuned... This is an open-access article. https://www.sciencedirect.com/science/article/am/pii/S0272771422001949

Johnson, Kelsey K. 2022. "Empirical Analyses of Forestry Interactions with Climate Uncertainty and Threatened Species." Ph. D., Dept. of Applied Economics, Oregon State University. In a changing climate, when you replant after harvesting timber, do you re-plant the same species as before, or do you plant a species you believe will do better in a changing climate? This question takes up the first half of the work and is concerned
with forests in the Eastern United States. The second question is concerned with the ideal widths of no-cut riparian zones in Oregon coastal forests. These are important questions with important answers. David J. Lewis was the major professor.

Kiffney, Peter, Jamie Thompson, Brianna Blaud, and Laura Hoberecht. 2022. Nonfishing impacts on essential fish habitat NOAA White Paper NMFS-NWFSC-WP-. no.2022-01, 258 p. https://doi.org/10.25923/xx1-m712 National Marine Fisheries Service (Seattle, Wash.) Many human activities that are not directly related to fishing can harm essential fish habitat. This publication looks at 19 different human activities that can damage essential fish habitat, from climate change to forest management to noise pollution, and more. The authors describe for each activity what is known to affect essential fish habitat, potential impacts, “and provide proactive conservation measures designed to minimize or avoid them” (from the Plain Language Summary).

Lewis, David J., David M. Kling, Steven J. Dundas, and Daniel K. Lew. 2022. "Estimating the value of threatened species abundance dynamics." Journal of Environmental Economics and Management. 113, no. 102639: 15 p. https://doi.org/10.1016/j.jeem.2022.102639 How much are people willing to pay for marginal increases in abundance of threatened species? This paper looks how the public values Coho salmon. “Results provide direct evidence that conservation activities that achieve immediate abundance gains for a threatened species (or prevent immediate losses) produce significantly higher benefits than activities that gradually achieve the same abundance gains.” (from the Abstract)

Li, Cheng, Clare E Reimers, and Peter J. Chace. 2022. "Protocol for using autoclaved intertidal sediment as a medium to enrich marine cable bacteria." STAR Protocols. 3, no. 101604: 12 p. https://doi.org/10.1016/j.xpro.2022.101604 Cable bacteria come from the family Desulfobulbaceae but have not yet been identified as to genus and species. The name “cable bacteria” comes from their tendency to form long networks of filaments. The length of the filaments allows cable bacteria to tap into energy harvested from sulfide oxidation. This article gives a protocol for extracting cable bacteria from natural sediment, inoculate cultivated sediment in the laboratory, and evaluate the quantity of cable bacteria in the cultivated sediment. Techniques for collection and extraction are described in detail.

McKenzie, K.A., H.M. Kelsey, E. Kirby, T.M. Rittenour, and K.P. Furlong. 2022. "Differential coastal uplift quantified by luminescence dating of marine terraces, central Cascadia forearc, Oregon." Quaternary Science Reviews. 298, no. 107853: 16 p. https://doi.org/10.1016/j.quascirev.2022.107853 At Yaquina Bay, there are marine terraces north and south of the bay. Although these terraces were deposited at the same time, they now have different elevations. This implies differential displacement along a fault in Yaquina Bay. The authors report on a study using luminescence dating
to determine what is happening in this area. “Our results confirm that Yaquina Bay has been active during the late Pleistocene, and it also appears that the fault has experienced significant variations in displacement over the last 125 kyr, and that a significant amount of displacement accrued during a relatively short time period post-106 ka” (p.13, section 6.1, “Faulting at Yaquina Bay”).


Reimers, Clare E., Michael Wolf, Yvan Alleau, and Cheng Li. 2022. "Benthic microbial fuel cell systems for marine applications." Journal of Power Sources. 522, no. 231033: 8 p. https://doi.org/10.1016/j.jpowsour.2022.231033 A lot is happening on the seafloor these days: aquaculture, trawling, mining, communication cables. There is a need for accurate, self-powered sensors for benthic environments. In this article, the authors report on a benthic microbial fuel cell and a power management platform that can recharge lithium batteries. The authors conclude that the systems described “are now sufficiently mature to be applied within marine observation networks. They represent an alternative power source that may be integrated readily with many kinds of innovative sensors.” (from the Abstract)

Shinn, Hope. 2022. Salmonid egg-to-fry survival and capture methods: Bibliography. NCRL Subject Guide no.2023-02, 126 p. https://doi.org/10.25923/wp1n-xt62 "Fish biologists at NMFS’ California Central Valley Division are interested in the variety of methods used to examine the survival of fish eggs in a rivers where salmonids dig nests in gravel. They are also interested in how salmonid egg-to-fry survival is calculated. To that end, the NOAA Central Library conducted a literature search and present their findings in this bibliography." (Background & Scope) https://repository.library.noaa.gov/view/noaa/48004/


voracious predator of bivalve molluscs, small crustaceans and other organisms. It has been present in Oregon since the late 1990s. The population grows when winter waters are warm, as they are during El Niños. Since 2015, however, “recruitment has been good every year. Since green crabs live for 6 years, these recent strong year classes can produce larvae until 2027.” (from the Executive Summary) This report is accompanied by a dataset, available at:
https://ir.library.oregonstate.edu/concern/datasets/b8515w17z
https://ir.library.oregonstate.edu/concern/technical_reports/g445cn70c

Considine, Megan E., Gway Kirchner, Jena Carter, and Tiffany Waters. 2023. Situation Analysis for Oregon’s Emergent Seaweed Aquaculture Industry. 35 p. The Nature Conservancy (Portland, Or.) At present, seaweed aquaculture is an underdeveloped industry in Oregon. Pacific dulse is the only species cultivated today in the state. The industry has great potential and can provide significant ecological services by cleaning seawater and providing habitat for marine animals. There is potential for mitigating climate change by buffering acidic ocean water and sequestering carbon. It would be worthwhile to investigate possible products such as biofuels, fertilizer and animal feed. Possible negative impacts such as overharvesting of wild stock, lack of genetic diversity, and competition for nutrients should be explored, and a stronger regulatory environment is needed. This is a most interesting introduction to what could be a beneficial and profitable industry.
https://seagrant.oregonstate.edu/sites/seagrant.oregonstate.edu/files/orseaweedsituationanalysis_final.pdf

Davis, Melanie J., James Anthony, Eric J. Ward, Julie Firman, and Christopher Lorion. 2023. “Coherence among Oregon Coast coho salmon populations highlights increasing relative importance of marine conditions for productivity.” Fisheries Oceanography. 32, no. 3: p.293-310. https://doi.org/10.1111/fog.12630 Anadromous fish like salmon live in two worlds: freshwater and the ocean. The scales of these worlds are quite different: the freshwater environment works at the scale of a single stream, and stressors at the stream level affect a single population of fishes. On the other hand, oceanic changes or stressors can affect broad regions or entire evolutionary significant units. Analysis of stock recruitment data for about sixty years along the Oregon Coast clarifies some patterns. Over this period, there have been significant changes in how fisheries are managed, from riparian buffers in forested lands to adding large woody debris to denuded streams. Despite these changes, it seems that oceanic conditions, especially the North Pacific Gyre Oscillation, which has dominated the marine environment since 1990, are determining population levels, rather than conservation efforts at the stream level.

Dunham, Jason, Christine Hirsch, Sean Gordon, Rebecca Flitcroft, Nathan Chelgren, Marcia Snyder, David Hockman-Wert, Gordon Reeves, Heidi Andersen, Scott Anderson, William Battaglin, Tom Black, Jason Brown, Shannon Claeson, Lauren E. Hay, Emily Heaston,
Charles Luce, Nathan Nelson, Colin Penn, Mark Raggon, and Pacific Northwest Research Station. 2023. Northwest Forest Plan: The first 25 years (1994-2018): Watershed condition status and trends. General Technical Report PNW. no.PNW-GTR-1010, 165 p. Pacific Northwest Research Station (Portland, Or.) "This report describes status and trends in watershed condition across the Northwest Forest Plan (NWFP) area over the first 25 years since its inception in 1994. The program charged with this task is the Aquatic and Riparian Effectiveness Monitoring Program (AREMP), which has assembled information from field data collection, spatial datasets, and a host of landscape models to evaluate the status and trends in aquatic resources in streams and watersheds.” (from the Abstract). Forest Plan efforts have shown incremental progress in improving aquatic conditions in Federal forests, but in the context of climate change. More planning and adaptations in monitoring methods are warranted. https://www.fs.usda.gov/pnw/pubs/pnw_gtr1010.pdf

Fleishman, Erica, and Oregon Climate Change Research Institute. 2023. Sixth Oregon Climate Assessment. 249 p. Oregon State University. Oregon Climate Change Research Institute (Corvallis, Or.) “This sixth Oregon Climate Assessment builds on the previous assessments by continuing to evaluate past and projected future changes in Oregon’s climate and water supply. Like the fifth assessment, it is structured with the goal of supporting the state’s mitigation planning for natural hazards and implementation of the 2021 Oregon Climate Change Adaptation Framework.” (from the Abstract) https://ir.library.oregonstate.edu/concern/technical_reports/gt54kw197

Green, Kristen Marie, Ana K. Spalding, Melissa Ward, Arielle Levine, Erika Allen Wolters, Sara Luanne Hamilton, and Lauren Rice. 2023. "Oregon shellfish farmers: Perceptions of stressors, adaptive strategies, and policy linkages." Ocean and Coastal Management. 234, no. 106475: 15 p. https://doi.org/10.1016/j.ocecoaman.2022.106475 The demand for oysters in the United States exceeds supply, marking oyster growing as an industry meritng support. On the west coast, growers must cope with climate change, particularly ocean acidification, as well as regulatory problems and labor shortages. To help resource managers help oyster farmers, the authors of this paper went to the growers. In 2022, they interviewed Oregon oyster growers, and their comments abundantly populate this paper. The authors note adaptive strategies oyster growers adopt to cope, and advocate for more targeted outreach to support the oyster growers.

Hall, Jason, Phil Roni, Kai Ross, Meghan J. Camp, Jason Nuckols, and Claire Ruffing. 2023. "Estimating juvenile salmon estuarine carrying capacities to support restoration planning and evaluation." Estuaries and Coasts 46, p.1046–1066. https://doi.org/10.1007/s12237-023-01185-y What is the carrying capacity of salmon habitat in a time of global warming and rising sea levels? To answer this question, the authors of this paper took a hard dive into the literature. “We demonstrate the habitat expansion approach by applying the quantiles of observed juvenile Chinook salmon (Oncorhynchus tshawytscha) and coho salmon (O. kisutch) densities (fish/ha) to spatial...
data describing current, historical or potential, and predicted (based on seal level rise) habitat extents for 16 coastal Oregon estuaries to estimate carrying capacities” (from the Abstract). This information will be important in the design and evaluation of restoration projects. This is an open-access article.


Kress, Marin M. 2023. Automatic Identification System (AIS) data case study: vessel traffic through the Yaquina Bay breakwater at Newport, Oregon. ERDC/TN DOTS-. No.23-1, 8 p. U.S. Army Corps of Engineers. Engineer Research and Development Center (Vicksburg, MS) Although there are two potential openings in the breakwater on the north of Yaquina Bay, there is no approved Federal channel that passes through the breakwater. There is interest in a possible passage through the breakwater, and the Portland District of the Army Corps of Engineers analyzed historical vessel transits of the breakwater. An interesting look at the movement of large vessels in the bay.

https://erdc-library.erdc.dren.mil/jspui/handle/11681/46549


https://digital.osl.state.or.us/islandora/object/osl%3A1008713

Pacific States Marine Fisheries Commission. 2023. "Western Aquatic Invasive Species Resource Center: A Collaboration to Prevent the Introduction and Spread of Aquatic Invasive Species." Pacific States Marine Fisheries Commission. This collaboration between the Bonneville Power Administration, contracted with the Pacific States Marine Fisheries Commission. It is supported by the U.S. Fish and Wildlife Service, and NOAA Fisheries. It began as a database of invasive species and has evolved into a collection of policy and research documents, with a focus on education. The site is current and has good information on problem species in our area, such as the European green crab.

https://www.westernais.org/


https://doi.org/10.1007/s10750-022-05127-w Freshwater mussels provide several valuable ecosystem services, including biofiltration, which removes nutrients, sediments, algae, harmful bacteria and heavy metals from the environment. Despite their value, freshwater mussel life cycles are not well understood, and their populations are declining. This article concerns the dominant freshwater mussel in Oregon, the western pearl mussel, Margaritifera falcata. “To understand M. falcata population ecology in Oregon’s coastal watersheds, we analyzed stream survey data on presence/absence of mussels collected over a recent eleven-year period, explored co-varying habitat characteristics, and summarized mussel distribution and host fish co-
occurrence.” (from the Abstract). This is an open-access article. Additional data is included in a supplementary file. https://link.springer.com/article/10.1007/s10750-022-05127-w

Stepanek, John. 2023. "Carbon Storage in U.S. Pacific Northwest Coastal Dunes: the Role of Invasive Beachgrasses and Sand Supply." M.S., Dept. of Integrative Biology, Oregon State University. Despite intense interest in global warming, the carbon storage capacity of coastal dunes, which take up much of the Pacific coastline, had not been well studied – until now. In this thesis, the author “measured the carbon storage capacity of coastal foredunes in the U.S. Pacific Northwest, where dunes occur on roughly 45% of the coastline. . .” (from the Abstract). Carbon storage of two introduced beachgrass species is contrasted with that of the native dunegrass. This is an interesting look at an often-over-looked ecosystem. Sally D. Hacker was the major professor. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/3n2046910

Stephens, Adrienne Lynn. 2023. "Cementation and Groundwater Chemistry in Pleistocene Paleodune Deposits of the Central Oregon Coast " M.S., Dept. of Geology, Portland State University. Those who drive along the Oregon coast have seen roadside deposits of light-colored rock that looks like sand close to the soil surface. These are actually ancient sand dunes. Pleistocene paleodunes have some cementation, but often display slope instability. “Weakening of cementing agents via changes to groundwater conditions due to altered vegetation, climate change, or contamination, for example, could promote slope instability, threatening lives and infrastructure. This study aims to investigate the variability in the type and degree of cementation and to determine how they are affected by changes in groundwater conditions” (from the Abstract). This interesting study addresses the Newport dune sheet, extending from Johnson Creek in the north to Yachats in the south. PSU Dissertations and Theses. Paper 6309. https://archives.pdx.edu/ds/psu/39676


Tinker, M. Tim, James Estes, James Bodkin, Shawn Larson, Mike Murray, Jan Hodder, and Elakha Alliance. 2023. Restoring Sea Otters to the Oregon Coast: A Feasibility Study. 249 p. Elakha Alliance (Siletz, Or.) When sea otters were exterminated in Oregon, there was no predator to stop the sea urchin population from expanding. Sea urchins eat kelp. More urchins mean less kelp. Less kelp means that many animals lose their valuable habitat. Nearshore waters become rougher because kelp beds cause the seas to lie down. The post-otter environment is less diverse and less hospitable. The Elakha Alliance (named for the Chinook Jargon word for sea otter) has been formed to bring the sea otter back to Oregon. The authors meticulously examined multiple aspects of the problem, from
environmental to legal, and conclude that it is possible to bring otters back. Interestingly, estuaries may provide valuable launching grounds, offering more protection than the open sea. As keystone predators, sea otters would help restore an environment badly out of balance and would provide many benefits aside from being adorable. As they say, the best dreams happen when we are awake. Colored maps, colored pictures. [https://www.elakhaalliance.org/feasibility-study/](https://www.elakhaalliance.org/feasibility-study/)

Yamada, Sylvia Behrens, Cameron Royer, Shon Schooler, Rebecca Flitcroft, Mitch Vance, Andrea Randall, and Jennifer Fisher. 2023. Status of the European Green Crab, *Carcinus maenas*, (aka 5-spine crab) in Oregon Estuaries. Report for 2022. 30 p. Pacific States Marine Fisheries Commission. Aquatic Nuisance Species Project (Portland, Or.) The invasive European green crab is a voracious predator of bivalve molluscs, small crustaceans and other organisms. It has been present in Oregon since the late 1990s. The population grows when winter waters are warm, as they are during El Niños. In recent years, enough information about the invader has been amassed to enable researchers to understand larval recruitment and transport mechanisms. “Now that the populations in Oregon, Washington and British Columbia have built up, we have evidence for local larval production and seeding from a genetically distinct population on Vancouver Island” (from the Executive Summary). [https://ir.library.oregonstate.edu/concern/technical_reports/73666d40c](https://ir.library.oregonstate.edu/concern/technical_reports/73666d40c)