

## **Background Resources and References for “The Oregon Coast before the Arrival of Europeans”**

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Changed Over Time?

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### 1. Using archaeological materials to learn about the coastal environment and its fauna in the Holocene

Archaeological and ethnographic evidence confirms that estuaries during the Holocene provided a rich and relatively stable resource base for native populations. Observations made by the first outsiders to contact native people and ethnographic interviews with native people in the nineteenth and twentieth centuries provide a description of a people and a culture that was opportunistic in use of resources. All available animals and plants were used for some purpose: food, tools, housing, clothes, ornaments, and trade. Shellfish, a mainstay for people living along the coast, together with other refuse items, comprised shell middens. Because shell tends to change acidic coastal soils to slightly alkaline, they foster the preservation of bones and make shell middens excellent places to look for material with which to reconstruct the environment of the past as well as the lifestyle. (Plant material, unfortunately, does not preserve well in middens.)

Published faunal analyses exist for many coastal sites but, as excavations and sites vary greatly, some are detailed and others skimpy. Most sites have been dated using radiocarbon techniques, and a large majority date within the last 1,000 years; a few date to the Late Pleistocene but the lowest levels lack shell since the coast line at that time was later submerged. Finding faunal remains in coastal sites almost always implies the existence of a shell midden that makes acidic soils moderately alkaline.

Following are names and designations of many of the coastal sites that have provided information about fauna listed in this report but the list is NOT exhaustive of all the research that has been done. Sites are listed by county from Clatsop in the north to Curry in the south. Site numbering systems consist of a number of the state alphabetically (OR is 35, WA is 45, CA is 4, etc.); next is an abbreviation of the county in letters. Sites are numbered from the first to the most recent registered with the State Historic Preservation Office, irrespective of geographic location within the county.

This report also lists sources providing detailed information on these sites and other aspects of native lifeways, and four tables listing common fauna in each of four categories: sea mammals, invertebrates, birds, and fish.

## 2. Sites providing faunal data

Clatsop: 35CLT : 12 (A and B, in Ecola State Park), 13 (Avenue Q Site, on Highway 101), 16 (Young's Bay, Astoria), 20 (Par-tee-on Seaside golf course; located on the east bank of the Necanicum River), 21 (A and B, Ecola State Park), 22 (Young's Bay, Astoria), 33 (Eddy Point, ~5 km east of Astoria), 47 (Palmrose site, at confluence of Shangri-La Creek and Hw. 26/101), 66 (on Highway 101, Clatsop County, Camp Rilea to Dellmoor Loop Road)

Tillamook: 35TI: 1 (and TI1a; Netarts Spit sites), 47 (Oceanside)

Lincoln: 35LNC: 14 (Seal Rock), 43 (Whale Cove-Otter Crest Loop Section of Hw.101), 45 (Boiler Bay St. Pk.), 48 (Yachats Ocean Road), 49 and 50 (Yaquina Head), 55 and 56 (near Good Fortune Cove in the Cape Perpetua Scenic Area), 57 (Cape Creek Shell Midden, Cape Perpetua Scenic Area), 60

(Whale Cove), 62 (Yaquina Head), 63 (Yachats Ocean Road), 68 (Whale Cove-Otter Crest Loop Section of Hw.101), 92 (Whale Cove-Otter Crest Loop Section of Highway 101), 100 and 101 (Boiler Bay St. Pk.)

Lane: 35LA: 3 (Neptune St. Pk.); 10 and 16 (both Bob's Creek Wayside), 25 (Siuslaw Dune)

Douglas: 35DO: 83 (Umpqua Eden), 130 and 175 (both Tahkenitch Landing)

Coos: 35CS: 1 (Philpott site), 2 and 3 (Bullards Pk., near-river sites), 5 (the Sandspit Site in Bullards Pk., studied as it was being eroded away by river action), CS17 (Cape Arago Slide), 24 (McCullough/Coos Bay Bridge site), 30 (Indian Bay on South Slough), 43 (Bandon village site), 62 (Whiskey Run), 136 (Coquille Point), 142 (Graveyard Pt. site), 173 (Cape Arago slide)

Curry: 35CU: 2 (Cape Blanco), 9 (Port Orford St. Pk.), 35 (Port Orford; note: the state park is large and contains other sites, many as yet not designated), 37 (Lone Ranch), 47 (Strain site, 17 mi. N. of Port Orford), 59 (Tlegetlinton site), 61 (Pistol River), 62 (Myers Creek), 67 (Indian Sands, Boardman St. Pk.), 75 (Blacklock Point), 106 (Blundon site), 160 (Goat Island)

### 3. Bibliography: Selected reports about Oregon native resources and sites

Barner, Debra Carol (1981) *Shell and Archaeology: An Analysis of Shellfish Procurement and Utilization on the Central Oregon Coast*. Master's thesis, Oregon State University, Corvallis.

(1987) Molluscan Remains. In: *Archaeological Investigations at Yaquina Head, Central Oregon Coast*, by Rick Minor, Kathryn Anne Toepel, and Ruth L. Greenspan. Heritage Research Associates Report No. 59, Eugene, Oregon, pp.42-53.

Benner, Patricia (1991) Historical Reconstruction of the Coquille River and Surrounding Landscape. In: *Near Coastal Water Pilot Project Report*, Oregon Department of Environmental Quality, Portland.

Bennett, Ann C. (1988) *Whale cove (35LNC60); An Archaeological Investigation on the Central Oregon Coast*. Master's Thesis, Oregon State

University Corvallis.

Berremen, Joel V. (1944) *Chetco Archaeology. A Report on the Lone Ranch Creek Shell Mound on the Coast of Southern Oregon*. General Series in Anthropology No. 11, Menasha, Wisconsin.

Bovy, Kristine M. (2005) *Effects of Human Hunting, Climate Change and Tectonic Events on Waterbirds along the Pacific Northwest Coast during the Late Holocene*. Ph.D. Dissertation, University of Washington, Seattle.

Boyd, Robert T. (1990) Demographic History, 1774-1874. In: *Handbook of North American Indians, Northwest Coast*, vol. 7, edited by Wayne Suttles, Smithsonian Institution, Washington, D.C., pp.135-148.

Byram, Robert Scott (1998) Fishing Weirs in Oregon Coast Estuaries. In *Hidden Dimensions: The Cultural Significance of Wetland Archaeology*. Edited by Kathryn Bernick; University of British Columbia Press, Vancouver, pp. 199 – 219.

Byram, Robert Scott (2002) *Brush fences and basket traps: the archaeology and ethnohistory of tidewater weir fishing on the Oregon coast*. Doctoral dissertation, University of Oregon, Eugene, Oregon.

Connolly, Thomas J. (1992) Human Responses to Change in Coastal Geomorphology and Fauna on the Southern Northwest Coast: Archaeological Investigations at Seaside, Oregon. *University of Oregon Anthropological Papers* 45, Department of Anthropology and Oregon State Museum of Anthropology, University of Oregon, Eugene, Oregon. [With contributions by Ruth L. Greenspan, Mark E. Darienzo, Debra Barner, Susan Crockford, Richard E. Hughes, Patricia F. McDowell, and Nancy Stenholm]

Connolly, Thomas J. and Guy L. Tasa (2004) Archaeological Evaluation of the Avenue Q Site (35CLT13), Oregon Coast Highway (US Highway 101), Clatsop County, Oregon. OSMA Report 2004-6. Museum of Natural and Cultural History, University of Oregon, Eugene.

Deur, Douglas and Nancy J. Turner, editors (2005) *Keeping it Living: traditions of plant use and cultivation on the Northwest Coast of North America*. University of Washington Press, Seattle, and UBC Press,

Vancouver.

Dicken, S.N. (1961) *Some Recent Physical Changes on the Oregon Coast*. Department of Geography, University of Oregon, Eugene.

Draper, John Allen (1988) *A Proposed Model of Late Prehistoric Settlement Systems on the Southern Northwest Coast, Coos and Curry Counties, Oregon*. Ph.D. Dissertation, Washington State University, Pullman.

(1980) *An Analysis of Lithic Tools and Debitage from 35CS1: A Prehistoric Site on the Southern Oregon Coast*. Master's Thesis, Oregon State University, Corvallis.

Erlandson, Jon M., Mark A. Tveskov and R. Scott Byram (1998) The Development of Maritime Adaptations on the Southern Northwest Coast of North America. *Arctic Anthropology* 35(1): 6 – 22.

Gard, Howard A. (1990) The Role of Southern Oregon's Coastal Islands in Prehistoric Subsistence. Master's Thesis, Oregon State University, Corvallis.

Grayson, Donald Kenneth (1984) *Quantitative Zooarchaeology*. Academic Press, Seattle.

Greenspan, Ruth L., and Rebecca J. Wigen (1987) Vertebrate Faunal Remains. In: *Archaeological Investigations at Yaquina Head, Central Oregon Coast*, by Rick Minor, Kathryn Anne Toepel, and Ruth L. Greenspan. Heritage Research Associates Report No. 59, Eugene, Oregon, pp.54-66.

Hall, Don Alan and Roberta L. Hall (1991) Bustards on the Southern Oregon Coast? *Oregon Birds* 17(4):112.

(1993) What were McLeod's "Bustards"? *Oregon Birds* 19(2):39.

Hall, Roberta L., ed. (1995) *People of the Coquille Estuary*. Words and Pictures Unlimited, Corvallis, Oregon.

(2000) The Earthquake Hypothesis Applied to the Coquille: Beginnings. In: *Changing Landscapes: Proceedings of the 3rd Annual Coquille Cultural Preservation Conference, 1999*, edited by Robert J. Losey.

Coquille Indian Tribe, North Bend, Oregon, pp. 33-42.

(2001) *Nah-So-Mah Village, Viewed Through Its Fauna*. Report to the Coquille Indian Tribe and OSU Sea Grant, Oregon State University, Corvallis, Oregon.

(2001) *Bone Salvaged from 35-CS-43, June and July, 2001*. Report to the Coquille Indian Tribe, North bend, Oregon.

(2002) Resource Traditions. In: *Changing Landscapes; Proceedings of the 5<sup>th</sup> and 6<sup>th</sup> Coquille Cultural Preservation Conferences*, edited by Donald B. Ivy and R. Scott Byram. Coquille Indian Tribe, North Bend, Oregon, pp. 99-120.

Hall, Roberta, Lee Lindsay and Betty Vogel (1990) Southern Oregon Prehistory: Excavations at 35CS43, Bandon, Oregon. *Pacific Coast Archaeological Society Quarterly* 26(1):60-79.

Hall, Roberta L., and Stefan Radosevich (1995a) Episodic Flooding of Prehistoric Settlements at the Mouth of the Coquille River. *Oregon Geology* 57:18-22.

(1995b) Geoarchaeological Analysis of a Site in the Cascadia Subduction Zone on the Southern Oregon Coast. *Northwest Archaeological Research Notes* 29:123-140.

Hall, Roberta L., editor (1995) *People of the Coquille Estuary*. Words and Pictures Unlimited, Corvallis, Oregon.

Harrington, John P. (1942) *Notes of Interviews with Alosea, Siuslaw, and Coos Informants*. John Peabody Harrington Papers, Alaska/Northwest Coast, Microfilm Reel 021-024; Interviews with Southwest Oregon Athapaskan Informants; Microfilm Reel 025-027; National Anthropological Archives, Smithsonian Institution, Washington, D.C.

Hatch, Dave (2001) Elakha. Jan. 4, 2001 posting on website: [Tidepool.org/features/hatch.otters.cfm](http://Tidepool.org/features/hatch.otters.cfm); Talk given at dedication of "Elakha/Sea Otter" research vessel, OSU.

Hatch, David (2002) Elakha: Sea Otters, Native People, and European Colonization in the North Pacific. In: *Changing Landscapes*; Proceedings of the 5<sup>th</sup> and 6<sup>th</sup> Coquille Cultural Preservation Conferences, edited by Donald B. Ivy and R. Scott Byram. Coquille Indian Tribe, North Bend, Oregon, pp. 79-88.

Ivy, Donald B. and R. Scott Byram (2002) *Changing Landscapes: Sustaining Traditions*. Proceedings of the 5<sup>th</sup> and 6<sup>th</sup> Coquille Cultural Preservation Conference. Coquille Indian Tribe, North Bend, Oregon.

Kreag, Rebecca A. (1979) *Natural Resources of Coquille Estuary*. Oregon Department of Fish and Wildlife, Salem.

Lindsay, Lee W. Jr. (1990) *Development of a Bone Artifact Typology for the Oregon Coast*. Master's thesis, Oregon State University, Corvallis.

(1995) Native Use of Resources on the Oregon Coast. In: *People of the Coquille Estuary*, edited by R. L. Hall, Words and Pictures Unlimited, Corvallis, Oregon, pp. 190-210.

Lindsay, Lee W. Jr., and Anthony R. Keith (1986) Faunal Remains and Artifacts from Bandon, Oregon, Site 35CS43C. *Northwest Anthropological Research Notes* 20(2):149-161.

Losey, Robert J. (1996) *Fishing on the Coquille River: A Zooarchaeological Perspective*. Master's Thesis, University of Oregon, Eugene.

Losey, Robert J. (editor) (2000) *Changing Landscapes. Proceedings of the 3<sup>rd</sup> Annual Coquille Cultural Preservation Conference, 1999*. Coquille Indian Tribe, North Bend, Oregon.

Lyman, R. Lee (1988) Zoogeography of Oregon Coast Marine Mammals: The Last 3,000 Years. *Marine Mammal Science* 4(3): 247 – 264.

(1991) *Prehistory of the Oregon Coast: The Effects of Excavation Strategies and Assemblage Size on Archaeological Inquiry*. Academic Press, San Diego.

(1996) Applied Zooarchaeology: the Relevance of Faunal Analysis to

Wildlife Management. *World Archaeology* 28(1): 110-125.

Lyman, R. Lee, Linda A. Clark and Richard E. Ross (1988) Harpoon Stone Tips and Sea Mammal Hunting on the Oregon and Northern California Coasts. *Journal of California and Great Basin Anthropology* 10(1): 73 – 87.

Mills, Elaine L., editor (1981) *The Papers of John Peabody Harrington in the Smithsonian Institution 1907-1958*. Vol. 1. Klaus International Publications, The Smithsonian Institution, Washington, D.C.

Minor, Rick (1986) *An Evaluation of Archaeological Sites on State Park Lands along the Oregon Coast*. Heritage Research Associates, Report No. 44. Oregon State Historic Preservation Office. Salem.

Minor, Rick (with contributions by Debra C. Barner, Ruth L. Greenspan, Rebecca J. Wigen) (1991) *Yaquina Head: A Middle Archaic Settlement on the North Central Oregon Coast*. Heritage Research Associates, Report No. 100; Bureau of Land Management, Salem District.

Minor, Rick and Ruth L. Greenspan (1995) *Archaeology of the Cape Creek Shell Midden, Cape Perpetua Scenic, Area, Central Oregon Coast*. Siuslaw National Forest. Coastal Prehistory Program. Oregon State Museum of Anthropology. Eugene.

(1998) *Archaeological Test at the Cape Blanco Lighthouse Shell Midden, Southern Oregon Coast*. Coos Bay District, Bureau of Land Management Report Number 216, Heritage Research Associates.

Minor, Rick, Ruth L. Greenspan, Richard E. Hughes, and Guy L. Tasa (2000) The Siuslaw Dune Site: Archaeology and Environmental Change in the Oregon Dunes. In: *Changing Landscapes: Proceedings of the 3rd Annual Coquille Cultural Preservation Conference, 1999*, edited by Robert J. Losey. Coquille Indian Tribe, North Bend, Oregon, pp. 82-102.

Minor, Rick and Kathryn A. Toepel (1986) *The Archaeology of the Tahkenitch Landing Site: Early Prehistoric Occupation on the Oregon Coast*. Heritage Research Associates, Report No. 46. Siuslaw National Forest.

Minor, Rick, Kathryn Anne Toepel, Ruth L. Greenspan, and Debra C. Barner



(1985)

*Archaeological Investigations in the Cape Perpetua Scenic Area, Central Oregon Coast.* Heritage Research Associates, Report No. 40. Siuslaw National Forest.

O'Neill, Brian L., Jenna E. Peterson, Guy L. Tasa, Todd J. Braje, and Thomas J. Connolly. (2006) *Archaeological Investigations at the McCullough (Coos Bay) Bridge Site (35CS24), Coos County, Oregon.* OSMA Report 2006-160. Museum of Natural and Cultural History, University of Oregon, Eugene.

Ross, Richard E., and Sandra L. Snyder (1986) *The Umpqua/Eden Site (35D083): Exploitation of Marine Resources on the Central Oregon Coast.* In: *Contributions to the Archaeology of Oregon 1983-1986*, edited by Kenneth M. Ames. Association of Oregon Archaeologists Occasional papers No. 3, pp. 88-101.

Roth, Barbara, and Roberta Hall (1995) *Archaeological Testing at Site 35CS3.* Report to the Coquille Indian Tribe; also on file at the Department of Anthropology, Oregon State University, Corvallis.

Seaburg, W.R. (1982) *Guide to Pacific Northwest Native American Materials in the Melville Jacobs Collection and in Other Archival Collections in the University of Washington Libraries.* University of Washington Libraries, Seattle.

Snyder, Sandra Lee (1978) *An Osteo-Archaeological Investigation of Pinniped Remains at Seal Rock, Oregon (35-LNC-14).* Master's thesis, Oregon State University, Corvallis.

Suttles, Wayne, editor (1990) *Handbook of North American Indians, Northwest Coast, Vol.7,* Smithsonian Institution, Washington D.C., pp. 572-579.

Tasa, Guy L, Todd J. Braje, and Thomas J. Connolly (2004) *Archaeological Evaluation of Sites within the Yachats Ocean Road Project (35LNC48 and 35LNC63).* OSMA Report 2004-8. Museum of Natural and Cultural History, University of Oregon, Eugene.

Tasa, Guy L. and Thomas J. Connolly (1994) *Archaeological Evaluation Along*

the Oregon Coast Highway (US Highway 101), Clatsop County: Camp Rilea to Dellmoor Loop Road Section. State Museum of Anthropology, University of Oregon, Report 94-5, Eugene.

(1995) Archaeological Evaluation of the Boiler Bay Site (35LNC45), in the Boiler Bay State Park Section of the Oregon Coast Highway (US Highway 101), Lincoln County, Oregon. State Museum of Anthropology, University of Oregon, Report 95-2, Eugene.

(1998) Cultural Resource Evaluation of Two Archaeological Sites on Youngs Bay, Clatsop County, Oregon: John Day River Bridge - Youngs Bay Bridge (Astoria Bypass) Section, Lower Columbia Highway (U.S. 30), Clatsop County, Oregon. Oregon State Museum of Anthropology Report 98-3. University of Oregon, Eugene.

(2001) Archaeological Investigations at Cook's Chasm Bridge, the Good Fortune Point Site (35LNC55), and the Neptune Site (35LA3). OSMA Report 2001-4. State Museum of Anthropology, University of Oregon, Eugene.

(2005) Archaeological Evaluation of Three Sites in the Whale Cove-Otter Crest Loop Section of the Oregon Coast Highway (US 101), Lincoln County, Oregon. OSMA Report 2005-237. Museum of Natural and Cultural History, University of Oregon, Eugene.

Tasa, Guy L. and Brian L. O'Neill, editors (2008) *Dunes, Headlands, Estuaries, and Rivers. Current Archaeological Research on the Oregon Coast*. Association of Oregon Archeologists Occasional Papers No. 8. Eugene, Oregon.

Tveskov, Mark Axel (2000) *The Coos and Coquille: A Northwest Coast Historical Anthropology*. Ph.D. Dissertation, University of Oregon, Eugene.

(2000) The Bandon Sandspit Site: The Archaeology of a Proto-Historic Coquille Indian Village. In: *Changing Landscapes: Proceedings of the 3rd Annual Coquille Cultural Preservation Conference, 1999*, edited by Robert J. Losey. Coquille Indian Tribe, North Bend, Oregon, pp. 43- 59.

Tveskov, Mark, Jon Erlandson and Madonna Moss (1995) Preliminary

Results of Archaeological Excavations at 35-CS-136, Coquille Point, Bandon, Oregon. Report to U.S. Fish and Wildlife Service; on file at University of Oregon, Eugene.

U.S. Fish and Wildlife Service Oregon Coastal Field Office (1999) Environmental Assessment, Ni-les'tun Unit Addition, Bandon Marsh National Wildlife Refuge. Newport, Oregon.

Valentine, Nicholas (1993) Cultural Resource Inventory at Coquille Point, National Wildlife Refuge, Coos County, Oregon. Report for U.S. Fish and Wildlife Service Region 1, Portland, Oregon, 23 pp.

Yunker, Jason, Mark A. Tveskov, and David G. Lewis, editors (2001) *Changing Landscapes: Telling Our Stories*. Proceedings of the Fourth Annual Coquille Cultural Preservation Conference, 2000. Coquille Indian Tribe, North Bend, Oregon.

Zontek, Terry (1983) Aboriginal Fishing at Seal Rock (35-LC-14) and Neptune (35-LA-3): Late Prehistoric Archaeological Sites on the Central Oregon Coast. Master's Thesis, Oregon State University, Corvallis.

Zucker, J., K. Hammel and B. Hogfoss (1983, 1987) *Oregon Indians*. Oregon Historical Society Press, Portland.

4. Four tables: Sea Mammals, Invertebrates, Birds, and Fish

Table 1. Sea Mammal Species Found in Many Archaeological Sites on the Oregon Coast

**Common name - Formal name or category**

California sea lion - *Zalophus californianus*  
 Harbor porpoise - *Phocoena phocoena*  
 Harbor seal - *Phoca vitulina*  
 Northern fur seal - *Callorhinus ursinus*  
 Northern elephant seal - *Mirounga angustirostris*  
 Sea otter - *Enhydra lutris*  
 Steller sea lion - *Eumetopias jubatus*  
 Whale *Cetacea* sp.

**Most common:** The Steller’s sea lion, the sea otter, and the harbor seal are the most common sea mammals identified in Oregon coastal sites. Most of these sea mammals have declined in numbers or in locations and two, the sea otter and Northern fur seal, no longer pup on the Oregon coast. Sea mammals were used for their skins, oil and meat, and some internal organs were used to store oil and blubber; teeth were made into ornaments.

Table 2. Invertebrates Found in Many Oregon Coast Archaeological Sites

<b>Category</b>	<b>Formal name</b>	<b>Common name – varies in time and space</b>
<u>Molluscs</u>		
Bivalve	<i>Mytilus californianus</i>	California or sea mussel
Bivalve	<i>Mytilus edulis</i>	Bay mussel
Bivalve	<i>Protothaca staminea</i>	Pacific little-necked clam
Bivalve	<i>Saxidomus giganteus</i>	Butter clam
Bivalve	<i>Tresus capax</i>	Northern gaper clam
Bivalve	<i>Tresus nuttallii</i>	Pacific gaper

Bivalve	<i>Clinocardium nuttallii</i>	Basket cockle or Heart cockle
Bivalve	<i>Macoma nasuta</i>	Bent-nosed clam
Bivalve	<i>Macoma secta</i>	Sand clam
Bivalve	<i>Volsella rectus</i>	Horse mussel
Bivalve	<i>Siliqua patula</i>	Razor clam
Bivalve	<i>Mya arenaria</i>	Soft-shelled clam; Eastern species, introduced in the 19 <sup>th</sup> century
Bivalve	<i>Haliotis refescens.</i>	Red abalone
Bivalve	<i>Penitella</i> or <i>Zirfarea</i> sp.	Piddock
Bivalve	<i>Ostrea lurida</i>	Native oyster
Bivalve	<i>Hinnites multirugosus</i>	Giant rock scallop
Chiton	<i>Malopalia muscova</i>	Hairy chiton
Chiton	<i>Katharina tunicata</i>	Black katy chiton
Chiton	<i>Cryptochiton stelleri</i>	Gumboot chiton
Univalve	<i>Notoacmaea</i> sp.	owl's eye limpet
Univalve	<i>Diadora aspera</i>	Keyhole limpet
Univalve	<i>Acmaea mitra</i>	Whitecap limpet
Univalve	<i>Acmaea pelta</i>	Shield limpet
Univalve	<i>Collisella digitalis</i>	Fingered limpet
Univalve	<i>Acmaea testudinalis</i>	Plate limpet
Univalve	<i>Notoacmaea</i> sp.	Limpets:mask seaweed, plate
Univalve	<i>Ocenebra lurida</i>	Lurid rock shell
Univalve	<i>Kellia laperousii</i>	Kelly shell
Univalve	<i>Tegula funebris</i>	Black turban or top snail
Univalve	<i>Amphissa columbiana</i>	Wrinkled amphissa
Univalve	<i>Fusitriton oregonensis</i>	Friiled dogwinkle/ Oregon

Univalve	<i>Nucella canaliculata</i>	Channeled dogwinkle or whelk
Univalve	<i>Nucella emarginata</i>	Emarginate dogwinkle
Univalve	<i>Nucella lamellosa</i>	Frilled/wrinkled dogwinkle
Univalve	<i>Olivella biplicata</i>	Purple olive snail
Univalve	<i>Searlesia dira</i>	Dire whelk
Univalve	<i>Nassarius fossatus</i>	Western nassar
Univalve	<i>Nassarius perpinguis</i>	Western fat nassar

#### Arthropods

Barnacle	<i>Balanus crenlatus</i>	Crenulated barnacle
Barnacle	<i>Balanus glandula</i>	Acorn barnacle
Barnacle	<i>Balanus nubilus</i>	Giant (acorn) barnacle
Barnacle	(Semi)balanus cariosus	Horse barnacle
Barnacle	<i>Mitella polymerus</i>	Goose barnacle
Barnacle	<i>Policipes polymerus</i>	Leaf barnacle
Crab	<i>Cancer magister</i>	Dungeness crab
Crab	<i>Cancer productus</i>	Red-rock crab

#### Echinoderms

Urchin	<i>Stryoglycentrotus franciscanus</i>	Red sea urchin
Urchin	<i>Stryoglycentrotus purpuratus</i>	Purple sea urchin
Sand dollar	<i>Dentraster excentricus</i>	Western sand dollar

#### Scaphopoda

Tusk	<i>Dentalius pretiosum</i>	Indian currency traded item
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**Most common:** The sea mussel, various clams, and barnacles are most common, the types of clams and barnacles depending on whether the site borders an estuary or is on the rocky coast. Although some invertebrates found in middens are considered "hitch-hikers" on food items, native people

made jewelry out of shellfish such as snails and abalone, which also could have been traded; dentalium does not grow locally but served coastal natives as currency in some purchases. Some (e.g., sea mussel) preserve well because of a thick shell in contrast, e.g., to crabs and sea urchins, which do not preserve well.

Table 3. Bird Species Found in Many Oregon Coast/Estuary Archaeological Sites

**Common name - Formal Name or Group**

Albatross - *Diomedea* sp.  
 American coot - *Fulica americana*  
 Bald eagle - *Haliaeetus leucocephalus*  
 Band tailed pigeon - *Columba fasciata*  
 Barrow's goldeneye - *Bucephala islandica*  
 Belted kingfisher - *Ceryle alcyon*  
 Blue grouse - *Dendragapus obscurus*  
 Brant goose - *Branta bernicla*  
 Brown pelican - *Pelecanus occidentalis*  
 Bufflehead - *Bucephala albeola*  
 Canadian goose - *Branta canadensis*  
 Cassin's auklet - *Ptychoramphus aleuticus*  
 Common murre - *Uria aalge*  
 Cormorant - *Phalacrocorax* sp.  
 Crow - *Corvus brachyrhynchos*  
 Dabbling ducks - *Anas* sp. (gadwall-*strepera*, green-winged teal-*crecca*, mallard-*platyrhynchos*, Northern pintail-*acuta*, wigeon-*Americana*)  
 Great blue heron - *Ardea herodias*  
 Great Horned Owl - *Bubo virginianus*  
 Grebe - *Aechmophorus occidentalis* (western), *Podiceps auritus* (horned), *Podilymbus* sp.  
 Gull - *Larus* sp.  
 Hawk - *Buteo* sp.  
 Killdeer - *Charadrius vociferus*  
 Loon - *Gavia immer* (common), *pacifica* (Pacific), *stellata* (red-throated)  
 Marbled murrelet - *Brachyramphus marmoratus*  
 Merganser - *Mergus* sp. or *Lophodytes cucullatus*  
 Northern shoveler - *Spatula clypeata*  
 Osprey - *Pandion haliaetus*

Owl - family Strigidae  
 Pacific fulmar - *Fulmarus glacialis*  
 Pigeon guillemot - *Cepphus columba*  
 Phalarope - *Phalaropus* sp.  
 Plover - *Charadrius* sp. and/or *Pluvialis* sp.  
 Pochard - *Aythya* sp.  
 Quail - *Callipepla* sp.  
 Rail - *Rallus* or *Gallinula*  
 Raven - *Corvus corax*  
 Rhinoceros auklet - *Ptychoramphus aleuticus*  
 Ruddy duck - *Oxyuru jamaicensis*  
 Ruffed grouse - *Bonasa umbellus*  
 Sanderling - *Crocenthia alba*  
 Sandpiper - Scolopacidae; *Calidris*  
 Scaup - *Aythya* sp.  
 Scoter - *Melanitta* sp. , including surf scoter *Melanitta perspicillata*  
 Skua - *Cataracta skua*  
 Sooty shearwater - *Puffinus griseus*  
 Storm petrel - *Oceanodroma* sp.  
 Tundra swan - *Cygnus columbianus*  
 Tufted puffin - *Frateroula corniculata*  
 Western screech owl - *Megascops kennicotti*  
 Wood duck - *Aix sponsa*  
 Woodpecker - family Picidae; Pileated woodpecker - *Dryocopus pileatus*

**Most common:** dabbling duck species, cormorants, scaups (bay ducks), scoters (sea ducks), gulls, and the common murre. Native people gathered eggs from bird nests and harvested the birds for food, decoration, raw materials for tools and whistles/pan pipes and bird-callers, ritual material or wealth for exchange (e.g., pileated woodpecker scalps), and they made clothing – capes – out of at least one species, cormorants. Because natives put almost all available resources to use, the middens can be considered to represent the available resource base.

Table 4. Fish Species Found in Many Oregon Coast Archaeological Sites

**Common Name - Formal Name or Category**

Buffalo sculpin - *Enophrys bison*  
 Cabezon - *Scorpaenichthys marmoratus*



English sole - *Parophrys vetulus* or *Pleuronichthys vetulus*  
 Kelp greenling - *Hexagrammos decagrammus*  
 Lingcod - *Ophiodon elongatus*  
 Longfin smelt - *Spirinchus thaleichthys*  
 Northern anchovy - *Engraulis mordax*  
 Pacific hake - *Merliccius productus*  
 Pacific halibut - *Hippoglossus stenolepsis*  
 Pacific herring - *Clupea palasi*  
 Pacific lamprey - *Lampetra tridentata*  
 Pacific sand-dab - *Citharichthys sordidus*  
 Pacific sardine - *Sardinops sagax*  
 Pacific staghorn sculpin - *Leptocottus armatus*  
 Pacific tomcod - *Microgadus proximus*  
 Petrale sole - *Eopsetta jordani*  
 Prickleback - Stichaeidae  
 Ratfish - *Hydrolagus colliei*  
 Red Irish lord - *Hemilepidotus hemilepidotus*  
 Redtail surfperch - *Amphistichus rhodoterus*  
 Rockfish  
     *Sebastes miniatus* (vermillion), *melanops* (black), *paucispinis*  
     (boccacio), *flavidus* (yellowtail), *ruberrimus* (turkey-red)  
 Salmonidae  
     *Oncorhynchus tshawytscha* (chinook); *kisutch* (coho); *clarki*  
     (cutthroat trout); *mykiss* (steelhead trout )  
 Shiner perch - *Cymatogaster aggregata*  
 Skate - Rajidae  
 Soupfin shark - *Galeorhinus zyopterus* or *galeus*  
 Spiny dogfish - *Squatius acanthias*  
 Starry flounder - *Platichthys stellatus*  
 Striped seaperch - *Embiotoca lateralis*  
 Sturgeon  
     *Acipenser medirostris* (green), *transmontanus* (white or Pacific)  
 Smelt - Osmeridae  
 Surf perch - Embiotocidae; *Amphistichus* sp.; pile surf perch -  
*Damalichthys vacca*  
 Surf smelt - *Hypomesus pretiosus*  
 Threespine stickleback - *Gasterosteus aculeatus*  
 Topsmelt - *Atherinops affinis*

**Most common:** Salmon, herring, and rockfish are common in Oregon's coastal middens. Lamprey have few hard parts that preserve but are known

from ethnographic studies and oral histories to have been plentiful along the coast. For an excellent discussion of prehistoric and contact-era fish that uses extensive ethnographic and archival documents, and for detailed information and references concerning historic-era observations (1800s, early 1900s) of habitat change and species losses, see Byram 2002: 65-82. He also shows that native communities, like today's coastal towns and cities, were highly dependent on available fish, although they also used many land-based resources.

### 5. Map of Oregon coast showing selected sites



### 60 SITES PROVIDED INFORMATION ON FAUNA

Seaside and Tahkenitch Landing, in addition to providing data on species present, illustrate geological changes over time; a site at Boardman State Park illustrates antiquity of coastal settlement; Whale Cove, Seal Rock, Neptune, Bullards and Old Town Bandon sites provide data on species in several time periods.