OREGON WILDLIFE

DECEMBER 1975

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RON E. SHAY, Editor

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THE COVER

Tidepool exploring is fun for all ages at most times of the year. For more on the coast in the winter see pages 8,9,&10.

HUNTER EDUCATION PROGRAM

INSTRUCTORS APPROVED

Month of October	32
Total Active	1,809

STUDENTS TRAINED

Month of October	3,140
Total to Date	228,505

HUNTING CASUALTIES REPORTED IN 1975

Fatal	2
Nonfatal	31

After The Season Is Over

As the major big game seasons in the state wind down for the year, we can't help but reflect on a couple of things that we've seen this year and had people comment on in the past.

The hunter is a minority group. He lives in a world of a few downright anti-hunters and a large number of nonhunters. The tools of the hunter's sport, especially the guns, are little understood by many people. Many folks equate guns with nothing but the steady diet of violence they see on television where the prime purpose of the weapon is to kill another human being whether the "good guys" or the "bad guys" are pulling the trigger.

Along the same lines, the only knowledge an increasing number of individuals have of wild animals is that projected on the screen of the television set. In most cases this shows creatures living in a "Bambi world" of sweetness and light where every creature lives together in unending plenty with death not part of the scheme. If the hunter does enter the picture, he is often billed as the heavy and pictured as something between a cave man and the Frankenstein monster.

But to the point of this. We have had two ardent hunters talk to us at length about seeing the heads of trophy deer and elk displayed on the front bumpers of vehicles or propped up in front of buildings. This was not an overnight thing but, instead, the head with attached antlers was left for a period of at least a week while the rains pelted down, making the whole display look like someone's version of a horror mask. Meanwhile youngsters showed their disgust as they passed on their way to school and adult passersby were no doubt equally revulsed.

In many European countries hunters have to undergo an extensive training period and test before they can go afield. Among the things taught is a respect, almost a reverence, for the game they are about to take. In this country, most have simply grown up with hunting and, though young hunters here in Oregon and many other states must take a hunter education course, the training is much shorter and less in depth than in Europe.

Allowing the head of a recently taken animal to lie in the elements and suffer the ravages of the rain shows little respect for the animal taken. This is not the same as having a nicely mounted head, well cared for in a den or trophy room. The head on the bumper or propped on the front of the garage may build the ego of the hunter but it does little to build his stature. In allowing such a thing to happen, the hunter is likely adding fuel to the anti-hunting fires and perhaps recruiting some nonhunters to the anti-hunting ranks.

Much the same happens in cases when gun-wary folks see the fellow running around town with the back window rack of his pickup filled with rifles well after all of the seasons have ended. In smaller towns in the more rural areas, folks coming in off the ranch may have their favorite "varmint" rifle stowed in the truck, but there is little justification for this type of thing day after day in the metropolitan areas. From the practical standpoint, it is an open invitation to someone to break in and steal the gun.

We'll no doubt hear from some of our readers who say we are pussyfooting or trying to put down hunting. Such is not the case. We feel hunting is a legitimate recreation and an important tool of wildlife management. The wildlife resource needs the help of every person no matter what his or her attitude toward hunting. Anything that unnecessarily alienates the nonhunter and the hunter hurts the resource. There are plenty of battles that need to be fought for wildlife. Hunters and nonhunters need to recognize the viewpoints of each other and then get on with the meaningful fights for the resource. Being somewhat sensitive to the feelings of others can help unite the front. RES

The Commission will hold two meetings in January. On the 16th a public hearing will be held to discuss the opening dates of the 1976 hunting seasons plus big game management strategies including separate mule deer and blacktail deer tags, a split elk season, and new big game tag and permit drawing procedures.

On January 30 the Commission will hold a public hearing to discuss the basic commercial regulations concerning the Columbia River and the winter commercial salmon season.

Starting times and locations of the meetings will be announced at a later date.

OCHOCO RESERVOIR

A History Of Change

by Richard G. Herrig
District Fishery Biologist,
Prineville

Ochoco Reservoir lies on the west slope of the Ochoco Mountains in central Oregon near the town of Prineville. The dam creating the reservoir was built by private interests from 1918 to 1921. The original purpose of the reservoir was to irrigate agricultural lands in the Prineville area. Ochoco Dam was rehabilitated and enlarged in 1949 by the Bureau of Reclamation.

The reservoir has a surface area of 1,090 acres and an active capacity of 46,500 acre-feet. It is about 3½ miles long with a maximum width of ½ mile. Water for the reservoir comes from three main tributaries—Mill, Marks, and Ochoco Creeks, having a total drainage area of 295 square miles.

Although the reservoir's main purpose is for irrigation, it is used extensively for fishing, boating, and swimming.

There are few records of the recreational uses, such as fishing, for the period from 1920 to 1950. Much of the history of the reservoir comes from old-timers like George "Sharkey" Lewis, who fished there in earlier days. Mr. Lewis says there were no trout to speak of in those days but many of the local people fished for brown bullhead. Crappie were fished for by a few of the local people but apparently they were never too popular.

Mr. Lewis says there were about seven boats in the Prineville area years ago and they were in nearly constant use when steelhead and whitefish were in the reservoir. Prior to 1949 rebuilding of the dam by the Bureau of Reclamation, steelhead and whitefish could swim over the spillway and into the reservoir during overflow years. That's when the old-timers say the fishing really was good.

There are no records of fish stocking at the reservoir until 1946. However, correspondence indicates that spiny-rayed fish collected at Sauvie Island were stocked for a number of years. The stocking included bass but Prineville residents report only a few bass were caught and the fishery was not good. When the reservoir was chemically treated, no bass were found.

The reservoir was treated for the first time on October 9, 1949 with rotenone the chemical used. This coincided with the time of the rehabilitation and enlarging of the dam by the Bureau of Reclamation. During the month prior to treatment, fish population studies revealed coarse-scaled suckers, squawfish, and crappie to be the main fish in the reservoir. Although brown bullhead weren't taken in the nets, they were known to be present in the reservoir.

Stocking of Ochoco Reservoir with rainbow trout fingerling started in 1950, six months after the chemical treatment. A trout sport fishery began in 1951. Sampling indicated the trout were mostly small rainbow, 7 to 8 inches long, and although it had been only two years since the reservoir was chemically treated, rough fish (suckers and squawfish) made up 71 percent of the net sample. By 1956, small crappie were being caught more often than trout and net samples indicated rough fish represented 95 percent of the reservoir's fish population.

Plans were made to "re-treat" the

Ochoco Reservoir

reservoir in 1957. On August 7 approximately 450 miles of tributary streams, irrigation laterals, and marsh areas were treated with liquid rotenone and millions of rough fish were eliminated. Suckers, squawfish, goldfish, sculpin, and rainbow trout were found in the tributary system; however, the suckers made up about 97 percent of the fish killed. A supreme effort was made to remove all of the fish from the watershed above the reservoir but rechecking on one of the tributaries revealed live suckers still present in seep and spring areas. About 4 miles of this area were again treated.

Ochoco Reservoir was chemically treated for the second time on September 24, 1957. Thousands of suckers and crappie were killed in the reservoir. Bullhead catfish were plentiful; few trout were observed during and after the treatment. Gill nets were used over a period of 12 days to check results of the chemical treatment. Unfortunately, four suckers and one crappie were caught in the reservoir. All of the fish were taken in the same area of the reservoir and it was felt that the reason for survival was a group of springs that exist in the area. Fish sought out the inflowing fresh water and avoided the rotenone.

The single crappie caught in a gill net on September 26, just after chemical treatment, was the last crappie reported caught from Ochoco Reservoir. There have been no squawfish reported at the reservoir since the chemical treatment.

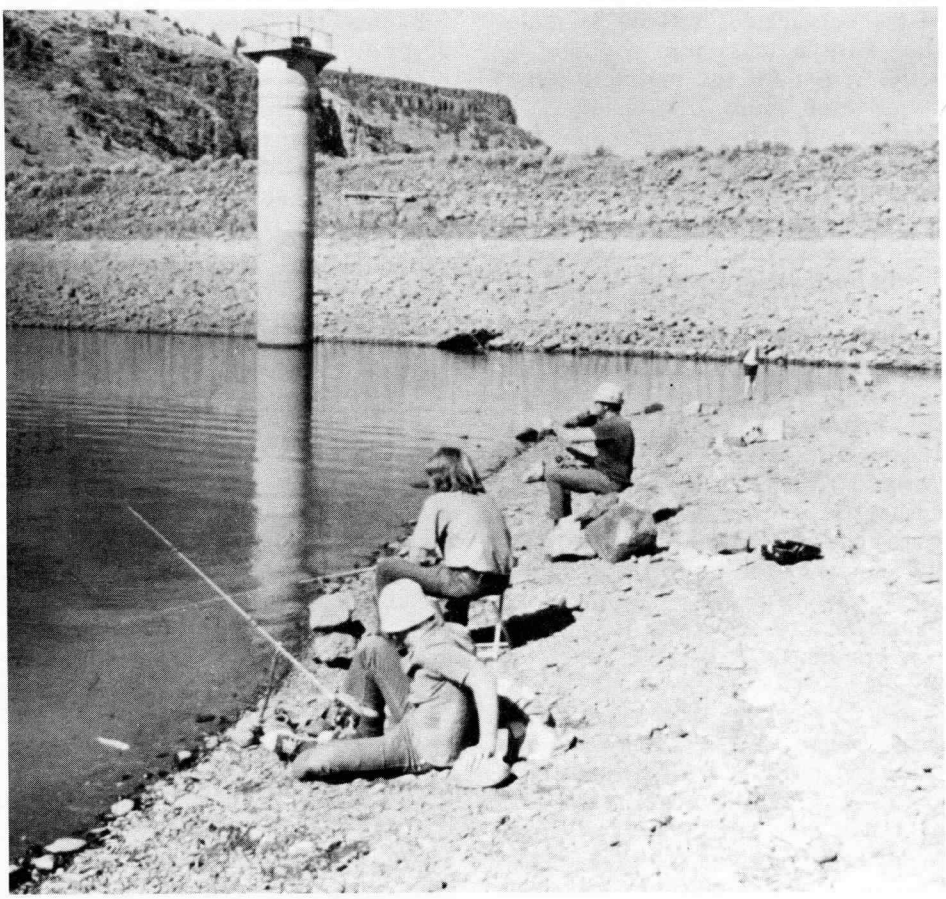
Stocking with rainbow trout started shortly after the reservoir was treated and over the next year about 480,000 fish were released at the reservoir. Good trout fishing was available in late summer and fall of 1958 but, unfortunately, poor water runoff in 1959 and 1960 caused the water level to be at dead storage both years. During this period trout growth was slow, rough fish numbers built up, and fishing access was poor. Each year that the reservoir is drawn down to a low level, most of the fish population leaves the reservoir through the outlet structure. When the reservoir was drawn down in 1960, there were approximately 22,000 trout salvaged from below the outlet and returned to the reservoir.

Fishing picked up again in 1961 and remained good through 1963. In spite of the increasing sucker population, good water years and good food production kept the trout population in fine condition. Then in 1964 the water level was low again. Fish growth was poor and use by anglers was low. The combination of small trout, poor boat access from low water, and low angler pressure put the fish population out of balance. Then on top of these problems came the Christmas flood of 1964. Water at the reservoir was extremely muddy through most of 1965, causing the trout to be in poor condition and making the angling community look with disdain at Ochoco Reservoir.

Trout at Ochoco Reservoir showed some improvement from 1966 to 1968 but angling pressure was not very high during this period. The year 1968 was another year of poor water runoff and the reservoir was less than half full in the spring. Once again the trout population lost condition, boat access was poor, and the reservoir received little use by the anglers.

It became apparent in late summer that the reservoir would go down to dead storage and most of the remaining trout would leave through the outlet. The decision was made to chemically treat the small pool that remained to eliminate the sucker population. Approximately 45 miles of tributaries were treated and then the reservoir was treated for the third time on October 14, 1968. Many thousands of suckers were removed from the tributaries and the reservoir although it was evident that the entire sucker population could not be removed from all tributaries.

Ochoco Reservoir was restocked with trout after the 1968 treatment and again, in the fall of 1969, anglers started making good catches. Anglers then enjoyed four good years at the reservoir, with trout larger than in the past and good water conditions for



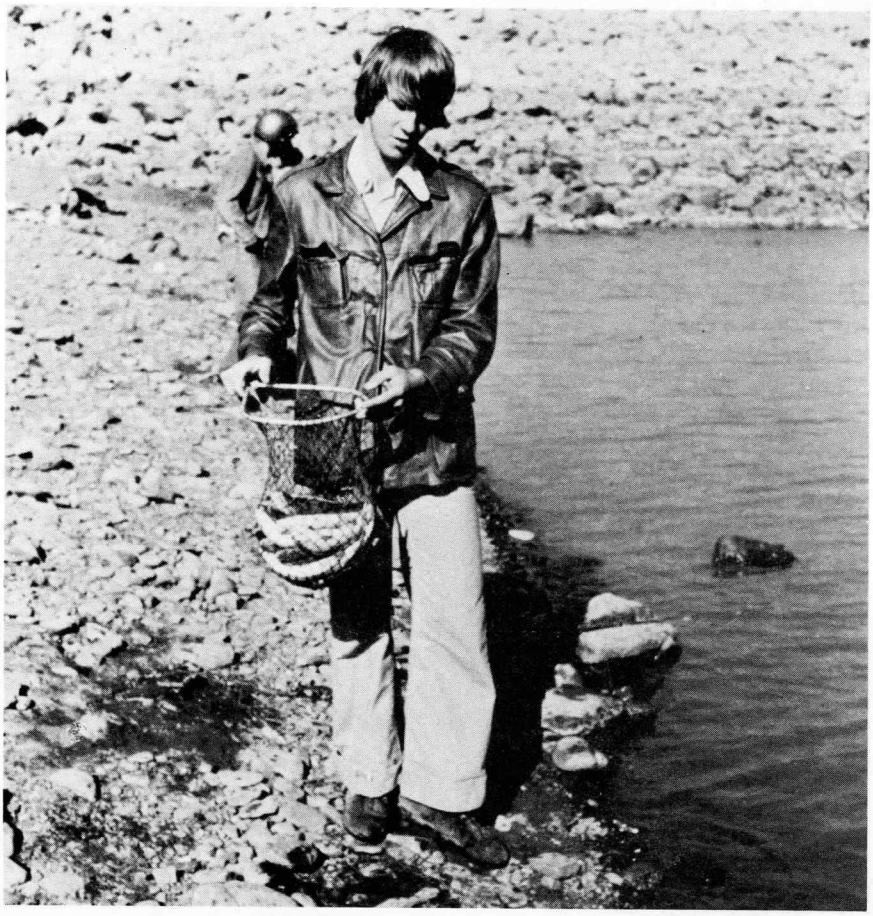
Ochoco Reservoir provides almost year around angling during its productive years.

fishing. The reservoir did not fill in 1973 and, although boat access was poor, trout anglers made good catches throughout the year. Rainbow trout were in excellent condition that year and as the water went down, concentrating the fish in a smaller area, bank anglers were making limit catches. It was unfortunate that as the water neared dead storage, most of the trout left the reservoir. Population estimates with gill nets showed the remaining population to be 84 percent suckers.

In October of 1973 the reservoir and 50 miles of tributaries were treated for the fourth time in its 55-year history. Fish killed, in order of abundance, were suckers, dace, rainbow trout, and sculpins.

Restocking of the reservoir with rainbow trout started in December 1973, as soon as the lake detoxified. It is fortunate that the spring of 1974 was an exceptional year for runoff and the reservoir went from dead storage to full pool. Growth conditions for trout were excellent, with good catches of trout starting in about August. The period from August 1974 through 1975 provided some of the best trout fishing in terms of catch and size in the history of the reservoir.

What about the future of Ochoco Reservoir? There are several factors to consider. Paramount among these are how low the reservoir becomes in the fall and the buildup of the sucker population. We can expect that sometime in the future there will be bad water years and it is likely that the reservoir will have to be chemically treated again to remove the rough fish. On the good years, through careful monitoring of the fish populations and productive capacity of the reservoir, we should continue to have some excellent success in providing a top-rate rainbow trout fishery for the anglers of Oregon. □



Fat rainbow trout are the desired bag at Ochoco. Undesirable fish are a continuing problem.

Regulations Set For 1976

Following a lengthy public hearing on Saturday, October 25, in Portland, the Fish and Wildlife Commission set regulations for angling and for personal use of ocean food fish, shellfish, and intertidal animals in 1976.

Considerable public testimony was heard concerning proposed reductions in the season bag limit for salmon and steelhead and in the daily bag limit for salmon in the ocean and lower Columbia River. Most of the testimony opposed the changes. The Commission left the regulations the same as in 1975 with the annual catch limit for salmon and steelhead at 40 fish and the daily bag limit for salmon in the lower Columbia and ocean will stay at 3 fish.

The Commission did reduce the daily bag limit for salmon in the Willamette River below Willamette Falls from 3 per day to 2 because returns were much lower than anticipated this year and the run is expected to be weak in 1976. The Commission indicated there would also be restrictions in commercial fishing on this run.

A short fly angling season for cutthroat trout in Steamboat Creek that had been proposed was not adopted but the Commission did set a fly angling season with a 1-fish daily bag limit on a 12-mile reach of the Blitzen River in Harney County.

The Commission adopted a regulation allowing the use of artificial flies and lures only in the Williamson River upstream from Klamath Marsh with a daily bag limit of 2 fish over 12 inches.

Fall closures on salmon angling were set for portions of the Illinois and Rogue Rivers where illegal snagging has been a problem.

A spring closure was set on Odell Creek to protect spawning rainbow trout and a portion of the Deschutes River above Crane Prairie Reservoir will be closed after August 31 to protect spawning brook trout and kokanee.

Opening date for the early general trout season was set for April 24 and the late opening will be on May 22.

The regulations synopsis for 1976 will be available from hunting and fishing license outlets throughout the state by about mid-December.

The Kenneth Denman Wildlife Management Area

by Howard Bowman
Area Manager

The Kenneth Denman Management Area is owned and managed by the Department of Fish and Wildlife. Consisting of 2,026 acres, it is located 7 miles north of Medford and managed for the benefit of wildlife. Of the 2,026 acres, 1,760 were part of the former Camp White military reservation and conveyed to the Oregon Game Commission in 1954, under Public Law 276. The restrictive deed specifies that the land must be used for wildlife management purposes. In 1956, ¼ section of land was purchased from Fred Hall and this is where the area headquarters is located.

Originally called the Rogue Valley Game Management Area, it was renamed the Kenneth Denman Wildlife Management Area in honor of the late Kenneth Denman, a prominent Medford attorney and conservationist who served on the Game Commission for 10 years.

Where Little Butte Creek empties into the Rogue River downstream from the area's north boundary, one can find man-made history combined with natural history. Near this spot the Rogue River Indians camped and hunted. Here the massacre occurred which triggered the war of 1855-56. Stone chippings that testify to the Indians' habitation are still uncovered as the earth is worked by the river and by man.

Three-fourths of the financing of the wildlife area comes from excise taxes on sporting arms and ammunition and some form of hunting is available during most of the 4½ months between September 1 and January 12.

Pheasants, ducks, mourning doves, quail, chukars, and black-tailed deer are available for the hunters.

Valley quail are hunted mostly near brush patches along Whetstone Creek, Little Butte Creek, and the Rogue River. Dove hunting generally is good until the rainy season starts and the doves migrate southward.

Most of the ducks are locally raised since the area is not in the main flyway. Nine fields planted to sudan grass, millet, and corn are flooded the last week of pheasant season, providing feed that helps hold ducks in the valley.

Deer hunting is allowed with bow and arrow and shotgun with number 1 buckshot or larger. Use of rifle and pistols is prohibited on the area.

There is steelhead, salmon, and trout fishing in the Rogue River and some trout fishing in Little Butte Creek. The area has 22 ponds, 17 of which are stocked with warm-water fish. These include bullhead catfish, crappie, bluegill, sunfish, and largemouth bass. These ponds provide a lot of recreation, especially in the early spring. One bass weighing 5¾ pounds was recorded.

In developing and maintaining adequate year-round cover for upland game birds, food plots are planted. Permanent grass is planted to provide cover and nesting and shrubs are being planted to provide more dense cover for protection from storms and predators. Most of these plots are about 1 acre in size. There are 80 wood duck nesting boxes placed on the area and small ponds are being dug in the wet marshy areas to provide better duck rearing areas. Numerous song birds utilize the habitat being provided.

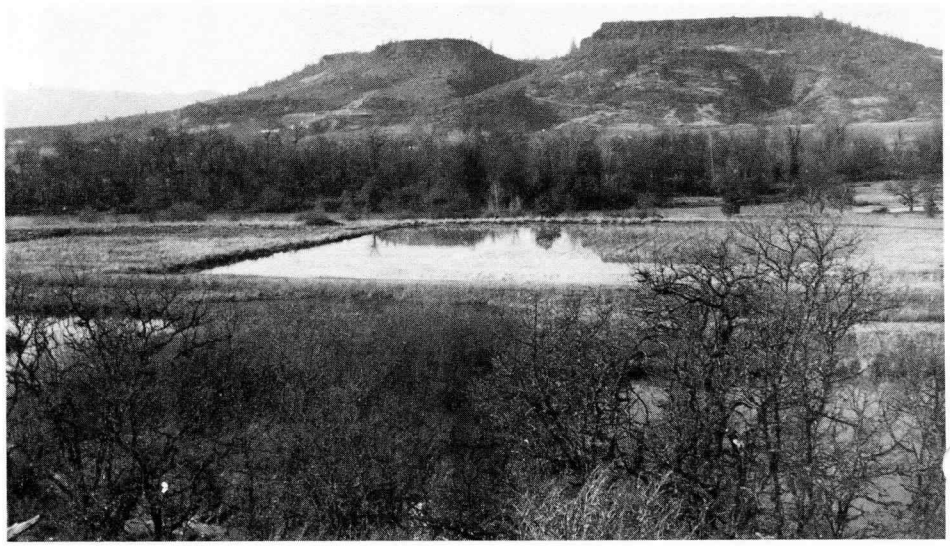
There is one pasture lease along Little Butte Creek for early spring pasture and one sharecropping lease for grain on fields north of Little Butte Creek. These leases have not conflicted with wildlife management.

In additional usage of the area, dog training and dog trials continue regularly. Hoover Ponds and the two upper ponds in the Military Slough are open to dog training the year around. One, and sometimes two, licensed field dog trials are held each year. The Southern Oregon Hound Owners Association holds a trial almost every year at Hoover Ponds. This location is also popular for school groups of all ages and Boy Scouts and Camp Fire Girls for holding outdoor workshops.

Fifteen hundred students from local schools attended a Jackson County resources tour conducted on the area last year. Agate, rock, petrified wood, and artifact hunters make good use of the area as do the bird watchers and nature study groups.

A waterfowl holding pen has been constructed along Gregory Road for persons who would like to observe the birds at closer range. There are 60 nongame species bird houses placed in the vicinity and food plots are utilized by nongame species, especially the sudan grass that is still standing when the snow falls.

Many of the 100,000 people of Jackson County regularly use the area and are joined by folks from throughout southwestern Oregon. □

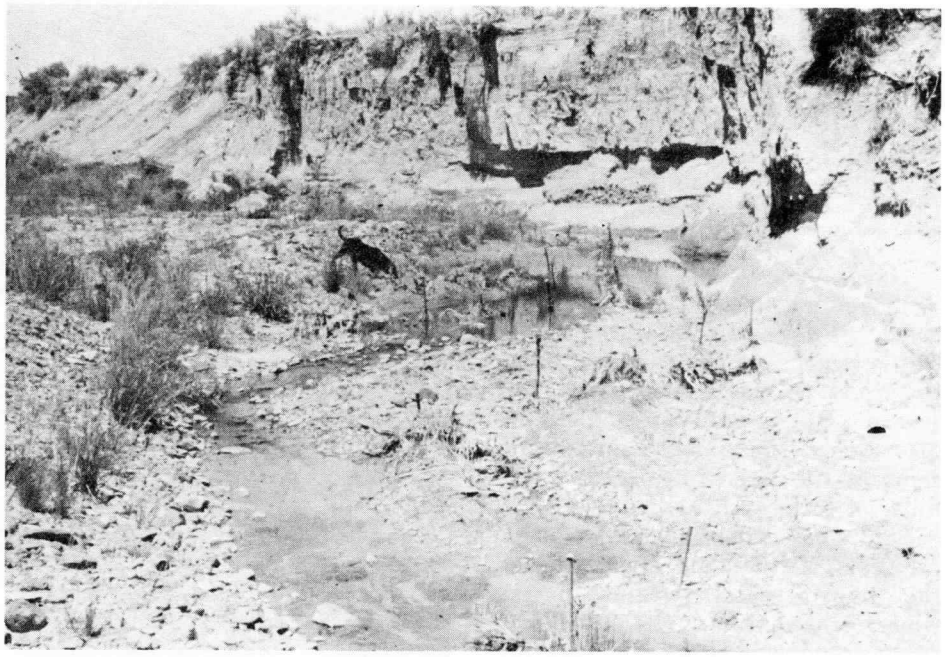


Where Has All The Wildlife Gone?

by Ron Shay,
Editor

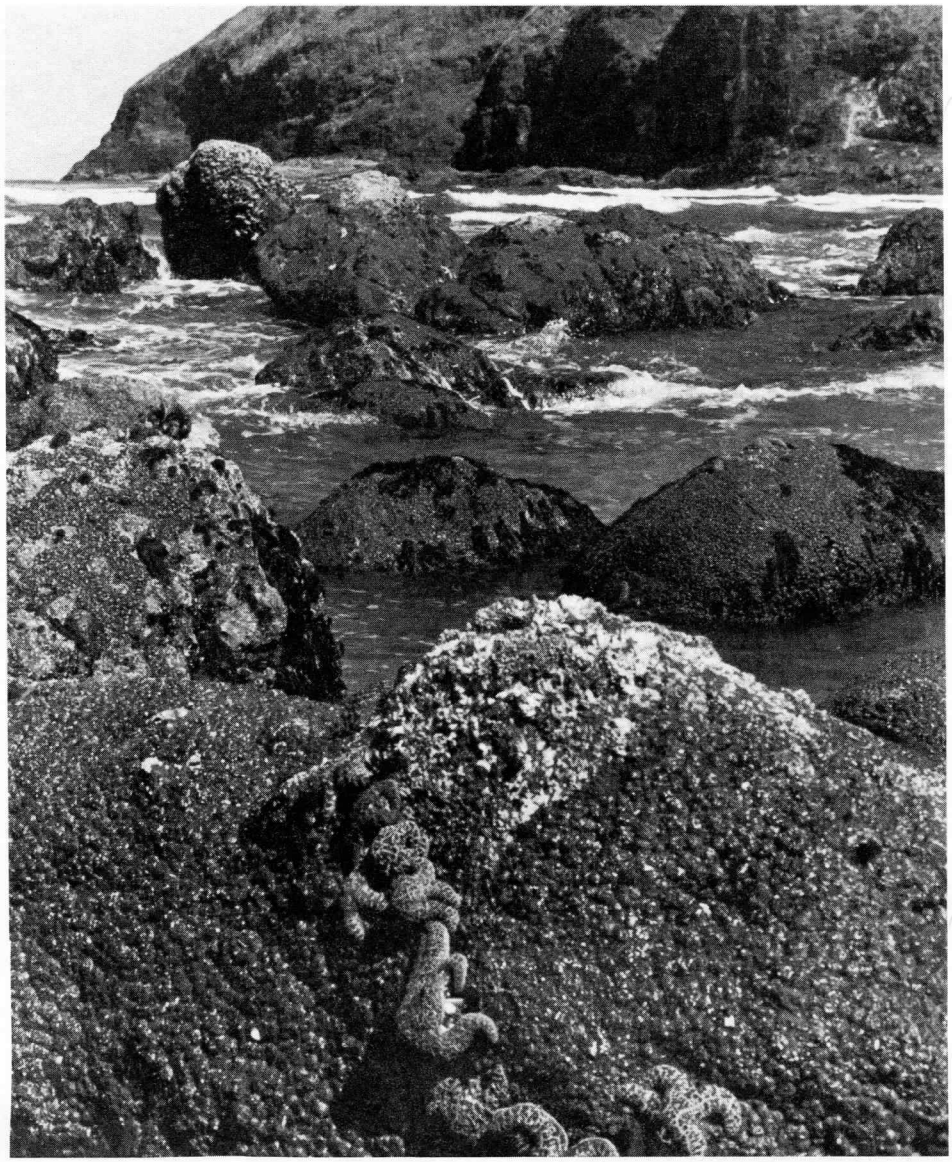
Last month we goofed! In putting the article on Camp Creek together we managed to mix up some of Harold Winegar's photos. Though the two pictures we ran did show some difference in growth, it was only a few month's difference. To the right is the proper "before" picture showing the creek after 100 years of abuse prior to rehabilitation. The change is even more graphic and shows what can be done through proper land use.

While in a few cases, wildlife habitat is being restored, the insidious destruction goes on in many more places. Below is a pair of pictures of the same small creek area near Portland. On the left is the creek as a marshy, well covered, wildlife producing area capable of slowing runoff and prevening erosion. In the lower right picture is the same creek a short distance away turned into a scoured out gut and becoming a junkpile. Exposed banks will probably soon give way to erosion and cover is already starting to go . . . no room for wildlife here!



Cool Time At The Coast

by Bob Kuhn
Staff Writer



Rich tide pools and rocky areas have numerous animals of interest. Some rules limit what may be taken.

As winter comes to Oregon's coastal areas, the days get shorter, the tourist traffic slows, and the residents begin to adjust to the slower paced "off season". But, as many Oregonians are discovering, the winter months offer some of the best times to visit the miles of rock, surf, and sand.

Avid steelheaders have known this for years, as weekend anglers travel the many coastal streams to fish winter runs that annually enter fresh water to spawn. However, there are many other interesting coastal activities to get involved with, including fishing which requires no license and offers some of Oregon's tastiest rewards.

During the months of January, February, and March, lingcod move from the ocean depths into shallows and rocky areas to spawn. These fish can weigh 35-40 pounds and make excellent eating. Other species making great catches include cabezon, striped perch, greenling (also known as "sea trout"), and surf perch.

While the steelheader or salmon fisherman must have a current angler's license and salmon-steelhead tag, all that's needed to go after any species of these ocean food fish (also known as bottom fish) is a little gear, some bait, and patience.

Almost any arrangement of gear works well and just about anything and everything is used. A stiff trout rod rigged with 10-pound test and 8-pound leader is sufficient to get started. However, a little experience will tell what works best for each fisherman.

Mud and ghost shrimp or other live bait is best and can be obtained at one of the many marinas or tackle shops that dot the coastline. While this kind of fishing does not demand the concentration or energy of steelheading or salmon fishing, the benefits are certainly worth the effort.

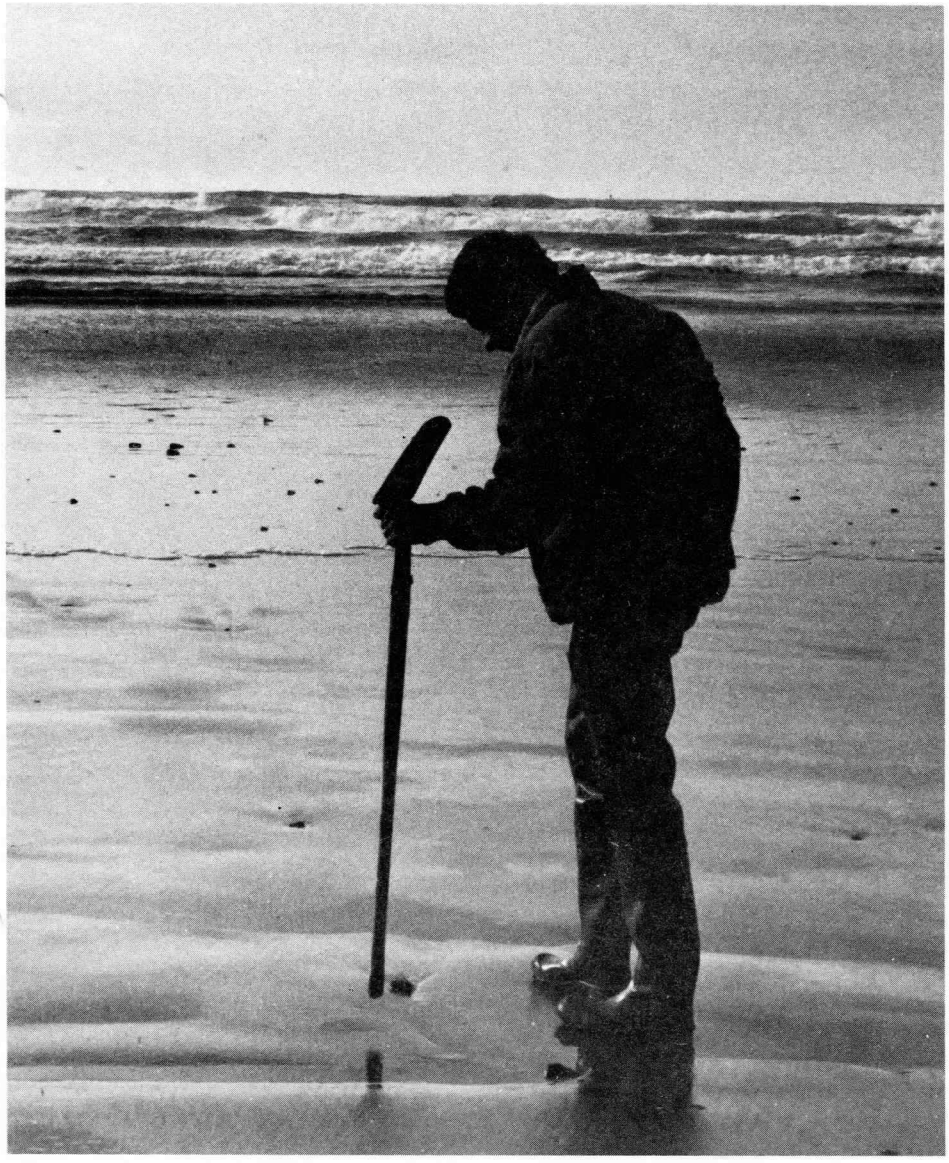
In past years there have been no bag limits on the ocean food fish. However, as of January 1, new Oregon angling regulations take effect which limit the individual take to 25 per day of flounder, sole, greenling, lingcod (5 only), rockfish, perch, albacore, or others in any combination. A seven-day limit of 50, of which no more than 10 can be lingcod, is also part of the new rules.

Clam digging continues through the winter months; however, since the best low tides are after dark, a good lantern is in order. Both razor and bay varieties are available and no license is required. Each digger must have his own container and keep his catch separate while still in the digging area. Shellfish such as clams and crabs must be taken by hand-powered tools only.

A narrow shovel works best for digging through the soft sand but when the digger gets near his quarry, hands work faster. Clam guns are another good method and some people prefer them. One important thing to remember is that tools can be shared among clam diggers but containers can not.

Clammers can be any age, but must do the actual digging and capturing themselves. Many a well-meaning parent has found himself before the judge after "helping Junior dig out his clam".

Bag limit on bay clams (cockles, butter clams, littlenecks, softshells, and others) is the first 36 taken regardless of size or condition. It's il-



Winter clamming is often at night and a lantern is needed, but the critters are still there . . . and there are less people.

legal to discard any clam after you've dug it. On the bigger gaper clams (also called blues, empires, or horsenecks) found in the bays, there is a 12-per-day limit which must be counted as part of the 36. Not more than 72 bay clams nor 24 gapers can be in anyone's possession during a seven-day period.

The daily limit on razors is the first 24 dug, regardless of size or condition, with no more than 48 in possession during a seven-day period. Individuals are also allowed 24 scallops, 72 mussels, and 36 piddocks (rock oysters) per day.

Winter crabbing is also gaining steady interest each year. While weather and tide conditions are not as favorable during the wintertime, it can be fruitful in the bigger estuaries. Crabs tend to move with the salinity. When freshwater runoff begins building up in the bays, they crawl out toward the ocean. However, in Yaquina, Tillamook, Coos, and Netarts the effect is minimized and the crabs have a tendency to stay put. Low slack through the flood produces the most consistent success.

Each crabber is limited to 12 male Dungeness crabs per day and may have 24 in possession during any seven days. Females must be returned safely to the water as well as any males that don't measure at least 5¾ inches in a straight line across the back, not counting the spines.

Now comes the ever asked question, "How do I tell which are the females?" One standard answer has always been "Just ask a male crab" but an easier way is to turn the animal on its back and look at the flap on its underside. The males are much narrower here than the females and soon the difference will become apparent to even the most novice crabber.

If you're not in the mood for fishing, clamming, or crabbing, try exploring the rocky intertidal areas where many forms of life abound. Easy finds are starfish, sea urchins, and anemones. But a closer look reveals many varieties of shore crabs, pill bugs, brilliant red ribbon worms, sea lemons, a host of life that depends on the changing tides for survival. Most everyone has at one time or another stuck his finger into the mouth of an anemone and watch it quickly close. Another trick is to feed these animals mussels, broken off a nearby rock.

Taking home souvenirs from these areas in the form of starfish, urchins, and other things is permitted in most areas. The daily limit is a total of 10 animals. However, these animals belong in their own environment and won't last long anywhere else. To take intertidal animals home, then discard them later, is a waste of the resource, something that should be remembered during collection.

Because of past unregulated collecting, some of Oregon's intertidal areas became stripped of all life forms. Starfish were found in the streets of several coastal cities in great numbers. Protection was given by state law several years ago and this wanton waste has since decreased. Besides the daily limits, certain areas have been designated off limits to the taking of intertidal animals. These include Boiler Bay, Shell Cove, Yaquina Head, Neptune State Park, Sunset Bay, Cape Arago, and Harris Beach. Marine Gardens at Otter Rock will be closed as of January 1 to the collecting of intertidal animals, clams, and mussels. Single mussels may be taken for use as bait, however.

The coast in the winter can be interesting and productive but, for a completely pleasant outing, remember there are some "rules of the road". □

Fresh Scallops For Dinner

by Jim White
Assistant Personnel Officer

Rock Scallop

As the divers came in through the mild surf at Yaquina Head and climbed onto the rocks, curious onlookers gathered. One scuba diver reached into the mesh bag hanging on his weight belt and brought out a large algae-covered item.

"What is that?" asked one of the bystanders. "It looks like a rock."

"Well, that's only partially correct. This is a rock scallop. It will be dinner tonight."

The divers had been gathering purple-hinged rock scallops, a favorite form of seafood to those able to gather them. Most of us are familiar with scallops on the menu at the restaurant but many do not realize the seafood plate scallops are actually the adductor muscles, the muscles that hold the shells closed on a particular kind of bivalve. Fewer yet know that occasionally scallops consumed in West Coast restaurants were scooped up in nets on the Atlantic shore or (generally under a trade name) are really round pieces of the "wings" of rays.

All true scallops start their bivalve lives with an ability to swim. By snapping their shells and jetting water, they are able to hop about like underwater grasshoppers. Equipped with two rows of tiny eyes, they generally whisk away when approached by predators like starfish.

Atlantic scallops, and some of our smaller species, continue to swim about. Thus they can be gathered by fishermen who skim the sandy ocean floor with nets. However, Oregon's largest scallop, the purple-hinged rock scallop, is different. During its first year of life, and perhaps during part of its second year, its shape and habits resemble those of its relatives. The tiny shells, usually about the size of a dime, have the characteristic flaring ears at the hinge and may be bright yellow, orange, or beige colored. Some look like miniature Shell Oil Company emblems. Beaches adjoining rocky areas with large scallop populations, like Shore Acres on Cape Arago, are apt to have many of these shells washed ashore.

When the rock scallop grows to about the size of a quarter, it picks out a rock or other solid surface and cements its shell to its home spot. The shell thickens and roughens. The bright yellow or orange that often appears on the juvenile shells slowly fades and the new growth is a camouflage brown. Thickening shells also develop rows of rasp-like projections that gather a covering of seaweed. Soon the growing scallop looks just like a rock. In fact, the older shells become porous from the efforts of various borers. When their dead shells are washed upon the beach, they appear gray and riddled with holes, almost like a hard sponge.

Nearly always present, however, from the tiny juveniles to the porous, empty adult shells on the beach, is some trace of purple coloring at the hinge line inside the shell. It is this that gives the purple-hinged rock scallop its common name.

How do the divers find these scallops? The hardest part is spotting them. Sometimes their shape is distinctive but the best clue is the mantle. When the scallop is undisturbed, the shells gape, showing a stripe of yellow flesh.

Are they hard to get? No, you can't often tear one loose with your hands but an abalone iron will do the job. However, if they are wedged into a crevice, you might as well forget it.

How deep do you have to go to get them? About 20 or 30 feet. Most of them are below the heaviest wave action but still within the zone of best light penetration where the plankton is thickest. Their food is the plankton they filter from the water.

If the divers are lucky, they may have some uncleaned scallops (shells and all) that weigh individually up to 5 pounds. Most, however, will only go a couple. Shellfish regulations allow the sport diver a bag limit of 24, which must be taken through use of the abalone iron. There is no closed season and scallops may be found on any offshore reef or rocky headland along our coast where there is some protection from the pounding surf.

The diver's dinner, with the adductor muscles sliced and fried in batter, will be delicious. What could be better than fresh gourmet seafood? Some folk even think they're quite delectable eaten raw! □

This and that

compiled by Ken Durbin

Grizzly Trophies Out In Lower 48

The Boone and Crockett Club no longer accepts grizzly bear trophies from south of the United States-Canada border for its North American Big Game Awards program. The club has historically used such action to direct public attention to the needs of various wildlife species and stimulate conservation efforts. In recent years the mountain lion and polar bear have been dropped from the program.

The Records of North American Big Game Committee of the club has conducted an extensive review of the grizzly's status. Its conclusion is while populations north of the United States-Canada border are in generally good condition, the same cannot be said for the lower 48 states' populations.

South Dakota Conservation Digest

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Americans Still Want Environmental Cleanup

A recent survey by Louis Harris and Associates indicates that Americans support new energy developments but are not willing to sacrifice the environment to the energy cause.

The survey report said that the public believes strongly that the nation is facing a serious energy shortage and supports four steps to ease the crisis. Those steps are: speeding construction of the Alaskan oil pipeline, offshore drilling for oil, increasing efforts to develop oil shale, and accelerating nuclear power plant construction. By a small margin, the public would also favor more strip mining of coal, the report said.

By 65 percent to 25 percent, Americans oppose slowing down the clean-up of air and water pollution as a step to help solve the energy shortage, according to the survey.

Wildlife Management Institute

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To Scratch Or Not To Scratch

The Wildlife Management Institute reports that encouraging progress has been made toward developing a biological control agent for mosquitoes. The Agricultural Research Service in USDA has had good success controlling mosquitoes by infecting their habitat with parasites that kill the bothersome insects.

The parasite is a worm that attacks some 60 species of mosquito, including those that carry the encephalitis virus. The worm occurs naturally in the wild but its distribution has been spotty. ARS is giving nature a helping hand by releasing worm eggs along the edge of ponds and other mosquito breeding sites. From 75 to 95 percent parasitization has been obtained after only one day. The worms seek out mosquito larvae, penetrate their bodies, and coil around the insect's thoraxes. The mosquitoes bleed to death when the worms emerge to mate.

On the other hand, a report from the National Wildlife Federation points out that mosquitoes serve a useful role and may be quite important in certain ecosystems.

Dr. Lewis Nielsen of the University of Utah is collecting evidence to prove that if it were not for the lowly mosquito, some of our most beautiful wild flowers would vanish, NWF says.

Male mosquitoes, like bees, feed on the nectar of flowers. "What we're trying to show," Nielsen says, "is that as the mosquitoes fly from flower to flower they also pollinate the blossoms and enable the flowers to reproduce."

Nielsen, an entomologist, concedes that mosquitoes are not as important as bees but believes they pollinate some tiny flowers that bees ignore, such as Forget-Me-Nots. The pesky insects also play another role in nature. They are a source of food to such predators as fish, birds, bats, dragonflies, and spiders.

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Pollution Detection

Miners used to carry a canary down into the mine with them to test the air. When the canary died, they knew the air was bad. Now the Japanese are using morning glory flowers to detect photochemical smog. The flowers are placed in areas where auto traffic is heavy and the rate at which the flower turns black and withers indicates the degree of pollution in the air.

Texas Parks & Wildlife

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Bats Are Beautiful

Maybe not really beautiful, but bats are at least extremely interesting. They are the only true flying mammals, and their appetites for insects make them handy to have around. During winter the little animals are in a period of stress because of diminished food supplies and they roost in tight groups for warmth. Any disturbance makes them susceptible to starvation or freezing because they must burn up valuable energy needlessly. If you should find a concentration of bats, leave them alone, undisturbed, so they can make it through the winter.

Texas Parks & Wildlife

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Blizzards Are Pheasant Peril

In all states with pheasant populations, cover or shelter combined with a nearby food supply is the key to pheasant winter survival. Shelterbelts, fencerow and woodlot cover, and vegetation left by strip farming practices are vital to pheasants during winter stress periods.

Pheasants normally roost on the ground at night under cover of willows, grass clumps, or ditch banks. Such areas catch blowing snow and during extreme conditions the birds may be covered by an insulating layer of snow. Lacking adequate cover, pheasants are forced to bear the full brunt of winter storms. Pheasant suffocation can occur when heavy winds force moisture into nostrils, where it freezes and forms ice blocks.

Ringnecks seeking gravel on and beside highways, or collecting warmth on sun-catching blacktop, can be subjected to heavy traffic loss. More of the birds would survive this hazard if motorists would slow down and be cautious whenever they see pheasants along highways. □

"Goodies" For Geese

By Jim Gladson
Staff Photographer

Fern Ridge Reservoir, west of Eugene, has been a popular waterfowl wintering area for many years. The population consists mostly of pintail and mallard ducks, but the number of dusky Canada geese using the area has increased gradually over the years.

In an attempt to draw even more of the duskies to the reservoir, the Department of Fish and Wildlife seeded about 40 acres of mudflats with winter wheat this fall. The young wheat shoots are a favorite forage of the geese.

Fern Ridge is primarily a flood control reservoir, and because of this must be almost drained each fall to make room for winter storage of water. The resulting mudflats are expected to provide a good seed bed for the wheat.

Because of the muddy conditions, conventional planting methods were impossible, so the area was seeded and fertilized by helicopter.

This is the first year of the seeding program. If the growth of the wheat and bird use of the crop are acceptable, the program will be expanded in the future.

The Department of Fish and Wildlife manages 2,000 acres of the Fern Ridge impoundment on a lease from the U.S. Corps of Engineers.

Other management activities within the leased acreage include nest box placement for purple martins, and the planned construction of nesting platforms for the reservoir's abundant population of osprey. □

Wheat seed and fertilizer were spread from helicopter at Fern Ridge Reservoir. Dusky Canada Geese and other waterfowl will benefit.

Oregon
Department of
Fish and Wildlife

1634 S. W. ALDER STREET
P. O. BOX 3503
PORTLAND, OREGON 97208