

# **OREGON WILDLIFE**

**DECEMBER 1976**

# OREGON WILDLIFE

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OREGON FISH AND WILDLIFE COMMISSION  
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RON E. SHAY, Editor

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## The Cover

A young mountain goat shortly after capture in Washington. For the story of Oregon's goats see facing page.

*Photo by Douglas Finch*

## HUNTER EDUCATION PROGRAM

### INSTRUCTORS APPROVED

Month of October .....	23
Total active .....	1,622

### STUDENTS TRAINED

Month of October .....	3,381
Total to Date .....	238,617

### HUNTING CASUALTIES REPORTED IN 1976

Fatal .....	2
Nonfatal .....	33

# Balderdash!

Many times during the near quarter century that your editor has been working for the Game Commission, Wildlife Commission, and Department of Fish and Wildlife we have heard tales of the use of state aircraft to frustrate anglers and hunters.

Each year the stories go around that Joe told Harry that he heard from some fellow hunting near Podunk Creek that he saw a plane go over just before elk season or deer season and break up the herds so the hunters wouldn't have as good a chance. The story during the angling season is that Department planes fly low over the lakes and scatter food so the fish won't bite as well for the opening. All we can say to those stories is **BALDERDASH!**

Another story is that Department personnel go out the night before and haze the animals with shotguns. Again — **BALDERDASH!**

The collection of hunters in an area before the season stirs the animals up enough so that they aren't normally standing around in the open for the beginning shot. The vagaries of fish psychology seem to give them a better than average chance and there are few recorded cases where the opening day pressure denuded a body of water of its fish population.

Aircraft are used in conjunction with fish and wildlife management and are used during the hunting seasons. Game enforcement officers use light planes to patrol with, but have strict orders not to fly in such a fashion as to spook game.

This year in the north coastal elk season the Air National Guard supplied a helicopter for emergency use in the event a hunter became disabled or had a heart attack. In addition, the chopper was used to haul a couple of illegal elk out of the canyon where they had been killed. Monty Montgomery, regional supervisor, told us that when the chopper landed at the Department's Jewell Valley Wildlife Area, the elk resting there paid virtually no attention. The whirlybird made two trips with the elk carcasses, landing on the parking lot at the Jewell area, and during the final trip the elk were bedded down in the pasture and didn't bother to even get up.

Two points seem to be evident by this. The aircraft might have been seen by hunters who assumed it was hazing elk and, secondly, big game animals have to be pressed rather hard by a plane to make them spook. This is not to say it can't be done, but it is to say that the Department and the State Police do not do it!

Most of the stories we've heard about such alleged instances are about third hand. Various Department personnel have tried to run down the details of some of these rather vague reports and it has been an exercise in futility. The source of the report or the description of the aircraft seems to disappear into the fog of "I was told . . ." or "Well, I didn't see it myself, but . . ."

These rumors that crop up each year are disturbing to everyone inside and outside of the Department. They serve no useful purpose. Those who start them could better spend their time getting detailed information on what they saw, in case it was indeed illegal harassment of game by some private aircraft. Law enforcement personnel can use all of the assistance they can get. Time spent gathering information on poachers, vandals, and trespassers is tremendously more productive than that spent chasing down rumors or starting them!

RES



*The Fish and Wildlife Commission will hold a regular business meeting at its Portland headquarters on December 10. The meeting will start at 9 a.m.*



# Mountain Goats of the Wallowas

by Ron Bartels,  
Wildlife Biologist, Enterprise



Mountain goat country in Oregon. Hurwal Ridge in the foreground and Sacajawea Mountain in the background. High, south-facing slopes are preferred habitat and lack of them may limit goat numbers.

The Rocky Mountain goat, though not native, is a magnificent addition to the wildlife of Oregon. Although Lewis and Clark referred to skins and blankets woven from the goats' snow white wool in their 1815 Journal, these items were most likely brought in from Washington or Idaho by Indians. The white goat is native to Washington State and the Seven Devil's Mountains of Idaho, but the Columbia and Snake River canyons were apparently barriers to its expansion into Oregon.

Mountain goats were introduced to the Wallowa Mountains in March 1950. Three adult males, two adult females, and a female "kid" (the name used for a mountain goat less than one year old), were transported from Chopaka, Washington by the Oregon State Game Commission and released at the foot of Chief Joseph Mountain. One adult female died shortly after release. The remaining goats moved onto Hurwal Divide and sightings were infrequently reported until the early 1960s. At this time, goats were observed on the Hurricane Creek-Lostine River Divide. Since that time, regular observation flights have shown the animals have continued to occupy the same ranges and have moved a maximum of nine airline miles from the initial release site. The current population numbers approximately 30 goats.

These beautiful animals are not true goats but are more related to the old world antelope. The mountain goat is the only living member of the genus *Oreamnos*. Its closest relatives are thought to be the Serow of Japan, the Goral of the Himalayas, and the Chamois of the Alps. Oregon's stock, originating in the Cascade Range of Washington State, is scientifically called *Oreamnos americanus*.

Most mountain goat mating takes place during November and early December after the population



Mountain goats are not native to Oregon. In 1950, a small group of them was transplanted from Washington to the northeastern part of Oregon. Limited habitat appears to make larger populations unlikely. Photo courtesy Washington Game Department.

gathers or the migration to wintering areas has occurred. The gestation period averages 178 days and young are born during May and June. Usually one kid is born to a female, although twinning is not uncommon.

A newborn goat is lamb-like in appearance with large, dark eyes and drooping tail. It weighs about 7½ pounds and is about 13 inches high at the shoulder.

Yearling goats can be recognized in the field by the length of their horns. In the spring when new offspring make their appearance, horns of yearlings are about 4 to 5 inches long, a little shorter than their ears. The average weight of yearlings varies from one range to another, but yearling males taken in the fall in South Dakota averaged 76.5 pounds field dressed. Individuals weighed during that study varied from 58 to 106 pounds, indicating a wide variation in sizes of yearling goats.

Sex of adult goats can readily be determined when horns are viewed from the front at close range. The horn base is much thicker on males and there is a noticeably greater taper from base to tip. The horns of both sexes are glossy black on the tip third and a dull, powdery black on the basal two-thirds. Horn lengths generally average near 9 inches for the males while those of the females are

slightly shorter, averaging about 8 inches from base to tip.

The mountain goat is the only all-white game animal in the 48 contiguous states. In early fall when the new coat shows little discoloration, its whiteness is in sharp contrast to the black horns, hooves and nose. Hair shedding begins in late spring and progresses through the summer. Loose strands of hair fall out and by early summer large patches have been lost from the neck and shoulder. By early September, the old coat has been replaced by a new white growth of hair.

Insufficient winter range leading to winter nutritional stress that results in the loss of young, both before birth and shortly afterward, appeared to be cause of low mountain goat numbers in the Wallowa Mountains. This conclusion resulted from a one-year study of the goats in the Wallowa Mountains by Michael R. Vaughan, at the time a graduate student working towards a Master of Science degree through the Oregon Cooperative Wildlife Research Unit at Oregon State University. Mike literally lived with the goats from June 1972 through June 1973. His observations were presented in a thesis titled "Aspects of Mountain Goat Ecology, Wallowa Mountains, Oregon." Mike found that ap-

proximately 77 percent of the total goat population wintered on a rocky escarpment on the west face of Sacajawea Mountain, a peak that reaches 9,839 feet above sea level. The goats were observed feeding on the barren, wind-swept slopes above 6,000 feet in elevation, preferring open timber/slide rock/cliff rock areas for bedding and feeding. The limited abundance of south-facing slopes with suitable winter forage is considered the primary factor limiting the growth of goat populations in the Wallowa Mountains.

Population trend and composition counts are made from aircraft annually to record such data as adult/kid ratios and distribution. If an imbalance in sex or age ratios is detected, special regulations can be used to allow the hunter an opportunity to take surplus animals. Four mountain goat seasons were held from 1965-68 when a total of 23 tags was issued and 20 goats harvested.

A preliminary inventory of additional mountain goat habitat has been made. There are more areas in the Wallawas as well as the rest of Oregon that show some promise as mountain goat habitat. Trapping and transplanting of breeding stock could be used to expand this species' range to areas of suitable habitat presently not utilized by other big game.

What does the future hold for the Rocky Mountain goat in the high Wallawas? The absence of south-facing slopes with interspersed open timber, cliff rock and slide rock areas will always limit the size of this goat population. However, several small areas do exist that contain the habitat required by goats. Possibly by using transplanting of breeding stock as a tool to overcome the mountain goat's tendency not to pioneer onto new ranges, several subpopulations could be developed. The July 1975 release of six goats in the Columbia Gorge near Cascade Locks is an example of putting this management practice into action.

Our mountain goats have many important values. Not only have they furnished sport for the hunter and could again at some future time, but they also provide pleasure for those wildlife enthusiasts who enjoy observing these animals under natural conditions on their rugged mountain ranges. □

# 1977 Proposed Legislation

by R. C. Holloway  
Chief,  
Information-Education Section

Included among the several hundred measures that will be considered by the 1977 Legislature are nine that will be introduced at the request of the Department. A brief description of each of these proposals follows.

**Classification of bobcat as a furbearing mammal.** This is similar to a measure that failed to be adopted by the 1975 Legislature. It would change the statutory classification of the bobcat from that of a predatory animal to a furbearing mammal, thus permitting the Department to regulate its harvest and provide protection where and when necessary. The bill includes a provision that the Department of Agriculture could, after a public hearing, declare the bobcat a predator and instigate control measures at times and in areas where such action is necessary to protect domestic livestock.

**Prohibit carrying a loaded firearm in a motor vehicle.** This measure would prohibit carrying a loaded firearm, other than a concealable weapon, in a motor vehicle. A "loaded" firearm is described as one in which there is an unexpended shell in the chamber or magazine. The proposal does not apply to a person on his own land or on land controlled by him, other than public land. It is predicted that enactment of such a law would reduce firearms accidents and improve hunting quality by reducing "road hunting".

**Application fees.** A minor amendment to an existing law would permit the Department to charge a fee to process applications for various tags and permits. In the course of a year, thousands of applications are received and this change would permit the Department to recover handling costs.

**Deferred Taxes on farm and forest use land.** The proposal would resolve a problem the Department has in purchasing land that is zoned for farm or forest use to use for wildlife

purposes. Such land is taxed at a rate which is much lower than it would be otherwise. However, it carries an additional tax liability which must be paid when and if the land is sold for another use or to a new tax exempt owner. By law, the Department is a tax exempt landowner. However, it is required to pay counties on most of the land it owns an annual amount equal to the ad valorem property taxes that would be assessed against a nonexempt owner. Essentially, the proposed change would permit a farm or forest use landowner to sell land to the Department without being liable for payment of the additional taxes.

**Predator hunting.** Oregon law limits the Department's authority to regulate hunting of predators except at times and places prescribed for elk hunting. Legislation is proposed that would authorize the Department to limit predator hunting at times and in places prescribed for deer hunting. This would help to reduce hunter concentrations by eliminating hunters who do not possess a valid deer tag and would materially assist enforcement of the separate mule deer and black-tailed deer tag requirement. The common explanation, "I'm hunting coyotes" would no longer be valid.

**Columbia River Compact.** This proposal would repeal the existing compact law between the states of Oregon and Washington and, pending ratification by Congress, substitute a compact that would include the state of Idaho. The three states would jointly set recreational and commercial fishing rules on the main stem of the Columbia River to its confluence with the Snake River and on the main stem of the Snake up to the Salmon River. Each state would have one vote except that Idaho could vote only on rules which might have a substantial impact on anadromous fish destined for Idaho waters. Membership from the three states would include the Idaho Department of Fish and Game, Oregon Department of Fish and

Wildlife, Washington Department of Fisheries, and Washington Department of Game.

**Commercial fishery fees.** This proposed legislation would eliminate the present schedule of fixed poundage fees and substitute a poundage fee of 4 percent of the price paid to the commercial fisherman on each species of salmon received or purchased and 2 percent of the price paid on each species of food fish other than salmon and shellfish received or purchased by a canner, buyer, fish bait dealer, or wholesaler. The fees would apply on food fish and shellfish taken within the state or landed in the state. More revenue would be generated than from present poundage fees and periodic adjustment by the Legislature would not be necessary to reflect changes in the economy.

**Personal use shellfish license.** This legislation provides for a personal use shellfish license with the annual fee pegged at \$3 for persons 14 years of age or older. The additional revenue would help defray the cost of shellfish research and management programs conducted by the Department.

**Penalties for commercial fishing and wildlife law violations.** The primary thrust of this proposal is to classify as Class C felonies the taking of big game animals out of season and the commercial taking of food fish of a value of \$200 or more out of season. The penalty would not apply to big game taken within one hour prior to and one hour following an authorized season or to commercial violations which occur within 12 hours prior to and 12 hours following an authorized season. The current schedule of graduated fines for repeat violations other than those mentioned above would remain in effect. Misdemeanor penalties now in effect do not appear to be severe enough to discourage such activities as organized illegal hunting, big game poaching, and illegal netting and dealing in food fish. □



# Food for Elk

by Bert Cleary  
Habitat Biologist, Corvallis

"The reported increase of elk in Clatsop and Tillamook Counties is gratifying, but it is not considered possible to re-establish elk as a game animal in the state of Oregon."

A statement from the 1975 big game report? No — A. E. Burghdoff, the state game warden, said it in his status report in 1922. Early records indicate that there was a good population of Roosevelt elk in western Oregon in the early 1800s. By 1900, many people believed that elk numbers had declined to a point beyond recovery. In the year 1905, elk hunting was prohibited throughout the state and 17 years later, some experts still believed that we would never hunt elk again. In spite of the pessimism, elk hunting was allowed on a very limited basis in 1938 and has been allowed each fall since.

Now that we are nearing the end of the 1900s, there is once again a deluge of pessimistic forecasts concerning big game in Oregon. This writer is of the opinion that, in spite of some of the critical problems facing us, an optimistic view is warranted. Some recent research findings, coupled with improved management practices, offer the hope that Roosevelt elk can and will be part of the wildlife scene for another hundred years.

As in the 1800s, the largest concentration of Roosevelt elk is found in Clatsop and Tillamook Counties. At the present time, there is an estimated population of 16,000 elk living in these two counties with many thousand more scattered throughout the rest of the Coast Range and portions of the Cascades.

One way to increase Roosevelt elk numbers is to move them from areas of heavy concentrations to lightly stocked areas with room for expansion. Wildlife biologists have perfected a relatively inexpensive and simple method to trap and transplant elk, utilizing portable traps capable of catching and holding up to 20 elk at a time. By the end of the 1975 trapping season, we will have trapped and released nearly 1,185 elk in western Oregon.



One way to increase populations of Roosevelt elk is to move them into new areas. Over 1,000 elk have been moved to new locations with suitable habitat in western Oregon.

Recent research studies indicate that the low reproductive rate of Roosevelt elk is related to body condition of breeding age cows which, in turn, is related to forage quality and quantity.

It's hard to imagine that food supply problems exist in lush green western Oregon, but analysis of winter forage shows that during long periods of overcast sky, crude protein content of forage plants drops to extremely low levels. As an example, some western Oregon grasses contain as low as 11 percent dry matter with little crude protein. An elk attempting to survive on this grass would need to consume 100 pounds per day to maintain body condition.

Roosevelt elk usually spend the winter months on one or more of four habitat types:

1. Cut-over timber lands
2. Natural openings
3. Agricultural lands
4. Hardwood stands

Although specific management practices have been developed for each of the above types, the goal is common to each: The improvement in quality and quantity of winter forage.

## Cut-Over Timber Lands

Cut-over lands, especially clear-cut units, are important to elk all year. However, some units become especially important during the winter months.

After a cutting unit has been identified as important winter range, dependent on approval of landowner or manager, it is seeded to legumes and fertilized. Highest seeding success has been in clear-cuts that were burned after logging. These units are fertilized each succeeding fall until the young fir trees begin to form a closed canopy which reduces forage production. We can normally expect about 10 years of good forage production before these units begin to decline.



It's hard to imagine that food supply problem could exist for big game in western Oregon. However, forage quality and quantity at times affects reproduction.

### Natural Openings

There are many small openings found throughout the range that are important producers of forage. These openings are usually found along stream bottoms and range from  $\frac{1}{4}$  acre to 10 acres in size. Most of these sites have stands of native grasses and forbs that respond very well to fertilizer. These sites are fertilized once or twice each year, depending upon elk use, and also require mowing occasionally to remove brush and seedling hardwoods.

### Agricultural Lands

Agricultural lands have the highest production potential for elk and are also the source of most elk problems.

The Department has purchased three areas in western Oregon for elk,

the Jewell, Beneke Creek and Humbug Creek areas, all located in Clatsop County. These three areas are currently under development to produce high quality forage through a pasture improvement program. The fields are plowed, disked, limed, seeded, and fertilized to produce maximum amounts of high quality forage.

The Jewell project, purchased in 1969, is supporting 200 head of elk most of the year. The Beneke Creek area was purchased in 1973 and encloses 687 acres. When development is finished at Beneke, we expect to winter 500 elk each year. The Humbug Creek area was recently purchased and will provide winter range to a portion of the 600 elk using the Humbug Creek subunit.

The Department cannot purchase

every site having winter range value because of many economic and political reasons. Therefore, if we are to improve habitat for elk, we must also work on privately owned lands. We now have several cooperative agreements in effect with landowners to improve winter pastures. Under these agreements the Department provides portions of the manpower, equipment, and materials needed to improve the site. In exchange, the landowner agrees to special grazing programs or hay removal and allows winter use by elk.

### Hardwood Stands

There are still large areas of hardwoods, mostly red alders, in western Oregon. These sites are gradually being converted to conifer production but we can expect hardwood forests to provide good elk forage for many years.

A project on Edwards Creek (Tillamook County) in cooperation with the Oregon Department of Forestry is showing promise. Forestry crews thinned alder using chemicals, tractors, and a hand-thinning crew. The Department's habitat crew followed up the thinning project with seeding and an application of fertilizer. Recent observations showed good utilization by elk on the improved sites. We hope to initiate more of this type of project in the future.

It's encouraging to note an increasing interest in wildlife by many of the land management agencies and private timber companies in the state. At the present time we are involved in cooperative habitat improvement projects with Bonneville Power Administration; the Bureau of Reclamation; the Siuslaw, Willamette, and Mount Hood National Forests; the Bureau of Land Management; the Soil Conservation Service; and the Oregon Department of Forestry.

The Department of Fish and Wildlife is involved in many programs throughout the state, with habitat improvement only a small part of the total effort. Since our funds and manpower are limited, we are working on only a small portion of the lands that could be improved for wildlife. We have made progress and plan to improve techniques and continue to improve as rapidly as time, technology, and public support will allow. □

# This and that

compiled by Ken Durbin

## Nectar Of The Bats

Most people are familiar with bees, butterflies, and hummingbirds as nectar feeders that pollenate many plants but another, often maligned animal also has this function. In many tropical and subtropical countries and the southwestern United States, bats are nectar feeder and very important in the pollination of plants. The relationship between these mammals and their favorite plants is known as chiropterophily — bat-loving.

*Texas Parks and Wildlife*

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## Honest Mistake

Alfred Hitchcock knew something all along. An Illinois woman was sunbathing in her backyard this summer when she heard a "swishing sound". She looked up to find a buzzard about to land on her, jumped in fright and saw six more buzzards circling low overhead. "It was," she said, "a terrible experience."

*Missouri Conservationist*

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## Transplanted Whooping Crane Dies After Hitting Fence

A juvenile whooping crane, hatched by foster sandhill crane parents and raised successfully for almost five months, died recently from injuries received when it flew into a rancher's wire fence in Colorado's San Luis Valley.

The whooper was one of four which hatched from eggs transplanted into nests of sandhill cranes in a joint U.S. Fish and Wildlife Service-Canadian Wildlife Service project to establish a second wild flock of the endangered birds. The eggs were taken from the whoopers' nesting grounds in northern Canada and placed in nests of sandhills at Gray's Lake National Wildlife Refuge in Idaho. Four other whoopers were raised in the project last year.

U.S. Fish and Wildlife Service

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## More Cartridge Recalls

Two cartridge companies have sent out notices of recall of some .30-30 caliber ammunition. Federal Cartridge Company of Minneapolis said it was recalling ammo or empty cases with lot codes ending in -5289 through -6285. The boxes may be under brand names such as Federal, Revelation, Wards, or Hiawatha. Frontier Cartridge Company of Grand Island, Nebraska also was recalling loaded ammo with lot numbers of 6-38-76-9, 6-42-76-9, 9-68-76-9, and 9-71-76-9.

The Frontier ammo originated with Federal shell cases.

Persons having this caliber ammunition or shell cases should return them to a dealer or contact either Federal, at 2700 Foshay Tower, Minneapolis, Minnesota 55402; or Frontier, P.O. Box 1848, Grand Island, Nebraska 68801.

Structural weaknesses have been found in the shell cases, making them potentially dangerous to shoot, the ammo companies stated.

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## Where The Money Doesn't Go

A picture of a bedraggled, mistreated animal appears in a magazine ad, prompting an animal lover to send a contribution, supposedly to help end animals' suffering. A suit filed against the Animal Protection Institute is uncovering where that money goes — and alleging that it's not to the animals.

The complaint, filed by the California Attorney General, charges the API and its president, Belton Mouras, with misrepresentations in fund raising and misappropriation of more than \$100,000 in charitable assets. Despite advertising claims to the contrary, the complaint further charges, the API has provided no substantive services for animal protection — more than 90 percent of funds raised went to salaries, administrative expenses, and more advertising.

*International Wildlife*

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## Muffled Spring

The indictments against pesticides and their mis-use keep piling up. Researchers now believe Kepone, which tragically affected some workers in the plant where it was produced, may cause cancer. Mirex, a pesticide used against ants in the South, is suspected of breaking down after application — into Kepone. In Kansas, misapplication of Endrin by aerial sprayers to kill army cutworms has been called a "disaster" for four counties. A *Kansas City Star* article said damage from fish kills, water and milk contamination and animal deaths could total from 3 to 5 million dollars. Endrin appeared in drinking water supplies, ruined an estimated "8,000 pounds of milk" and reportedly killed cows, horses, dogs and more than 2 million fish. There is an encouraging note in the pollution trenches — Canadian researchers have apparently developed a strain of bacteria which feeds on PCBs (a common industrial chemical similar to DDT). The bacteria could be used in treating industrial wastes rich in PCBs but would not affect PCBs "already in the environment".

*Missouri Conservationist*

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## Man-Made Evolution

In one of those not quite believable monster movies of the 1950s the creature — was it "The Blob"? — rose from a pit of carelessly dumped radioactive waste. Well, it has happened. Only it's not exactly a monster, and it is certainly not science fiction. Twenty-five years ago 47,500 barrels of radioactive waste were dumped in the Pacific Ocean 30 miles west of San Francisco, near the Farallon Islands. An oceanographer with the Office of Radiation Programs of the Environmental Protection Agency has found a new genus of giant sponge growing at the dump site. The sponge is four feet high and shaped like a large vase. Plutonium content of the sea bottom at the site was found to be 25 times higher than the maximum levels predicted by scientists.

*AUDUBON Econotes*

□



# Angling Regulations Set For 1977

The Oregon Fish and Wildlife Commission adopted angling regulations for next year following a public hearing October 23.

Although most angling regulations remain unchanged, there were a number of rule modifications around the state that will be important to anglers.

April 23 will be the opening date of the early general trout season. Coastal streams, streams of northeast Oregon, and a few other bodies of water will open a month later on May 21. These season lengths are the same as in 1976 with opening dates adjusted to fall on Saturdays.

Season dates for salmon and steelhead angling in the ocean, at the mouth of the Columbia River, and in the Snake River system of northeast Oregon were not set with the other angling rules. The ocean dates will be established sometime this spring, in March or April. Also, the Columbia and Snake River runs will be examined and a season considered later in 1977.

All angling regulations will be published in a synopsis form as they have in the past and the regulations booklets will be available from license agents before January 1.

**These season and bag limit changes do not take effect until 1977.**

Major rule changes from those in effect during 1976 are listed below.

## **Salmon and Steelhead Regulations**

- A new hook regulation is designed to reduce snagging in streams and parts of some bays with runs of salmon and steelhead. Only one hook is allowed with a maximum size of  $\frac{5}{8}$  inch for single hooks and  $\frac{3}{8}$  inch for double or treble hooks. Does not apply to lures that are buoyant or on specified sections of streams in the synopsis.
- Also hitting at snaggers is a rule prohibiting the sale of salmon or steelhead eggs except to licensed bait or fish buyers. The same rule would apply to the skeletal parts of ocean food fish.
- The length differentiating between jack salmon and adult salmon changed from 20 inches to 24 inches.

- Salmon bag limit on the Columbia River is reduced from 3 fish per day to 2 fish per day.
- The Willamette River closed to salmon angling below Oregon City Falls during May and June to insure adequate escapement upstream for spawning and angling purposes and the deadline below Oregon City Falls is moved downstream several hundred feet. The Commission intends to relax this season restriction if the run size permits.
- Drone boats (airboats used to carry baited hooks far out into the river) are prohibited above the boat angling deadline below Bonneville Dam.
- No open season for salmon or steelhead is scheduled for the Snake River or its tributaries because of low expected numbers of returning adult fish in 1977. The Commission would open this area later if sufficient runs develop.
- In the Columbia River the salmon season would be from January 1 through March 31 and August 1 through December 31 downstream from Bonneville Dam, and August 8 through December 31 above Bonneville Dam. Steelhead season downstream from Bonneville Dam would be from January 1 through March 31 and October 1 through December 31. These are similar to the seasons that have been imposed by emergency action in 1975 and 1976 due to poor returns of steelhead and chinook salmon bound for upper portions of the river system. The Commission may relax these restrictions later if runs are larger than anticipated.

## **Trout Regulations**

- Lost Lake in Linn County will remain open until October 31 instead of closing in September.
- Illinois and Applegate Rivers opened to winter trout angling with restricted bag limit.
- Grayling caught in Fall River must be released unharmed back into the water. A limited number of grayling will be released into upper Fall River before angling season opens in 1977. The catch and release rule is part of an attempt to establish a

natural breeding population.

- Angling from a floating device to be allowed on Todd Lake.
- Regulations on the Williamson River upstream from Klamath Marsh modified to allow keeping 2 trout per day over 6 inches. Artificial fly and lure restriction remains in effect.
- Mud Lake, Radio Springs Reservoir, Sherlock Gulch Reservoir, and Spalding Reservoir in Zone 6 were added to the list of waters closed to angling from a motor-propelled craft.
- Blitzen River returned to 5 fish bag limit and any method of angling.
- Upstream boundary on the Powder River arm of Brownlee Reservoir defined as the Richland-Huntington road bridge in waters open to angling entire year.
- Phillips and Thief Valley Reservoirs open to year-round angling.

## **Warm-water Game Fish**

- North Unit of Sauvie Island opened to angling during the waterfowl season.
- St. Louis Ponds (Marion County) are closed to all angling. The ponds are newly established and the closure for one year will allow time to permit natural spawning and growth of fish before angling pressure begins.

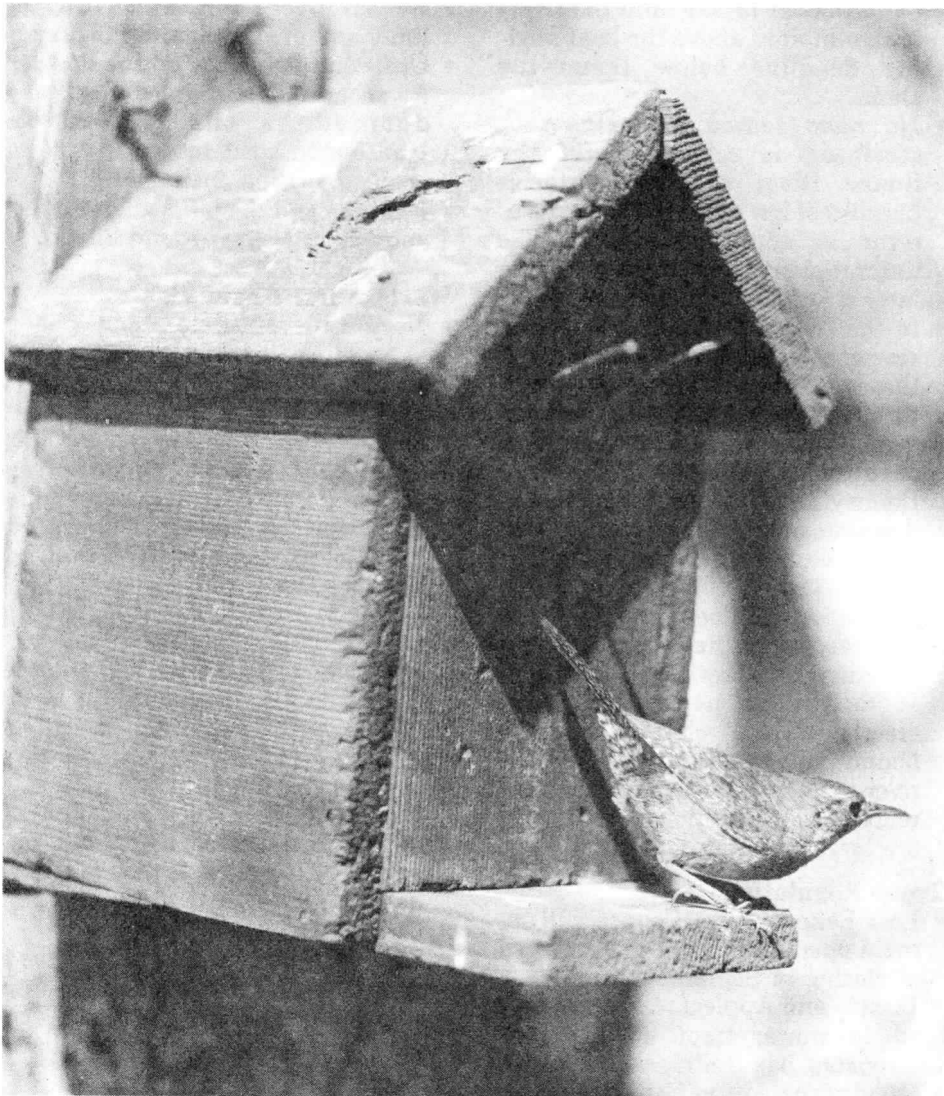
## **Shellfish**

- Bay clams separated into three groups and limits changed:  
Cockle, butter, and littleneck clams — daily bag limit 20, any size, sorting for size allowed.  
Gaper clams — daily limit first 12 dug regardless of size or condition, and to be included as part of the 20 daily limit for cockle, butter, and littleneck clams.  
Softshell clams and other bay clams — daily limit is first 36 dug regardless of size or condition and may be taken in addition to a limit of other clam species.

*We have listed only some of the major changes here. A number of deadlines were modified and dates adjusted on various waters. Be sure to consult the 1977 Angling Regulations Synopsis for the complete rules.*

# Capturing Wildlife on Film

by *Jim Collins*  
Nongame Biologist, Roseburg



Wildlife photography can start in your own back yard. Various plants will attract birds as will bird houses. Learning the fundamentals of this fascinating hobby can be done at home.

How many times have wild creatures appeared for a few seconds and looked like a beautiful picture? Prized pictures are taken each day by people who carry and know how to use their cameras. Being prepared for the opportunity is the key. Photo opportunities can be the redtail hawk along the road or the river otter and great blue heron on the stream bank. Finally, there is the chance that a wolverine or the uncommon ringtail cat may cross your path once in a lifetime, but will be lost if the camera is not at hand.

Wildlife photography is high on the scale of outdoor activities. It is engaged in without restriction on bag limits or seasons. Oregon is blessed with a variety of wildlife and habitats to match, but where to go or how to capture wildlife on film is the basis of this article. With knowledge on how to use the modern cameras, films, and camera accessories, the photographer is limited only by his imagination.

The cameras and accessories on the market today will baffle the beginner — range finders, Instamatics, and 35mm single lens reflex (SLR), just to name a few. The SLR is desirable for wildlife because the subject is viewed through the lens and accessories can be attached. Two valuable accessories are a telephoto lens and artificial source of light. The photographer will



see the need for a telephoto lens on his camera after filming songbirds at a bird feeder. The songbird will be a speck on the film unless a telephoto is used or the camera is placed within two feet of the feeder. A 200 to 400mm lens (six to eight power magnification greater than the 50mm normal camera lens) is ideal to capture most wildlife on film.

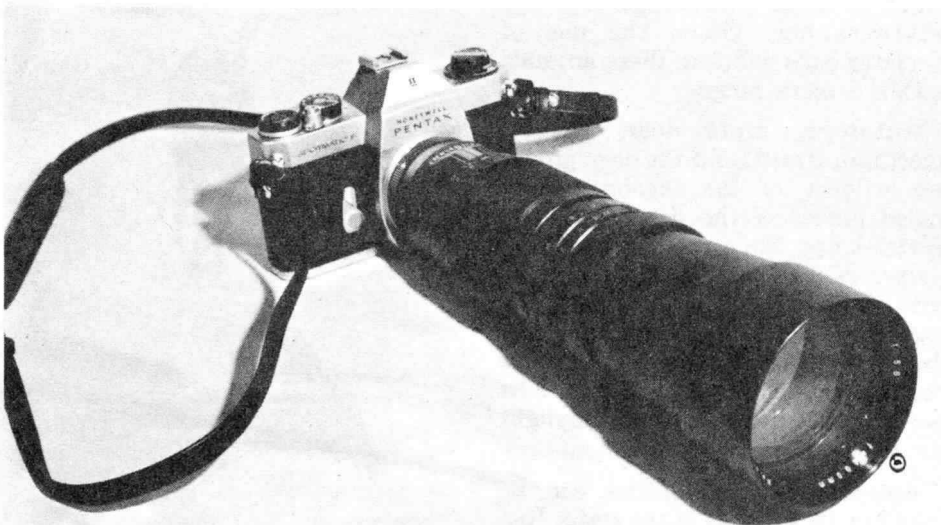
The second item is film. Whether it be black and white or color, it is the photographer's canvas. Although black and white film will cost less to develop or publish, it lacks the visual impact of color with nature subjects. Color film requires planning before exposure because it has less latitude for error. The less sensitive (lower ASA) films will be sharper and have truer color reproductions but may be restricted to good light conditions or nonmoving wildlife. In contrast, fast film may be required for wing shooting of waterfowl or to stop the movement of a frightened deer in a meadow.

The next item before the chase begins is light. Outdoor light (in photography circles called available light), artificial light, or a combination of both is the ingredient needed to put the image on the film. Wild creatures seldom cooperate with the photographer by posing in ideal light or background conditions. Shooting with a camera is similar to hunting with a gun. The wildlife has to be pursued on its own ground. To the photographer, it means using available light for the deer in the sunlit meadow or the ringneck pheasant in the shade of a thicket. When available lighting is to the side or back of the subject, dense shadows can be lightened with a "fill-in" flash. The automatic strobe will simplify fill-in light. Otherwise, a simple rule can be to use a fill-in light with outdoor light on subjects between six and twenty feet from the camera.

With a bag full of cameras and accessories, the wildlife photographer will find that he can pursue his sport the entire year. It is easy to think of using a camera when the flowers and birds return in the spring but winter can be a time to catch the quail in the blackberries, too. Winter forces wildlife that doesn't hibernate or migrate south to concentrate on winter food supplies or at the backyard feeder. The state and



Bird feeders and bird baths are good ways to attract birds for picture taking purposes.



A single lens reflex camera with a telephoto lens is ideal to capture most wildlife on film. The complexity of the equipment is largely determined by the involvement and finances of the photographer.

federal wildlife refuges provide an excellent variety of subjects because large concentrations of eagles, hawks, and waterfowl can be observed daily in their predator-prey struggle.

With the arrival of spring and millions of birds, the photographer can go in any direction to record the new events. Again, the wildlife refuges will provide hundreds of subjects: ducks, geese, and shorebirds nesting in the cattails. For information, contact the refuge manager. He can direct you to specific birds and the best time to approach their nest. If birds are disturbed during egg-laying, they will abandon the nest.

The next question is how to get the photographer close to the wildlife. In most cases the photographer should have a blind to hide his form and movements. First, the automobile, whether it be a car or camper, is a

ready-made blind. Wildlife accepts the machines, if humans remain inside and are quiet. Since accessibility to wildlife by car may be limited, the photographer will have to construct a portable blind or use a boat in some areas. The canoe or drift boat can put the photographer within range for wing shots of waterfowl or a surprise approach on the river otter and beaver. Wing shooting birds is similar to pass shooting with a shotgun; a fast shutter and follow through will bring home a trophy.

The photographic opportunities in Oregon are vast — from the seashore to inland streams, lakes and swamps, forested mountains, agricultural lands, and finally the high desert country. For example, the seashore offers visions of gulls, sea lions, and lingcod. Farther inland, a choir of

(Continued on back page)

frogs on a spring evening is an invitation to visit the swamp. The photographer, equipped with a head lamp to focus his camera and flash equipment, has an opportunity to catch a prowling raccoon or an owl seeking mice. When forest or agricultural wildlife is discussed, it's usually deer, elk, and bear. Deer are found statewide and never cease to be a subject for the photographer. However, bears and other large predators such as the bobcat and coyote are secretive by nature and offer a real challenge to the photographer. Often the use of predator calls will lure these animals within camera range.

Antelope, mule deer, coyote, shorthorn lizard, and the sage grouse are wildlife of the sagebrush and aspen groves of the desert country. Water holes, the center of desert activity, can be the most productive with a blind because desert wildlife, except reptiles, will stop by sometime during the day or night. Sage grouse begin a unique ritual in March. The males can be observed at daylight strutting before the hens.

Amphibians and reptiles can be found in all habitats of the state. Just turn over a rock or inspect a decayed log and be ready for quick action. The proper time to photograph cold-blooded reptiles is at sunrise, before the temperature increases. Otherwise, the camp ice chest is useful to slow up the nonpoisonous species for pictures.

With the enormous variety of wildlife in Oregon, the most enthusiastic photographer will need a lifetime to produce a photographic record. Along with hunting or fishing, the outdoor experience can be greater if a camera is added to the equipment list. Roger Tory Peterson, naturalist and artist, comments that a photograph arrests a moment in time. It is an exact record of what happened in a particular split second. A painting, on the other hand, even a representational one, is a composite of the artist's past experience.



Winter months offer photographers many opportunities to take wildlife photos. It is important to remember that birds and animals are under great stress during this time of the year and should not be harassed or made to move unnecessarily for the sake of a photo.

#### Editor's Note:

As the author points out, winter is a good time to photograph many forms of wildlife. However, we hope you will remember that winter is also the time of greatest physical strain on birds and animals and they should not be harassed for the sake of picture taking. Approach cautiously and do not force the creatures into unnecessary activity. Energy reserves are needed for survival and anything that causes exertion and undue stress may cause animals to die. This is especially true in the case of big game wintering in heavy snows where food is scarce and movement difficult. □

## Snagger Rapped

An individual charged with attempting to snag salmon in October was found guilty by a Tillamook County jury. The sentence imposed by Judge Marjorie Christensen hopefully will discourage his further attempts. The sentence was:

- 1—Fine \$256
- 2—30 days in jail with 28 suspended upon payment of fine
- 3—Three years probation
- 4—Angling license revoked for 18 months
- 5—All tackle being used confiscated.



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