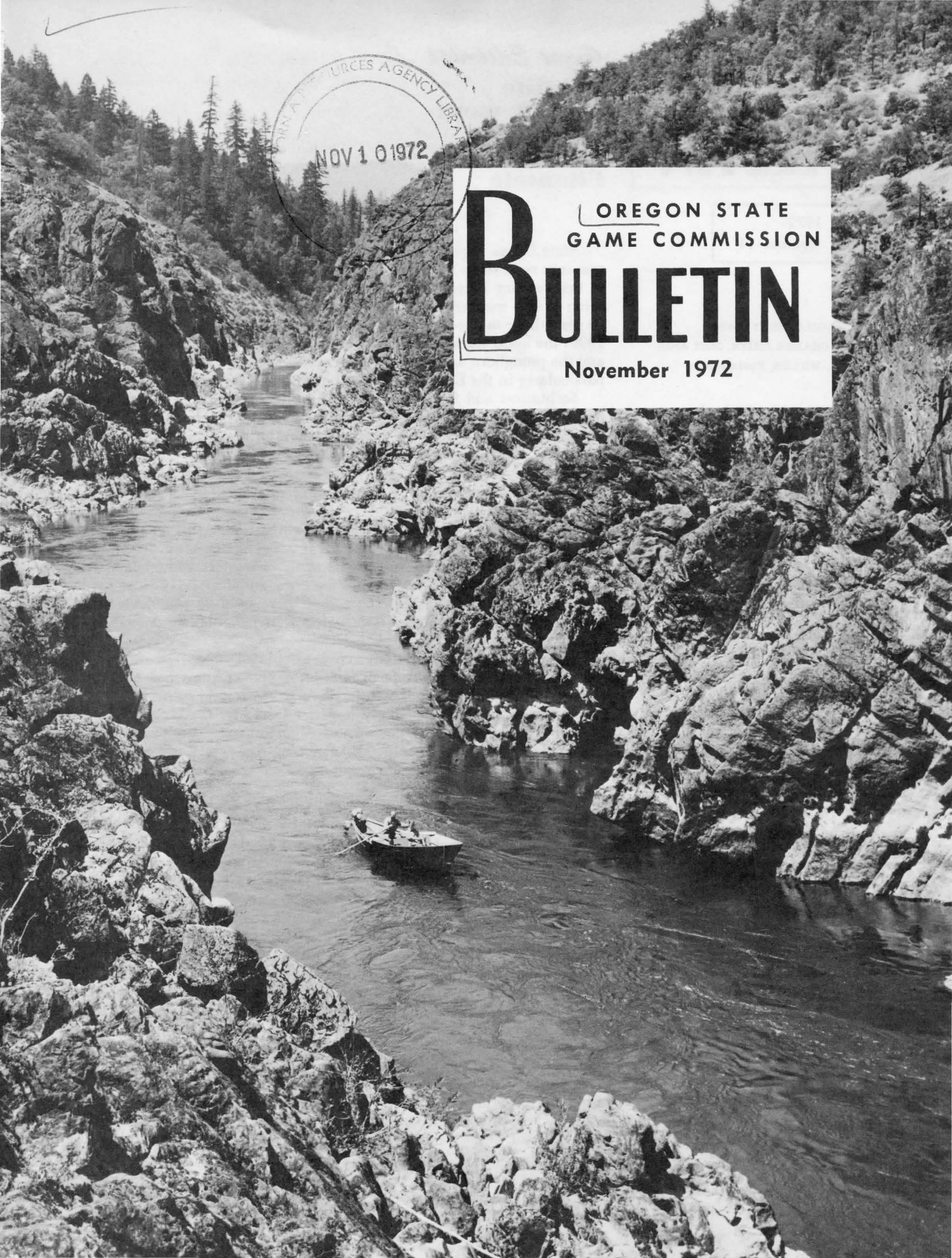




# BULLETIN

OREGON STATE  
GAME COMMISSION

November 1972



# OREGON STATE GAME COMMISSION BULLETIN

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## The Cover

A section of the Rogue River pinched in by rugged canyon walls.

*Oregon State Highway Division photo*

## HUNTER SAFETY TRAINING PROGRAM

### Instructors Approved

Month of September .....	85
Total to Date .....	2,887

### Students Trained

Month of September .....	3,271
Total to Date .....	185,463

### Firearms Hunting Casualties Reported in 1972

Fatal .....	3
Nonfatal .....	14

## Guest Editorial Wildlife Management and Its Non-Hunting Clientele

by CHARLES CALLISON

Executive Vice President, National Audubon Society  
(From the Missouri Conservationist)

State Game Departments (called Game and Fish or Conservation Departments in most states) were brought into being late in the last century and early in this century by groups of concerned sportsmen. They wanted to do something to stop market hunting and the excesses of game hogs. They wanted to do something to check the startling decline of wild game populations. By the 1890s the bison were virtually gone, the passenger pigeon was near extinction, and the pronghorn antelope appeared on the way out. In all the better streams, particularly in the East, fishing was nothing like the "good old days."

So hunters and fishermen banded in clubs and associations and got state legislatures to pass laws setting closed seasons and bag limits; and to establish hunting and fishing licenses to raise money to hire game wardens to enforce the laws.

Those pioneering steps in wildlife conservation occurred in an era when most American families counted on game on the table as a nearly regular part of the family diet. The American people were not yet far from the Frontier.

They were, in fact, in the 1890s and early 1900s, still on the Frontier in many parts of the Midwest and in great areas of the West. Most families—father, mother and children—had one or more hunters and anglers. In many families the hunters were Pa and all the boys, and everybody went fishing, including Ma and the girls. To the extent they could be persuaded to support conservation laws, the hunters and anglers were potentially a powerful political force.

But today things are different in over-populated, urbanized and mechanized America, where even many farm families no longer know how to cure a ham or cut up a frying chicken, much less how to clean wild game.

According to the latest survey figures released by the U.S. Fish and Wildlife Service, fewer than 25 per cent of Americans over 12 years of age went hunting or fishing in 1970. In the large cities only 13.3 per cent engaged in either sport. The percentage for small cities and suburbs was 21, and for town and rural areas, 28.5 per cent.

While the population climbed, the numbers of licensed hunters in the U.S.A. remained almost constant from 1969 to 1970—at about 14 million—although the number of fishermen increased by about one-third, from 25 million to 33 million. Haven't you noticed the streams, lakes and coastal waters becoming more crowded with boats and tangled tackle?

These figures make the point that the hunters and fishermen who support the state wildlife programs with their license fees and when necessary, their votes, are now a diminishing minority. Particularly the hunters.

But count *all* of the people who are interested in wildlife for non-consumptive kinds of recreation and add them to sport hunters and anglers and you have a solid majority. Take bird watchers, for example. No one has ever come up with a good estimate of the number of birdwatchers, although a few years ago a federal study indicated there are at least as many active birders as there are licensed hunters. The problem is how to define a birder for purposes of counting them. Do you count only those who go afield with binoculars to build a trip list or a life list? Or do you include all of those less intense watchers who enjoy the birds at the back-yard feeder and who enjoy them casually, but really, while camping, hiking, on trips to the beach, or other outings?

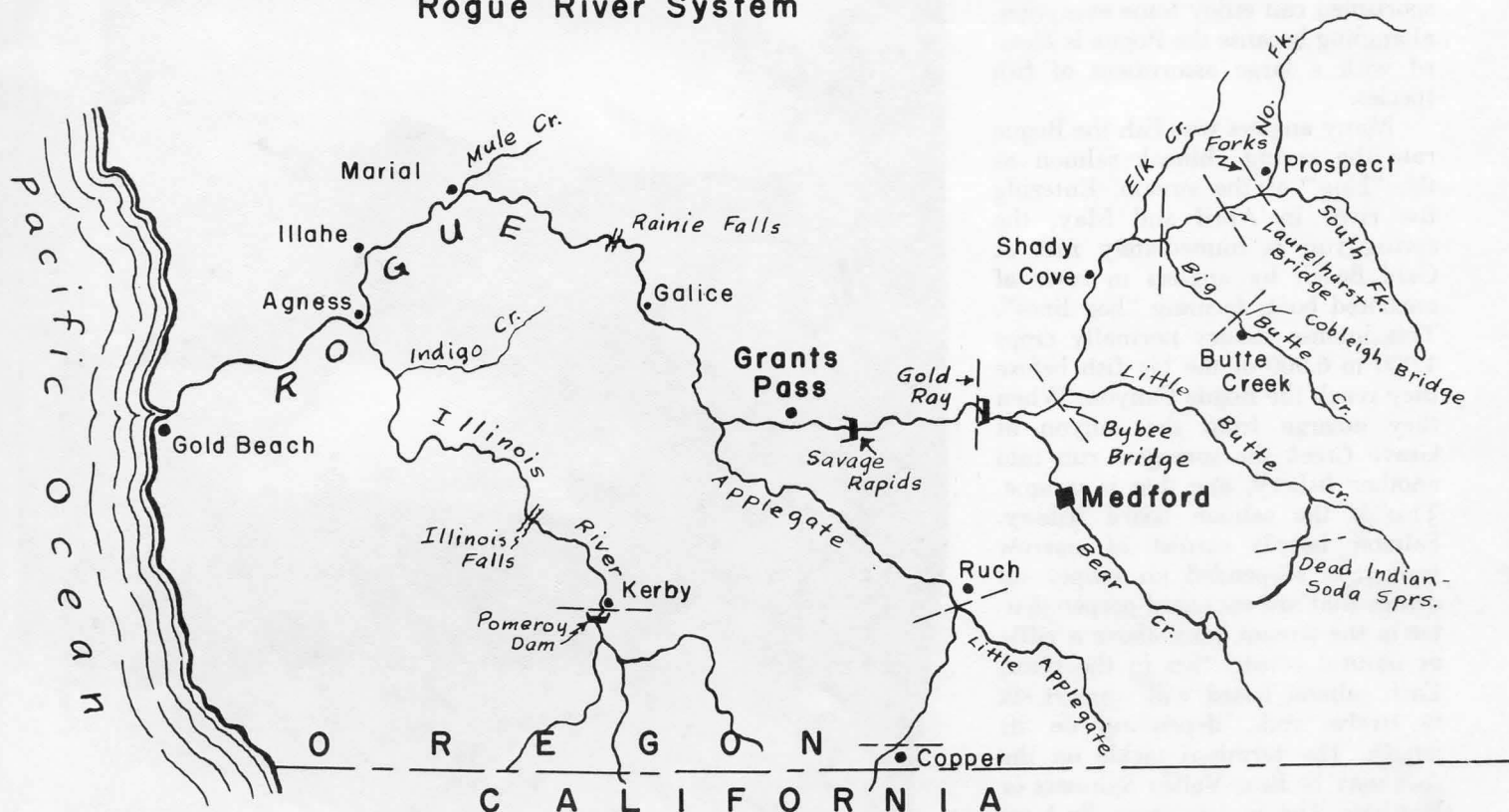
Then add to the ranks of real and potential wildlife advocates all of the

*(Continued on Page 11)*



# "The World-Famous Rogue"

## Rogue River System



Dashed lines on the map indicate the various angling regulation deadlines in 1972 regulations.

By WILLIAM HAIGHT  
District Fishery Biologist

"The world famous Rogue River" is a common expression in southwestern Oregon. This may be Chamber of Commerce jargon, but it is a fact that the Rogue Basin continues to increase in its importance as a vacation land. Many things draw people to the Rogue; its historic sites, its scenery, and certainly its fishing opportunities. We hope to acquaint readers with some of the Rogue's features, its fishery resources and some of the problems the Game Commission deals with in managing those resources.

### A Wild and Scenic River

The Rogue has its beginning in icy springs high in the Cascades at the foot of Mount Mazama. It flows from western Klamath County through the forested mountain region of eastern Jackson County before cascading into the Rogue Valley, wherein lie the cities of Medford and Grants Pass. Below Grants Pass it intercepts the Applegate River and then enters the Rogue Canyon.

So great is the natural beauty of the Rogue Canyon that an 84 - mile section of stream has been placed under the protective care of both the National Wild and Scenic Rivers Act and the Oregon Scenic Waterways

Law. Zane Grey was awed by the Canyon's beauty and wrote about places like Tyee, Mule Creek Canyon and Blossom Bar.

Once below the mouth of Grave Creek, little access is afforded to the river except by drift boat or trail until the stream reaches the settlement of Agness some 40 miles downstream. The Illinois River, another stream designated by law as an Oregon Scenic Waterway, enters at Agness and the Rogue continues the remaining 30 miles to its mouth at Gold Beach.

(Continued on Next Page)

# The Rogue

## A Variety of Fish

From Crater Lake to the Pacific the Rogue winds its way for 210 miles. Throughout that distance sportsmen can enjoy some exceptional angling because the Rogue is blessed with a large assortment of fish species.

Many anglers who fish the Rogue rate the spring chinook salmon as the "king" of the stream. Entering the river in April and May, the spring run is immediately met at Gold Beach by anglers in rows of anchored boats forming "hog lines". This intense fishery normally crops 4,000 to 6,000 of the big fish before they reach the Rogue Canyon. When they emerge from the canyon at Grave Creek the springers run into another fishery, one that is unique. This is the salmon board fishery. Salmon boards consist of narrow walkways suspended on empty oil drums that are anchored perpendicular to the stream bank above a riffle or natural constriction in the river. Each salmon board will support six to twelve rods, depending on its length. The terminal tackle on the rods may be Bear Valley Spinners or Hotshots. The anglers generally busy themselves on shore with pinochle games or horseshoes until a fish hits.

The chinook fishing changes again as the fish reach Grants Pass. Bank casting and egg bouncing from drift boats become the rule and remain the popular methods upstream to the upper limits of fish migration near Laurelhurst Bridge. Altogether, about 10,000 chinook are taken from the spring run prior to the close of the season on July 15. Nearly all of the springers move to deep resting holes in the upper river where they await their time of spawning in September and October. A fish viewing chamber constructed in 1968 in the fishway at Gold Ray Dam, an old Pacific Power & Light Company installation at river mile 125, gives accurate counts of the chinook as they move upstream. The run over the dam, according to the counts, averages around 40,000 fish.



Spring chinook salmon going through the counting chamber at Gold Ray Dam.

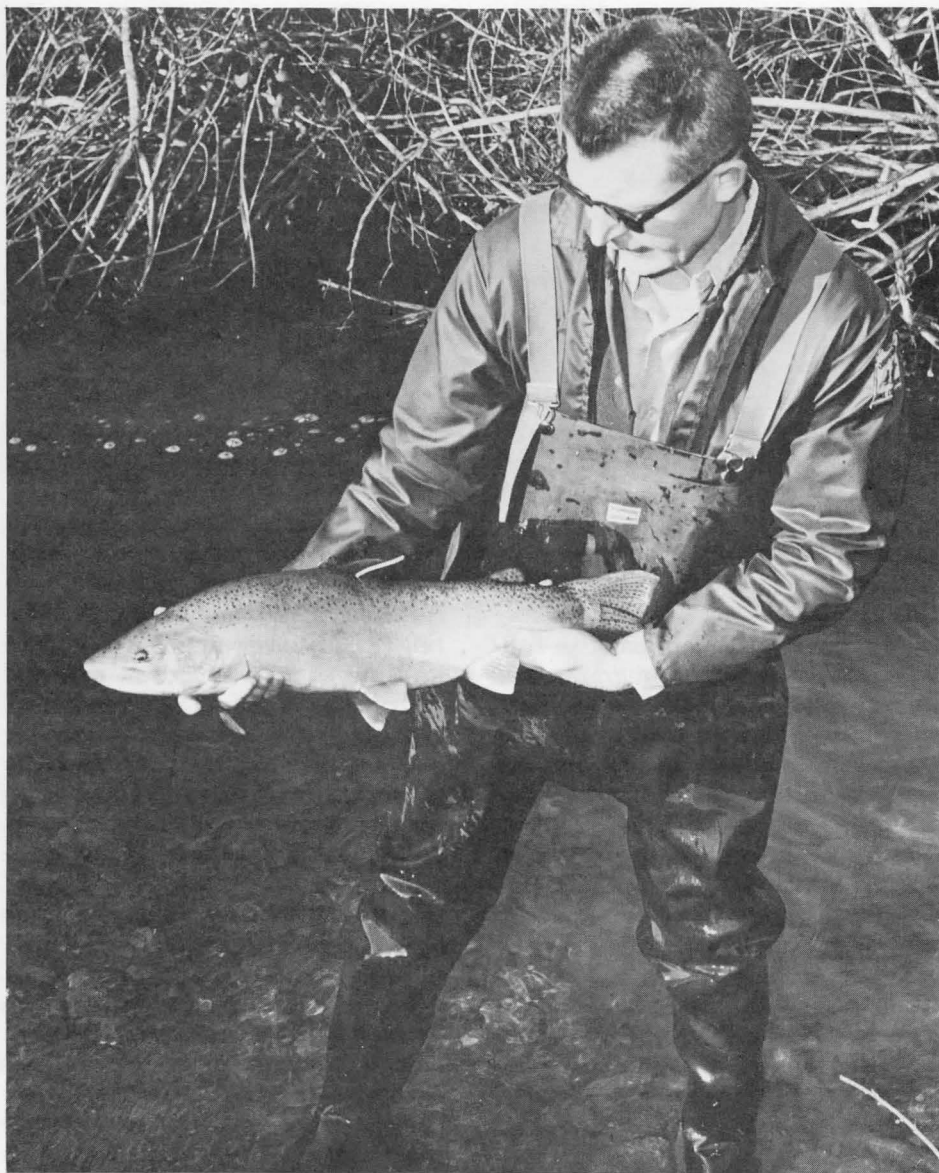
Photo by Art Besaw

Right on the heels of the spring run and extending into December, the fall chinook make their migration. This run, estimated as large as 100,000 fish, supports a large fishery in August and September at the mouth of the river and as far upstream as Agness. Few of the fish are taken in the river above although the season is open the entire year below Savage Rapids Dam at river mile 107. The annual catch for the entire river usually reaches 4,000 fish. The fall chinook spawn from October to January in the main stem of the Rogue up to and above Gold Ray Dam, in the Illinois and Applegate Rivers, and in many of the larger

tributaries.

Old - timers tell of the large runs of coho that once reached the headwaters of the Rogue and its tributaries. It is a sad reality that this fish has felt the impact of civilization and now numbers 5,000 fish at the most. Very few are caught by anglers.

Summer steelhead enthusiasts flock to the Rogue in August, September and October to test their skills. Guided fall drift trips through the canyon are known across the country and beyond, thus the "World Famous Rogue River." Unknown to many anglers, however, many steelhead sneak into the Rogue along with the spring chinook in April. Adults



Game Commission researchers used various types of tags to assist them in their study of the Rogue summer steelhead's life history.

Photo by Art Besaw

enter the river in the spring and the fall, but through July and August the river swarms with a 12 to 16 inch beauty locally known as the "half-pounder." A three - year study by the Game Commission's Research Division looked into the life history of the Rogue's unique summer steelhead and found some intriguing facts. The early spring-run adults are predominately females while the opposite is true of the fall run.

The "half - pounders" are immature males and females that seem to be on a tourist trip up the River. Roughly 10 percent of the male "half - pounders," however, do move to the spawning grounds where they

are able to assist with spawning. The spawning season peaks in late January and early February following freshets that move the steelhead into some of the Rogue's smallest tributaries. Spawning populations have been found in about 100 tributaries of the Rogue and Applegate Rivers, but none in the Illinois River. Most of the spawning streams are intermittent and dry up by late June; consequently the fry emerging from the gravel in April and May must leave their parent streams by June or perish. Most of the juveniles undergo smoltification that drives them to the ocean when they are two years old. The youngsters reach the coast by March

or April, but apparently do not like the taste of salt water as they are back in the Rogue by July making up the "half - pounder" run.

Much of this information was gathered through the cooperation of sportsmen who returned tags that Game Commission researchers placed on the steelhead. Through the tagging and recovery program it was also learned that the summer steelhead run annually amounts to 150,000 to 170,000 fish, 70 percent of which are "half - pounders." In spite of the intense fisheries throughout the river, only 15 percent of the run is cropped annually.

The winter steelhead run hits the Rogue River in November and continues on its upstream migration into the following May. Most spawning takes place in March and April. Angler catch data indicate that approximately 19,500 of these steelhead are cropped annually from the Rogue, Applegate and Illinois Rivers. Estimated size of the run is 100,000 fish.

Other sea - run, or anadromous, fish that call the Rogue home include sea - run cutthroat trout, shad, white and green sturgeon and an occasional stray striped bass. Few sea - run cutthroat are taken on their upstream journey, but a moderate fishery occurs in the spring as the fish work downstream. The shad enter the Rogue in May and June and migrate into the Rogue Canyon where they are blocked by Rainie Falls. This run is estimated at close to 100,000 fish. Few are caught by sportsmen, but interest in the fish is developing.

Trout anglers find that the Rogue has a variety of species on which to test their skills. The higher tributaries on the North, Middle and South Forks of the Rogue provide brook trout, not large, but in good abundance. Lower elevation tributaries house native cutthroat and rainbow. Brown trout can be found in a short section of the North Fork of the Rogue between the towns of Prospect and Union Creek. To supplement the native populations, the Game Commission annually stocks between 120,000 and 140,000 legal - sized rainbow in the Rogue, Applegate, Illinois and many of the basin's larger tributaries.

*(Continued Next Page)*





Extensive irrigation withdrawal following fast winter runoff leaves many streams in the Rogue drainage dry or too low and warm for fish use.



Grave Creek shown here had 83 cubic feet per second of water on June 2 when the left photo was taken. By August 31 the flow had dropped to .2 cfs as shown in the right-hand photo.

### A Glimpse at Management Problems

It has often been said that a large share of fish management is people management. This is because most of the frustrating management problems stem from the effects of civilization. One such problem on the Rogue River is the Savage Rapids Dam located about 5 miles upstream from Grants Pass. Owned by the Grants Pass Irrigation District, this structure supplies about 230 cfs of water to the Grants Pass and Rogue River areas for irrigation. It presents problems to both upstream migrating salmon and steelhead and to their progeny coming downstream. The problems confronting the downstream migrants center around the pumps on the north side of the dam that lift water to canals located on either side of the river. The pumps are propelled by water - powered turbines that require an additional 800 cfs to run them. Prior to 1957, the intakes to the turbines and pumps were unscreened to the detriment of perhaps millions of young salmon and steelhead over the years. The spring chinook run had dropped to 13,000 fish.

In 1957 a congressional appropriation allowed the Bureau of Reclamation to install screens over the intake. The screens, however, proved to be inadequate to handle the large water volume; consequently, young chinook continue to be lost by impingement upon the screens. Also, the water pressure is responsible for frequent and costly breakdowns of

the structure.

Savage Rapids Dam has two fishways to pass upstream migrants over its 30 - foot crest. One on the north side was constructed with the dam in the 1920s, but because its entrance lies adjacent to the discharge from the turbines, few fish can find it. Most of the fish move over the dam on the south side where the Game Commission, sportsmen groups and the Grants Pass Irrigation District have piecemealed a hodgepodge of walls, pools and jumps over the last 20 years. Having had little or no engineering in its creation the south fishway has a long list of problems. At times of low summer flow, for instance, a fish must jump at least three feet to enter its lower end.

The encouraging part of the Savage Rapids situation is that sportsmen groups, interested individuals, fishery agencies and elected officials have not been content to sit by and watch. Early this summer, as a result of their efforts, our U. S. senators and representatives were able to announce that an appropriation of over \$60,000 had been made to study the fishery problems and the feasibility of converting the irrigation complex to an electric pump, closed pressure system that might eliminate the need for Savage Rapids Dam. Fish management - wise on the Rogue River this has been a milestone.

Two fish management problems that seem to confront biologists all over the state are too much water in the winter and not enough in the

summer. It does not take a devastating flood like we experienced in 1964 to cause shifting of gravel bars and destruction of salmon and steelhead eggs. This is especially true in many of the Rogue's smaller drainages where good watershed management practices were not followed in years past. The same high flows scour spawning gravel and food supplies from streams and leave spawning bars covered with silt. The Rogue, consequently, receives the accumulative effect of the tributaries. Quite the opposite is true in the summer. Extensive irrigation withdrawal following fast winter runoff leaves many streams dry or too low and warm for fish use. Again the main stream feels the accumulative effects, and on occasion the Rogue below Grants Pass drops to a flow below 1000 cfs and the temperature rises to near the 80° F mark. This hot, low condition has a devastating effect on adult and juvenile salmon and steelhead as it provides ideal incubating conditions for several fish diseases. These same conditions are responsible for delaying the upstream migration of summer steelhead that supply a summer fishery in the upper river.

The Corps of Army Engineers is working on a partial solution to these problems. The Corps has launched into what is known as "the Rogue Basin Project" which will consist of three dams, the Lost Creek Dam on the upper Rogue River above the town of McLeod, the Elk Creek Dam

*(Continued Next Page)*



The Cole Rivers Fish Hatchery being constructed by the U. S. Army Corps of Engineers on the upper Rogue as part of the Rogue Basin Project. Completion date is set for April 1973.

Photo by Art Besaw

on Elk Creek about two miles above the mouth, and the Applegate Dam on the upper Applegate River near the California line. The dams will serve mostly for flood control but fish benefits will be included in the Lost Creek and Applegate Dams in the form of increased and cooler downstream flows in the summer.

Also included in the project is a nine million dollar fish hatchery that will compensate for the loss of spawning areas above the three dams. Located at McLeod on the upper Rogue, the hatchery, named after the late Cole Rivers who for 22 years was the Game Commission's fishery biologist on the upper Rogue River, will annually produce 2,760,000 yearling salmonids. This will include 2,000,000 spring chinook, 200,000 coho, 100,000 summer steelhead and 460,000 winter steelhead. The hatchery will also produce 70,000 pounds of trout each year for stocking above the project areas. The hatchery is nearing completion and will be in operation by April 1973.

Public facilities are being built into the hatchery to accommodate the large number of visitors that are anticipated. The Lost Creek Dam is now under construction and will be completed in 1976.

The Rogue Basin Project is not expected to solve all of the fish management problems, but it will help. Many of the people problems will continue and perhaps get worse as the population in the Rogue Basin grows. For this reason the Game Commission gives thanks to those who made possible such legislation as the Forest Practices Act and gravel removal and stream channelization laws, and to those who are helping to strengthen the state's pollution laws. These laws assist development of the fish resources by helping to maintain the watersheds and by keeping our streams clean. The end results will be continued runs of salmon and steelhead and trout populations that will sustain the Rogue as an angler's haven for years to come.

## Trappers Open 1972-73 Season

Probably the oldest industry in Oregon will again be in production on a statewide basis November 15. This is the 1972-73 trapping season for mink, marten, river otter, muskrat, and beaver. One furbearing animal, the raccoon, is at present unprotected and may be hunted or trapped the year around. The fisher, ringtail cat, wolverine, kit fox, and sea otter are protected at all times.

Beaver and otter trappers in Grant and Harney Counties will actually begin the season on these two furbearers November 1, as will trappers after muskrat in Lake, Klamath, Harney, and Malheur Counties. Trappers in the rest of the state must hold off until the November 15 date.

The market value of fur generally dictates the extent of trapping in Oregon. When the value of fur is high, participation is quite heavy; when the price is low, the number of trappers also declines.

In addition to the license, beaver trappers are also required to purchase beaver tags at \$1 each and affix a tag to each beaver pelt taken.

Printed copies of the trapping regulations are obtained from the Portland office of the Game Commission on request.

## Illegal Elk Hunt Costs \$1,700

An illegal elk hunt in Tillamook County during which five prime elk were downed became a \$1,700 venture for a Portland resident. Apprehended when he and friends were attempting to haul the five animals to Portland, the culprit was cited into the Tillamook court where he requested a jury trial. The jury deliberated for a brief 20 minutes after hearing all testimony in the case. He was fined \$500 for the first elk and \$300 for each of the other four animals.

Judge Marge Christianson of the county court assessed the fine and also sentenced the offender to one year in jail, with probation at the end of 60 days, and revoked his hunting privileges for the remainder of the year.



## Guide For Hunters Duck Identification

After making the first choice offered at the top of the page follow the black lines to secondary choices until the correct identification has been made.

STA  
DOES YO



Bill broad, typically ducklike

Wing patch gray, nonmetallic  
or wing uniform in color



Bill without two rings



Bill with two bluish-white  
rings, one at the base and  
one near the tip



RING-NECKED DUCK

Head flattish, sloping with  
straight line appearance from  
forehead to bill



CANVASBACK

Head rounded with angle  
at forehead and bill



White or whitish cheek patch



RUDDY DUCK

Head uniformly reddish  
or yellowish brown



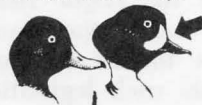
REDHEAD

White face patch behind eye

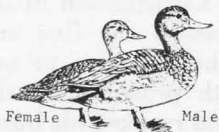


BUFFLEHEAD

No white face patch, or if  
present, in front of eye

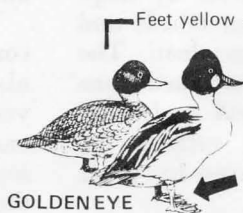


White wing patch with black  
or dark feathers in center



GADWALL

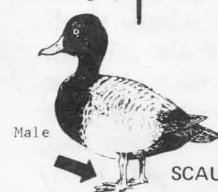
White wing patch without black or  
dark feathers in center



GOLDEN EYE

Feet yellow

Feet gray



SCAUP

Wing patch iridescent blue, purple,  
green, brown or black or white



Wing patch white



Wing patch brown



PINTAIL

Wing patch  
green, br



Wing patch blue



Wing patch bordered on  
both sides with white



MALLARD

Head crested



WOOD DUCK

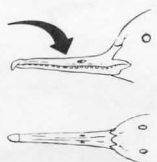
Florida ducks, mottled ducks  
can ducks are very similar  
These may be separated by  
easily than by feather character



ERE

CK HAVE

Bill slender, pointed, and toothed



Feet yellow or yellowish-gray

Feet pink or reddish



HOODED MERGANSER



COMMON MERGANSER



RED-BREASTED MERGANSER

atelic blue, purple, or black



Wing patch blue, purple, green or black



urple



Wing patch green or black



Wing patch without white border or white only at feather tips



yellow

Head not crested, feet orange-red or coral red



BLACK DUCK

Male

New Mexico black ducks. Distinctions more subtle.

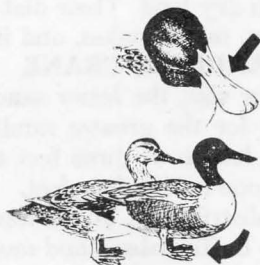


Florida Duck

Blue patch on shoulder of wing



Bill very large and broad, feet orange or coral-red



SHOVELER

Bill normal, feet yellow



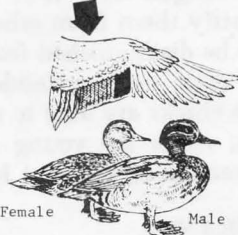
BLUE-WINGED TEAL

Cinnamon teal is similar to blue-wing teal except that male cinnamon teal is reddish on head and underparts. The female is virtually identical to the female blue-wing teal.

Patch on shoulder of wing not blue

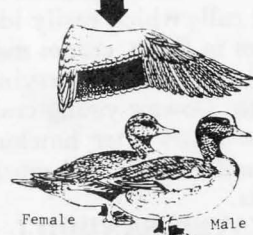


Shoulder of wing gray or brownish



GREEN-WINGED TEAL

Shoulder of wing with white patch



AMERICAN WIDGEON

Female American widgeon has brown breast and flank. Female green-wing teal has gray speckled breast and flank.

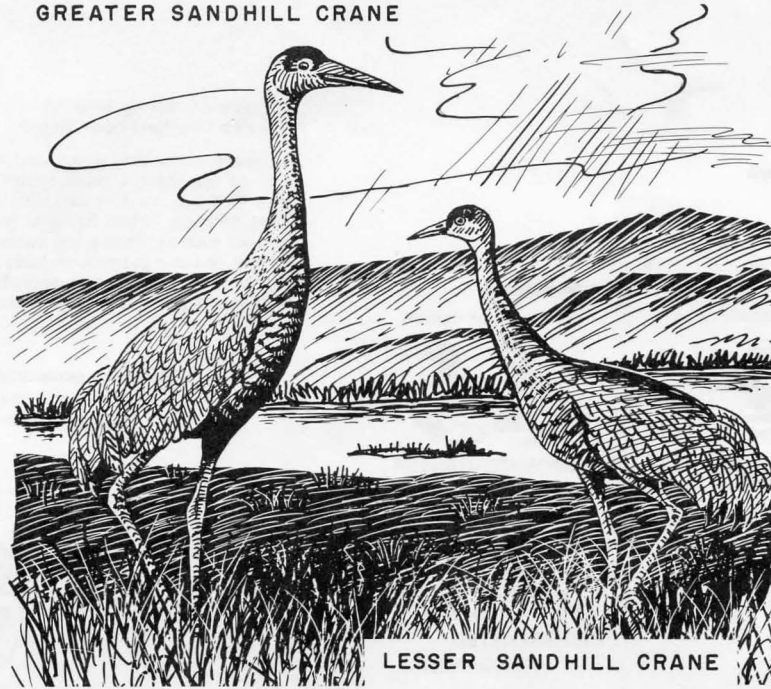
This pictorial aid is designed to assist in recognizing ducks in the hand after they have been bagged.

The shape of the bill, wing markings, color of feet or head crest are some of the typical characteristics used to identify ducks in the hand. This is quite different from identification of ducks in flight or sitting on water. When flying or on water other identifying features are used such as silhouettes, mannerisms of flight, wing beat, speed of flight or color patterns on body and wings. Every effort should be made to learn to recognize ducks before they are shot. By doing this the hunter is able to take much greater advantage of his sport.

Although occasionally seen inland, sea ducks are not included in this key. They are most frequently found in open salt water areas.



## GREATER SANDHILL CRANE



LESSER SANDHILL CRANE

Marshland provides suitable homes for many species of wildlife. Some of the more noticeable creatures are the cranes, herons, egrets, and bitterns.

During the American colonial period and on through the 1800s bird plumages were very fashionable and commanded exceptionally high prices in the millinery trade. The brilliant plumes and aigrettes developed by herons and egrets during the breeding season were of exceptional value. These birds were not protected by law and the uncontrolled slaughter of adult birds at rookeries, with the inevitable loss of nestlings, resulted in near extinction of several species. Even today changing habitat caused by marsh drainage, clearing, and other land uses makes survival of these interesting birds difficult.

In Oregon there are two groups of long-legged wading birds: the Ardeidae, which includes herons, bitterns, and egrets; and the Gruidae or cranes.

### GRUIDAE OR CRANE FAMILY

Cranes appear similar to herons in some respects, although they constitute a distinct group in a different order. The family comprises about twenty species of which only two occur in Oregon. Their favorite habitats are both marshland and meadowland. Diet is both plant and animal matter, with a preference for roots, bulbs, and seeds. The two cranes present in Oregon have loud and resonant calls which easily identify them from other species. When in flight, cranes may be distinguished from herons by their habit of carrying their necks extended at full length. Downy young crane chicks are able to run about a few hours after hatching, while the young of herons are undeveloped and must remain in the nest for several weeks.

### GREATER SANDHILL CRANE

The greater sandhill crane is one of the largest of the wading birds in Oregon. This gray or light brown crane grows to four feet in length and has a wingspread of six to seven feet. Flying with outstretched neck and feet, the

"V" or single file formations are visible at an altitude of one mile. Their raucous calls can be heard for a distance of three miles.

Distribution of this crane in Oregon is somewhat limited. Migrants are normally restricted to eastern Oregon. Nesting takes place in the marshes in Lake, Klamath, and Harney Counties. Prior to nesting a spectacular "courting dance" is attended by all cranes. Bowing, bobbing, and jumping to heights of eight feet seem to impress the opposite sex. Nesting usually takes place on a small island far out in the marsh. Here a nest is constructed of dried tules, cattails, rushes, and grass which blends with the surrounding vegetation. The greater sandhill crane lays two, sometimes only one, and rarely three brown-olive drab eggs. Young cranes move about with the parent birds shortly after hatching but remain with the adults until fully grown. They are fed for a long time by regurgitation. By August the young birds can be seen circling over the meadow and marsh. As October nears, the birds congregate in larger flocks, and by November most have winged their way south for the winter.

Unlike the herons, sandhill cranes spend much of their time on dry land. Their diet consists of roots, bulbs, berries, grain, mice, snakes, and insects.

### LESSER SANDHILL CRANE

Except for size, the lesser sandhill crane could easily be mistaken for the greater sandhill crane. Adult birds will reach a length of three feet and have a wingspread of three and one-half to four feet.

Nesting distribution of the lesser sandhill is from Siberia, east to Baffin Island and south to Hudson Bay. The bird winters from California to Texas and south into Mexico. It can be observed in large flocks both in eastern and western Oregon during spring and fall migrations.

Food habits of the lesser sandhill crane are similar to other cranes in that they prefer roots, bulbs, cereal grains, and miscellaneous insects.



## GUEST EDITORIAL

(Continued from Page 2)

nature photographers and everyone else who thrills to the sight of a deer or an eagle or a flight of wild waterfowl when in the out-of-doors. You've got about everybody who ever gets into the out-of-doors.

The National Audubon Society insists that the whole public has a stake in the healthful functioning of natural ecosystems. The conservation of wildlife and of wildlife habitats is essential to such functioning. Therefore every citizen should support the wildlife programs of federal and state agencies. His own health and welfare depends upon the ecosystem.

But by law and tradition and habit of mind, most state game departments have remained locked-in to the game species and to the hunter and fisherman (a diminishing minority) as their sole clientele. All the while the task of maintaining wildlife populations, against all the pressures of human population and development and pollution, becomes increasingly difficult and costly.

The Game Departments need help. The sportsmen need help. And that help is at hand if you set about systematically to bring it into the fold.

How do you recruit the non-hunter? In the long range, and as quickly as possible, the state game departments have got to broaden and expand their programs to include active attention to the non-game species. The non-hunting wildlife enthusiast is interested in the whole of nature, including the animals you call game but also the non-game, and there are far more of the latter than the former. But this takes money, more money than hunting and fishing licenses will ever yield or should yield.

You can't really get into research and management of non-game wildlife on the scale it deserves without new funds. It isn't fair to go to the sportsman for funds for this purpose. No one has yet figured out how to collect license fees from all the people who enjoy looking at birds without killing them, or wild flowers without picking them, especially when such enjoyment may be merely incidental to other outdoor pursuits. How do you license a farmer who benefits from the mousing habits of hawks and owls? Or the skin-diver who communes silently and pleasantly with underwater life without capturing a single minnow?

But the whole public does indeed benefit from wildlife conservation, and the whole public should contribute. This can be done through general revenue appropriations (a precedent now well established in New York although not to scale) or through special taxes, as Missouri is now proposing to do through a one-cent levy on soft drinks.

It is never easy to persuade legislators or the public to vote new funds, but it can be done if hunters and non-hunters combine forces. And in such combination we can accomplish many other things.

Daniel A. Poole, president of the Wildlife Management Institute, recently wrote a long letter to the Assistant Secretary of the Interior for Fish, Wildlife and Parks. Mr. Poole was, in fact, commenting on some conclusions reached by the Department from the 1970 survey of hunting and fishing, the same survey I mentioned earlier.

"In our view," wrote Mr. Poole, "the time is at hand for the non-hunter and non-angler to begin to match his 'non-consumptive' demands for fish and wildlife and their habitat with his money."

I couldn't agree more.

Mr. Poole went on to list several areas of downright neglect and even abuse of wildlife resources that federal and state agencies should and could correct—given purpose and funds. Some examples:

*The National Forests.* "Appropriations for . . . habitat management are inadequate, and fish and wildlife receive little consideration in . . . other programs of the U.S. Forest Service."

*The Public Domain.* "The fish and wildlife potential of The Bureau of Land Management lands is immense, but ignored."

(Concluded on Back Page)

## Road Closure Proposed

Hunters are having a chance to comment on some proposed road closures in the Malheur, Ochoco, and Wallowa National Forests.

The road closures that would be in effect during the 1973 seasons affect around 81,000 acres in the Malheur, about 93,000 acres in the Ochoco, and a smaller amount in the Imnaha Unit in the Wallowa.

This fall the areas suggested for road closures are posted with large yellow signs. Forest patrolmen and Game Commission personnel are in each area to discuss the suggested closures with interested hunters. Final details will be developed during the winter after the comments received are evaluated.

In the Malheur, proposed restrictions to vehicle travel take in four blocks and 170 miles of back roads, all located in areas of major big game migration routes or vital escape cover. Over 3,000 miles of roads remain open to vehicle use. All main roads will be open but access to some camping areas may be restricted if the proposal is enacted. Foot or horseback travel will not be restricted.

About 12,000 acres are involved in the Snow Mountain District in the Ochoco and about 81,000 acres in the Rager District. Again, main roads would remain open, with side roads in areas of good escape cover or main migration routes blocked to entry by vehicle.

The proposed closures in the Imnaha take in the upper Lick Creek drainage from the Lick Creek Guard Station west to Nebo Mountain and the upper Grouse Creek drainage around Morgan, Miller, and Gumbo Buttes.

The purpose behind the proposed road closures is an attempt by the Game Commission and Forest Service to put the "hunt" back in hunting—to make hunting a test of hunting and tracking skills instead of a road hunting show with little or no escape for the animal being pursued. Proposed road closures in all three areas take in important big game migration routes, vitally needed escape cover, and fawning and calving grounds.



#### BREACHING OF CARTWRIGHT CREEK DAM

Members of the Eugene Chapter of the Northwest Steelheaders, working in cooperation with Game Commission personnel and the landowner, removed a block to upstream fish migration Saturday, September 9.

Fish passage at Cartwright Creek, a tributary to the Mohawk River at Marcola (15 miles north-east of Eugene), has been blocked since 1926 when a wooden dam was built. In 1947 the present 6-foot-high and 10-inch-thick concrete structure was constructed.

The Steelheaders worked 8 hours in the rain with pneumatic and electric hammers to chip a 4-foot square hole in the face of the dam. A pool created by a beam bolted to the concrete apron below the dam will enable coho salmon and cutthroat trout to swim through the hole in the dam.

The dam will be filled for irrigation during the summer and drained for fish passage during the rest of the year.

## GUEST EDITORIAL

(Continued from Page 11)

*National Wildlife Refuges*, where the program is "barely afloat." "It lacks public identity," Mr. Poole charged, "and has little obvious in-house support."

*Federal Farm Programs*. These often do outright damage to wildlife resources at taxpayer expense when there are, instead, enormous opportunities to benefit the public that pays the bill.

*Private Timberlands*. In most states there is little service to many owners of small private holdings who would like to use their land for wildlife, recreational and esthetic purposes, not for commodity production.

By combining their numbers and political influence the hunters and non-hunters together can provide the purpose and they can secure the funds for all of the task outlined by Mr. Poole. And the whole public will benefit by virtue of a better environment.

## Angling Regulations To Be Set November 11

The public hearing to adopt angling regulations for the 1973 season will be held in Portland on November 11 at the Western Forestry Center located in the Zoo-OMSI area off Canyon Road. The hearing will convene at 10 a.m.

Staff recommendations will be reviewed; interested groups and individuals then will have an opportunity to be heard at the public hearing. Proposals may be submitted to the Commission in writing or may be presented orally.

Following public testimony the Commission will adopt final angling rules for the 1973 calendar year.



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