

OREGON WILDLIFE

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Wildlife Law Enforcement

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The Cover

Through rapids on the Deschutes. See feature story for more of the fishery of the river.
Photo by Meg Campbell

HUNTER EDUCATION PROGRAM

Instructors Approved

Month of July	18
Total to Date	3,418

Students Trained

Month of July	216
Total to Date	209,155

Firearms Hunting Casualties Reported in 1974

Fatal	0
Nonfatal	5

I don't know how many times I have heard someone say, "I've fished and hunted all my life and never been contacted by a game warden." To me, this is not a surprising statement nor does it infer that there is little or no enforcement activity. When one considers the fact that there are several hundred thousand of us and less than one hundred of them, is it any wonder that you or I could spend a lifetime in the field without encountering any of the efficient officers of the Game Division of the Oregon State Police?

The Department of State Police is charged by law with the responsibility of enforcing the wildlife laws. The expenses of the Game Division of the Department are chargeable to the Wildlife Fund. The Division is doing an excellent job considering the manpower limitations. Its arrest record is outstanding in comparison with other states. This is so in spite of the fact that, according to the Wildlife Management Institute, only four other states in the nation have a higher ratio of licensed anglers and hunters to enforcement officers than Oregon. But the men assigned to this important activity are spread too thin across the state and their responsibilities have multiplied in recent years. They need help now and that means more manpower and more money.

Consider the variety and volume of fishing and hunting opportunities and seasons that require surveillance. Consider the dispersal of hundreds of thousands of outdoor enthusiasts to all corners of the state, aided by a growing complex of roads and trails and a host of recreational vehicles. Consider the 96,981 square miles within the state that must be traversed. Consider the complexity and variety of the laws and regulations that must be enforced. And finally, consider the unfortunate fact that there are those among us who do not hesitate to violate the wildlife laws. Add these factors together and you have a man-sized job, one that demands more resources than are presently available.

Poaching is a serious problem statewide. High meat prices and a general disregard for conventional behavior by some elements of the population are contributing factors. More attention must be directed to this problem. The wildlife enforcement officer, because of his experience, knowledge, and availability, is expected to enforce laws other than those applying to wildlife, such as boating, anti-pollution, and general environmental laws. Most of these laws, if enforced properly, are of direct benefit to wildlife or of benefit to the angler or hunter. Recently the wildlife enforcement officer has become involved in enforcing laws and regulations applying to rare and endangered wildlife species and nongame wildlife. He is also active in livestock theft investigations.

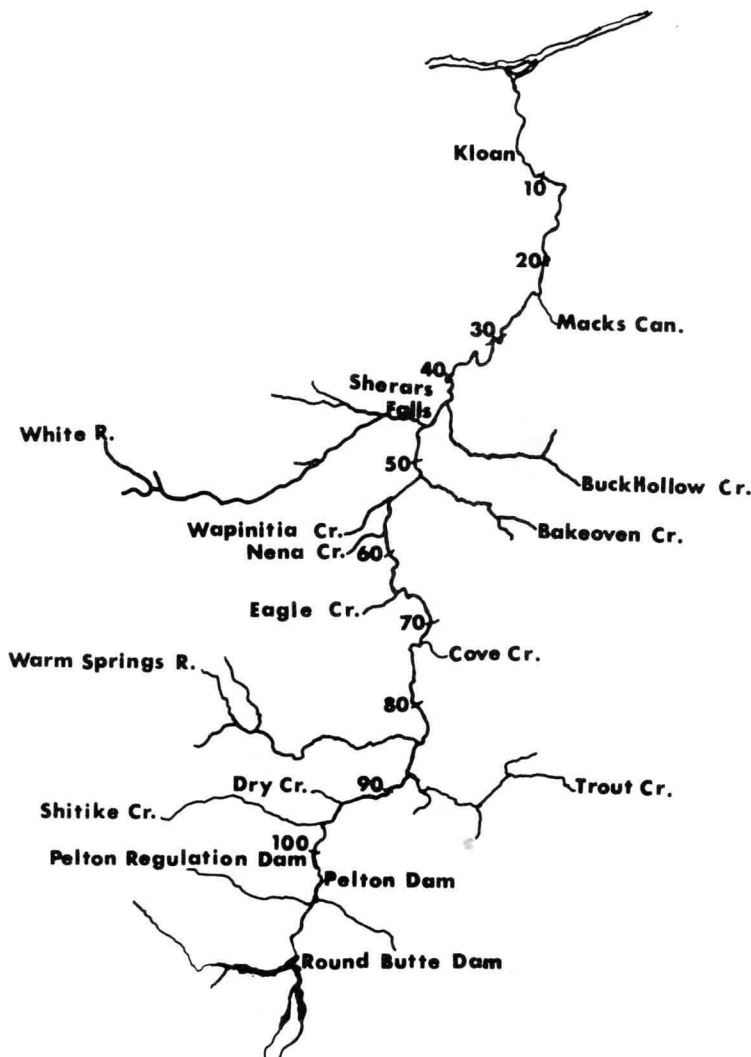
One of the primary reasons that the Commission will request the 1975 Legislature to authorize an increase in revenue is to provide funds for an expanded wildlife enforcement operation. The cadet program in which young men are employed seasonally to supplement the efforts of the regular officers has proved highly successful and should be enlarged. The ratio between the number of sportsmen and officers must be reduced. An increased enforcement effort could be the key to opening up lands presently closed to entry.

There is ample justification for an increase in wildlife law enforcement personnel. The wildlife resource and the people of Oregon will benefit from such a move.

R. C. Holloway

Deschutes Summer Steelhead and Resident Rainbow

by Jim Fessler and Al Lichens,
Fishery Biologists



For centuries the sea-run and resident forms of the rainbow trout (*Salmo gairdneri*) have existed as part of the ecosystem of the Deschutes River. But only for a short part of this time have the fish been in contact with man. Early man considered the rainbow and steelhead only as food, then later as a source of pleasure and profit. Today Deschutes steelhead trout are harvested by recreational, non-Indian and Indian commercial gillnet fishermen in the Columbia River and by Indian dipnet fishermen and recreational anglers in the Deschutes.

The Deschutes River has gained worldwide fame as one of Oregon's best recreational angling streams. Summer steelhead and resident rainbow are the most important species in the lower river although significant fisheries for spring, summer, and fall chinook salmon also exist. Even with a relatively large recreational use and other harvest, construction of dams, irrigation diversions and other man-caused environmental changes, these fish continue to survive in good numbers and provide thousands of man-days of recreation each year.

Most scientists agree that differences between the anadromous or migratory steelhead and resident forms of rainbow trout are slight. At the present time there is no consistent characteristic that can be used to separate nonmigratory and migratory populations. In the Deschutes River the question as to whether both occur because of inherited differences or because of environmental differences affecting young fish has not been answered.

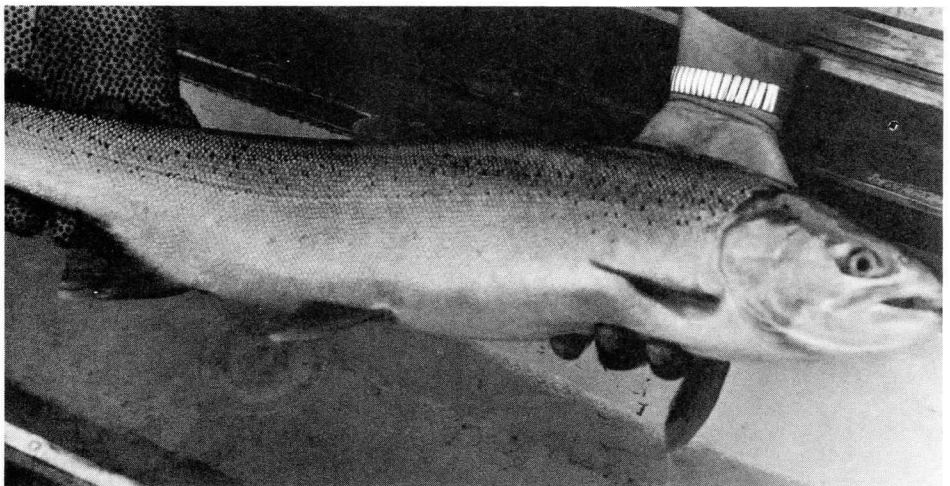
The Deschutes River basin drains 10,400 square miles of central Oregon. From its source, high in the Cascade Range, it flows east and north, entering the Columbia River 204 miles from the sea. The watershed is one of the largest in Oregon. However, access to major upstream spawning tributaries for steelhead and salmon production was eliminated at river mile 100 in the late 1950s with the construction of the Pelton-Round Butte Dam complex.

The lower Deschutes River has received regular attention from Wildlife Commission fishery biologists since 1951 on a variety of investigations. Most work has related to obtaining catch statistics by interviewing anglers but also includes a detailed five-year study of the river flows; trout, steelhead, and salmon spawning; and other related factors. A continuing intensive joint investigation of steelhead and rainbow trout by both the Research and Fishery Management Divisions has been underway since 1969. Some of the resulting information is summarized in this article.

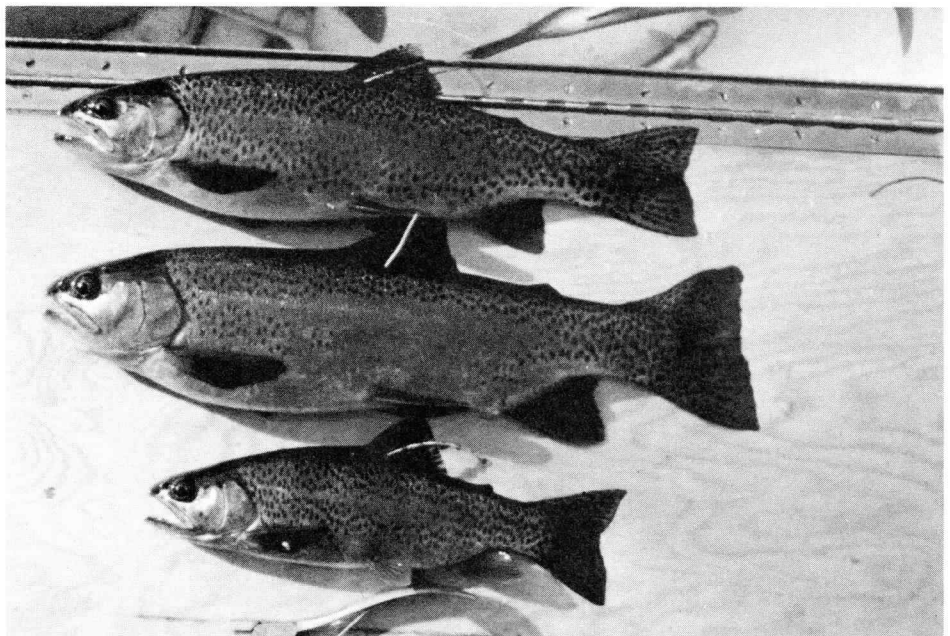
With the construction of Pelton and Round Butte Dams by Portland General Electric Company and subsequent failure of fish passage facilities, a hatchery program was initiated in 1966 to compensate for losses of salmon and steelhead that formerly used the stream system above the dam complex. Round Butte Hatchery was built and its operation is financed by PGE. Many of the practices developed earlier in a winter steelhead hatchery program were incorporated into the hatchery program for summer steelhead. In the first few years there was only limited success but returns of adult fish have steadily increased. Advanced hatchery technology, field studies, and management decisions continue to improve the hatchery program for Deschutes summer steelhead. Studies have shown that releases of yearling juvenile summer steelhead (called smolts) 8 to 10 inches in length in April-May can bring a 2 to 4 percent return of adults. Approximately 5 percent of the smolts released do not migrate to the ocean and an additional 5 to 10 percent of the juvenile steelhead released are quickly caught in the trout fishery.

Most of the native juvenile summer steelhead develop in the main Deschutes River. As they reach a length of 6 to 8 inches at one to two years of age, they migrate to the sea where they reside for one to three years.

As summer approaches, the maturing summer steelhead begin the long journey back from the ocean to their native stream. The major portion of the adult steelhead run enters the Deschutes River from July through



A Deschutes summer steelhead. These fish range from 3 to 15 pounds in size and are considered top sport fish by most anglers.



Native resident rainbow trout from the Deschutes with spaghetti tags attached at the base of the dorsal fins. Such tagging studies have added much information about these fish.

September. The fish spawn from January through April of the following year. Approximately half of the adult steelhead return to fresh water after spending one year at sea. At this time the fish weigh 3 to 5 pounds and are 20 to 25 inches in length. The remainder of the adults return to fresh water after two or three years. The "two-salt" fish weigh 5 to 8 pounds and are 25 to 28 inches long. The small percentage of the steelhead that return after spending three years at sea provides the angler a chance to catch a fish up to 20 pounds and 40 inches in length. Few adult summer steelhead return to spawn a second time. The extended period in fresh water prior to spawning and the difficult migration back to sea over two

major Columbia River dams take a heavy toll of spawned-out adult steelhead.

While the seagoing steelhead is subjected to this rigorous life cycle, the resident rainbow spends its entire life in the main Deschutes River. Rainbow inhabit the entire 100 miles of the river but are most abundant in the Sherar Falls-Pelton area (river mile 45-100). Resident rainbow trout spawn from May to mid-July. Favorite spawning areas are associated with accumulations of small gravel throughout the river above Sherar Falls. Most rainbow do not spawn until they are three years of age or approximately 10 to 12 inches long although some males spawn as two-year-olds when they are 6 to 8

inches long. A few rainbow do not spawn until they are four or five years of age or approximately 13 to 16 inches in length. Once a fish matures and spawns, its growth rate from year to year is very slow, indicating that sexual maturation, spawning, and regaining body condition after spawning are absorbing most of its body energy. Unlike the migratory summer steelhead, the native rainbow usually spawns several times.

With the ever increasing demand for adult summer steelhead by recreationists and other user groups, it is essential to broaden our knowledge about the fisheries and fish populations. To learn more about migration and population size, an intensive summer steelhead tagging program was undertaken in 1971. This showed that adult summer steelhead enter the lower river in small schools during the summer with peaks of movement in early August and September. About 90 percent of the run remains in the river below Sherar Falls until the fall freshets occur. Recovery of tagged fish in the 1971 recreational fishery resulted in a calculation of 34,660 steelhead entering the Deschutes River, of which 13,800 were hatchery fish. In 1972 the total steelhead run was estimated at 26,600, of which 9,330 were hatchery fish. Based on Pelton fish trap returns, angler harvest, and spawning counts, the 1973 steelhead run was between 30,000 and 35,000 fish.

It appears that the Deschutes River supports an annual run of about 30,000 steelhead with one-third of the run of hatchery origin. Some steelhead from upper Columbia tributaries seem to prefer, temporarily, the cooler water of the Deschutes. Tagging studies indicate that steelhead destined for other streams stray as far as 35 miles up the Deschutes River and contribute to the recreational fishery.

Much time is spent gathering catch information from anglers and from the Indian dipnet fishery. In 1972, anglers harvested an estimated 7,000 adult steelhead in the lower Deschutes River. The total recreational catch plus the Indian dipnet catch at Sherar Falls brought the total harvest to approximately 8,000 steelhead for 1972. In comparison, the estimated total steelhead catch for 1973 was 10,000. Of these, ap-

An Indian dipnet fisherman at Sherar Falls.





Construction of the Pelton project at river mile 100 and subsequent failure of the fish passage facilities eliminated the upriver areas for steelhead and salmon production. Round Butte Hatchery was built to compensate for the loss.

proximately 35 percent were hatchery fish. At the present time, recreational anglers and the Indians with dipnets are harvesting about one-third of the total run in the Deschutes River. Although recreational use has increased each year since 1970, spawning surveys and catch estimates indicate that the run is not being overharvested at the present time.

Half of the hatchery steelhead smolts produced by the Round Butte Hatchery are now being released below Sherar Falls with the objective that returning adults will "home" to this area and be caught in greater numbers.

The Deschutes River draws a wide spectrum of steelhead anglers from many areas. In 1971 and 1972 only 38 percent of the anglers were local residents, 48 percent were from other areas in Oregon, mainly the Portland metropolitan area, and 14 percent were from out of state, mainly Washington and Idaho.

In 1972, 32.5 miles (63 percent) of the prime rainbow trout water were set aside for wild trout management. In the wild trout area extending from Dant (river mile 64.5) to Warm Springs (river mile 97) the bag limit is two trout over 12 inches in length and anglers are limited to using artificial lures and flies. The remainder of the lower Deschutes River has a bag limit of six fish of which three may be over

12 inches. An intensive tagging program was initiated in 1971 to measure the effects of this restrictive regulation on the native rainbow trout population. Using a tagged to untagged ratio of fish captured with electrofishing gear, population estimates were calculated for each study area. An estimated 1,800 rainbow trout per mile, one year of age and older, inhabited the wild trout area.

The angling regulation protecting wild trout reduced the number of angler days by about 65 percent but no significant increases or decreases can be detected in the rainbow population through 1974. This is probably because the recreational use in this isolated section of the river has never been sufficient to materially influence the makeup of the population.

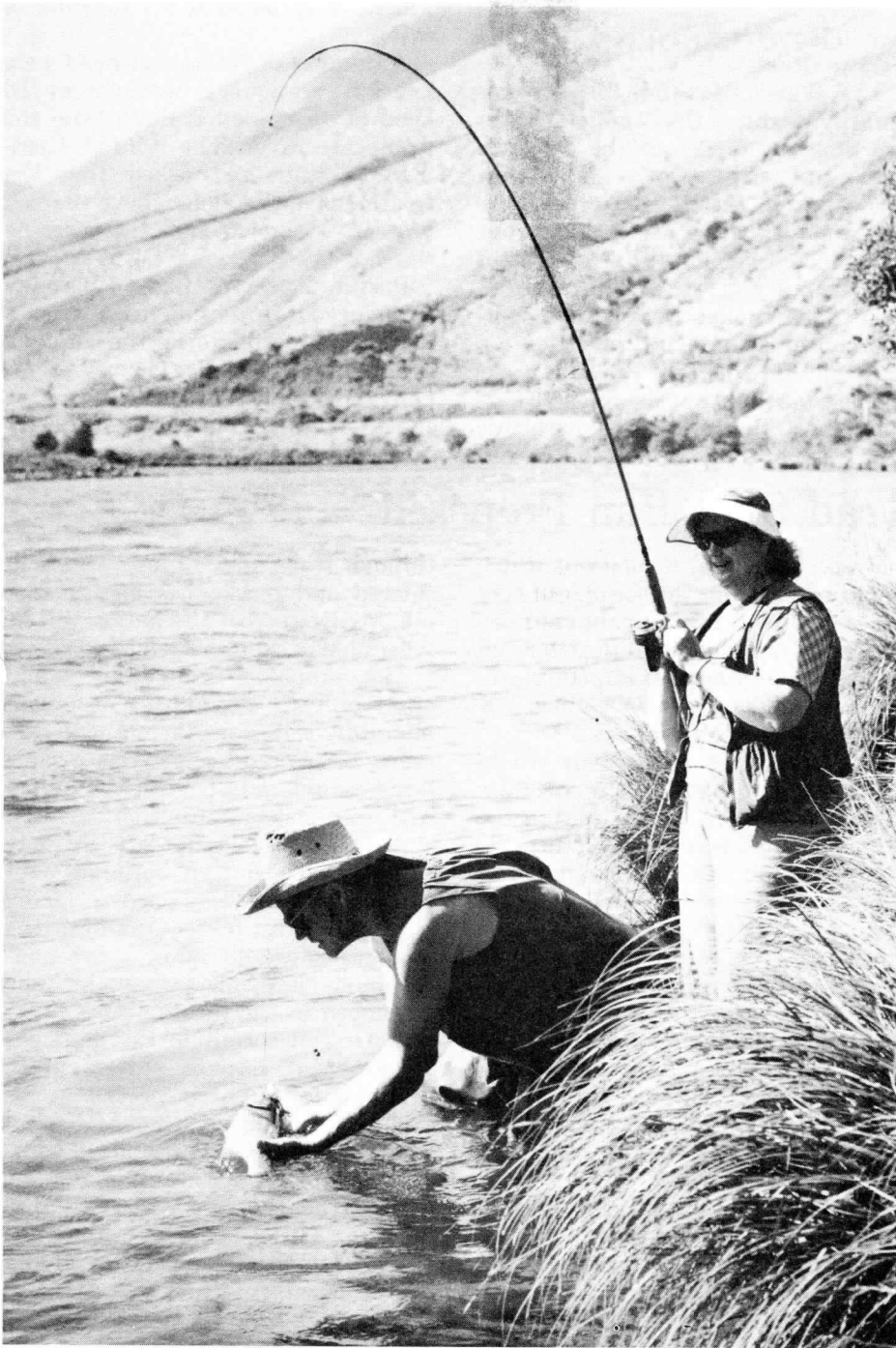
Approximately 60,000 catchable hatchery rainbow have been released annually in the past in three areas (8.5 miles) in the lower 100 miles of the Deschutes River. About 50,000 hatchery rainbow were released in 1973, plus 20,000 post-smolt steelhead in the Maupin area. The Warm Springs and upper and lower Maupin areas are popular angling sites, with easy road access and consequently high angler use. In the three stocked areas about 60 percent of the total catch consists of hatchery fish while the other 40 percent is wild rainbow.

For the most part, the hatchery trout appear to stay in the areas where they are released but few of them survive the summer. The study in the stocked area indicated there were about 1,700 wild trout per mile. Though this number is quite similar to the 1,800 wild trout per mile in the wild trout area, the fish in the stocked area were smaller, reflecting the greater angling intensity.

Catch rates in the two areas revealed considerably greater variation. In a study of an 18-mile section of the wild trout area in 1969 the average catch per angler day was 1.8 fish. In 1973 with the new regulations in effect, the rate dropped to 0.5 fish per angler day.

In a comparable study of an 18-mile section in the stocked area in 1973 the average catch per angler day was 1.0 fish. Data gathered in 1973 from the two 18-mile sections of stream (wild trout and stocked sections) indicate the stocked section of river is producing about six times more days of angling than the wild trout area.

There are many citizens, resource groups, public agencies, and the Confederated Tribes of the Warm Springs Indians who are deeply concerned about the fishery resources of the river and the interests of all must be considered when any proposed changes of management practices are planned. Several important decisions



At present, Indians with dipnets and recreational anglers take about one-third of the summer steelhead run of the Deschutes but the future of the run seems secure if environmental changes of the river can be controlled.

have already been made concerning fishery resources of this famous stream. Restrictions on power boats were implemented by the legislature to aid in protection of spawning salmon, steelhead, and rainbow and to perpetuate the aesthetic value of this stream for anglers and other recreationists. Fishing from a floating device is prohibited by regulation and prevents overharvest of salmonids and harassment of spawning fish. Camping on islands is prohibited by the Bureau of Land Management to prevent destruction of fragile island vegetation and habitat. A wild trout management area was established to protect the native rainbow trout and to provide an opportunity to monitor changes in the population as a result of the special regulations.

The Commission is currently managing the summer steelhead fishery by supplementing the wild run with hatchery fish from the Round Butte station. Only stock native to the Deschutes drainage is used in hatchery operations. A steelhead brood stock selection program has been implemented at the hatchery to evaluate crosses of wild and hatchery fish and to minimize genetic changes in the native population. Research and management findings pertinent to competition of juvenile hatchery steelhead with native stocks will be implemented to protect the latter.

Because the summer steelhead and native rainbow trout use the main Deschutes for migrating, spawning, and growing, the protection of the stream from pollution, industrial development, irrigation diversions, and other environmental changes detrimental to the fishery resource is essential.

The future seems secure for the summer steelhead and native rainbow trout in the Deschutes River. The ability of this species to inhabit a variety of natural environments gives it flexibility, which is a valuable asset in nature. If increased angling pressure and harvest indicate that further restrictions on the steelhead and resident rainbow trout harvest are necessary, they can be made. Careful management and public concern for the fisheries of the Deschutes can help insure continued presence of meaningful numbers of summer steelhead and resident rainbow trout.

□

Environmental Events

Refuge Hunting Upheld

Public hunting on three national wildlife refuges has been upheld by the U.S. Court of Appeals for the District of Columbia Circuit as a suitable method of wildlife management for controlling surplus animal populations.

The Secretary of the Interior and the Fish and Wildlife Service had been challenged in court by the Humane Society of the United States for authorizing public deer hunts in the Great Swamp National Wildlife Refuge in Morris County, New Jersey, and in refuges in Maryland and Virginia.

Through temporary court injunctions, the Humane Society of the United States had managed to stop two scheduled hunts on Great Swamp Refuge which biologists had recommended to remove excess deer.

Wildlife management on the basis of preservation rather than the proven principles of conservation has proven ill-conceived in many instances throughout the country in the past and is now becoming painfully evident on Great Swamp Refuge. The first concrete evidence came to light this spring when refuge and state personnel found seven deer which had died of starvation. Observations soon revealed more starved deer and the rest of the herd to be in poor physical condition.

In its arguments against the hunts the Humane Society had contended that the scheduled hunts were not compatible with the primary purposes for which the refuges had been established, which in all three instances was to provide habitat for migratory waterfowl.

A lower court found no basis on which the injunction sought by the Humane Society could be properly granted. The court of appeals likewise found no statutory requirement that humaneness be a guiding factor in selecting weapons to be used for public hunts. The court agreed that deer populations needed controlling. It further found that Congress had clearly authorized the recreational use of refuges and that public hunting is an acceptable method for controlling refuge deer populations.

The Wildlife Commission staff urged the State Water Resources Board to change its policy favoring additional dam construction on the middle Snake River. The Board held a series of informational meetings concluded by a formal hearing on its 1959 position.

The Water Resources Board temporarily modified the beneficial water use program to reduce the Tualatin minimum streamflows. The flow quantities in the interim order were the same as those set in 1966, but were increased in 1970 to protect water quality of the stream environment. The change was made to permit continued agricultural irrigation and will end this fall.

The Court of Appeals upheld a Circuit Court finding that a herbicide user was not liable for a fish kill that

resulted from the accidental loss of the chemical even though negligence could have been involved. Until adequate change can be made to the Wildlife Code, general pollution laws will have to be used in this kind of case.

A number of young steelhead were killed by an aquatic herbicide at the head of an irrigation ditch from the Applegate River. The Wildlife Commission staff had asked that the treatment not be done above the fish protective screen, but the warning was not taken.

Pacific Power & Light Company announced its intention to construct a nuclear power plant near the Umpqua community in Douglas County. Company spokesmen described possible effects at a meeting with natural resource agency representatives. □

Lead Shot Ban Proposed

Proposed federal regulations which would ban or limit the use of lead shot for waterfowl hunting have been published in the Federal Register and a draft environmental impact statement which discusses the issue is now available for public scrutiny.

If passed, the regulations would effect a total ban in the Atlantic Flyway beginning in 1976 and in the Mississippi Flyway in 1977. In 1978 the restriction would be extended to the Central and Pacific Flyways although the proposed ban might be limited to specific problem spots.

The regulations have been proposed to stop further deposition of lead shotgun pellets in areas where waterfowl are heavily hunted. Consumption of spent shotgun pellets has resulted in lead poisoning and death to many birds each year in the United States.

The U.S. Fish and Wildlife Service is inviting public comments on the proposals. All comments received

through November 15 are to be considered and public hearings in four major cities across the nation will be scheduled and publicized in advance.

The proposed regulations would apply only to the hunting of certain migratory waterfowl including ducks, geese, swans, and coots. Other game birds would still be legally hunted with lead shot ammunition.

Although steel shot is the only suitable alternative to lead shot which has been developed so far by U.S. ammunition companies, the regulations would allow other non-poisonous shot pellets which might be developed in the future.

In Oregon a copy of the draft environmental impact statement is available for public inspection at the regional office of the Fish and Wildlife Service in Portland. In addition, single copies are available by writing the U.S. Fish and Wildlife Service, Office of Environmental Coordination, Washington, D.C.

Editor's Note: The Humane Society of the United States (established 1954) headquartered in Washington, D.C., which temporarily halted the management practices on the Great Swamp Refuge, should not be confused with the American Humane Association (established 1877) head-

quartered in Denver. The latter group recently produced an excellent film explaining the need for sound wildlife management. Copies of the film entitled "Wildlife — Our Responsibility" are available for free loan from regional and headquarters offices of the Wildlife Commission. □



Third National Hunting And Fishing Day On Tap

September 24, 1974 is the date of the third National Hunting and Fishing Day. Over 4,000,000 persons took part in the first celebration according to the National Shooting Sports Foundation. This day is designed to give hunters and anglers a chance to let the rest of the populace know where their sports fit into the scheme of wildlife management and to allow them to perhaps communicate some of the true facts concerning the problems of our fish and wildlife.

The quiz below is designed to present some of these facts . . . to you if you aren't aware of them and to the perhaps confused nonhunter who has been bombarded with emotional tirades that may be mighty slim on factual data. These bits of information don't remove the responsibility of every hunter and angler to police the ranks and kick out the slobs who bring on "anti-hunter" feelings on the part of others. However, it is hoped that this material may help put legal sport hunting in better perspective and help to ally everyone who is truly interested in the fate of our wildlife resource.—*Ron Shay*

- Most of the money for conservation programs in your state comes from: a. your taxes b. federal aid c. sportsmen d. private groups
- Compared to 75 years ago, the number of deer in the U.S. today is: a. one-half b. the same c. 10 times as many d. 30 times as many
- The number of elk in the U.S. today as compared to 1910 is: a. one-tenth b. one-half c. same d. five times as many
- According to the Dept. of Interior, of the 109 animals on the endangered list, how many are hunted? a. none b. 15 c. 62 d. 109
- The most serious cause of wildlife decline is: a. hunting b. habitat destruction c. natural evolution d. predators
- In the past 50 years, sportsmen have contributed: a. 50 million b. 250 million c. 1.5 billion d. 2.8 billion for conservation

Answers:

1. (c) Sportsmen pay nearly \$300 million for conservation annually. They are often the sole support of conservation departments.
2. (d) There are some 15 million deer in the U.S. today. There were 500,000 in 1900.
3. (d) There are 5 times as many elk, and also many more antelope, turkey and beaver.
4. (a) That's right. No endangered species are hunted.
5. (b) Experts agree that destruction of habitat is far more injurious to wildlife than any other factor.
6. (d) \$2.8 billion. It's all for conservation, and it all comes from sportsmen.

This and that

compiled by Ken Durbin

A 19½ inch northern pike from Hyatt Lake? The answer is yes, much to the consternation of the Wildlife Commission.

Pike are not native in Oregon and there have been no plans on the part of the Commission to introduce them. This particular fish was obviously an illegal transplant released by an angler practicing armchair biology.

Although the northern pike is a popular game fish in some of the north central states, biologists here say it could pose a serious threat to native fish species if it became established where it could enter river systems. As one of the most predacious fish known in North America, the northern pike satisfies its voracious appetite largely on other fish.

Hyatt Lake is one body of water where east meets west. Its natural drainage is toward the east into the Klamath River basin. But a water diversion canal also drains water to the west through Little Hyatt Reservoir, down through the Medford valley, and eventually into the Rogue River.

The Wildlife Commission had an unconfirmed report last year of a small pike taken from Little Hyatt Reservoir. The 19½ inch fish taken this year was confirmed by district fishery biologist Bill Haight. Trap nets set in Hyatt Lake for several nights turned up a few trout and many bullhead catfish, but no pike. Biologists are convinced there is no large population of pike in Hyatt Lake but have no idea how many may have been introduced. They will be watching the lake closely during the next few years for any development of pike fry.

Although introduction of non-native fish in Oregon is strictly illegal, it has occasionally been done by shortsighted anglers trying to satisfy their own personal interests with no thought for possible long-term consequences.

A deadline of October 15, 1974 has been set for entries in the annual Duck Stamp Art Contest conducted by the U.S. Fish and Wildlife Service. The winning entry will be on the Duck Stamp this fall. Further entry information is available from the Service, Department of the Interior, Washington, D.C. 20240.

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An international study of swans is under way involving six nations — the United States, Soviet Union, Canada, Denmark, Japan, and Great Britain. The three-year study will trace the global movements of five species of swans — the threatened trumpeter swan, and the whistling, whooper, Bewick's, and mute swans. It will document the birds' behavior and feeding patterns, the condition of their wetland habitats, and focus on how they are adapting to recent habitat changes.

Audubon econotes

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Fishes can and do sometimes rain from the skies, even in modern times. According to information compiled by the Smithsonian Institution Center for Short-Lived Phenomena, "Mr. William Tapp, owner of the Killarney Station, reported that about 150 fish 'rained from the sky' within a one-quarter-square mile area near his home. Mr. Tapp also believed that there could have been falls about 40 miles from the homestead . . . The general local opinion was that the fish were perch of about 2-3 inches in length. There were some doubts as to whether they were the salt or fresh water variety."

This was not an Irish tall tale, for the Killarney in question is in Northern Territory, Australia. A stranger twist is provided by the fact that the actual report did come from the original Emerald Isle — from County Donegal. The sober reason proposed was water spout conditions arising from tropical low pressure storms.

U.N. Development Forum

The Indian mosquito can fly nearly five miles nonstop, compared with only 500 yards for the American kind, making it difficult for exterminators to win the war against malaria, according to medical authorities. This long-distance flying ability makes it difficult to trace the mosquitoes' breeding ground, according to a report by the Indian Council for Medical Research, and the World Health Organization. In addition, the report stated that Indian mosquitoes are becoming immune to various treatments, including DDT, and some have abandoned their traditional breeding grounds in stagnant water to breed on salt water.

Conservation News

National Wildlife Federation

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Exotic leathers for riding boots are enjoying a boom. Some of the best sellers — offered mainly by Texas companies — are, according to *Horseman* magazine: lizard, elephant, seal, shark, ostrich, sea turtle, anteater, python, and boa constrictor. A few firms even offer alligator, although one allowed as how it was "almost impossible to buy." A pair of boots from the most exotic skin, anteater, costs \$300.

Audubon econotes

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'73 Unit Maps Still Good

Some confusion has arisen concerning the maps showing the big game management units. These maps are not issued new each year, but only after changes have been made in the boundaries. Since there were no changes made this past year, the map dated July 1, 1973 is still in effect.

Hunters who wish to determine boundaries of the various management units should use the map they obtained last year or get a copy of the map from their local hunting and angling license agency. Agents who may have exhausted their supply of the maps last year may obtain a new supply by contacting the Oregon Wildlife Commission in Portland. □

1974 Big Game Hunting Outlook

by Paul Ebert
Staff Biologist, Big Game Management

Oregon's big game hunters will find deer and elk numbers and hunting pressures similar to last year during the coming seasons. No major changes have occurred in the status of big game during the last year and license records to date indicate little change in hunter numbers.

Little improvement was noted in the mule deer herds of eastern Oregon during the last year and deer hunters are again encouraged to hunt black-tailed deer in western Oregon. Hunters will find black-tailed deer populations comparable to last year.

Blacktail hunters will have a 37 day season (October 5 through November 10) in that portion of the state west of the summit of the Cascade Range. Dixon and Rogue Units are an exception where buck hunting will close on November 3. The September High Cascade buck season will again be limited to 5,000 permits valid in an area which provides quality alpine and wilderness hunting experience. Extended hunting opportunities will be available in portions of the Willamette Valley and foothills.

Highest densities of black-tailed deer are found at medium and lower elevations in McKenzie, Dixon and southern Santiam Units in the Cascade Range and the Willamette drainages of the Coast Range south of Carlton. Blacktail hunting is usually not productive until the latter half of the season when cool weather makes the deer more active and leaves have shed to improve visibility.

Mule deer hunters will again be restricted to a short buck season scheduled October 5 through October 17. No management unit permits were allowed and only limited antlerless harvest was approved in crop damage areas. Low fawn survival continues to limit the annual increment and herd levels remain 19 percent below the ten-year average. Improved range conditions provide a

more optimistic outlook for the coming year.

Elk tag sales increased at an unparalleled rate of 25 percent in 1973 over the previous year and there is reason to believe that hunting pressures equal to that of last year will again be found in the more popular areas of the state.

The Rocky Mountain elk season extending from October 26 through November 13 should produce a harvest comparable to last year. While average calf ratios and increasing population trends are favorable, the prospects of heavy hunter competition is not so encouraging. Intensive logging to salvage tussock moth damaged timber will influence hunting and create heavy weekday traffic in many areas of Union and Wallowa Counties, especially in the Umatilla Unit.

Heavy annual cropping of available bulls leaves few mature males for harvest. The Wasco, Minam and Snake River Units are more difficult to hunt and produce a higher ratio of mature bulls. A high percentage of the bulls taken in the southeast area are also mature. The more popular elk hunting areas of northeastern Oregon (which include the Baker, Chesnimnus, Snake River, Sled Springs, Starkey, Ukiah, Umatilla and Wenaha Units) not only produce the largest harvest but draw the heaviest hunting pressure.

The southeastern area will be open to either sex only from October 26 through November 3 with the bag restricted to bulls only the remainder of the season. The take from this area, although not high, is remaining stable.

Roosevelt elk hunting will be allowed in western Oregon west of U.S. Highways 97 and 26 except in that portion of the Chetco Unit in Josephine County. The season extends from November 16 through

November 27 for bulls with antlers longer than the ears.

Although transplanting continues to expand the range of Roosevelt elk, the bulk of the harvest comes from two major areas in the Coast Range (Coos County and Tillamook and Clatsop Counties). The McKenzie Unit leads the harvest in the Cascade Range although the Santiam and Dixon Units are producing more as herds build and expand. Smaller herds are also scattered through other minor areas of the Coast Range.

Hunters are cautioned that anyone hunting with a rifle in elk hunting areas while an elk season is in progress must possess a valid unused elk tag.

Bear hunting is currently in progress statewide and will continue through December 31. Best hunting is found in the Coast Range, especially in the extreme north and south portions. Higher elevations of the Cascade Range, along with portions of the Chesnimnus, Imnaha and Minam Units of northeastern Oregon are fair producers of bear.

Most of the Coast Range is difficult to hunt for bear unless dogs are used. Hunters with dogs are encouraged to hunt tree damage areas of the Tillamook Burn and Clatsop County. The hunter without dogs stands the best chance around huckleberry fields in the High Cascades and in the more open timbered areas of northeastern Oregon. All bear hunters must possess a valid bear tag.

Some variety of big game hunting is available during half of the year in Oregon and interested hunters can find opportunities under a variety of geographic and climatic conditions. While better success may be expected in familiar territory, hunters are encouraged to try new areas as a means to gain experience and more fully appreciate the wildlife resources of the state. □

Upland Game and Waterfowl Seasons Set For 1974

Hunting seasons and bag limits for upland game and waterfowl were set by the Oregon Wildlife Commission following a public hearing on Friday, August 16, in Portland.

Season lengths are generally similar to last year but hunters will want to note some bag limit changes. Daily limits for pheasants and chukars in eastern Oregon and for quail statewide have been reduced because of lower bird populations while waterfowlers will receive a two-pintail bonus on top of the five-duck limit throughout most of the state.

Field reports from wildlife biologists indicate the production of most upland game birds is down somewhat from last year. The cool, rainy spring weather probably was responsible for poor nesting success in many areas of the state, although most biologists qualified their observations saying heavy vegetative growth this year made brood survey observations more difficult than usual. Population levels, they say, are probably somewhat higher than population trend counts indicate.

The waterfowl picture is somewhat brighter. Although mallard production throughout the Pacific Flyway is down somewhat, it has been a good season for pintails. Oregon's waterfowl production, which contributes only 4 percent to the flyway, is up for all species due to abundant water during the nesting season.

The blue and ruffed grouse season was set for September 1 through September 30 in eastern Oregon and from September 14 through November 10 west of the Cascade crest. The bag limit for grouse will be 3 per day, 6 in possession.

A two-day sage grouse season was set for September 7 and 8 for Harney and Malheur Counties only. The daily limit remains 2, with 2 in possession.

The seasons for mourning doves and band-tailed pigeons were set previously by the Commission and will run from September 1 through September 30. The limit for doves remains at 10 per day, 20 in possession. For pigeons the daily bag is 8, with 8 in possession.

A cock pheasant season of the same length as last year will extend from October 19 through November 24. The bag limit was reduced to 2 per

day in eastern Oregon and remains at 2 per day in western Oregon. Possession limit in western Oregon and Klamath County is 4, with 8 pheasants allowed in possession throughout the rest of eastern Oregon.

The following table lists the upland bird and waterfowl seasons, bag limits, and general open areas. The complete regulations booklet should be available for public distribution by mid-September.

1974 UPLAND GAME AND WATERFOWL SEASONS

	OPEN SEASON (all dates inclusive)	Open Area	Limit	Possession
			Daily Bag	Limit
Silver Gray Squirrel	Sept. 1-30	Hood River & Wasco Counties	5	5
	Entire Year	Southwest Area		
Blue & Ruffed Grouse	Sept. 1-30	Northwest Area	No limit	No limit
	Sept. 14-Nov. 10	Eastern Oregon	3	6
Sage Grouse	Sept. 7-8	Western Oregon	3	6
Chukar & Hungarian Partridge	Sept. 7-8	Malheur & Harney Counties	2	2
Cock Pheasant	Oct. 5-Dec. 31	Eastern Oregon	6	12
	8:00 a.m.	Western Oregon and Klamath County	4	8
	Oct. 19-Nov. 24	Eastern Oregon except Klamath County	2	8
		Western Oregon and Klamath County	2	4
Valley & Mountain Quail	8:00 a.m.			
	Oct. 19-Nov. 24	Western Oregon	5	10
	8:00 a.m.			
	Oct. 19-Dec. 31	Eastern Oregon	5	10
Turkey	No open fall season			
Mourning Dove	Sept. 1-30	Entire State	10	20
Band-tailed Pigeon	Sept. 1-30	Entire State	8	8
Duck	Oct. 12-Jan. 12	*State	5	10
	Oct. 12-Jan. 19	Columbia Basin counties	6	12
Coot	Oct. 12-Jan. 12	Entire State	25	25
Merganser	Oct. 12-Jan. 12	Entire State	5	10
Goose	Oct. 12-Jan. 12	**State	3	6
	Oct. 12-Dec. 29	Baker, Benton, Lane, Linn, Malheur, Marion, Polk, and Yamhill Counties	2	2
	Oct. 12-Jan. 19	Wasco, Sherman, Gilliam, Morrow, Umatilla Counties	3	6
Black Brant	Nov. 23-Feb. 23	Entire State	4	8
Common Snipe	Oct. 12-Jan. 12	Entire State	8	16

**The above table gives general dates, seasons, and bag limits only. For complete details be sure to consult the official synopsis available about September 15.*



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