

OREGON STATE
GAME COMMISSION
BULLETIN
JULY-AUGUST, 1965



OREGON STATE GAME COMMISSION BULLETIN

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The Cover

These young ladies are very pleased with the fishing on opening day this year at Unity Reservoir. Photo by Robert Borovicka.

BULLETIN HUNTER SAFETY TRAINING PROGRAM

INSTRUCTORS APPROVED

Months of May and June 25
Total to Date 3,434

STUDENTS TRAINED

Months of May and June 1,452
Total to Date 80,806

FIREARMS CASUALTIES REPORTED IN 1965

Fatal 0
Nonfatal 7

RETIREES HAVE LONG SERVICE RECORD

Five Game Commission employees retiring this summer had accumulated a total of 176 years of service. Andrew B. Smith, superintendent of the Oak Springs Trout Hatchery, led the list with a record of 48 years. Everett Moore, Butte Falls Hatchery superintendent, followed closely with 44 years in the hatchery system. Guy Taylor, wildlife conservation aide, had spent 25 years working for the Commission in various capacities. Ted Howell, construction superintendent, and Harry Voss, assistant superintendent of the Wallowa Hatchery, each had 20 years to his credit. John Chambers, assistant superintendent of the Willamette Hatchery, had a 19-year service record. The men were feted at a joint retirement party early in June.

Five employees also received their 25-year service pins at the June meeting of the Game Commission. They were: Len Mathisen, regional supervisor; John Dimick, in charge of service and supply; Ross Newcomb, personnel officer; William Pitney, water resource analyst, and Guy Taylor, wildlife conservation aide.

RETURN TROUT TAGS

Anglers fishing for searun cutthroat trout in the Siuslaw and adjacent rivers are requested to watch for and return tags found on the fish.

Please note the tag number, date, catch location, and size of the fish on the report and mail to the Oregon State Game Commission, Division of Wildlife Research, 303 Extension Hall, O.S.U., Corvallis.

OREGON HOST TO TWO MAJOR CONVENTIONS

The 55th annual conference of the International Association of Game, Fish and Conservation Commissioners and the 95th annual convention of the American Fisheries Society will be held in Portland (Hilton Hotel) this September. It will be the first meeting in Oregon for each group.

The International Association, which meets on September 20 and 21, represents the fish, game, and conservation departments of the United States and Canada. President this year is L. P. Voigt, director of the Wisconsin Conservation Department. The group will be welcomed by Governor Mark O. Hatfield at its opening session.

Participating in the program are representatives of the Canadian Wildlife

SMALL GAME HEARING ON AUGUST 9th

Regulations concerning seasons, bag limits, and methods of taking upland game, waterfowl, and furbearing animals will be considered by the Game Commission at its hearing on Monday, August 9. The meeting will convene at 10 a.m.

The general public is invited to submit recommendations personally or by mail.

Final regulations will be adopted for upland game and furbearers after all recommendations and information have been considered. Waterfowl regulations will be determined after notice is received from the federal government of the framework within which dates and bag limits for Oregon may be selected by the Game Commission.

Regulations for doves and bandtailed pigeons will be announced the latter part of July by the U.S. Fish and Wildlife Service. States are asked to select open season dates within a prescribed framework.

SHOOTING RANGE OPEN TO PUBLIC

Hunters will be glad to know that the Multnomah County Sheriff's Kelly Butte shooting range again will be made available to the general public this summer.

Located at 95th and S.E. Powell Streets, the range will be open from noon until 6 p.m. each Saturday and Sunday until after the opening of the hunting season this fall, according to Sheriff Donald Clark.

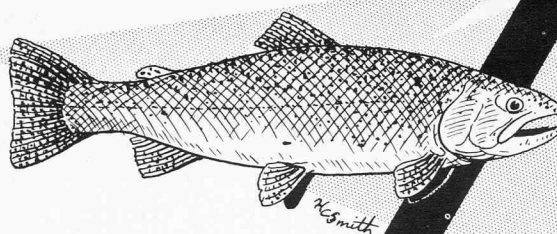
A fee of fifty cents per gun will be charged. Proceeds will be used to provide covered firing points and other improvements to facilities.

Service; Mexico's Wildlife Department; Wildlife Management Institute; National Wildlife Federation; Audubon Society; Department of the Interior; Weyerhaeuser Corporation; Colorado Department of Game, Fish and Parks; California Parks Department, and California-Oregon Recreational Development Association. "The Place of Fish and Wildlife in the National Outdoor Recreation Program" will be the subject of one panel discussion.

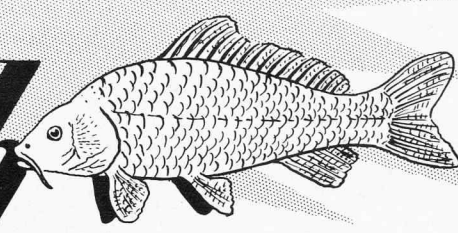
The American Fisheries Society sessions will be on September 23 and 24 and will feature an international discussion of world fisheries and the law of the seas, with particular emphasis on the proposed 12-mile limit. President of the Society is George Eicher, aquatic biologist for Portland General Electric Co.

The two organizations will participate in joint field trips on September 22.





Trout for trash



By Robert L. Borovicka, Coordinating Biologist

ADD THE EQUIVALENT of 75 new fishing lakes or reservoirs and approximately 2,300 miles of trout water to the State's recreational assets and you are bound to shorten the time between strikes. The Oregon Game Commission's program of trading angler-rejected fish for the trout and pan fish he wants and can catch has been a lift to angling in Oregon. Some of the lakes or reservoirs did not turn out exactly as expected, but over the years the majority of treated waters have provided good to excellent fishing where there has been none.

Let's take, as two examples, Diamond Lake and then a smaller water, Morgan Lake in northeastern Oregon. The 1954 treatment of Diamond Lake with powdered rotenone to remove its rough fish populations was one of the first large scale projects of this kind in the United States. This lake was formerly a top-trout water in Oregon. The fishery had been reduced to a sad state due to the prolific Tui chub introduced from Klamath Lake. Nine years of creel census since removal of the chub have indicated a catch of 965,000 pounds, or 487½ tons, of trout caught by anglers. The total catch has averaged over 53 tons of fish each season. The 1964 season was the highest on record, with 115,500 angler trips accounting for a catch of over 416,000 rainbow trout that weighed approximately 171 tons. This one year's catch is equal in weight to the total average annual sport catch of spring chinook salmon on the Willamette River plus the annual steelhead catch in the Alsea, Wilson, and Trask

Rivers. The average annual stocking cost of Diamond Lake is less than \$7,000.

Sixty-five acre Morgan Lake at the outskirts of La Grande was hardly considered fishing water before 1956. Its main claim to fame was a stunted population of yellow perch and bullhead catfish. The few fishermen found at the lake before treatment had plenty of privacy but few fish. The stunted perch and catfish were killed with rotenone in 1956 and the lake was restocked with brook and rainbow trout. Since then the annual angling pressure has been approximately 8,000 angler-days with a catch of over 16 tons of trout in the four-month season.

Irrigation reservoirs usually respond well to chemical treatment. An example is Unity Reservoir in eastern Oregon where 51,625 angler trips produced over 270,000 nice rainbow trout in 1964. The 1965 season is starting good and may be even better.

Stream sections that year after year were scorned by anglers as fit only for squawfish, carp, and suckers suddenly sprouted into top-notch trout waters. The elimination of competition from rough fish species enables trout population to explode by both natural reproduction from tributary streams and by restocking with fingerling and fry. New techniques have been developed so that on some streams the water can be detoxified at specific points and the kill of fish confined to the problem areas.

The present chemical treatment program to remove fish populations from infested waters and restock with game species is not quite the news story it was at the beginning. Through research and

experience, the techniques associated with the work have become a basic management tool of most fishery departments. Problems of species differentiation associated with the chemical treatment increase as waters containing anadromous and other desirable fish enter the total stream habitat.

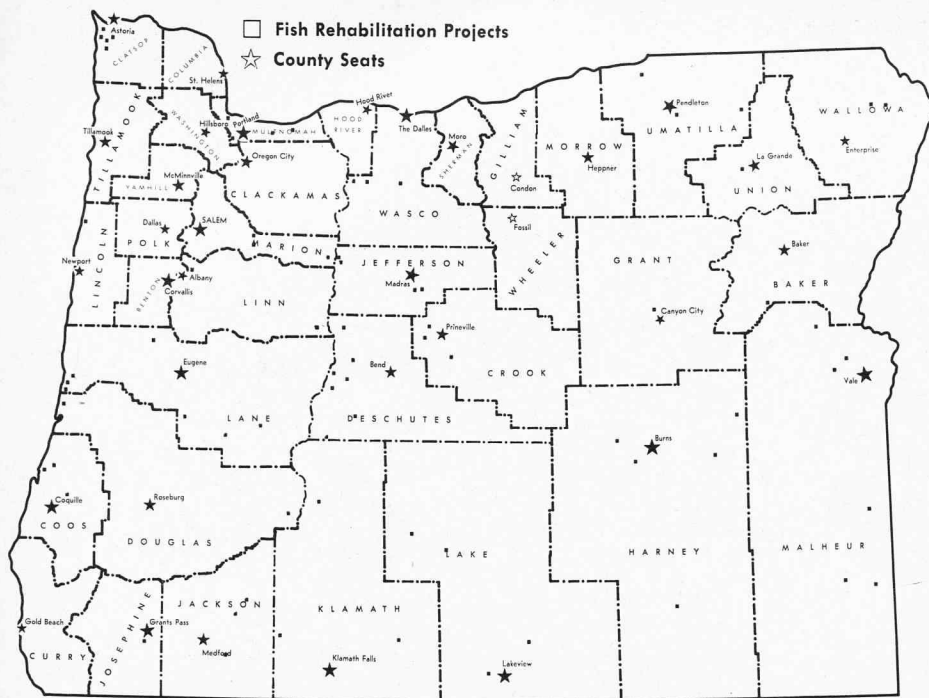
The Oregon Game Commission, since the start of the program in 1941, has rehabilitated over 75 major lakes and reservoirs, at least 140 small ponds, and approximately 2,300 miles of tributary streams and river sections. The Commission, as well as other state conservation agencies, had a difficult selling job in the early days of the program. Now we may receive frequent requests from sportsmen to eliminate undesirable species if the rough fish start to compete with popular and well-established fisheries.

The rehabilitation program in fishery management is not well understood by many of the people who reap the harvest when a bonanza fishery begins. The basic idea is really rather simple. If you have a lawn full of weeds and you would rather have grass, you either plow the yard and plant new grass or kill all the weeds and reseed. In fish management we have only recently started intensive research on selective chemicals to eliminate fish; so it is necessary to plow up the lake, so to speak, and restock with what the fishermen want. Now, as in the past, the majority of fishermen do not want carp, squawfish, suckers, and chub, but they want game fish.

Various formulations of cube and der-

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Locations of Lake and Stream Rehabilitation projects in Oregon.



Trout for Trash

Continued from Page 3

ris root which contain rotenone were some of the first products tried for fish removal and are still the most popular for many reasons. There is a vast background of scientific study on the use of rotenone in insect and fish control. Rotenone itself is harmless to man and warm-blooded animals in even higher concentrations than used in fish control. Fish are killed by the effect of rotenone on the gills and the respiratory system. Rotenone-killed fish can be collected for human consumption on most projects. Possibly, new chemicals will eventually replace rotenone, but at the present time it is the most desirable product for rough fish control. Newer chemical formulations have been tried and some with great success. Recent studies have shown many of these chemicals are very persistent and collect in other aquatic life in lakes. Research is now in progress to completely study the problem.

Each program of chemical treatment of lakes and streams may pose problems peculiar to the land area in which it is situated. Detailed biological and physical surveys must be conducted on each water scheduled for treatment. A great deal of coordination is necessary to initiate a project. Sportsmen, businesses, landowners, recreationists, nature lovers, state and federal agencies, and many other interests must be informed of any

proposed program. It is the Commission's desire that every interest be notified and appraised of contemplated rehabilitation projects.

The elimination of the problem fish in the lake, reservoir, or stream is not the complete answer for good angling. There must be teamwork among individuals, outside agencies, and allied departments of the Game Commission. New access must be provided in anticipation of the shift of recreationists to the area. Campgrounds must be built, boat ramps improved and increased, and sanitary facilities must be provided. Public access must be assured before the project can be approved. All land management agencies, such as the U. S. Forest Service and Bureau of Land Management, are important in the access phase of the project. County, city, and state agencies have been very helpful in planning and constructing new facilities. Many sportsmen's clubs have been active in providing sanitary facilities necessary at these new fishing locations. Commission engineers provide valuable technical assistance.

Biological investigations are necessary to determine the proper number, size, and species of fish to restock. Angler's preferences as to species of fish must be considered, consistent with what the water will produce. Projects must be planned well in advance so the correct size, numbers, and species of fish for restocking can be reared in the hatcheries. The entire operation requires a

team-approach involving all divisions of the Commission.

Spectacular angling success has been obtained with restocking of fingerling rainbow trout of the right size and strain. Brook trout have produced well in several instances where habitat is suitable. Some specialized fisheries have been developed, such as the Atlantic salmon program in Hosmer Lake in the Cascades. The Atlantic salmon have now replaced a heavy population of carp and stunted brook trout.

Mediocre success has been achieved in Oregon by restocking with warm-water game fish. Warm Springs Reservoir in eastern Oregon, after treatment and restocking, produced fairly good bass and catfish angling, but rough fish and yellow perch from extensive tributary systems are starting to dominate the population. Some lakes have had illegal introductions of pan fish but few of these have provided top-quality angling. Devils Lake at Lincoln City is producing bass and perch angling but it is underutilized.

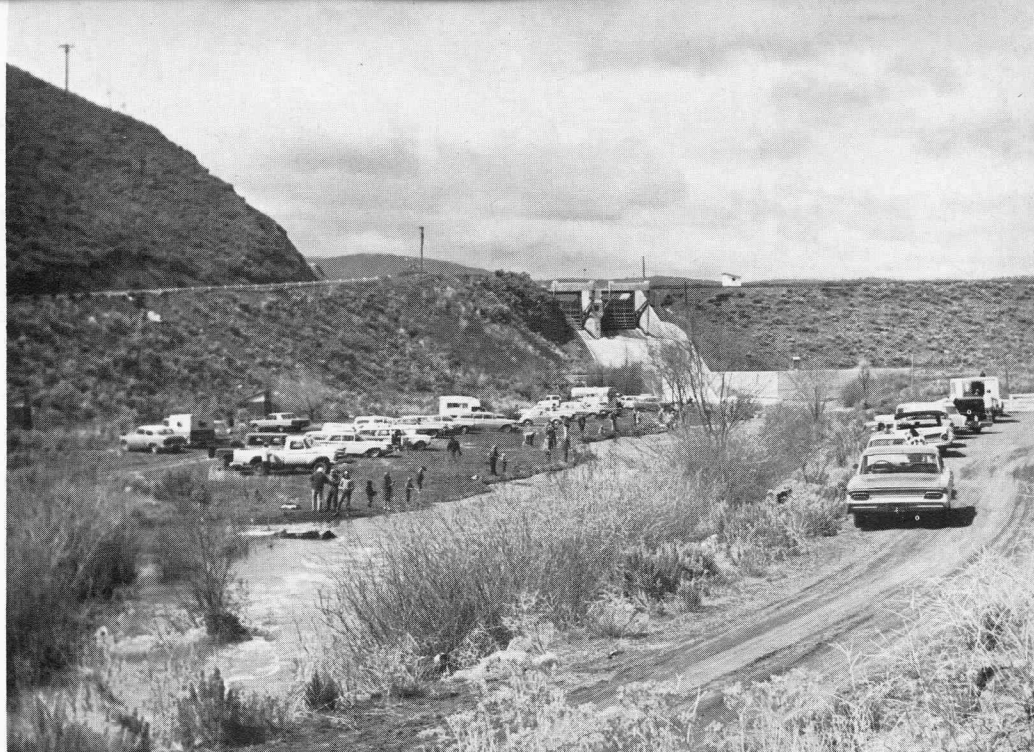
Streams, such as the Crooked River above and below Prineville Reservoir, the John Day River from the town of John Day to Dayville, and the Malheur River and tributaries, are good examples of projects where an entire new trout fishery was developed after rough fish were reduced in number. The Crooked River chemical treatment project was done in conjunction with the building of Prineville Reservoir to bring rough fish under control before the reservoir was filled with water. The Malheur River project in southeastern Oregon was part of the Bully Creek Reservoir rehabilitation work.

It has been the policy of the Game Commission to conduct studies in advance of each project so that individual species of fish would not be in danger of serious reduction in numbers in their entire environment. Fishery biologists have found that it is almost an impossibility to completely eliminate an individual population of fish from a stream environment by using rotenone. Carp, roach, and various warm-water fish that are primarily lake-dwelling species have been successfully eliminated from individual lake systems.

What are the most common rough fish species that cause problems of competition and overpopulation in game-fish waters? In Oregon possibly the Tui chub, *Siphateles bicolor* (Girard), often called roach or chub, is the number one culprit on the most unwanted list. The chub has a bad habit of creeping back into lakes that have been chemically treated. One reason is that it apparently has the ability

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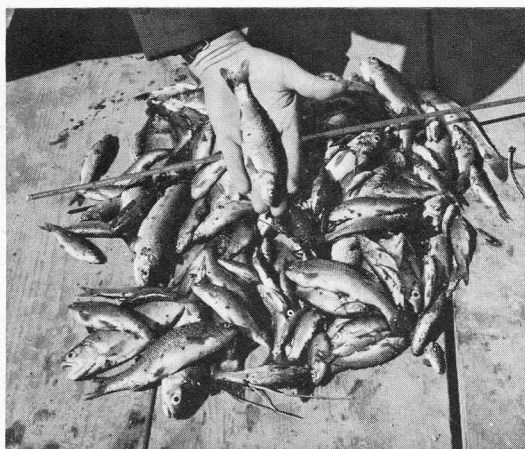
Trout For Trash



Crowds gather at Unity Reservoir in eastern Oregon. This body of water produced over 270,000 rainbow trout in 1964.



Larry Bright, Game Commission biologist, checks a nice catch on opening day 1965 at South Twin Lake. The lake was treated to remove chubs in 1941 and again in 1956.



The presence of Tui chub is an indicator of problems for trout. Annual fish population inventories are necessary to determine possible changes in competition with game fish.



Davis Lake in central Oregon, treated in 1961, yielded this happy Springfield trio some large rainbow on flies opening day 1965. These trout are just over two years of age.

U.S. Highway 20 borders 56 miles of the Malheur River. Over 92 miles of the river contain excellent trout populations that have replaced the rough fish.

Tui chub can be a rough competitor to trout. This photo was taken after the Drews Reservoir treatment project. Photo by Lakeview Examiner



Trout for Trash

Continued from Page 4

to escape chemical treatment by seeking out and detecting areas where fresh water may be seeping into a lake or reservoir.

Other species that are on the most unwanted list are carp, coarsescale suckers, bridgelip suckers, and reddsides— all common species to the entire Columbia River system. In many areas the tributary system to a lake or reservoir may be so extensive that it is impossible to keep all undesirable fish from reinfesting the main body of water. In these cases, the Game Commission has found that it is possible to provide an excellent fishery for two to five years after chemical treatment. It is good management to repeat the project when competition again builds up in the environment.

The sportsmen of Oregon have occasionally been the losers of thousands of dollars when unscrupulous parties have taken it on themselves to stock a species of fish that they feel should provide good angling, or one in which they have a particular interest. Anglers have also introduced undesirable fish species by illegally using live minnows for angling. Few anglers know what species of fish they may be using for bait. In most sections of Oregon it is illegal to use live or dead fish for bait. Some reservoirs and lakes have necessarily been re-treated because of the thoughtless acts of other people.

The problem of reintroduction of rough fish by unthinking persons is well illustrated by the table on South Twin Lake showing results of the annual population studies by nets and the buildup of Tui chub after introduction. South Twin Lake was first treated to remove chub in 1941. They were again introduced in 1955, and the lake was re-treated in 1957. No chub were found until 1964, and now the population is climbing.

**South Twin Lake, Deschutes County, Oregon
Fish Population Inventory by Nets, 1958-65
Fish Removed with Rotenone, 1956**

Year	Species of Fish		Percent of Catch
	Rainbow	Chub	
1958	20		100
1959	188	0	0
1960	85	0	100
1961	85	0	0
1963 ¹		0	100
1964	45		0
1965	74	1	99
		337	18
			82

¹Roach observed for the first time since treatment.

What are the financial considerations in conducting the program? Since 1941 the Game Commission has expended

approximately one-half million dollars on rough fish control.

Improved angling due to chemical treatment not only provides a fine new fishing hole for anglers, but other interests also may be affected. Whole communities suddenly find themselves in the midst of a recreation boom after waters have been rejuvenated and the anglers move in for the reward. Resorts that had boats, cabins, and other facilities that were idle, suddenly found they could not handle all the new business. The frenzy of opening weekend on a lake that starts to produce after chemical treatment is something to behold. Possibly the only bad thing about providing a new fishery in a lake or stream is the loss of privacy. The magnitude of camping and general use on the lakes is a reflection of the quality of sport fishing.

No attempt has been made to assess the overall economic benefit of the program. The success in Oregon, nationally, and for that matter internationally, certainly indicates a continuation of population control in fisheries management. We do have reliable statistics from a number of lakes where studies have been conducted to determine total catch and angling pressure. Diamond and Morgan Lakes and Unity Reservoir were mentioned as examples at the beginning of this article.

One of the most important problems in the expansion of chemical treatment in the Northwest is the mixing in most of our streams of salmon and steelhead and other anadromous species with rough fish populations. Temperature separation of the species during summer and fall months and the use of detoxification stations during treatment have made some projects feasible. A case is the John Day River project in eastern Oregon where both temperature and detoxification stations were used effectively. Research is now being conducted in the search for specific chemicals or biological controls that may permit reduction of individual undesirable populations of fish.

Intensive survey and investigations of some waters have revealed more information on the distribution of individual species of fish and how they might best be controlled. Small ponds in Oregon have been detoxified within a matter of days so that fish could be restocked immediately. Rotenone has been used to control competition and predation in steelhead and salmon pond-rearing research. Medco Pond in southern Oregon has provided some interesting facts on competition from undesirable fish. During the first year of operation following an unsuccessful elimination of bullhead catfish and after a stocking of 114,000

steelhead fry, the pond produced over 1,000,000 small catfish that weighed 16,000 pounds. A total of only 82 pounds of steelhead smolts was recovered. Intensive chemical treatment after drawdown each year has now provided almost the entire production in the fish desired. Bullhead catfish have been eliminated from the pond by systematic annual chemical treatment with rotenone. The pond now produces approximately 110,000 steelhead smolts annually. The unusual success of the rearing program at Medco Pond is an indication that steelhead and salmon production is primarily related to the complete removal of competitive fish even though other factors contribute to mortality of fry.

As techniques are improved, it is felt that from experimental work done in the John Day system, anadromous fish-rearing habitat can also be restored and survival increased due to the elimination of competition among species of fish. It has been demonstrated that the young of steelhead and salmon may rear from the fry stage up to the time of migration in waters where the competition has been eliminated. Before the elimination of competition, few, if any, fry reared in these waters.

Partial rough fish control projects have seldom been successful. Even though it has been tried many times, it appears impossible to completely control numbers and reproduction of some species by eliminating a portion of the population. However, there has been some success with partial control in Oregon. Few people know that two of the most popular trout-fishing waters in Oregon, East and Paulina Lakes, require partial control of roach each year. Without the control program, roach would dominate the available habitat in each lake. The partial control program at East and Paulina has been carried on each year since 1945. A program of determining the feasibility of partial control of yellow perch is now being conducted at Tenmile Lakes on the Oregon coast.

No amount of statistics showing economic values received or the money generated by the fishery can replace the real value of the satisfaction of having a good creel of trout. For the fisherman to say "We had good luck today" is the real test of a program.

Liquid rotenone can be rapidly applied to water with a simple boat bailer.





An Introduction Pays Off

By R. U. Mace, Chief, Upland Game

ONE OF THE OBJECTIVES of game management is to provide hunting, and efforts dating back to 1950 begin paying off this year. California bighorn sheep will be hunted in Oregon for the first time since the species became extinct shortly after the turn of the century. True, only six permits will be issued the first year, but this is a start toward harvesting bighorn rams which are considered by many to be the ultimate big game trophy in the world.

As to why we are having a bighorn season, let's trace the history of this animal and its reintroduction to Oregon. Very seldom is man able to rectify errors of the past, particularly in the case of wildlife which has disappeared.

The California bighorn, sometimes called the lava beds bighorn or rimrock sheep, is a subspecies which is fairly common in the United States and Canadian Rockies. California bighorns originally occupied much of the butte and rimrock area of southeastern and central Oregon, being particularly numerous on the Steens and Hart Mountains. Sheep numbers declined following settlement by white man in the late 1800s and disappeared shortly after the turn of the century.

Fortunately, a remnant population survived in British Columbia, and the Oregon State Game Commission began negotiations in 1950 to obtain some of this

stock for reintroduction. Trapping arrangements began in 1953 following approval of the project by the British Columbia Game Department and its active co-operation in the initial phases of the effort. A trap subsequently was constructed on Riske Creek, west of Williams Lake. At the same time, a 35-acre holding pen was built on Hart Mountain in Lake County to serve as a temporary home until a larger 600-acre pasture could be fenced in.

ON NOVEMBER 4, 1954, the trap was sprung, setting in motion the historic reintroduction of the California bighorn to its native Oregon range. Twenty sheep, including one ram, twelve ewes, and seven lambs, survived a 36-hour trip by truck in fine condition and were released in their new home at 2:30 a.m., November 8. The animals were turned into the adjoining 600-acre pasture following completion of the fence in July.

Reproduction has been good since the original transplant. Animals were first liberated outside the pasture in 1957, and others have escaped since that time to populate adjacent range on Hart Mountain. Most of these animals continue to reside within a 10-mile radius of the pasture. Eleven sheep were trapped and transplanted on the east side of the Steens Mountain in late 1960 and early 1961.

A count continues to be made each year on Hart Mountain to determine num-

bers of sheep. Admittedly, the results are conservative because the area is rough and steep with many pockets difficult to reach on foot. The most recent tally, May 26, revealed a minimum of 116 animals to be present. Approximately 35 were counted inside the pasture while the remainder were seen along the west face of Hart Mountain. Many of these were mature rams.

The Commission feels that the time has come to declare a modest dividend. Thus, sheep hunting becomes another milestone to mark the progress of modern big game management in Oregon.

Bighorn ram trapped at the Hart Mountain pen and transplanted to the Steens Mountains in May, 1962.



How Far Have We Come . . .

"On August 30, Game Wardens Fish & McClees caught five members of the _____ & _____ families in the Tioga Country . . . with the heads, hides and meat of two elk in their possession. Caught with the goods they confessed and got off with the minimum sentence of 30 days and \$200. . . .

"Compare the above sentence, if you will, with some of the \$500 and \$1,000 fines for infractions of the prohibition law. . . .

"The Game Commission and sportsmen, as well as Elks, are thoroughly aroused and future penalties promise to be most severe."

B.P.O.E. Bulletin 1160
Marshfield, Oregon
October 1924

* * *

"A fawn deer is pretty, yes; and cunning also, and with a baby-like confidence in the soothing stroke of a benefactor are almost irresistible to those who may discover them in the wilds; but do not thoughtlessly cultivate them.

"One of the most annoying things the Game Commission has to contend with during the spring and summer of every year is the taking of fawn deer. . . ."

The Oregon Sportsman
January 1925

(Ed. Note: A perpetual problem—the words are just as true 40 years later. Fawnkapping is still a problem and now is illegal also!)

* * *

"The resolutions passed at the recent meeting of the State Sportsmen's Association are of particular interest at this time and some of the more important ones are:

A resolution in favor of a uniform three dollar angling license fee for residents and non-residents alike;

The annual license fee of \$25 for aliens;

The extension of the present license law to apply to women; . . ."

The Oregon Sportsman
November 1924

Oregon State Game Commission Bulletin

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

BIG GAME SEASONS

Species	Open Season	Open Area	Bag Limit
Deer	Oct. 2 - 24	West of Cascade Summit and Keno Unit	1 having not less than forked antler
	Oct. 2 - 24	All other Units east of Cascade Summit	1 with visible antlers
*Deer Unit Hunts	Oct. 16 - 24	Management Units as specified	1 deer
Roosevelt Elk	Oct. 30 - Nov. 14	Area west of U. S. Highway 97	1 with antlers longer than ears
Rocky Mountain Elk	Oct. 30 - Nov. 28	N.E. Area	1 with antlers longer than ears
	Oct. 30 - Nov. 28	S.E. Area	1 elk
*Elk Permit Hunts	Nov. 13 - 28	N.E. Management Units as specified	1 elk
**Antelope	Aug. 14 - 18	S.E. Oregon Units as specified	1 adult buck having horns longer than ears
Bear	Aug. 14 - Nov. 30	Areas in which classified as game animal	1 bear
	Entire year	Rest of state	No limit
*Bighorn Sheep	Sept. 11, 12, 18, 19	Portions of Hart Mountain	1 ram with $\frac{3}{4}$ curl
**Mountain Goat	Aug. 28 - Sept. 6	Eagle Cap Wilderness Area	1 adult goat

*Free permit required in addition to general tag.
**Controlled hunt tag required

Commission Adopts Regulations

Big game seasons set for 1965 by the Game Commission at its June meeting generally follow the same pattern as last year.

New this year, however, is the issuance of a small number of permits for bighorn sheep and mountain goats. Five tags will be issued for hunting of mountain goats in the Eagle Cap Wilderness Area of the Wallowa Mountains from August 28 to September 6. Bag limit is one adult goat. Six tags for bighorn sheep will permit hunting in the Hart Mountain area. The first three tags issued will be valid on September 11 and 12 and the second three on September 18 and 19. The bag limit is one ram with not less than $\frac{3}{4}$ curl and each hunter will be accompanied by a Game Commission representa-

tive. Application for bighorn sheep or mountain goat tags may be made on a post card, furnishing name, address, hunting license number, and choice of season. The fee is \$10 per tag but do not submit fee with application.

Deadline dates for filing applications for controlled season tags and unit deer and elk permits are shown in accompanying box. The controlled hunt application form (available at license agencies) must be used for applying for antelope or controlled deer hunt tags. Application blanks for the free deer and elk permits are issued with the general deer and elk tags.

For more detailed information, consult the official synopsis of big game hunting regulations. Copy may be procured at license agencies and Game Commission offices.

Schedule of Closing Dates and Drawings for Big Game Tags and Permits

Antelope, Bighorn Sheep, Mountain Goat Tags:

Closing date for applications, 5 p.m., July 20. Public drawing, 10 a.m., July 28.

Deer Permits:

Closing date, 5 p.m., August 3. Public drawing, 10 a.m., August 11.

Elk Permits:

Closing date, 5 p.m., August 23. Public drawing, 10 a.m., August 27.

