



2ND WATERFOWL SEASON OPENS DECEMBER 19

Bird hunters are provided the final chance to use their shotguns this year when the second half of the waterfowl season opens at noon on December 19. The season will close January 7 and those desiring to hunt after December will be required to purchase a 1950 hunting license. It will not be necessary, however, to acquire a new duck stamp as the stamps are issued on a fiscal year basis and do not expire until June 30.

"Bluebird" weather during the first half of the split season did not promote good hunting and hunters are hopeful of better luck during the second season.

1949 DEER KILL

Although approximately one-half, 80,892, of the 1949 deer kill return cards had been returned to the Game Commission by November 9, these returns indicate a substantially greater kill of deer this year than in 1948. A total of 33,644 buck deer were reported taken, 43,453 or 56 per cent of the hunters did not kill a deer and 3,795 tagholders did not hunt. On November 9, 1948, a total of 120,066 hunters had reported and only 30,101, or 25 per cent of them had bagged deer.

Reports from hunters and the Commission's field agents reveal that Oregon's deer hunters have again taken a heavy toll of protected doe and fawn deer this year. This increased tendency to shoot first and look afterwards may be partially attributed to the fact that with Oregon's rapidly expanding human population, a greater number of inexperienced hunters are afield; however, this certainly is no excuse.

Many corrective measures have been suggested but by far the most common is the suggestion that the bag limit allow the harvest of any deer and, in that way, prevent the waste of protected animals.

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Economic Aspects of the Wildlife Resources

By P. W. SCHNEIDER, Assistant State Game Director

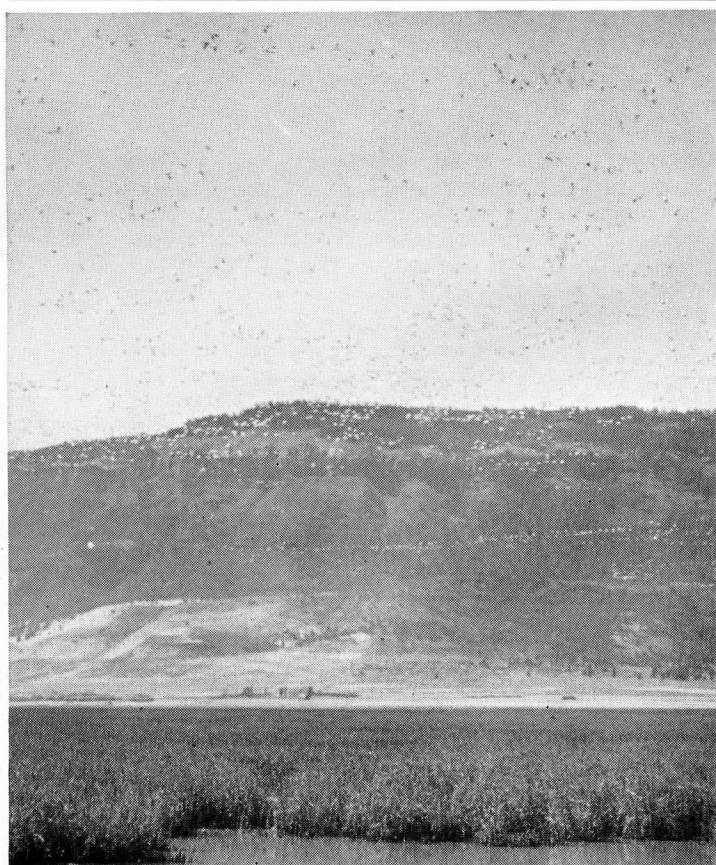
To any traveler in the State of Oregon on the opening day of trout season or the few days preceding the opening of the deer season, it is obvious that some stimulus is taking many of our citizens away from home in a spontaneous exodus. This is a phenomenon witnessed periodically throughout the year coincident with opening of some particular hunting or angling season on bird, mammal or fish. It is a scene witnessed in increasing magnitude each year, until today well over 500,000 Oregonians devote many days at this activity.

Aside from the fact that a lot of people go hunting and fishing, little objective consideration is given to what is actually

involved and represented. Foremost, of course, is the recreational and health values derived from such activity. Unfortunately, however, these and similar factors are of such an intangible nature that reducing them to a common yardstick for appraisal is difficult. We seem to have been reluctant to use any other measurements for evaluation. Perhaps this has been best because only the individual angler and hunter knows in his own mind and heart the real value of this heritage. In the face of modern times it is not fair to the resource, however, to overlook other values if such a procedure will aid in maintaining the resource.

We are keenly aware of other industries and commodities of various kinds. Oregonians are dependent upon and proud of the varied and valuable crops which are each year harvested throughout the state and which channel into our economy the exchange of money and goods, making our standard of living comparatively high and satisfactory. We recognize such items as timber and potatoes, wheat and pears, even lily bulbs and Cascara bark, as commercial entities important to our economic existence and standard of living. Not only the harvested crop but the activities

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Snow geese swarm up from a rest lake on the Summer Lake Management Area in Lake county.

☆ THIS AND THAT ☆

The 1949-50 Oregon Game Code is now available for general distribution from the office of the Game Commission. The code is a compilation of game laws and related acts passed by the legislature. It does not include regulations adopted by the Game Commission, which are printed separately in the Hunter's and Angler's Guides.

* * *

The open season on sage grouse in southeastern Oregon during the first five days of October appears to have been very popular and successful. At first there had been some opposition to the late season by local residents who claimed that the grouse were not palatable after August. Field agents, in questioning hunters during the season, learned that the young birds were still palatable in October and almost all hunters contacted were satisfied with the time of the year.

* * *

The eastern brook eggtake at Paulina and East Lakes is exceeding the anticipated figure. More than four million eggs had been taken early in November and it appeared that the figure might reach five million by the time the operations were completed.

* * *

Elk hunters are asked to send in their report cards as soon as they have completed their hunting for the year. With the exception of the extended season which remains open until December 31 in a specified area in the vicinity of Baker, the eastern Oregon season closed on November 20. Early returns from hunters indicate that the heaviest kill had been made in Umatilla county.

* * *

Poisoning of trash fish in Unity Reservoir on October 22 appears to have been successful as no fish have been caught since that time in gillnet settings carried out by fisheries field agents. The small tributary streams also were cleaned out so that there would not be a source of trash fish left to re-establish a population in the reservoir. Trout will be stocked in the reservoir sometime this coming spring or summer and it will be left closed to angling until the fish reach a catchable size.

* * *

Construction of a low dam and grill in the outlet of Big Lava Lake near Bend was recently finished by the fishway construction crew of the Game Commission. This lake, the scene of recent trash fish control work, is connected by an intermittent stream with Little Lava Lake which still has a population of trash fish. The low dam with a grill was constructed to keep these trash fish from migrating back into Big Lava Lake during the spring run-off. A similar installation was placed in the outlet of Little Cultus Lake, which also has been cleaned of trash fish.

Construction Projects Completed

The program for the enlargement and modernization of the Roaring River trout hatchery in Linn county, started a year and a half ago, has now been completed. Work included construction of twelve new rearing ponds and the building of spawning pens to facilitate the taking of eggs from brood fish. One section of ponds has also been designed and constructed for treatment ponds to make it possible to isolate any infected fish. The hatchery house has been completely renovated and modernized, a new pipeline installed and large cold storage building constructed.

At the Wallowa trout hatchery, a \$20,785.00 construction job was recently finished. It included the construction of two large ponds 20 by 100 feet, seven smaller ponds and one new dwelling. Still more pond space is being planned for this hatchery which provides trout for a large area in the eastern part of the state.

The short-eared owl is so called because its ear tufts are barely visible.

Oregon State Game Commission Bulletin

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ANGLING REGULATION HEARING IN JANUARY

The annual hearing in regard to angling regulations will be held by the Oregon State Game Commission on Friday, January 13, 1950, at the offices of the Commission in Portland. At this time, the 1950 seasons and bag limits for the taking of game fish will be considered.

Trout Liberations by Pack String Completed for Season

The string of pack mules used by the Oregon State Game Commission to stock the remote lakes of the state finished up the season's work late in October. Operation had been continuous since the last week of June. During the season a total of 434,000 eastern brook trout and 440,000 rainbow trout had been stocked in Cascade lakes which are not reached by road. Several headwater streams also received plantings. The fish varied in size from two to three inches in length.

Since much of the work has been taken over by the airplane, the pack string concentrated on the more isolated lakes. Forty-five lakes not previously planted were stocked for the first time. The trout were supplied from the Klamath, Fall River, and Wizard Falls Hatcheries of the Game Commission. The area covered roughly ranged from the headwaters of the Rogue River to the Mt. Jefferson country.

Greater numbers of fishermen were observed in the wilderness areas this year than in any time in the past. The fishing success varied with the weather and the locality, but from most interviews, it seemed that anglers had had excellent results in most lakes. The largest fish checked by Game Commission personnel in the wilderness was a rainbow weighing 5½ pounds and measuring 26 inches in length. This fine rainbow was taken in the Taylor Burn area.

December-January Calendar

Salmon and Steelhead over 20" — open both months.

Trout, Salmon, Steelhead (12" minimum) — open both months, certain coastal waters.

Spiny-ray Fish — open both months.

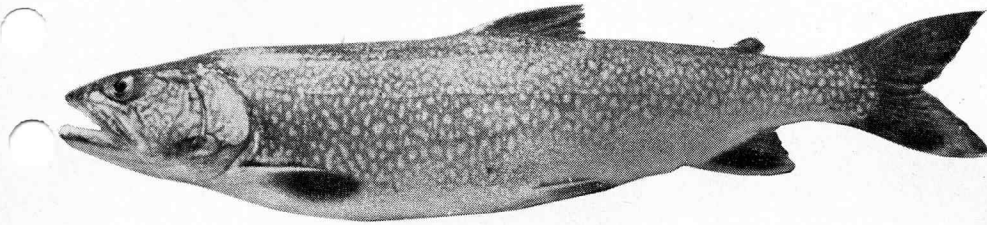
Predators — open both months.

Elk — extended season in Baker area closes December 31.

Waterfowl — Noon Dec. 19-Jan. 7.

Mink, Muskrat, Raccoon, Otter — open both months.

NOTE: For exceptions consult Angler's and Hunter's Guides.



A lake trout.

Lake Trout in Odell Lake

The Great Lakes trout, or as it is known in the West, the mackinaw, was planted in Odell lake more than thirty years ago, but the fish has not been able to maintain itself in sufficient numbers to make for good fishing.

Circumstances of recent years have produced a larger catch than usual, and much enthusiasm among fishermen has been engendered. An effort to make the lake produce rainbows in any quantity over the years has failed. It is only the expert angler who can bring the rainbow to the creel in Odell.

We recognize that the fish most suited to any body of water should be planted therein, if it will not be detrimental to other species, is a food fish, and will provide sport. In view of the great population of minnows, suckers, and whitefish which amount to lake trout pasturage not now being utilized by the other species in the lake with the exception of the Dolly Varden, the deep cold waters rich in oxygen throughout, the already present lake trout, the enthusiasm with which catches of lake trout are made, the large size attained, and the excellent eating qualities of the fish whether large or small, all point to the need for a larger population.

Since the lake trout broadcasts its eggs instead of burying them as do all other Oregon salmonids, and in view of the excellent success obtained in other parts of the United States with artificial propagation, aiming toward the release of fish over six inches in length, the rearing of yearling lake trout is advocated.

At Odell lake the presence of roach, whitefish, and other species has aided in nullifying the extensive rainbow trout planting which has been carried on for many years. The roach compete with rainbows for living space on the narrow feeding shelf around the lake and control of the roach has not been possible. The deep, cold water over most of the area is not conducive to the growth of rainbows. Fry plants would have to be made in astronomical numbers in order to insure any significant survival and the stocking of large rainbows that could feed on roach and whitefish is not possible nor would it be wise since large rainbows would not be fish eaters necessarily. In addition, the growth of rainbows in the lake is slow, and fry plants would only result in small trout.

In summary, a large population of forage fish is present which is not utilized and preys in part upon the young of all trout and on the eggs of the lake trout, and competes with young trout for food; a need for a predaceous game fish suited to the water is felt; and the lake trout is admirably suited to the need.

All Oregon Antelope Hunters Report

One hundred per cent returns have been received from Oregon's antelope hunters. Of the 1,000 tag holders, 929 hunted and 586 made a kill. Although only 109 of the group hunted in Malheur County, they had the highest success with 82 of them reporting kills and only 27 Malheur County hunters reporting no kills. Lake County was hunted the heaviest with 304 kills reported and 191 reporting no kills. The reports from those hunting Harney County showed 196 kills and 125 who were unsuccessful. Four of the successful hunters failed to report in which county they made their kill. This gave a total of 586 antelope killed and 343 hunters who were unsuccessful.

The heaviest kill was on opening day with 306 kills followed by 161 on the second day of the season. The success compares favorably with buck antelope seasons in the past and attests to the ability of the hunters in stalking this wary animal.

Results of the season show that it was favorably received by the hunters, and illegal losses were at a minimum. By limiting the kill to bucks, the Game Commission expects to perpetually maintain antelope hunting as a sport in Oregon.

Game Commission To Furnish Sportsman's Clubs with Multiflora Rose Plants

A sufficient supply of multiflora rose is now available to permit a limited free distribution to organized sportsman's groups located in Western Oregon. It is believed that most clubs have members who know of sites where the planting of this living fence would be of benefit to both the landowner and upland birds. If organizations are interested in establishing such a club-sponsored project, it is suggested that the group select planting sites with the cooperation of the landowner. After this is done, the club secretary should notify the Game Commission of its project and request the number of shrubs desired, either 500 or 1,000, along with the date, and place of delivery desired. Plantings of multiflora rose should be made in Western Oregon from November first through the winter with the exception of freezing weather.

The Game Commission staff is continuing its practice of making plantings on farm lands at the owner's request; however, it is felt that sportsman's club-sponsored projects will present an excellent opportunity through cooperative habitat improvement work to bring the farmer and the sportsman to a closer understanding of their mutual problems.

If the technical assistance of a Game Commission employee is desired, every effort will be made to meet such requests.

HAVE YOU RETURNED YOUR ELK REPORT?

Beaver and deer were slightly out of their usual roles in carrying out some of their activities in Grant county last month, according to damage complaints received by the district agent. From Ritter Hot Springs came a report that the beaver in the area were not only cutting fruit trees but were trailing down to the hot springs and taking baths in the hot water tubs constructed for human use. At the same time the agent received another complaint of reported activities of deer damming up an irrigation ditch. The district agent is wondering whether the deer are helping out the beaver while the latter take the cure for rheumatism.

JANUARY SUNRISE AND SUNSET TABLE

Sunrise and sunset tables for the first seven days of January, which are not included in the 1949 hunting synopsis, are listed below:

JANUARY	Western Zone		Central Zone		Eastern Zone	
	Sunrise	Sunset	Sunrise	Sunset	Sunrise	Sunset
1.....	7:53	4:37	7:40	4:35	7:29	4:19
2.....	7:53	4:37	7:40	4:35	7:29	4:19
3.....	7:53	4:38	7:40	4:35	7:29	4:19
4.....	7:53	4:39	7:40	4:35	7:29	4:19
5.....	7:53	4:40	7:39	4:36	7:29	4:19
6.....	7:53	4:41	7:39	4:37	7:29	4:20
7.....	7:53	4:42	7:39	4:38	7:29	4:21

Hunting and Fishing . . .

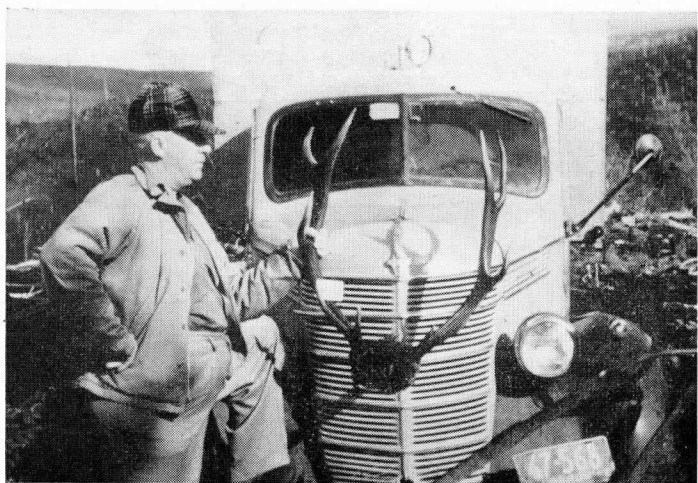


Mule deer on the range in Harney county.

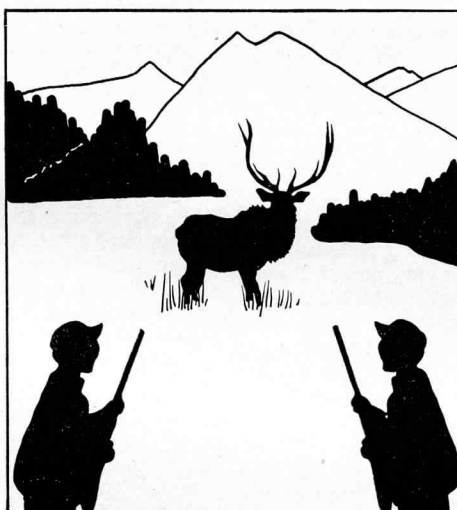


1948

164,642 hunters
killed
37,454 deer.



A western Oregon elk hunter and trophy.



1948

22,380 hunters
killed
5,523 elk.



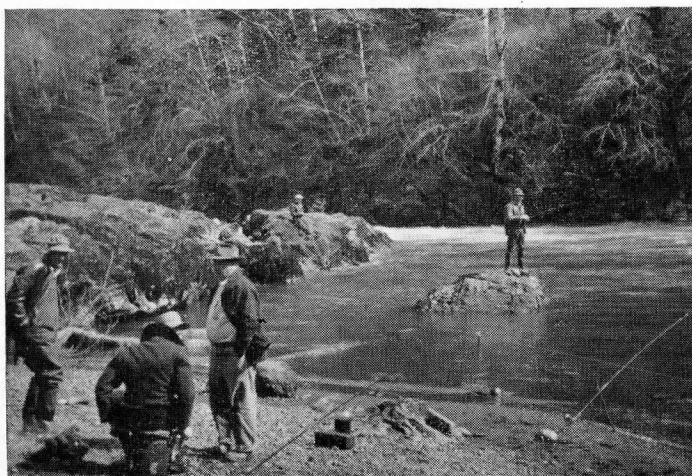
Summer Lake waterfowl hunters check out.



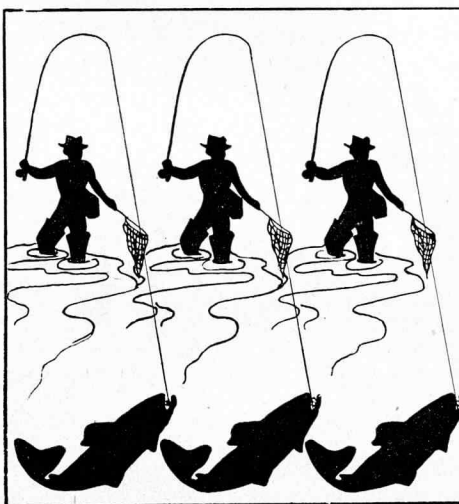
1948

65,947 duck
stamps sold
in Oregon.

. . . It's a Big Business!



Steelhead fishermen on the Trask River.



1948

269,918 angling
licenses issued
in Oregon.



Anglers' cars crowd East Lake shoreline.



1948

East Lake
22,850 anglers
caught
17 1/2 tons fish.



McKenzie River white water boat parade.



1948

McKenzie River
4,700 anglers
(estimated)
caught
27,837 fish.

Economic Aspects of The Wildlife Resources

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associated with the production, harvest, processing and disposition of these and other crops affect their value. Thus we clearly recognize most commodities produced in the state from an economic standpoint.

The concept that more than 500,000 consumers are engaged annually in harvesting a wild crop, thus making a substantial contribution to the state's economy, is rarely heard in connection with the industry of hunting and fishing. Traditionally, the sports fisheries, fur and game resources have, as a group, been relegated to a position of recreational assets with little or no consideration given to the possible economic aspects thereof. The term recreational when applied to a commodity, although of a very significant value to a state, is nearly immeasurable from a monetary standpoint. The consideration of a resource solely or chiefly from this standpoint tends to minimize the complete value of that resource. That there are substantial and important economic aspects is apparent but not sufficiently recognized.

Economic Appraisals Needed

The failure to appraise fisheries and game resources in their full worth is probably occasioned by three factors. First, we have insisted in America that no toleration of a commercial taint be permitted to hunting or fishing. We know that those values associated with sentiment and just plain enjoyment are immeasurable and exceed the dollar sign in value. Second, we have by tradition looked on these resources with a philosophy of exploitation rather than sustained and orderly utilization. Not until comparatively recent years have we determined the annual harvestable crop on the basis of inventory and production. We need to recognize more fully a simple but basic fact that these resources constitute annual crops of which the magnitude of harvest depends upon annual yield. This will reveal units of production upon which values can be placed. Third, there have been few economic appraisals of these resources completed to call to the attention of the consumer (angler and hunter) the broader and more complete perspective of the full worth of these products. Recent periodic considerations of the economic aspects involved indicate that before the passing of many more years there will be a more thorough study of these aspects as well as the less tangible but important recreational aspects, thus resulting in a fuller appreciation of these commodities.

One of the first procedures necessary for an overall appraisal of the economic value of a given commodity is the knowledge of the annual harvested crop. With wildlife crops, this has been difficult to achieve. Even now we have measurements of annual harvests on only part of

our fisheries and game crops. Here and there, however, a bit of information is becoming available which lends itself to this type of analysis. As fact finding procedures are carried on and sufficient continuity of such procedures are adhered to, more and more information of this nature will become available.

Value of Deer Harvest

A number of states have conducted economic studies of the value of their deer herds. In most instances the values indicated from these studies are impressive in terms of strictly a dollars and cents value. Although we have conducted no such evaluation as yet, we know that in 1948 about 165,000 hunters participated in harvesting approximately 40,000 head of deer. In terms of meat alone, this crop

by the average deer hunter in one season. These figures have varied from about \$50 per year to better than \$117 annually. Although we do not know what the average Oregon hunter spends in comparison to other states, it is at least fair to assume, until figures are available, that our expenditures will fall some place in between these two figures. To carry it even further, however, and until actual figures are available, let us use the very minimum figure of \$50 for a quick calculation of the average expenditure for the 165,000 deer hunters in 1948. We find this represents \$8,330,000.00 spent in a period of less than one month as a result of only one of our major game resources. We know, too, that the national average value is placed closer to \$100 instead of \$50. Further, if capitalized at 4 per cent, the value of Ore-



Cars of hunters parked at a commercial pigeon shooting stand in the Willamette Valley. Landowner collected a daily fee from each hunter for the privilege of shooting on his land.

represents at least 4,000,000 pounds of nutritious food. We know, however, that the poundage of meat does not alone represent the total economic picture associated with the annual harvest of our deer crop. Each of those individuals who engaged in the deer harvest, a figure approximating 165,000, expended considerable money as a result of the deer resource. This money, although its expenditure was occasioned as a result of the opportunity to harvest a deer, was channeled into many segments of our commerce. Numerous and varied business enterprises derived some benefit as a result of this 20-day period of harvesting an annual crop. Food, clothing, automotive supplies, camping equipment, transportation, liquor, hunting accessories, processing of deer products and numerous other hunting accessories indicate to some extent the economics involved.

Recent studies in several states have been directed at determining what is spent

gon deer herds will reach substantial economic proportions.

This same pattern of economic values, in varying degrees of magnitude, could roughly be outlined for all categories of wild crops of sports fisheries, wild caught fur and other game resources.

Sport Fisheries Values High

As examples, we can turn briefly to the fisheries side of the picture. Oregon is blessed with approximately 15,000 miles of fishable waters and over 1,000 lakes supporting intensive sports fisheries. There is some angling in at least part of the state 12 months of the year. We have no statewide measurement of the annual harvest of any category of the fishery resources, but a few measurements and figures available pertinent to the picture indicate that in the sport fishery even greater economic values are present. To begin with, there were considerably more consumers (anglers), 269,918, in 1948 who

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have had many more months available when they can utilize the resource than with a game resource. This lends itself to an expenditure of a greater amount of money by virtue of more opportunities to participate. Little consideration is given to the capacities of our waters to produce fishery products, yet this fact is part of the picture of the sports fishery industry. From one lake there has been harvested in a single short season a trout crop of 75 pounds per surface acre. This rate of annual production compares favorably with the rate of annual beef production on some pasture lands. In addition, the accepted national average value placed upon a pound of harvested trout has been \$3. This then would indicate a per acre cash value of \$225. In another lake during a recent three-year period 51,650 anglers removed 66,510 trout weighing 78,450 pounds, or nearly 40 tons of fish flesh. The location of these lakes are such that considerable travel and equipment is necessary in order to utilize the fishery. The intensity of use of our waters for fishing has been increasing at an incredible rate during recent years. This intensity of use is not confined to the two cited above but is apparent along all the miles of streams and thousands of acres of lakes and estuaries throughout the state. The foregoing figures are merely cited because of their availability and to indicate roughly the level of harvest plus intensity of use of trout waters.

Financial Investments Result of Resource

It may be assumed that even though large sums of money are probably expended as a result of these resources, most of it goes for those items directly associated with harvesting the fish and game, such as tackle, ammunition, and so on. National surveys conducted by federal agencies indicate that on the contrary less than one-fourth of every dollar expended as a result of the resource was spent for those types of items.

Automobile travel along any of our popular streams or to Oregon's lakes reveal capital investments in accommodations which were made almost solely to cater to the angler. Lodges, cabins, boats, docking facilities and all the attendant accoutrements associated with fishing are represented in numerous private enterprises along the thousands of miles of streams and shores throughout the state. Few towns can be located in which a sporting goods store is not present, or if absent, the handling of sporting goods is part of some other merchandising business in the community. Along such streams as the McKenzie and the Rogue, many of the private homes have been located there because of the fishery resource. We could proceed to many additional examples of manifestations of the economics associated with the fisheries

and game resources. There are concrete and substantial examples which can be added to the recreational and health values. These are beginning to emerge in our concept of the resource to a greater extent each year.

It is realized that the above statistics concerning very sketchy indications of harvested wild crops are perhaps uninteresting to most of us who enjoy a hunting or fishing trip. They are cited, however, to point out some of the pertinent facts frequently overlooked in appraising an existing resource which we are too often prone to accept and utilize as inconsequential. The fact that the availability of such resources for public use induces over 500,000 people in our state to expend money in its harvest is important economically.

Unfortunately, we do not as yet have available information adequate to indicate the magnitude of each fishery or other unit of the resources to make total appraisals on a statewide basis. It is information long needed and being secured. It is probable that as the information becomes available and the cold statistics are totaled, we will more fully appreciate that in these wild crops we have an industry of far greater proportions than ever realized. Recent statistics estimate that 25,000,000 American sportsmen spend over 4 billion dollars annually in enjoying the sport of fishing and hunting.

It is not the intent of this article to over-emphasize the monetary values of our wildlife resources. The recreational, social and health values, if measurable by some commonly understood yardstick, would be formidable and would far exceed the dollars and cents value. However, the monetary aspect, understood by all of us, is one which is usually overlooked when associated with such a crop. We do not propose to minimize or forget all the intangible values derived therefrom. There will be advantages to the resource, however, to pursue and develop these other perspectives which seem necessary in our modern economy and philosophies.

Tiny green plants grow inside some one-celled animals, using up the waste gas produced by the animals. The plant, in return, produces oxygen and sugar, which helps the animal in which it grows to live.

YOUR ELK REPORT — IS IT IN?

Do you want to receive this
BULLETIN each month? If so,
send in your name and address
and you will be placed on the
mailing list free of charge.

EXPENSES OF AVERAGE 1948 N. Y. DEER HUNTER

FOOD, LODGING AND GUIDE...	\$ 26.05
Camp supplies or board (\$15.29), lodging (\$9.49), guide, fees (\$1.27).	
LIQUOR AND BEER.....	3.99
Above normal expenditures.	
CAMPING EQUIPMENT.....	13.67
Picnic outfit, bedding, axe, tent, lantern, first aid kit, etc.	
TRANSPORTATION	14.95
Gas, oil, tires, chains, depreciation on car. Computed at 7c per mile travelled. (Bus, rail, plane fare 9c per man).	
HOBBY	3.51
Camera and film, field glasses, etc.	
LICENSE	1.25
Special 1948 resident deer license.	
FIREARMS	30.26
Rifle or shotgun, ammunition, scope, case, cleaning rod, etc. New or depreciation costs.	
ACCESSORIES	3.15
Carried by hunter; map, compass, whetstone, matchbox, whistle, tobacco, laces, knife, dragging rope, etc.	
CLOTHING	18.58
Everything carried in personal duffle bag.	
DEER PRODUCTS.....	2.57
All expenses after deer has been killed; taxidermy, tanning, gloves, butchering, storage, etc. (pro rata expenses for 37,683 deer).	
TOTAL PER HUNTER.....	\$117.98
(From New York State Conservationist.)	

Several years ago an Oklahoma publication offered a prize for the best comments on two pictures which it published. One picture showed a dilapidated house; the other a washed-out field. It wasn't remarkable that a Cherokee Indian won the prize with the following philosophical essay on man and his land:

"Both pictures show white man crazy. Make big tepee. Plow hill. Water wash. Wind blow soil, grass all gone. Squaw gone, papoose, too. No chuckaway. No pig, nor corn, no hay, no cow, no pony. Indian no plow land. Keep grass. Buffalo eat grass. Indian eat buffalo. Hide make tepee, mocassins, too. Indian no make terrace. No build dam. No give a dam. All time eat. No hunt job. No hitchhike. No ask relief. No shoot pig. Great Spirit make grass. Indian no waste anything. Indian no work. White man heap crazy."

Oregon State Game Commission Bulletin

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Eliza Island Field Day

The third annual field day of the Oregon Cooperative Wildlife Research Unit under the direction of Arthur S. Einarsen was held on November 5 at the Eliza Island Research Center and was attended by a limited number of representatives of the Washington and Oregon game departments, the Research Unit and sportsmen's groups.

Eliza Island, Washington, is a base for the study of upland game and the current work concerns the most accurate tests possible of the various phases of pheasant management, to be followed later by controlled studies of other upland game species.

Each season a different problem is considered. This year's study was an attempt to answer the following question: "Do liberated game farm hens contribute another clutch of eggs after laying the usual complement in captivity, and, if so, what is the yield with natural predation controlled?" On June 4, 1949, 100 hens and 10 roosters from the Corvallis game farm were liberated and the birds were protected as fully as possible from natural predation. The results of the harvest on this year's field day will be compared with those of 1947 when a similar number of birds were released but predation was not controlled. Charitable groups were the recipients of all birds harvested.

The Eliza Island study is unique and is receiving considerable attention throughout the nation. A complete report of the findings will be published in the Bulletin as soon as the study has been completed.



"Last year he returned with one on his fender."

Oregon's apportionment of Pittman-Robertson federal funds for the 1950 fiscal year totals \$250,846.11. To this sum the state must add \$83,615.35, making the total amount available for the program \$334,461.46. Each state's share of federal funds is based upon the area of the state and the number of hunting license holders. The total amount of the federal apportionment for the nation totals \$10,378,538.42.

ELK HUNTERS! REMEMBER TO MAIL YOUR REPORTS

THE YOUNG AND THE OLD OF IT

Animal	Male	Female	Young
Elk, moose, cattle, seal, elephant, giraffe, whale, walrus, buffalo.	Bull	Cow	Calf
Rabbit, caribou, Mule or whitetail deer. . .	Buck	Doe	Fawn
Antelope	Buck	Doe	Kid
Wolves, Coyotes	(?)	Bitch	Whelp, pup, cub
Fox	Dog Fox	Vixen	Whelp, kit
Cats (large)	Tom	Lioness, Tigress	Cub
Cats (small)	Tom	Tabby	Kitten, kit
Sheep	Ram	Ewe	Lamb
Goats	Billy	Nanny	Kid
Swine	Boar	Sow	Shoat
Pheasant, quail	Cock	Hen	Chick
Swan	Cob	Pen	Cygnets
Ducks	Drake	Duck (?)	Duckling
Geese	Gander	Goose	Gosling
Trout	Buck	Female	Fry
Shark	Bull	(?)	Cub

1949 DEER KILL

(Continued from Page 1)

If it were true that all of the deer habitat in Oregon was stocked to capacity or over, a general either-sex season might be justified in order to avoid over-stocking and permanent damage to the forage resources. However, at present only a very small per cent of Oregon's 50,000,000 acres of deer habitat is stocked to capacity and some of the more popular areas, such as the Tillamook Burn, could support many more deer than are now present.

Some states have found it necessary to apply either-sex seasons to reduce deer numbers in inaccessible or brushy areas and Oregon has frequently found it necessary to allow the harvest of females in isolated problem areas; however, these controlled harvests have had immediate effect upon deer numbers and should only be used where a reduction of numbers is required for good game management.

In view of Oregon's past experience with antlerless deer seasons, it is obvious that a state-wide uncontrolled either-sex season would result in a substantial reduction of deer numbers and with Oregon's increased demand for hunting, there is an urgent need for all of the breeding animals the deer ranges will support.

The common misconception among hunters is that the woods are full of barren does that never have or will bear fawns. This premise has been proven false on many occasions. For example, in the winters of 1946 and 1947, an autopsy of 49 female deer from the Interstate Deer Herd, which summers in Lake and Klamath counties, indicated that 98 per cent were pregnant and 75 per cent carried twin fawns. The sex ratio of the herd in 1946 was 1 buck to 9.5 does. Oregon's present average ratio is approximately 1 buck to 4 does.

It is true that many fawns are lost by predation and other factors before hunting season so that some does may be seen without fawns; however, that is no reason to assume that they will not produce fawns on the following year.

The five leading counties in numbers of deer harvested this year are Lake, Klamath, Grant, Deschutes and Harney.

A complete tally of the 1949 deer kill by counties will be published as soon as all report cards have been received.