

Oregon State GAME COMMISSION BULLETIN

Vol. III

PORTLAND, OREGON, MARCH, 1948

No. 3

Coordinated Program for Waterfowl Management Pacific Flyway Planned

Another step forward to maintain the migratory waterfowl resources of the Pacific Flyway was taken when a coordinated plan of study and management for the Pacific Coast was decided upon as a result of a conference held in Portland on February 17 and 18 by representatives of the British Columbia, Washington, Oregon and California game departments and the United States Fish and Wildlife Service.

Varying types of waterfowl management work have been engaged in but much of this has been done by the separate agencies on a local basis. Since maintenance of this resource involves the necessity of ascertaining annual facts on a coastwise basis, it is desirable that a program be formulated to apply to the entire flyway. The Pacific Flyway, the migratory route of thousands of ducks and geese, extends from Alaska to Central America and maintenance of this resource depends upon the knowledge of the status of the birds throughout the

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Game Damage in Oregon

By AUSTIN F. HAMER, Field Agent

Game damage is not a new problem to people of the state of Oregon, and records of complaints go back for a number of years. From 1935 to January 1946, a total of 616 complaints were on file, including 200 complaints of deer damage, 52 of elk damage, 164 of pheasant damage and 200 miscellaneous complaints. The fewest were received in 1938 when 41 complaints were filed, the most in 1943 when 99 were received.

Expanded agricultural development during the last few years due to increased profits from agricultural products is felt to be partially responsible for much of the game damage being currently experienced. In many areas, particularly in western Oregon, isolated tracts of land on, or adjacent to, excellent game habitat were cleared and intensively farmed. Game animals have naturally utilized these unprotected and palatable crops.

Economic Loss

From the standpoint of economic loss inflicted, black-tail deer are probably the worst offenders. Very few crops seem to be immune from their depredations and once they have acquired a taste for a certain cultivated crop they become habitual "repeaters". They are not at all choosy when it comes to garden vegetables and will sample carrot tops, peppers, cucum-

bers, beet tops, lettuce, spinach, cauliflower, cabbage, tomatoes, watermelons, cantaloupes, peas, beans, corn and potatoes.

If garden crops were the only ones damaged by deer, the loss would not be too great and complaints would be less numerous. However, there are many commercially grown crops which suffer. In the Silverton Hills district east of Salem, the strawberry growers have for years been harrassed by the nightly raids of our most important big game animal. In southern Oregon, one operator raises Laidino clover for seed, and has more than 100 acres under irrigation. Deer come down from the surrounding hills and cross through the clover, eating blossoms to right and left as they go.

Melon growers have a justifiable complaint when they find that deer have broken into several dozen melons of marketable size. Owners of filbert, peach, pear, cherry and apple orchards despair when they discover hundreds of young trees with the tips browsed off or the bark stripped by bucks rubbing their antlers.

Nurserymen, grain growers and cattle ranchers are hit in the pocketbooks when deer or elk start feeding on young seedling trees, winter wheat or mature grain, and summer range land. Even fences suffer, and frequently more damage results from domestic livestock which are given access over broken gates and torn fences.

Sportsmen often are apathetic in their view toward farmers' complaints of game damage and fail to realize the importance

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Intensive agriculture on lands adjacent to natural deer habitat, such as this young orchard, sets the stage for damage.

☆ THIS AND THAT ☆

Aerial coyote hunting is continuing in southeastern Oregon and up to the first of January the fliers had taken 634 coyotes with 188 hours of flying time, or an average of 3.37 coyotes per hour.

* * *

Fences are near completion at the Hermiston game farm and the construction of nests and coops has been started. While much work remains to be completed at this new unit before rearing operations can start, if materials can be obtained as needed, it should be possible to initiate rearing operations on schedule.

* * *

Game field agents devoted a large portion of their time during February to winter census activities to determine big game trends in numbers. A systematic system of sampling has been set up in all districts so that uniform results for comparison purposes may be obtained. Aerial antelope census was done in the Central, Harney and Malheur districts.

* * *

A U. S. Fish and Wildlife Service release announces that for the fiscal year ending June 30, 1947, the number of hunting licenses sold in the nation reached the peak of 12,066,763, producing a gross revenue of \$28,558,447 for the 48 states.

* * *

Another story on whether or not small fish survive after being hooked is offered by Ted Howell, now in charge of fishways and screens for the game department, but employed in 1937 by the Park Service at Yellowstone National Park. There his agreeable chore was to fish the various lakes and streams of the park for the purpose of keeping the aquariums supplied with show fish. The fish were taken either fly fishing or trolling with such lures as abalone spinners having three pronged hooks, and practically all of them survived through the summer in the tanks, being released when the park was closed to travel in the fall. Even with small eastern brook there would be no appreciable loss although as many as 150 ranging from 4 to 7 inches would be caught in a single day.

* * *

Printed copies of the 1948 Synopsis of Angling Regulations may be obtained from license agencies throughout the state or from the Portland office of the Commission.

* * *

Three new fish tanks for the liberation trucks were built this winter by the fisheries personnel, which resulted in a saving of approximately fifty per cent of what the cost would have been if the work had been contracted outside.

* * *

Ducks have a transparent membrane to pull over their eyes when in flight — like goggles.

* * *

Turtles live in the water, but they lay their eggs in the sand away from water.

Oregon State Game Commission Bulletin

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Crows Blasted in Malheur County

Game Commission employees cooperating with members of the Malheur Game League successfully held another crow blast on Snake River between Ontario and Nyssa in Malheur county early in February. Approximately 7,000 crows were killed.

This is the only known place in Oregon where the crow rookery is concentrated enough and so located as to make dynamiting a practical project. This particular rookery has been blasted annually for the last three years and field observations indicates that successful blasts have reduced the crow population in the highly productive pheasant areas of Malheur, Harney and Baker counties.

Since white men first came to this country, crows have been using the series of Snake River Island between Ontario and Nyssa as roosting areas. It is estimated that in excess of 40,000 crows were using the islands this winter.

It takes \$500 worth of dynamite, prima-

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February Meeting of the Game Commission

The Oregon State Game Commission held its regular monthly meeting in Portland on February 13 and 14.

The following business was conducted:

It was decided to reject the offers already received for purchase of pasture land at the Hermiston game farm and call for sealed bids to be opened at the March meeting of the Commission.

The Commission went on record protesting any further drainage of marshes in the Upper Klamath Lake area by the federal government.

It was decided that immediate application should be made for desirable lands at Camp White.

An easement to the Pacific Power and Light Company at the Pendleton game farm was approved.

It was ordered that the staff continue its experiment on weed control in waters of the state and that a progress report be submitted by the June meeting.

The fisheries department was authorized to send representatives to the annual conference of the Pacific Fisheries Biologists at Lake Quinalt, Washington, on March 25, 26 and 27.

The Supervisor was instructed to carry out as fast as possible the projects authorized under the postwar capital outlay budget.

The Supervisor was instructed to obtain information as to the cost and feasibility of screening the turbines of Savage Rapids dam.

The Supervisor was authorized to obtain a lease from the Fish Commission covering holding ponds at Gate Creek, near the McKenzie hatchery, and make the necessary expenditures for immediate improvements so that the site can be placed in operation this season.

A delegation, headed by Ben Anderson, of Sauvies Island landowners appeared before the Commission to inquire as to plans of the Commission with reference to Sauvies Island. The Commission announced that application was being made for a Federal Aid project to acquire a tract of approximately 10,000 acres of low land lying along the south bank of the Columbia River, for a game management area and public shooting ground. Three-fourths of the funds for this project would be derived from the federal government under provisions of the Federal Aid to Wildlife Restoration Act (Pittman-Robertson).

The musk deer is eagerly sought by the natives throughout the Orient as musk is valuable for perfume. In Mongolia a "pod" is worth five dollars (silver), and in other parts of China it sells for considerably more. The musk sac is present only in the male deer and is, of course, for the purpose of attracting the does.

Prescription for Wildlife

By DR. IRA N. GABRIELSON President, Wildlife Management Institute

The pattern for wildlife resources management has been successively based on different ideas. Each method has had its enthusiastic supporters, all sure that their plan provided the sure-fire method to make the dream of endless hunting and fishing sport come true.

One after another, restrictive legislation, artificial propagation and stocking, and refuges, to mention only three of the more important, have been on trial and found wanting. No one of these methods for increasing stocks of fish and wildlife has been "the answer", but all remain and probably will remain as useful tools of proper management.

Certainly no thinking sportsman can believe that it will ever be possible to do without laws governing the human harvest of natural resources. The type and degree of regulation may change from year to year, but game law enforcement will always be a part of the management program.

Likewise, few successful management plans, and no successful restoration program, have been put into operation without furnishing sanctuary for breeding stocks. There is little doubt that refuges, both formal and otherwise, will always be used in game management.

(Editor's Note: This is another in the series of Ding Darling cartoons and accompanying articles made available through the National Association of Conservation Education and Publicity.)

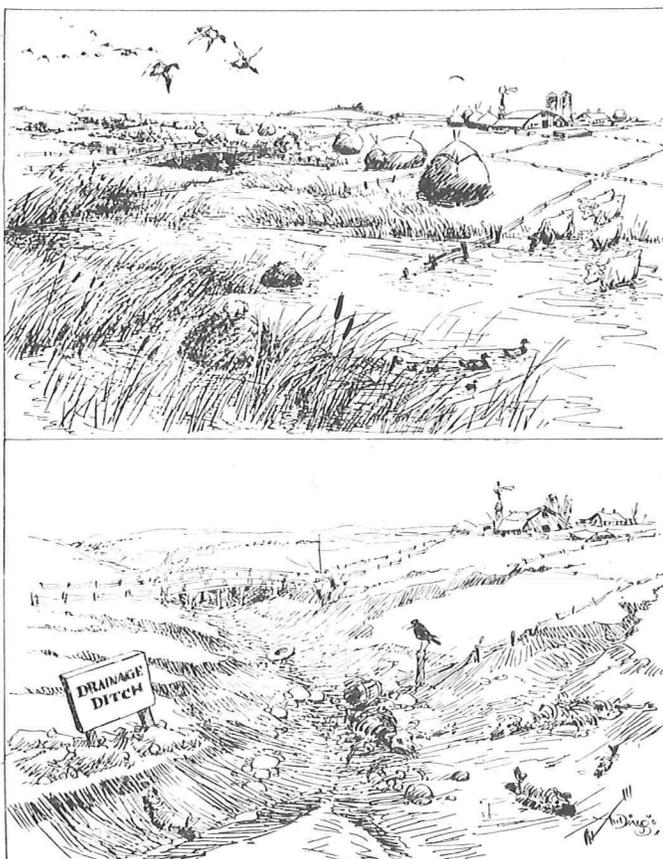
Coordinated Program for Waterfowl Management

(Continued from Page 1)

entire range and at all seasons of the year.

A coordinating committee was established with a representative of each agency serving on the committee to establish uniformity in the program of the various agencies to pool all information being secured.

Those attending the conference were: James G. Cunningham, Game Commission of British Columbia; J. Burton Lauckhart, Robert Jeffrey and Carl N. Crouse, Washington State Game Commission; Charles F. Yocom, Game Management, Washington State College; Robert N. Hart, John E. Chattin and James F. Ashley of California Division of Fish



"How Man Does Improve on Nature"

Hatchery Dam Washed Out

Storms in February washed out the dam at the Bandon trout hatchery of the Game Commission and necessitated emergency measures on part of the hatchery crew to keep up the water supply in the ponds until the liberation crew could release the approximately 100,000 legal-sized cutthroat trout being held at that station for spring release. No fish were lost, however, and plans are underway for repair of the dam.

and Game; Stanley B. Jewett, Leonard Springer, Robert Boone, Kenneth F. MacDonald and Ralph H. Imler of U. S. Fish and Wildlife Service; F. B. Wire, P. W. Schneider, A. V. Meyers, W. M. Morse and Melvin Cummings of Oregon State Game Commission; and Jay Long, Oregon State College.

Another meeting of the conference is planned to be held in Salt Lake City at the time of the annual meeting of the Western Association of State Game and Fish Commissioners in June.

Neither is there much doubt that restocking will remain a useful and, under certain circumstances, an important tool in management.

The latest and, so far as it has been tried, the most effective method of producing game and fish is restoration of proper living conditions for them. We must reverse the idea in Ding's cartoon, "How Man Does Improve on Nature", building back environment as we vigorously preserve that which still exists. We must increase the homes for wildlife if we are to increase the amount annually produced.

By development of new environment more game and fish can be produced each year at less cost than any other method yet found. It is Nature's way of producing wildlife and it has the enormous additional advantage of fitting in well with the vitally important program of soil conservation and management. It is not possible to practice good land management and reduce destructive erosion without producing better food and cover conditions for many species of wildlife.

Soil and water are the two most vital resources of this nation and their proper management is of vital concern to every citizen. The retention and best management of the fertile soils

and the greatest possible utilization of the biological productive capacity of the water is of increasing necessity to the maintenance of national health and prosperity.

Wildlife is one of the important products of land and water. It cannot be produced on worn out lands or in sterile and polluted water in any greater abundance than domestic crops and livestock could be produced under the same unfavorable conditions.

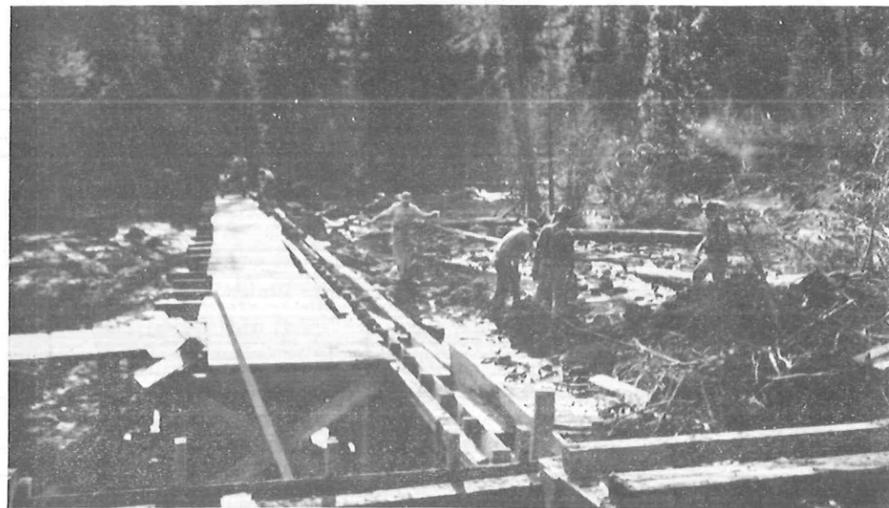
Wildlife is dependent entirely on the right environment; in other words, on suitable cover (living quarters) and food at all times of the year. Without such environment it cannot long survive; with it, annual crops of wildlife can continue to be produced. Therefore, the preservation of suitable environment and its restoration where it is now lacking are fundamental in any fish and game program.

This concept is the very basis of continued wildlife production.

The yellow rail bird, a good swimmer, generally swims only at night.



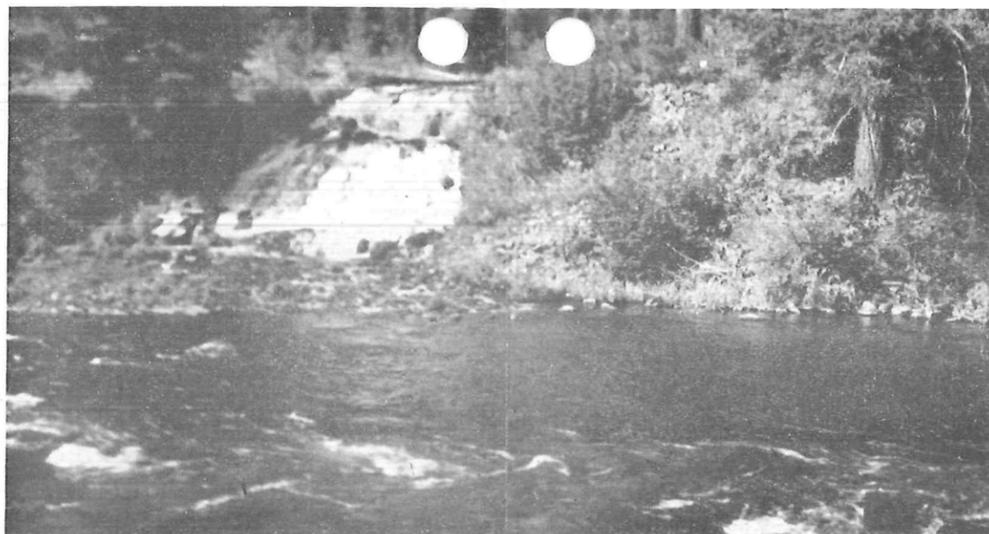
Hatchery building with 32-trough capacity. Pine trees were saved wherever possible to preserve the beauty of the grounds.



Early stage of construction of the dam at Intake No. 1 to impound spring water.



Impounded water after completion of the dam shown in the picture above.



Wizard Falls on the west bank of the Metolius River. Over nine second feet of water flow out of springs forming the falls

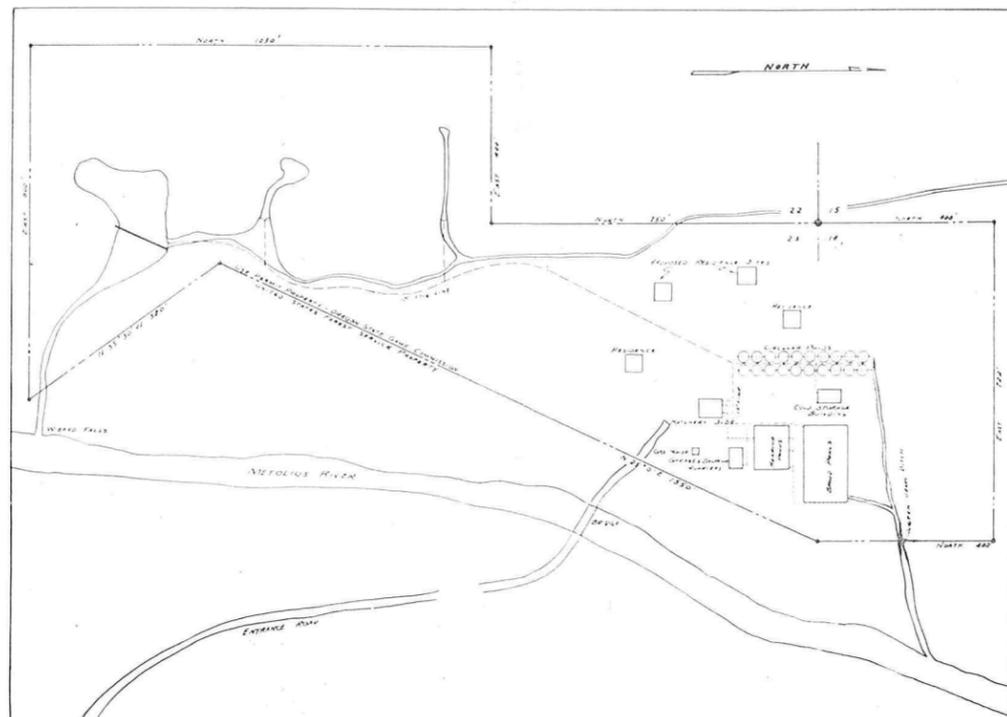
Progress Report on Wizard Falls

Construction of Oregon's newest trout hatchery, Wizard Falls in central Oregon, is well under way. Situated on the banks of the Metolius River and surrounded by a forest of Ponderosa pine, this hatchery will have the most scenic setting of any of the Commission's other stations. A special permit issued by the United States Forest Service authorizes the use of land which is inside the Deschutes National Forest.

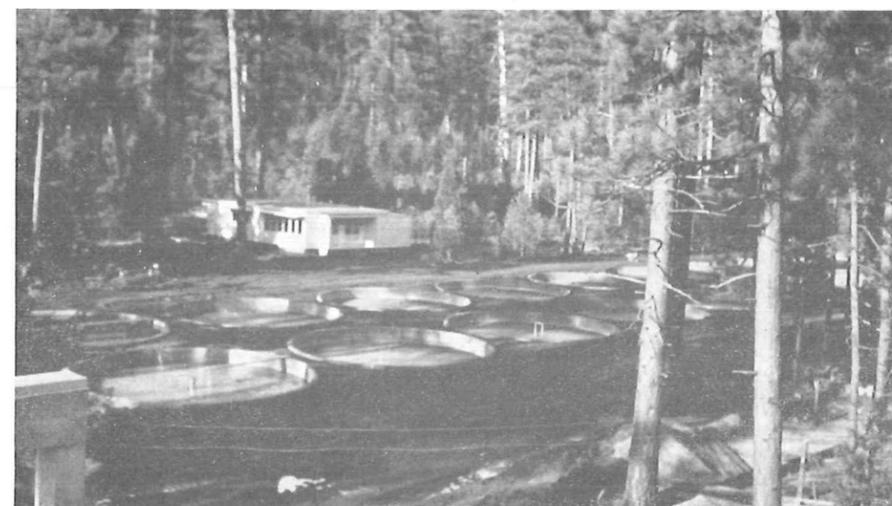
Work was started last summer and, as the pictures indicate, considerable progress has been made. It is hoped to get the station into production by late spring or summer if construction goes according to

schedule.

The hatchery will be devoted to the rearing of rainbow and eastern brook trout and will have a capacity of around 2,000,000, including fish of all sizes. For the present the source of all the water will be from the numerous springs located on the area but there is room for expansion if it is ever decided to make use of the river water. Temperature of the spring water ranges from 47 to 55 degrees, with an average of around 51 degrees. There are no flood stages or muddy water conditions to cope with as is the case at some of the other stations supplied from streams.



Wizard Falls hatchery lay-out.



Few of the 20 circular rearing ponds, 25 feet in diameter, with one of the prefabricated residences shown in the background.



Concrete raceways under construction. Total number of raceways will be 24.



Several of the 12 brood ponds which also may be used for rearing purposes.

Game Damage in Oregon

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of a practical solution to this problem.

In eastern Oregon, cattle ranchers have long suffered during the winter months from elk depredations on their outlying haystacks. Most damage occurs on ranches which are located adjacent to winter range, and the greatest problem areas at present are the west side of the North Powder river valley between Baker and La Grande, the middle fork of the John Day river between the Pendleton-John Day highway bridge and Bates, and a small area in the Burnt river valley near Hereford. Elk damage in these areas is not limited to haystacks, but fields of winter wheat are trampled and cut up during thawing weather, and when the grain is mature the elk come in and strip the heads off. There is less loss from actual consumption of hay than from trampling and bedding upon it as domestic stock refuse to eat such hay.

Recently, Roosevelt elk have created somewhat of a problem in a small area west of Coquille where they have come down into a narrow valley to feed on standing grain, orchards and gardens. Similar problems have occurred in southern Curry county, Clatsop and Tillamook counties, but these have been temporary and usually the removal of one or two of the worst offenders has alleviated the situation.

Some of the damage reported to the Game Commission is of the nuisance variety. Such was the case of a large bull elk which held up traffic and frightened women and children a few miles north of Coquille.

Pheasants and quail do a great amount of good in a garden by eating grubs, cutworms and other destructive insects, but it must be admitted that they frequently make a meal of peas, corn and other vegetables. Waterfowl do much damage during the spring and fall months when they are migrating, and farmers in the Snake river bottom suffer heavily from damage done to grain.

Muskrat and beaver are capable of causing much damage, particularly in drainage and irrigation districts, but the controlled trapping program carried on by the Game Commission has kept damage at a minimum.

Control Methods

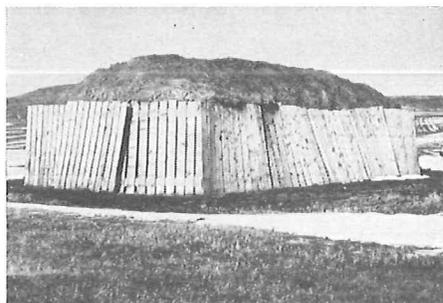
Oregon is only one of the many states in which game damage has become an increasingly important problem, and in recognition of this, the Game Commission in May, 1946, adopted its policy with reference to game damage control. From the standpoint of scientific game management, both mechanical and chemical controls are less desirable than the application of proper game management principles, which include the use of regular and special hunting seasons to harvest game surpluses and maintain optimum numbers, proper land usage to avoid conflicts

between agriculture and game, and the planting of buffer strips. However, as this form of practical control will be discussed in a later Bulletin issue, the main purpose of this article is to summarize the results of a research project authorized by the Commission in July, 1946, on other game damage control methods.

To be considered satisfactory, a control measure must meet at least two specifications. Its cost must bear a reasonable relationship to the value of the crop to be protected, and it must be practical. Control measures which demand frequent re-application and attention do not find favor in the eyes of farmers and landowners. Mechanical controls include deer or elk-proof fences, electric fences and various frightening devices. All types of chemical repellents fall in the classification of chemical control.

Mechanical Control

A 6½-foot fence constructed of woven wire or a combination of woven wire and barbed wire has proved very successful as used around strawberry fields in the



Panels protect haystacks from elk damage.

Silverton Hills district. Seven strawberry growers in that area now have these deer-proof fences and, except for the scarcity of fencing materials, many more would have protected their crops with this type of fence.

Electric fences of an out-rigger design are being tested around fields, but results are not yet definite. Several types of electric fences have been used around haystacks in eastern Oregon, but, to date, have met with only moderate success. Weather conditions have much to do with the successful operation of an electric fence. If the ground is moist, good contact with the fence will result in a substantial shock. However, heavy snowfall which forces elk and deer down onto agricultural land also acts as an excellent insulation under an electric fence and reduces the shock to an animal.

Tests indicate that occasionally an elk or deer will jump the fence. To attract attention to the electric wire, shiny tin can lids, can containing salt, and small discs of rabbit salt have been suspended by copper wire. Tracks have been observed showing where animals have nearly flipped over backwards after contact with one of these attractors. Likewise, they hesitate to return to a fence with which they have come in contact.

Wooden panels built of 1x12 boards 8 feet square with the boards placed in an upright position against the haystacks have successfully kept elk from doing any damage. The expense of building these panels, which is about \$100 for a stack of average size, has discouraged some ranchers from protecting their stacks in this manner despite the effectiveness. However, these panels, when properly cared for, will last for years and may be used over and over again, thereby reducing the yearly cost of haystack protection. Also, they take the place of ordinary stackyard fences which are necessary to exclude domestic livestock.

Chemical Control

Chemical repellents have so far not shown encouraging results. Lime sulphur has been the most effective of the chemicals tested, and even it has the disadvantage of required re-application after about three weeks. In addition, the cost of application on one acre of strawberries amounts to about \$28, which brings the cost of protection for an average sixty-day season to over \$85. A relatively new commercial deer repellent known as Acme Toxo has been tested but with uncertain results. This material is expensive, costing \$2.50 per gallon f.o.b. New York. The manufacturer claims that the chemical retains its effectiveness over a two-month period and is non-injurious to most plant foliage. The cost of application to a one-acre field of mature strawberries would be about \$135.00. Several other chemicals, including crude naphthalene flakes, asafetida, sulphur and lead arsenate dust, sheep dip and anise oil have been tested and found lacking in one way or another, although it is improbable that any control measure will afford complete protection under all circumstances.

Frightening devices of every conceivable design have been tried for years by harrassed farmers, and several years ago an automatic carbide exploder was placed on the market. This contraption uses carbide and water to manufacture acetylene gas, which is exploded in a cylinder and results in a loud noise accompanied by a brilliant flash. On the first test with this machine the results were very heartening and deer were kept out of a six-acre field for 28 days. On the second test, the exploder was operated more frequently with the apparent result that deer became accustomed to the explosions. Future tests will be needed to determine the proper interval between operations.

Summary

A summary of the game damage control methods which have been tried indicates the superiority of the deer or elk-proof fence over any of the other methods tried to date. Not only is a fence the most effective but it is the cheapest to maintain over a period of years.

Each problem must be handled on an individual basis as no single control meas-

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Game Damage in Oregon

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ure can be expected to work under all conditions and on all types of crops. In some elk damage areas, the vulnerable haystacks can be protected by panels during the winter, but this action will not eliminate depredations on grain fields and other crop lands during the other seasons of the year.

Special hunting seasons have already proved that they can be of great benefit in eliminating or diminishing damage in some areas. Many of the offending animals can thus be removed and others are driven and scattered onto more desirable winter range. Important to the sportsmen of the state is the fact that they are afforded an opportunity to participate in the hunt. Local farmers and ranchers realize and appreciate the benefit they derive from special hunting seasons designed to remove and disperse game animals which may later cause damage to crops and haystacks.

It is becoming apparent that game damage problems will not be solved by the application of any single control measure. Therefore, it will be wise for sportsmen, farmers and the general public to consider carefully all known methods of damage control, and the use of game management tools for prevention of game damage problems. These include:

1. Special hunting seasons designed to remove surpluses in areas which, at some season of the year, are focal points for crop damage.
2. Use of the effective control measures where damage is severe and has not been eliminated by the special seasons.
3. Removal of offending animals where the numbers are small, a special season not justifiable or practical, and other control measures not effective or economical.

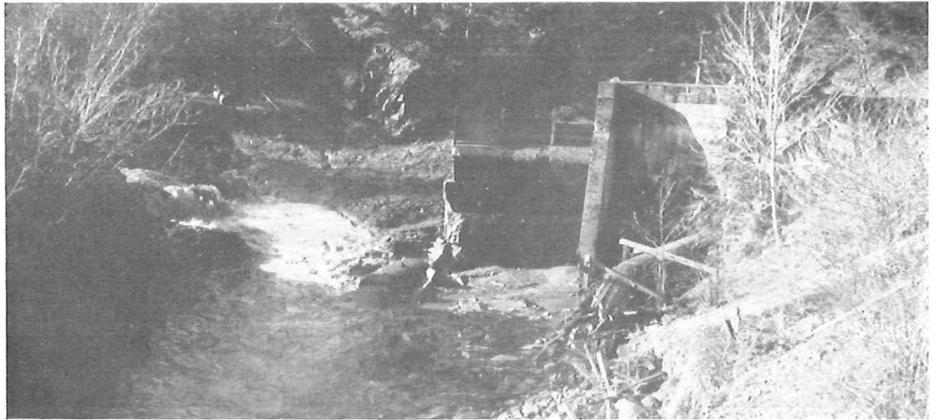
Work is being diligently continued in an effort to discover new and practical solutions to game damage, and to improve upon known methods. Unfortunately, no one cure-all will apply to all problems, but it is hoped that future efforts in Oregon and other states will result in minimizing losses from game damage.

Change of Address

Bulletin readers are asked to send advance notice of any change in address as the Post Office does not forward copies since the Bulletin is being sent out as second-class mail. Also, the department is charged for each notice received from the Post Office when an address has been changed.

There are probably very few animals which have played so important a part in the history of the world as the earthworm. Ten tons of soil passes through the body of each every year.

KEASEY DAM OPENED



Working jointly, stream improvement crews of the Fish and Game Commissions cleared a passage-way for fish migrating up Rock Creek, tributary of the Nehalem River, when they blew out the 22-foot high concrete dam at Keasey formerly used by the Western Oregon Electric Cooperative. While the dam had been provided with a fishway, removal of most of the structure itself provides better access to the spawning grounds upstream.

Fisheries Staff Conference Held

The annual meeting of the fisheries staff was held in the Portland office of the Game Commission on February 3, 4 and 5.

The first day's session was devoted to discussions of hatchery problems such as nutrition and disease, grading, pond designs and selective breeding. Officials from outside departments participating included Dr. L. A. Donaldson, University of Washington; Dr. E. Rucker, and Roger Burrows, U. S. Fish and Wildlife Service; Clarence Pautzke and Cliff Millenbach, Washington Department of Game; J. N. Ellis, Hagerman, Idaho; and C. H. Ellis, Washington Department of Fisheries.

Joint discussions for the hatcherymen and biologists were held the second day. Speakers included Dr. J. Alford Hall, U. S. Forest Service; C. M. Everts, State Sanitary Authority; D. L. McKernan, Fish Commission of Oregon; as well as various members of the staff.

The last day was devoted to management problems. Dr. J. L. R. Li and R. E. Dimick of Oregon State College spoke and the rest of the time was devoted to discussions by staff members.

Trapping Season Closes

Trapping season for mink, muskrat, raccoon and otter ended on February 15, but predatory animals, such as cougar, wolves, wildcats, bear, skunks, badger and other unprotected species, may be hunted or trapped the year around.

The kiwi bird of New Zealand is a smart fellow. Knowing that worms come to the surface of the ground when it is raining, he imitates the sound of rain by stamping on the ground with his feet, thereby decoying up a meal.

Coastal Waters Closed March and April

Fishing for salmon and steelhead in the coastal waters will be at a standstill during March and April under the new regulation passed by the Game Commission in January.

The purpose of the closure, as explained in the February issue of the Bulletin, is to reduce the intensity of angling on these streams and provide protection during the spawning period to the steelhead and cutthroat brood stock.

The closure covers those waters, including lakes, that are tributary directly or indirectly to that part of the Columbia river below the northern city limits of St. Helens; and those waters, including lakes, south of the Columbia river that are tributary directly or indirectly to the Pacific ocean, except the Rogue, Umpqua and Siuslaw rivers, which have specific regulations of their own.

The main Columbia river will be open during March and April as well as those of its tributaries above St. Helens. This, therefore will leave the Willamette river and its tributaries below Oregon City falls open to spring chinook salmon fishing the same as in former years.

In addition to the general March and April closure, salmon fishing will be closed until September 15 in the following streams: that part of the Nehalem river above Mohler bridge; and that part of the Trask rivers above Highway 101 bridge; and that part of the Wilson river between Highway 101 bridge and Lee's bridge.

The young of the white bass are generally found on the leeward side of the lake on a windy day, while older fish are almost invariably on the windward side.

Oregon State Game Commission Bulletin

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Waterfowl Report for Public Shooting Areas

The waterfowl hunting kill for 1947 on Oregon's two public shooting grounds in Lake county, Summer Lake and Chewaucan, were as follows:

SUMMER LAKE

	Hunters	Kill		Success Ratio Birds per Man Day
		Geese	Ducks	
First Half	1,907	775	2,422	1.67
Second Half	728	81	1,206	1.77
TOTAL.....	2,635	856	3,628	1.70

CHEWAUCAN

	Hunters	Kill		Success Ratio Birds per Man Day
		Geese	Ducks	
First Half	299	380	296	2.26
Second Half	94	40	111	1.61
TOTAL.....	393	420	407	2.1

Highway Shooting Unlawful

One of the most common violations of game regulations is shooting from the highway. Hunters who probably get tired walking through the fields cannot resist road hunting. Most of the spotlighters also work from cars along the highway. There have been the usual amount of such cases made this season, and occasionally the violator thinks he can beat the law if he gets off the used portion of the highway before shooting.

One incident like this occurred this fall. A bird shooter in Malheur county jumped from a car and ran over to the side of the highway near the fence and then shot at a bird in the field. The officers arrested him and he hired an attorney to plead his case. The case was later settled out of court by payment of the fine assessed by the justice court.

A recent opinion of the Attorney General, after quoting several sections of the law, makes the following statement: "Obviously, the legislative intent is to include the entire area between the boundary lines of the right of way and not just the traveled portion thereof. This seems plain from the use of the phrase 'when any part thereof is open to the use of the public for purposes of vehicular traffic,' referring to the traveled portion of said highway. It is my opinion that Section 115-366, O.C.L.A. applies to the entire highway between the boundary lines of the established right of way."

This should clarify the question as to what constitutes a highway.

Crows Blasted in Malheur

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cord, and pea gravel to properly "load" one roost so the entire rookery cannot be blasted. The roost to be blasted is selected and "loaded." Then for a week before the blast, sportsmen with power boats and shotguns and Commission personnel patrol the rest of the rookery to harrass the crows away and concentrate them over the loaded area. On the designated day the charge is detonated before daylight. The rest of the day is spent dispatching the many crippled and stunned crows that are not killed instantly.

In previous years the blasting had been done on an island roost but an unannounced premature attempt earlier this winter by inexperienced persons using small tree bombs proved unsuccessful in killing crows and merely scattered them. It was necessary to select a new blasting site and a willow patch on the main land was used with only fair success compared with results of other years.

MARCH CALENDAR

Species	Open
Salmon and Steelhead over 20", except coastal waters	All month
Jack Salmon under 20"	Same as salmon
Spiny-rayed Fish	All month
Predatory Animals	All month

NOTE: For specific exceptions, consult official synopsis of hunting or angling regulations.



Bobcat and one of its victims, an antelope kid. The predator was killed near Spanish Lake on Hart Mountain by Field Agent Ellis Mason and Morse Murphy, Warner Valley resident, while on a trip through the area. Bobcat was spotted sitting behind a sagebrush not far from the antelope carcass.

Things You May Not Know

The cutting teeth of beavers continue to grow throughout their lives.

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Jack rabbits in Ontario, Canada, grow to weigh as much as 25 pounds.

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Korean hunting licenses carry the following: "Hunting in public streets, shrines and temples is not permitted. Firing at buildings, people, cattle and street cars is not permitted."

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Shark's teeth originate in the rear of the mouth and work forward until reaching the outer edge, where they are discarded. New rows move up continuously to replace the discarded ones.