

OREGON STATE  
GAME COMMISSION

# BULLETIN

DECEMBER 1968



# OREGON STATE GAME COMMISSION BULLETIN

Number 12, Volume 23  
December 1968

Published Monthly by the  
OREGON STATE GAME COMMISSION  
1634 S. W. Alder Street — P. O. Box 3503  
Portland, Oregon 97208  
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## The Cover

Helicopters and fixed wing aircraft are efficient in distributing chemicals, seed and fertilizer over rough terrain.

Photo by R. U. Mace

## HUNTER SAFETY TRAINING PROGRAM

### Instructors Approved

Month of October ..... 29  
Total to Date ..... 3,708

### Students Trained

Month of October ..... 2,839  
Total to Date ..... 134,596

### Firearms Casualties Reported in 1968

Fatal ..... 7  
Nonfatal ..... 32

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## The Spotted Towhee

The spotted towhee, or chewink, occupies a western range which extends from southern British Columbia to Mexico and from the Rocky Mountains to the sea. It is a permanent resident over much of this territory, with migrations taking place only among those birds which breed in mountainous regions. When winter snows blanket their feeding grounds, the birds are forced to the warmer valley floors where they become a familiar sight in the shrubbery of city lots or at backyard feeding stations.

The spotted towhee is a ground-inhabiting finch, closely related to the large family of sparrows. It is a thick-loving species, being especially fond of cutover or scrubby lands that have grown up to weeds, briars, and dense stands of underbrush.

When disturbed in these brushy surroundings, this very shy bird simply refuses to stay where it can be observed. It will dive into the underbrush only to reappear at some other point, continually uttering alarm notes that provide positive identification. The distinctive calls, "toe-hee" and "che-wee," are repeated over and over, as if to make certain it is recognized. Its repertoire also includes a mew-ing call, not unlike that of a cat, which has led to the towhee being frequently but erroneously referred to as a catbird.

In size the spotted towhee is slightly

smaller and more slender in build than the robin. Its head and upper parts are black with rows of white spots on the back and wings and thumb-print spots on the outer feathers of the long black tail. The belly is white, bordered by conspicuous robin-red sides. At close range the bright red eyes can easily be seen.

Towhees are not gregarious by nature and rarely are many seen together, although at times several may collect at feeding stations or where food conditions are particularly favorable. These birds are essentially seed eaters, their strong bills being well adapted for breaking open hard seeds. They also relish insects and capture many larvae during the spring to feed their growing offspring. When foraging in the underbrush, the bird is more often heard than seen as it vigorously scratches in the dead leaves in search of food.

The nest of the towhee is built on the ground or in low bushes or brush piles. It is a loose cup constructed of twigs, leaves, and weed stems, all skillfully woven together and lined with fine grass and hair. Three to five heavily-spotted greenish-white eggs are laid in late May. By mid-June the young, which are still unable to fly more than a few feet, leave the nest to begin a perilous life among the fallen leaves and underbrush.

-- C. E. Kebbe

## Proposed Legislation

Trapping licenses, big game tags, and controlled hunt permits would be valid from July 1 through June 30 of the following year if a proposal by the Commission is approved in the forthcoming session of the Legislature. This is one of

several bills for which the Commission will seek introduction.

Under existing law, all licenses and coupons expire on December 31 of the year of issuance. Some difficult adminis-

(Continued on Page 8)



# A PLACE TO LIVE...



By R. U. Mace  
Chief Biologist, Game Development

Oregon's game animals and birds depend on habitat for survival. Necessary requirements include quality food, well dispersed water, and adequate cover for protection and rearing of young. The key to game abundance is the quantity, quality, and distribution of these items throughout all seasons of the year.

Many activities of man have not been kind to wildlife. Intensive agricultural development, industrialization, land sub-

divisions, and other practices which accompany increased human populations combine to remove or change habitat to the extent that it becomes less productive. To offset such changes, sportsmen through license fees are financing habitat improvement practices. The Game Commission is charged with the responsibility of carrying out such practices and has been conducting an organized statewide program since 1953.

Over \$1,500,000 has been expended on wildlife habitat development to date. In addition, a large proportion of the \$450,000 expended annually on ten Commission management areas is devoted to food crop production and other habitat practices. Habitat improvement represents the largest single expenditure in Oregon's wildlife management program.

Here's a look at some of the results.

Protective cover is essential for the survival of upland game and intensive farming practices such as brush removal have reduced the amount available. The first major habitat improvement program involved shrub planting to provide this necessary requirement. Most of the work was done on individual farms with emphasis in the Columbia Basin, central Oregon, and the south end of the Willamette Valley. Umatilla, Sherman, Morrow, Union, Crook, Wasco, Jefferson, Lane, and Linn Counties lead in the amount of shrub planting projects completed.

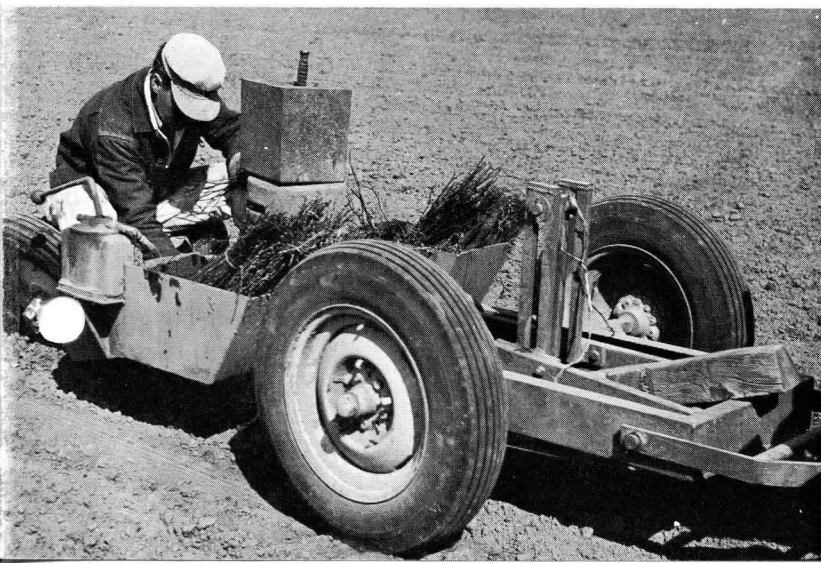
Multiflora rose, American plum, black locust, honeysuckle, matrimony vine, Russian olive, and a variety of other species

have been planted on over 2,600 acres at 825 locations since 1953. Cultivation is required for at least three years to assure establishment of the plantings and, in most cases, the areas are fenced.

In addition to furnishing cover, the program has provided access to hunters. An agreement is signed with each landowner before the work commences specifying that public hunting will be allowed for at least ten years. A total of 517 agreements have been signed to date permitting hunters on nearly 600,000 acres of private land. In many cases, the agreements are extended beyond this period so the shrub planting program definitely has long range effects.

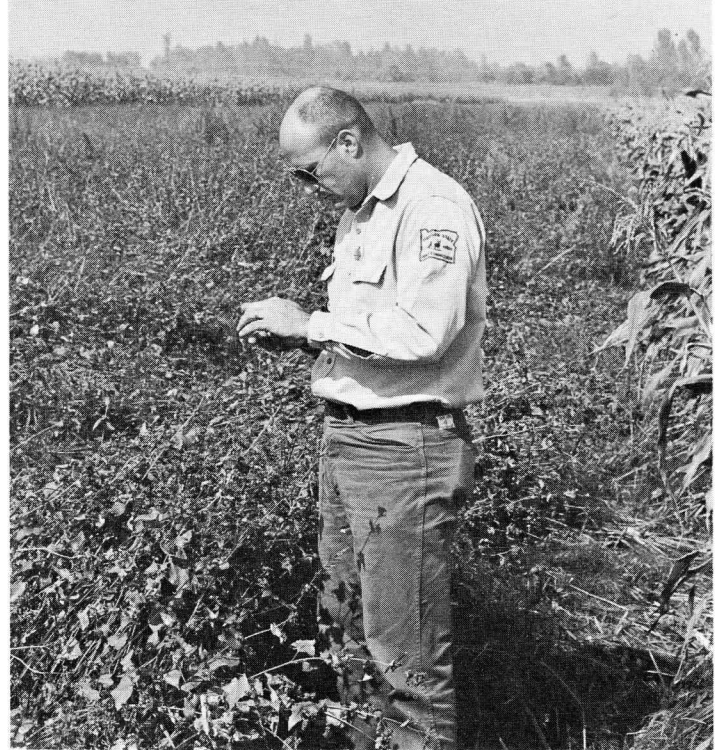
A tree planter is one of the many specialized pieces of equipment required in the shrub planting program.

Once established, shrub plantings provide winter cover and a place to nest for pheasants and quail.





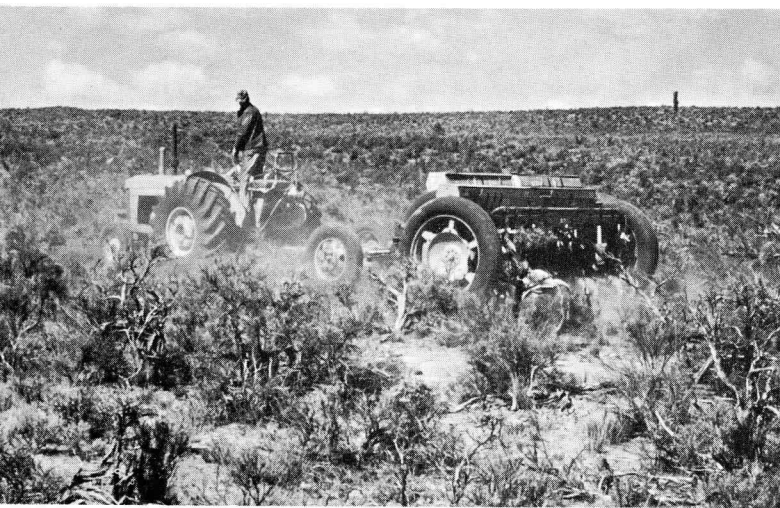
The U. S. Bureau of Land Management and the U. S. Forest Service cooperate in seeding waterfowl and upland game food crops on the sand dune area near Florence.



This excellent stand of buckwheat will be the first to disappear when wintering flocks of waterfowl descend on the Sauvie Island Game Management Area.

Ample food at all seasons is necessary, particularly during the winter when natural supplies are lacking. Annual plantings of such crops as wheat, barley, sudan, corn, buckwheat, and millet

are made for waterfowl and upland game. Nearly 11,000 acres of food crops have been planted at 1,250 locations during the past 15 years. An additional 2,000 acres are seeded annually on game management areas operated by the Commission.



Fires require emergency treatment and are seeded to stabilize the soil. Advantage is taken of these opportunities to establish big game forage. The rangeland drill was developed especially to seed sagebrush and other rough types of range.

Some of the plantings are made in cooperation with landowners. In the Willamette Valley, the Commission pays for seeding sudan in newly planted rye grass fields for use by pheasants and waterfowl.

An increasing amount of work is being done on lands owned by the Commission or under license from the Corps of Engineers and Bureau of Reclamation. Numerous plantings are made annually, for example, on the 3,000-acre Prineville Reservoir project in Crook County and the 4,000-acre Fern Ridge Reservoir project in Lane County.

Federal agencies take an active part in planting food crops for game birds. The U. S. Forest Service and Bureau of Land Management cooperate in seeding considerable acreages each year on the sand dunes area near Florence.



One of the most critical problems is the need to improve winter ranges for deer and elk. Numerous trial plantings of shrubs, grasses, and legumes have been made to determine adaptable species and planting techniques. The results of such trials have furnished the background for an aggressive improvement program and increased emphasis is being placed on this activity. Nearly 30,000 acres have been improved for wintering big game to date, in addition to 2,500 acres seeded on the three management areas being developed for big game. More projects are planned for the future.

Most winter range rehabilitation projects are large and expensive and require combined efforts to accomplish. Fortunately, a good many agencies and private groups are involved, either in doing the work or furnishing land for development. Among these cooperators are the U.S. Forest Service, Bureau of Land Management, Bonneville Power Administration, Oregon State Board of Forestry, Deschutes County, Weyerhaeuser Timber Company, Crown Zellerbach Corporation, and Pacific Power and Light Company. Not to be overlooked is the excellent cooperation afforded by sportsmen throughout the state. Organized sportsmen have taken an active part for years in reseeding legumes on logged-off areas in Clatsop, Columbia, and Tillamook Counties, for example.

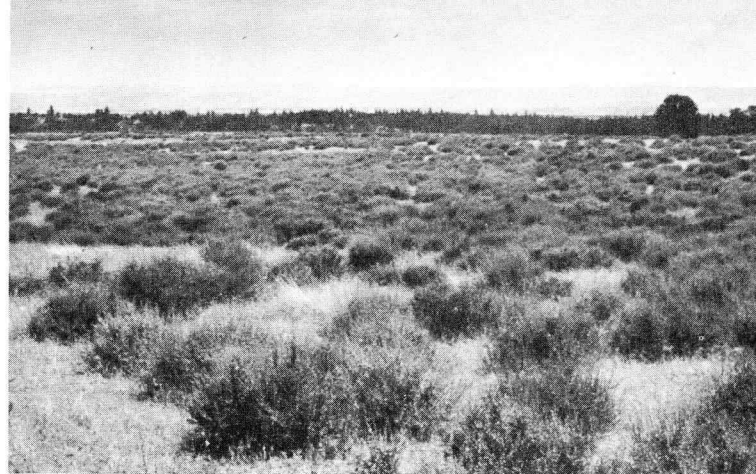
Methods and the species planted vary depending on location. Advance planning is necessary to be sure that the right decisions are made. Orchard grass, lotus, Dutch white clover, and fertilizer may be applied on burns and areas disturbed by logging in western Oregon while choices on burned-over areas or sagebrush and juniper ranges east of the Cascades will depend mostly on elevation and available moisture. Bitterbrush will be included in the mixture where practicable or saltbush will be substituted on the more alkaline soils. Dry land legumes such as Nomad alfalfa and Sainfoin are used as well as the tolerant crested wheatgrass where moisture is scarce.

As with the choice of species, experience dictates the method of preparing the ground and applying the seed. Competition such as sagebrush must be removed by spraying, plowing, or burning. Heavy juniper stands can be chained, a method of uprooting the trees by dragging a heavy anchor chain between two large crawler tractors. The seed may be drilled with specialized equipment such as browse seeders or rangeland drills. Often, the most efficient and inexpensive method involves the use of fixed wing aircraft or helicopters.

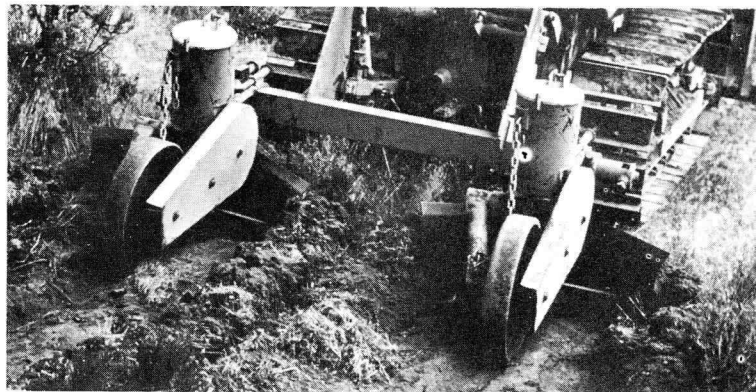
Variety is the key to big game winter range improvement. Deer and elk prefer edge areas and are reluctant to move far from cover. For this reason, several small plantings well distributed next to cover are more productive than a single large development. Saving islands of tall sagebrush or patches of juniper is sound management and such consideration is given during the planning of a project.

Water must be available before game can use an area and sources should be well distributed. Several methods of supplying water have been developed to offset the shortage of natural supplies.

Catchment devices called "guzzlers" have been constructed to furnish water for upland game. Corrugated sheet metal or fiberglass aprons are installed to collect rain and snowfall which



Results are encouraging. This excellent stand of bitterbrush was seeded on the White River Game Management Area in Wasco county.



A browse seeder is used to plant double rows of bitterbrush. Competition is removed by scalping the soil ahead of the planting attachments.



A "guzzler" being installed for chukar use. The metal apron to the left will be placed to drain rain and melted snow into the 250 gallon plastic reservoir.



A waterhole under construction. Sacks of bentonite in the foreground will be spread over the bottom to stop leakage.

Water being measured in a deer cistern with three storage tanks, each capable of holding 600 gallons.



is funneled into plastic storage reservoirs. A sloping ramp on the reservoir provides access to the water which remains available during the critical dry period. The water supply is shaded by the collecting apron which reduces evaporation loss. Pheasants, quail, and chukars are the main beneficiaries of the 850 "guzzlers" installed to date.

Big game also benefit from water development. Cisterns are installed on deer summering ranges similar in principal to the upland game "guzzler" except that metal tanks instead of fiberglass reservoirs are used for storage of the runoff. Another difference is that water is supplied the animals by piping to a trough with float valve attached rather than directly from the reservoir. Waterholes may be dug to store runoff and the bottoms are sealed with bentonite, a natural clay, if the soil is porous. Natural springs also are improved to provide a reliable



Fences protect "guzzlers" from damage.



Fences also are important in managing livestock distribution on big game ranges.

source of water for big game. A total of 150 big game water developments have been completed in eastern Oregon, many in cooperation with the Forest Service and Bureau of Land Management.

One of the most effective ways to protect wildlife developments is a barbed wire fence. Upland game "guzzlers," cover plantings, and food crops are fenced against livestock. In most cases, individual developments are small and little fencing is required. Without such protection, however, the investment

would stand little chance of survival. Nearly 29,500 rods of fencing have been installed around upland game habitat projects.

New seedlings require protection from grazing for a minimum of two years and fencing is necessary in most cases. Fences also are used to achieve better livestock distribution on winter ranges and protect vulnerable browse supplies. Over 7,500 rods have been constructed on big game ranges to date. Some of this work has been accomplished in cooperation with the U.S. Forest Service and Bureau of Land Management.

All birds require places to nest. In the case of wood ducks, the supply of hollow trees may be limited. Nest boxes constructed of rough lumber and placed on trees near water offer a satisfactory substitute. Construction and placement of wood duck nest boxes has been a popular activity for sportsmen, Boy Scout troops, and other civic organizations. Over 4,000 have been installed to date with the help of cooperators and the results are gratifying.

Canada geese also benefit from artificial nesting structures and readily use such facilities. Discarded metal wash tubs may be used as well as platforms constructed of lumber. A total of 75 have been installed in nesting habitat, primarily in eastern Oregon.

Shallow ponds in marshy areas provide the edges and seclusion preferred by nesting waterfowl. Twenty impoundments have been dug for use by ducks, mainly in the vicinity of Fern Ridge Reservoir in Lane County.



Ducks prefer to nest in cover adjacent to shallow ponds such as this.



Canada geese use this type of nesting platform.



A home for wood ducks being installed.

## Salmon Spawning Counts Complete In Eastern Oregon

Spring chinook salmon spawning tallies in northeastern Oregon streams were recently completed by Game Commission fishery biologists and show the runs in Willowa County streams, the Grand Ronde, and the John Day to be on a par with previous high counts of salmon in these streams.

In the Grande Ronde and Catherine Creek drainages the spawning count showed 536 redds observed on 89 miles of sample route, compared with 599 redds observed in 1967. The 1967 count was one of the highest number of redds observed in the area. A fine spawning run

was also recorded in Willowa County streams, with 324 chinook observed on the sample routes.

The highest spawning total ever recorded was made on Clear Creek, tributary of the John Day River, with 242 redds noted in four miles of spawning gravel. Redds on Granite Creek totaled 251 on five miles of spawning area. Actual salmon observed during the spawning survey totaled 350.

Clear Creek, originally torn up by early dredge mining, was rehabilitated by the Game Commission about ten years ago, providing salmon and steelhead with an excellent spawning stream. Increased use has been made of this stream since the gravel bars and resting pools were developed.

Jim Hewkin, district fishery biologist at John Day, reported that during the

summer irrigation season rotary screen bypass traps accounted for more than 60,700 young downstream migrant steelhead, over 1,000 chinook salmon, and about 1,500 coho salmon. This is the third highest steelhead count on record and the fourth highest chinook count.

## Special Notice!!

In the January issue of the Bulletin you will find a postcard inserted. The card is being inserted so that we can update our mailing list. If you want to continue receiving the Bulletin, you must fill out and return the card. **WATCH FOR IT!**

If the schedule goes as planned, the March mailing list will be based on the cards that are returned.

## PROPOSED LEGISLATION

(Continued from Page 2)

trative problems have arisen in connection with big game hunting seasons that extend beyond December 31. Also, the necessity to obtain new tags or permits after that date is a distinct inconvenience to hunters. For years the trapping season has covered the period from November to about the middle of April, and the suggested change would make the one license valid through that season. The Commission is not suggesting that the valid period for basic fishing and hunting licenses be changed.

Another bill concerns the disposition of interest on money deposited in the State Game Fund. Presently, the interest, which amounts to about \$130,000 biennially, accrues to the General Fund for use in general state services. The proposed legislation would provide that this interest become a part of the Game Fund Account.

One of the proposals would provide that one-half of the proceeds from all fines assessed and bail forfeited for game law violations would accrue to the Game Fund. Under present law the Commission receives no revenue from fines assessed in District Courts, the money now being divided equally between the county in which the fine is assessed and the State General Fund.

Under present law a charge of 50c is made to issue a duplicate fishing or hunting license to be used in lieu of an original that has been lost or destroyed. It will be proposed that this law be broadened to include big game tags and Certificates of Competency on the safe handling of firearms. It is also suggested that the fee be raised to \$1 to cover increased costs.

Holding wild animals and birds in captivity is now subject to two statutes with conflicting provisions. To straighten this out, it is being proposed that both laws

be repealed and that a new law be enacted giving the Commission a greater degree of flexibility in determining which species of wildlife may be held in captivity and the circumstances under which a holding permit would be required.

The new uniform citation law for fish and game law violations has made it easier for the person to whom a citation has been issued to post and forfeit bail. Forfeiture of bail does not constitute conviction, and several game statutes provide that if convicted of a certain kind of violation the person convicted is subject to additional penalties such as loss of hunting or fishing privileges. The Commission is asking that in these instances either conviction or forfeiture of bail shall be cause for assessing the additional penalties.

Another proposal to the Legislature will be to amend existing law so that certain Commission-owned lands that are farmed for wildlife production would be defined as farm land for tax purposes.

The Commission and the State Police will jointly seek the introduction of a bill relating to remanding of cases involving game law violations by juveniles from a Juvenile Court to another court. The request is being made that a Juvenile Court be permitted to enter an order directing that all juvenile game law violation cases be remanded to another court, such as a Justice or District Court.

Other legislation would provide for the repeal of four statutes considered archaic, unnecessary for conservation purposes, or in conflict with federal regulations. These involve lying in wait for game, the use of boats in waterfowl hunting, location of waterfowl hunting blinds, and the requirement of a license to store, pick, or dress game birds.

- - R. C. Holloway

## 1969 ANGLING RULES SET

The Game Commission adopted the 1969 sport angling regulations following a November 16 hearing. Summer salmon and steelhead regulations on the Columbia River will remain the same as those set up in the 1968 regulations with the understanding that an emergency closure would be placed in effect if developments indicate such action to be necessary.

In making the motion for continuation of the 1968 regulations, George Hibbard, game commissioner from Oregon City, stated, "We want to make it abundantly clear that the Game Commission still has great concern over these runs of fish. However, in light of the statements made at this public hearing, and because of lack of assurances from the other Oregon and Washington agencies regulating other fisheries of the Columbia, we are setting this season. The Washington sport fishery and the commercial fisheries of both states have not at this point been curtailed, but this Commission intends to take emergency action to close the Oregon sport fishery if the facts so dictate. We wanted to point the direction we feel all fisheries regulations should go. We are convinced these runs need protection and will cooperate fully with the other agencies when their intentions become known."

Two weeks ago, the Commission had tentatively closed the 1969 summer salmon and steelhead season in the Columbia during certain periods of June and July.

Inland streams and lowland lakes will open April 19 and the high lakes and coastal streams on May 24. Both seasons will extend through October 31.

Only other major change enacted by the Game Commission was a restriction on angling gear on the McKenzie River. During the salmon season, only single hooks less than one-half inch between the point and shank will be legal.

The new regulations become effective January 1, 1969. A printed synopsis of the rules will be available at license agencies about the last week in December.

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