

# Oregon State GAME COMMISSION BULLETIN

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No. 3

## What About the Multiflora Rose?

An increasing interest in the potentialities of multiflora rose as a living fence is being evinced by many farmers of Oregon. Since the Game Commission established its habitat improvement program last summer and announced its intention to conduct trial plantings of this shrub, numerous requests have been received for information and for planting stock.

It should be understood, however, that this woody plant is just one of many to be tried as rapidly as planting stock becomes available. It is not expected that multiflora rose will be adapted to all of the varied growing conditions throughout Oregon; nor is it apt to become a universal solution to the seasonal food and cover shortages of our upland game birds. It is, nevertheless, the most promising shrub, particularly for fencerow planting, known to us at this time. Its popularity in the East and Midwest has steadily risen since its value was first recognized by the Soil Conservation Service in the late thirties. Frank Edminster writing in the *Pennsylvania Game News* says: "Not over 20 miles of rose fences were planted in the whole United States five years ago. This year (1948) some 800 to 1,000 miles were set out, and it would have been more had enough planting stock been available."

Planting stock as obtained from the nursery may be either year-old seedlings or cuttings. It should be an upright, thorny variety. Names and addresses of dealers and detailed planting directions may be secured from the Game Commission.

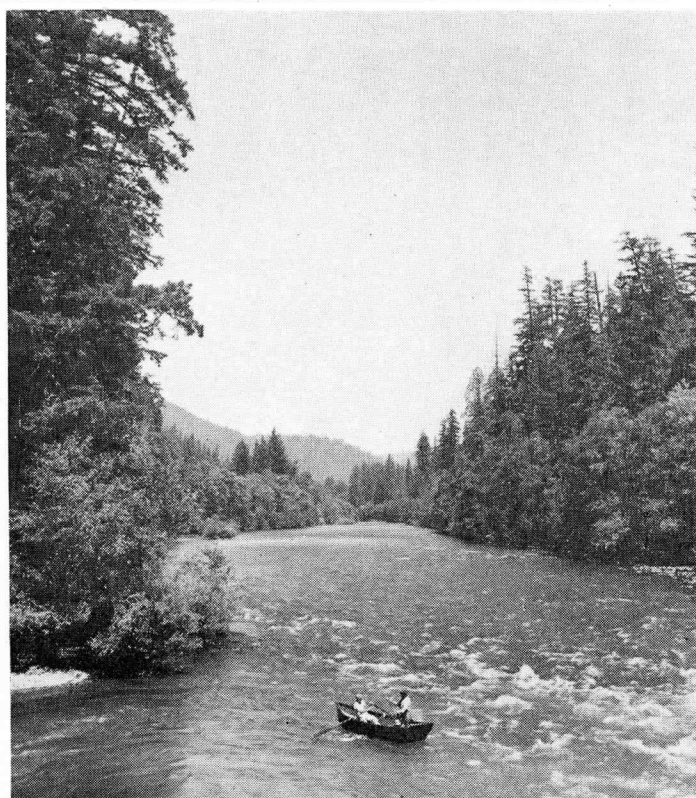
The plants grow rapidly on a wide variety of sites and may attain full growth of 8 to 10 feet in six years. Rose fences under favorable conditions in the Midwest have become stock tight in three or four years. Newly established plantings should either be cultivated for a year or two or be heavily mulched. Temporary protection from trampling or browsing by livestock may be advisable. It is said to grow poorly on the extremes of droughty wind

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## McKenzie River Investigations

By CHRIS JENSEN, Field Agent

Back in the early days when Bang's Livery Company of Eugene operated their horse drawn stages to the mining camps on the McKenzie River, fishing in the McKenzie as well as in other streams throughout Oregon was excellent. It was not uncommon, say some of the old timers, to catch a limit of 75 fish in a day, and usually only those fish 12 inches or over were considered worth the effort of packing home. One of the guides, commenting on a fishing trip in 1916, related how he and two other men caught 225 large trout in one day while running the McKenzie from Thomson's landing to the fish hatchery, a distance of approximately 5 miles. The first boats used on the river were 16 to 22 feet long and were constructed of thick planking to withstand the pounding of the rugged boulders. It is generally conceded by the old timers that Ben Finn built the first few river boats which were later improved upon by Cary Thomson and others. Today the boats are lightly constructed of strong marine plywood. Bank fishing was, of course, popular long before boating on the McKenzie started, and if there were catch records available on the number of fish taken by miners, residents, etc., they would probably show a catch per man equal to that of the boat fisherman.



Fly fishing on the McKenzie river. —OREGON STATE HIGHWAY COMMISSION PHOTO

Information, supplied by guides and long time residents, indicates that fishing was considered very good in the McKenzie until the early thirties. Following several years of poor fishing, it again picked up and was good until 1945. Since that time, however, catches have been below par, and it was for this reason plus the over-all increase in angling pressure that the Oregon State Game Commission authorized a study of the river to start in July of 1947.

Originating in spring-fed Clear lake in the Cascade Mountains, the ever cold McKenzie flows south to Belknap Springs, then runs west adjacent to highway 28, emptying into the Willamette River a few miles north of Eugene and traveling eighty miles in its course. Horse Creek, South Fork, and Blue River are the most important tributaries open to fishing.

Unlike some of the other large rivers in Oregon, the McKenzie is primarily a trout fishing stream. It is, of course,

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## ☆ THIS AND THAT ☆

A four-state antelope meeting was held in Lakeview on February 2, with the states of Oregon, Idaho, Nevada and California represented by delegates together with the Federal Aid division of the United States Fish and Wildlife Service. Mutual planning was made regarding co-ordinated aerial antelope surveys of herds which migrate between the states and other phases of antelope management also were discussed. This work will be conducted in the spring as soon as weather conditions are favorable for flying. It is hoped by such getting together to provide management of those herds which occupy more than one state.

\* \* \*

Weather conditions the past two months have held up the work of the fishway and screen department. Screening crews have not been able to do as much field work as in past years at this season of the year, and installations planned for new areas have had to be delayed.

\* \* \*

Tabulation of the final figures on the Ukiah-Birch Creek special elk area show that the 824 hunters checked in killed a total of 485 elk. The majority of the kills were made the first four days of the season with the heaviest kill being recorded from the Bridge Creek Flats, Birch Creek watershed and in the Ukiah Basin. The kill included 100 bulls, 286 cows and 99 calves.

\* \* \*

The Silver Lake special antlerless deer season in December showed a high success ratio of 93 per cent. There were 458 hunters participating and the kill was 430.

## Too Many Fish!

Kinney Lake, in Wallowa County near Joseph, is supporting a large population of big bullhead catfish, but fishing pressure has not been sufficient to crop the fish produced. Unless more fishermen take out more cats, the fish population may deteriorate through lack of food just as the size of individuals in the adjacent trout population in the Wallowa Mountains decreased through overpopulation and consequent lack of food.

The residents of the region should take advantage of the excellent catfishing and catch more of the species. Its flesh is fine-flavored, it is easy to catch, and the whole family can enjoy an outing when the sport is catfishing. Try it from April to June!

## MARCH-APRIL CALENDAR

Steelhead and Salmon over 20"—Coastal area closed; inland waters open.

Jack Salmon over 12"—Coastal area closed; inland waters open.

Spiny-ray Fish—Open both months.

Predators—Open both months.

## February Meeting of the Game Commission

At its regular monthly meeting on February 11 and 12, the Game Commission transacted the following business:

Received and opened bids for a three-year lease of grazing rights on approximately 100 acres of land at the Hermiston game farm, as follows:

G. B. Wallace, Portland...\$1,583.33 a yr.  
H. J. Andrews, Echo..... 1,500.00  
Stephen Spike, Echo..... 1,310.00  
Virdun Kellems, Pendleton 305.00

The high bid of G. B. Wallace was accepted.

The application of Robert Graff Markley, Hood River, was added to the recommended list of applicants for the game division of the State Police.

With reference to inquiry of Jackson County Court in regard to the possibility of obtaining rights to gravel deposits on certain surplus lands in Camp White for which the Game Commission had applied through the War Assets Office, the Commission indicated that if such lands were acquired, it would be willing to negotiate an agreement to provide limited gravel rights, subject to approval of the federal authorities and giving due consideration to maintenance of the maximum amount of recreational area for the general public.

It was decided to submit an application for a Federal Aid project for the emergency feeding of game birds and game animals.

The Supervisor also was instructed to emphasize to the general public that the feeding of game animals and birds during

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## Oregon State Game Commission Bulletin

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The Chipping Sparrow is the smallest of all sparrows. It weighs less than one ounce.



A familiar sight in eastern Oregon during the recent cold spell. These mule deer were photographed in Herney county by Ellis Mason, district field agent.





Cage in which quail are transported. After the birds are lured into a square trap made of half-inch hardware cloth, cage is placed against opening in trap and birds moved into it without being handled.



Quail for transplanting were trapped from coveys like this one. No area was completely trapped out but coveys were thinned to bring them into balance and safeguard against predation.

## Cooperation Essential in Habitat Improvement

A habitat improvement program relies almost entirely upon the cooperation of the landowner or, in the case of public lands, the administering agency. The Game Commission, therefore, is engaged in procuring working agreements with various individuals, groups or agencies. The following are among those already in effect or completed.

Through the cooperation of the United States Forest Service, three waterholes have been constructed at cost north of the Deschutes Game Refuge on the Deschutes National Forest. Portable water tanks temporarily located in this area last summer demonstrated the practicability of developing water on this dry, browse range as a means of securing better distribution of the deer herd.

Another highly regarded development project for big game is the construction of waterholes on the High Desert antelope ranges of southeastern Oregon. These will be excavated at cost this spring by agreement with the United States Bureau of Land Management on lands under their administration. The sites, selected by Game Commission district agents and approved by the federal District Graziers, are located on ranges otherwise capable of supporting larger antelope populations. This should result in better use of the range and assist in the increase of antelope.

The United States Soil Conservation Service is materially assisting Game Commission efforts to secure adequate planting stock of various shrubs possessing both soil conservation and wildlife values. Woody plant species of the desired sorts are very difficult to secure in large

quantities, and the production of these at cost by this Service for Game Commission use in demonstration plantings throughout eastern Oregon should greatly accelerate the cover and food planting program for upland game birds. These shrubs are to be available for planting in the spring of 1950.

Irrigation canal banks are potentially important to game birds for nesting and other cover. Seeding of perennial grass or other plants on these strips, protected from grazing, free from the dangers of the mowing machine and possession of an ample supply of water, could produce ideal nesting sites. Agreement has recently been completed with the United States Bureau of Reclamation which permits the Game Commission to develop all rights-of-way along irrigation canals, laterals, and drains within the Klamath Project in Oregon. Work will commence on several areas as soon as weather conditions permit.

Also in Klamath county, the Southern Pacific Company has permitted the free use of selected portions of its right-of-way for the planting of shrubs, grain and other plants to provide winter cover and emergency food for upland game. This agreement is believed to be particularly significant because of the enormous potentialities for habitat improvement lying in the many miles of idle land along the tracks. Much of this could be developed into pheasant or quail habitat. The Company has further agreed to minimize its necessary burning operations on these areas and, insofar as possible, to conduct the burning prior to the nesting season. The Game Commission will activate a planting program on the railroad property this spring.

The Oregon Northwestern Railroad

Company is cooperating in the upland game bird program in Harney County by refraining from the unnecessary destruction of vegetation along its right-of-way in Harney County.

Individual landowners in a number of instances have agreed to leave undisturbed areas particularly desirable for winter game bird cover. District agents of the Game Commission are actively engaged in securing additional cooperative agreements with landowners for the purpose of improving the habitat for Oregon's wildlife resource.

## February Meeting of the Game Commission

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this critical weather was not considered a solution to the situation but was being done only as an emergency measure.

After going over the capital outlay budget, deferred for consideration from the December meeting, the Commission approved the gross budget for 1949 at \$3,080,735.88, which included the current operating, current capital outlay and the postwar capital outlay budgets.

Contribution to the Oregon Cooperative Wildlife Research Unit was increased from \$500 to \$1,000 a month.

It was ordered that \$5,000 be made available for further work in predator control in cooperation with the Fish and Wildlife Service.

Dr. Richard Bond of the Soil Conservation Service appeared before the Commission to discuss the farm pond program and the possibility of obtaining bass and bluegill as brood stock for the Soil Conservation Service.

## McKenzie River Investigations

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a very important spawning area for the spring chinook salmon, but steelhead have never been known to penetrate its cold waters. The most important trout is the spring-spawned "McKenzie Redside." Cutthroat trout are prevalent in the tributaries, and a fair population of Dolly Vardens are found in the South Fork and in other sections of the main river. Whitefish are equally abundant in all sections, whereas scrap fish such as chubs, squawfish and suckers are generally confined to the lower areas below the Leaburg dam. Bottom food is abundant throughout the entire area, and large hatches of many kinds of aquatic insects may often be seen swarming over the river surface.

### Objectives

The over-all objectives of the McKenzie River investigations are to secure necessary information to form the basis for management policies which will result in the maximum returns of fish to the angler. The economic factors in production of returns to the angler are also being considered. Subsidiary objectives are: (1) to evaluate the tributaries as productive areas for native trout and for feeding and rearing areas for planted trout; and (2) to determine losses among downstream migrants in the power diversions.

After a preliminary investigation of fishing conditions during the summer months of 1947, a long term fish marking program was outlined and approved by the Commission. It provided for release of experimental lots of marked fish in the McKenzie and its tributaries over a period of approximately 5 years. Primary objectives of these experiments are: (1) to make comparisons of returns to the angler from plantings of marked fish at different sizes, times and places; (2) to find the proportion of marked to unmarked fish in the angler's catches; (3) to determine the extent of migration and the over-winter losses among hatchery planted fish; (4) to provide a basis for estimating the total population of hatchery and non-hatchery fish in the stream at various times; (5) to allow economic comparisons of liberations of various sizes of fish; and (6) to supply data for estimating future planting requirements for the stream.

In 1948 the investigation was concerned chiefly with the first three objectives. Information was also gathered concerning the downstream migration of salmon and trout fingerlings in the Leaburg power canal.

### Method of Study

Because it is imperative that the total catch by fishermen be known in order to measure the success of various experimental management techniques that are applied, a system of voluntary catch record cards was established. These business reply cards, asking for specific informa-



Pulling fyke net from Leaburg canal used to determine downstream migration of salmon and trout fingerlings in the canal.

tion regarding the catch were displayed in recreation areas and business establishments on the river and in sporting goods stores in Eugene and Springfield. They were also distributed daily to the fishermen interviewed by men working in the area. In order to establish the percentage of people making returns on the cards, a card survey was conducted throughout the season. With the percentage of return for any one period or for the season known, the total catch could easily be computed.

To ascertain a representative sample of the fish being taken by the anglers, a creel census was conducted on the main river from Coburg bridge, north of Eugene, to Smith River, approximately 7 miles north of Belknap Springs. The tributaries open to fishing, Horse Creek, South Fork and Blue River, were also covered. Catches by guided parties were reported separately by each professional guide operating on the river.

Beginning in 1947 and continuing through mid-summer of 1948, five separate lots of hatchery fish, marked by the removal of one or more fins and by the use of jaw tags, were planted in approximately 40 miles of river from the Leaburg dam upstream. All of these fish were of legal length or longer at the time of liberation. The data regarding the plantings are summarized in Table 1.

Two additional lots of marked fingerlings were also liberated in September and October. They were, however, too small to show up in the 1948 catch.

Approximately 75 per cent of the legal-sized fish planted in 1948 were distributed by using the planting boat illustrated in the May issue of the Game Commission Bulletin.

### Results

The creel census in 1947 was started immediately after the planting of the first group of marked fish on August 29 and 30, and was continued for the remainder of the season. Out of 467 fish examined from 287 creels on the main river from a point 7 miles below Blue River to Olallie recreation area and including the tributaries, 212 or 45.4 per cent consisted of marked fish. The average daily catch per fisherman during that period was 4.7 fish. Independent returns from guides throughout the season indicated that their parties averaged 6.1 fish per trip. Lack of data from the first four months of the fishing season made it impractical to calculate the total catch for 1947.

In 1948, the total catch by bank fishermen, private boats and professionally guided boat parties, was computed to be 27,837 fish (see Table 2). Marked fish contributed 7,639 or 27.44 per cent of the number caught. The average catch per day (taken from catch record cards) was 5.2 fish in the area above Leaburg dam including the tributaries, and 4.3 fish in the lower area. A survey of anglers, who did not file a return, indicated that their average catch was two fish per day in the lower river. Guided parties averaged 8.99 fish per trip. A comparison, of the daily

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Table 1

Lot No.	Fins Removed	Date Planted	Number Planted	Location of Plantings
1.	Both Ventrals	Aug. 1947	5,810	Blue River to McKenzie Br.
2.	Both V. and Adipose	April, 1948	6,264	Blue River to McKenzie Br.
3.	Left V.	April, 1948	23,095	Dam to Blue River
				McKenzie Br. to Belknap Sp.
4.	Right V.	May to July, '48	16,038	Dam to Olallie Rec. Area
5.	Jaw Tag	April to May, '48	289	Dam to McKenzie Bridge



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average catch of the anglers for the two successive years, shows that there was a substantial increase in catch per day in 1948 among the guided parties and the bank fishermen.

Marked fish made their largest contribution to the angler's catch during the first 4-week period of the fishing season when it was found that 44.9 per cent of all fish examined in the area upstream from the Leaburg dam were marked. For the remaining four 4-week periods and the last two weeks, in the same area, marked fish accounted for: 28.7, 27.34, 19.62, 23.52, and 24.48 per cent of the total catch. The mid-season liberation of fish of legal length during July contributed more than 50 per cent of the marked fish taken by anglers from then until the end of the season. Marked fish in the lower river accounted for: 16.83, 6.58, 8.33 and 10 per cent of the total catch for each 4-week period respectively. No marked fish were recorded during the last two periods in this section.

The return on catch record cards varied with each 4-week period and ranged from 22.5 to 48.6 per cent in the upper river and from 14.47 to 30 per cent in the lower river. An average return of approximately 42 per cent was obtained for the season.

Throughout the fishing season measurements were recorded of many of the marked trout taken by fishermen, and it was found that the fish which had been kept on a hatchery site for a longer period of time had put on more growth than those which had been liberated earlier and had existed on a natural diet of insects in the main stream. Among two lots of fish of the same age class, one of which had been liberated in August of 1947 and the other in April of 1948, the latter lot had surpassed the earlier plant in growth by approximately one-half inch in length. This was surprising because the fish, which had been liberated in 1948, had been the smaller of the two groups when they were graded and marked in July, 1947. Of the two other lots of fish of the same age class, liberated in April and July of 1948, the July plant showed the same rapid growth from their prolonged hatchery diet. They too had been the smaller fish when they were marked earlier in the year.

Table 3 shows the percentage of return to the fishermen from each individual planting in relation to the number planted. If it can be assumed that the methods used to calculate the total catch were approximately correct, it is interesting to note that while marked fish contributed 27.44 per cent of the total catch, only 9,182 or 17.83 per cent of the total number released had been caught by the fishermen.

The migration of native and hatchery planted trout in the McKenzie River has long been a controversial issue. There are a few people who believe that many of the

	Marked Fish				Jaw Tag	Total Mark.	Total Unmark.	Total
	LV	BV-Ad	BV	RV				
Bank Fishermen and Non-guided Boat Parties..	2,811	502	445	1,638	86	5,482	13,407	18,889
Guided Parties .....	1,029	214	277	581	56	2,157	6,791	8,948
TOTALS .....	3,840	716	722	2,219	142	7,639	20,198	27,837
Per Cent Total .....	13.80	2.57	2.59	7.97	.51	27.44	72.56	

Lot No.	No. Fish Liberated	Calculated Catch		Total in Per Cent
		1947	1948	
1.....	5,810 (Aug. '47)	1,543	722	38.98
2.....	6,264 (Apr. '48)	....	716	11.43
3.....	23,095 (Apr. '48)	....	3,840	16.62
4.....	16,038 (May to July, '48)	....	2,219	13.84
5.....	289 (Apr. to Jul. '48)	....	142	49.11
TOTAL.....	51,496		9,182	17.83

fish move downstream past the Leaburg dam during high water and never return, while others maintain that the fish merely drop down in to the lake area during high water and gradually work their way upstream again in the spring. The check of fishermen's catches during 1948 showed that considerable downstream migration did occur among two lots of fish that were planted above Blue River in 1947 and 1948. Approximately 40 per cent of the catch from the group planted in 1947 and 33 per cent of the catch from those planted in 1948 were caught in the 18 miles of water from Blue River downstream to the dam. Of the very small number that were caught below the dam, several were reported to have been taken as far as 20 miles downstream. A few fish from the 1948 planting were also reported as having been caught in two of the tributaries, Horse Creek and the South Fork. Further creel census studies in 1949 and 1950 will undoubtedly supply additional data concerning migratory habits of hatchery planted trout.

#### Downstream Migrants in the Leaburg Power Canal

In an effort to obtain data on the downstream migration of salmon and trout fingerlings in the Leaburg Power canal, which has its intake at the dam and empties back into the McKenzie River below the town of Leaburg, a fyke net was fished regularly from January 11 to October 8 in 1948. Downstream migration among salmon reached its peak during March and dwindled rapidly after May 15. Salmon in the size group from one to two inches made up 75.8 per cent of the total number of migrants, two to four inch fish 19.7 per cent and four to six inch fish 4.5 per cent. Trout of two to four inches made up 72.2 per cent of the migrants and four to six inch fish, 27.8 per cent. Approximately 85,780 salmon and 8,424 fingerlings were estimated to have migrated down through the canal during

the time that the net was in operation. Mortality among the fingerlings going through the powerhouse was not determined last year, but experiments to arrive at that mortality will be started in 1949.

#### Tributaries

Surveys conducted on several of the small tributaries of the McKenzie River in 1947 and 1948 indicate that rainbow trout are generally dominant in the lower sections of the streams and that cutthroat predominate in the higher sections. Many of the rainbows and the majority of the cutthroats examined were found to be mature at from 6 to 7 inches in length. In some of the smaller tributaries, the cutthroat trout had exceedingly large heads and long slender bodies, characteristics which may be attributed to overcrowding and/or lack of available food. The tributaries were closed a few years back because it was believed they would serve as feeder streams to the main river. An experiment is now underway to find the returns from fingerlings planted in the tributaries versus plantings in the main stream, and to also determine how long artificially planted fingerlings remain in the tributaries prior to their migration into the parent stream. Further investigations will evaluate the tributaries as spawning areas for native trout and as feeders for larger streams.

#### Summary

At the present time hatchery-reared fish of legal size contribute a good proportion of the angler's catch in the McKenzie. As the population increases so the angling pressure increases, and that in turn brings about the demand for the release of more fish. Hatchery operations are expensive and the cost of legal size fish particularly comes high. It, therefore, is important to give attention also to building up natural propagation so that it will contribute substantially more

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## PUBLIC SHOOTING GROUNDS HUNTING REPORT, 1948

The 1948 waterfowl season showed a general increase in both hunters and hunter success over the preceding year. Hunting conditions, particularly the weather, were superior to those in 1947, but still left much to be desired from a duck hunter's viewpoint.

Most of the kill was made the first half of the split season. Freezing weather prevailed the second half of the season and relatively few hunters utilized the three public hunting grounds.

Results of the season are presented in the following tables:

### HUNTING PRESSURE

	No. of Individual Hunters		
	Permits Issued	Resident	Non-Resident
Summer Lake .....	3,789	2,376	57
Malheur .....	1,411	775	52
Chewaucan .....	195	....	..

### HUNTING SUCCESS

Success Ratio: Birds per man day

	Ducks	Geese	Total
Summer Lake .....	1.31	1.29	2.60
Malheur .....	0.93	0.38	1.31
Chewaucan .....	1.53	0.31	1.84

### WATERFOWL KILLED

	Ducks	Geese	Total
Summer Lake .....	4,834 (15 species)	4,790 (5 species)	9,624
Malheur .....	1,301 (13 species)	526 (6 species)	1,827
Chewaucan .....	295 (11 species)	65 (5 species)	360
<b>TOTAL</b> .....	<b>6,430</b>	<b>5,386</b>	<b>11,811</b>

### LAW ENFORCEMENT

Area	Arrests Made
Summer Lake .....	31
Malheur .....	3
Chewaucan .....	3
<b>TOTAL</b> .....	<b>37</b>

### WATERFOWL KILL BY SPECIES

Species	Summer			Total
	Lake	Malheur	Chewaucan	
<b>Ducks</b>				
Mallard .....	1,480	469	234	2,183
Pintail .....	782	262	19	1,063
Baldpate .....	855	163	15	1,033
Green-Winged Teal .....	841	32	10	883
Shoveller .....	338	28	2	368
Canvasback .....	54	265	..	319
Gadwall .....	117	39	3	159
Redhead .....	40	23	10	73
Scaup .....	54	11	2	67
Ruddy .....	36	2	1	39
Golden Eye .....	32	1	2	35
Ruffle Head .....	24	...	..	24
Cin Teal .....	10	...	..	10
Merganser .....	...	4	..	4
Scoter .....	...	2	..	2
Wood Duck .....	1	...	..	1
Coot .....	170	...	1	171
TOTAL DUCKS.....	4,834	1,301	299	6,434
<b>Geese</b>				
Snow Goose .....	4,474	255	11	4,740
Canada Goose .....	179	223	35	437
Cackling Goose .....	116	28	12	156
White Fronted Goose.....	20	17	3	40
Lesser Canada Goose.....	1	3	6	10
TOTAL GEESE.....	4,790	526	67	5,383
GRAND TOTAL.....	9,624	1,827	366	11,817

## Distribution of Individual Resident Hunters By County

County	Lake	Malheur	Total
Deschutes .....	566	56	622
Multnomah .....	416	142	558
Lane .....	449	26	475
Marion .....	181	77	258
Linn .....	142	60	202
Clackamas .....	66	27	93
Klamath .....	91	2	93
Benton .....	44	38	82
Harney .....	..	78	78
Douglas .....	60	13	73
Polk .....	59	6	65
Malheur .....	2	50	52
Washington .....	35	16	51
Clatsop .....	23	24	47
Lake .....	46	..	46
Lincoln .....	19	25	44
Yamhill .....	16	25	41
Columbia .....	33	4	37
Crook .....	10	23	33
Tillamook .....	12	21	33
Grant .....	2	31	33
Jackson .....	27	5	32
Coos .....	21	5	26
Josephine .....	16	4	20
Jefferson .....	14	..	14
Wasco .....	10	4	14
Curry .....	4	5	9
Baker .....	1	5	6
Gilliam .....	4	..	4
Hood River .....	3	..	3
Union .....	..	3	3
Morrow .....	2	..	2
Wheeler .....	2	..	2
<b>TOTAL</b> .....	<b>2,376</b>	<b>775</b>	<b>3,151</b>

## McKenzie River Investigations

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to the fishermen's catch. The McKenzie has good spawning areas available in the main river and in the tributaries; cover is sufficient and natural food plentiful to support natural propagation but the potential brood fish usually are removed from the stream by the angler before they reach the age at which they reproduce. The anglers can do their part by being satisfied with a catch of immature fish and by returning to the stream large fish that are ready to spawn and also spawned-out female fish that will, in all probability, survive to again add to the fish population of the following year.

Declaring that game law violations must cease, Justice of the Peace George Rogers of Enterprise recently imposed 30-day jail sentences on Joe Dillon, Forrest Snyder and Miles E. Hage arrested by State Police Officer Richard O'Brien on the charge of shooting pheasants out of season. The men also were fined \$25 on each of several counts.

Judge Rogers stated, "We won't have any game in Wallowa County unless game law violations can be stopped and fines alone don't seem to be doing the job, so we will try jail sentences."

## What About the Multiflora Rose?

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blown sand and on very poorly drained soils. It does not do well on sites lacking top soil, nor is it thrifty when grown in the shade. Minimum soil, water and temperature requirements which will undoubtedly limit use of this shrub in some sections of Oregon have not as yet been determined. Multiflora rose grows exceedingly well on the Columbia River bottom land below Portland. Commercial nurserymen use it as understock on their budded garden roses. A six year old planting on the Pullman nursery of the Soil Conservation Service in the Palouse region of eastern Washington at least equals the dimensions usually given for the mature plants in the Midwest. Nebraska and South Dakota reportedly have some ten year old plantings that have survived their winters with no serious losses.

A mature fence may be 10 to 12 feet wide. Pruning is not necessary; however, the sides can be trimmed back with a mower blade set vertically. Weedy fencerows have not been a problem under this rose. Its roots are not widespreading; crops can be grown right up to the plants. It is not seriously affected by disease or insects. Due to its close relationship to soft fruit trees, it is not advisable with our present lack of knowledge to establish multiflora rose adjacent to orchards. Suckering will not occur, but some layering may take place if tips are covered. This will ordinarily be controlled by the usual farming operations of plowing or mowing. This rose will not spread in competition with either sod or cultivation. In fact, according to an article in the Country Gentleman by Hugh Steavenson,



Close-up of the multiflora rose blossoms. (Soil Conservation Service photo.)



Multiflora rose field border planting started in 1941 at the Pullman Nursery in Washington. (Soil Conservation Service photo.)

multiflora rose has not become a nuisance even around the oldest plantings.

Multiflora is usually set out in a single row, but it is also useful planted in gullies to arrest erosion and in odd areas for wildlife. In rows it serves to reduce wind erosion and damage to crops by wind. One study in Illinois showed that corn yields were actually greater adjacent to the fencerow due to better moisture conditions. Multiflora rose will hold soil well and is said to have been used on highway cut banks and for stream bank protection. It can be used as firebreak or snowfence. In conservation farming it is used on the contour between fields, on terraces between crop and grassland, and for protecting grassed waterways, ditches, ponds and woodlots from livestock. Possibly, future tests may even show it to be effective in keeping deer out of forbidden territory. It certainly will prevent trespass of man or dog when used as a boundary fence. Compared with wire for permanent fencing multiflora is easier and cheaper to establish, and it requires less maintenance. According to a recent article in the Farm Journal, a hedge of this species is estimated to cost about forty per cent less than a woven wire fence of the same efficiency.

The wildlife value of multiflora rose is primarily as winter cover for birds. Fencerows bordering or dividing cultivated fields may be ideal year-around habitat for pheasants and quail, but it is particularly in the winter that dense brushy cover is needed for protection from man, predators and the elements. At this season birds depend for food largely upon

weed seeds, where available, and waste grain in the harvested fields, but without available protecting cover such areas are utilized at great risk or, as with brush inhabiting species of short cruising radius, such as quail, they are largely unutilized. Quail in particular, as they normally move about on the ground, also use fencerows as travel lanes. Dense, thorny clumps of multiflora planted in gullies or waste corners could provide ideal habitat for good populations of quail. The showy, white flower clusters of spring become masses of pea-sized, red fruits in fall. These remain on the bushes all winter and provide an abundant source of emergency food when severe weather conditions cause the staple foods to become unavailable. An extensive cooperative study between the Soil Conservation Service and the State of Washington Department of Game was conducted on the former's Pullman nursery where many woody plant species, as well as grasses and legumes, are tested. The crop and gizzard food content of 94 pheasants and 54 Hungarian partridges was analyzed. The partridges had made little use of the woody plants. Ninety-nine woody species produced fruit during the seven years study; of these, 35 were utilized by pheasants. The seed of three species of wild rose, including multiflora, was found to be third in importance.

The Oregon State Game Commission has established demonstration plantings of multiflora rose west of the Cascades. Scarcity of planting stock is limiting expansion of this phase of the habitat im-

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## INCREASE IN GAME CODE ARRESTS

The 1948 annual report of the game division of the Department of State Police shows an increase in both the number of arrests made and the amount of fine imposed for game law violations by the courts. In 1947, 2,431 arrests were made while 2,908 are reported for 1948. The 1947 total of fines imposed was \$81,948.45 (\$7,871.05 remitted) compared to \$110,295.96 (\$15,758.50 remitted) for 1948.

Highest number of violations was for hunting and fishing in prohibited areas and hours and by prohibited means. The number of arrests also was high for hunting or fishing without a license.

### ANNUAL REPORT Department of State Police 1948 Game Code

	Warn.	Arrests	Acq.	Sent.	Fines
Angling:					
Altering angling license.....	..	1	..	....	\$ 50.00
Closed season .....	16	39	1	.14	902.50
Prohibited areas, hours, or methods...	233	476	10	.70	12,064.99
Disguising:					
Sex of deer .....	..	13	3	.32	1,403.00
Exceeding bag limit.....	24	248	11	.47	6,770.03
Failure to register trapping location.....	1	1	..	....	25.00
Failure to tag properly or at all.....	14	134	8	2.39	8,939.50
False application for license.....	..	10	..	.08	211.00
Holding game animal, no permit.....	1	....	..	....	.....
Hunting:					
Closed season .....	4	169	7	5.33	9,664.25
Prohibited areas, hours, or methods...	116	616	27	4.65	23,130.80
Protected animals, birds.....	..	54	3	1.27	3,729.50
Interfering with duties of law enforcement officer .....	..	1	..	....	25.00
Lending angler's or hunter's license.....	..	3	..	....	195.00
Molesting game animals or birds.....	..	4	..	....	100.00
No fish ladder.....	1	....	..	....	.....
No license:					
Alien gun .....	..	1	..	....	25.00
Angling .....	168	357	11	.27	7,684.90
Game breeder .....	..	1	..	....	50.00
Guide .....	..	6	3	....	85.00
Hunting .....	92	176	12	1.77	4,170.00
Non-resident .....	2	95	..	.04	2,486.00
Trapping .....	2	14	1	....	326.00
Permitting dogs to run deer.....	1	....	..	....	.....
Possession:					
Game animal .....	..	194	13	9.49	18,000.49
Game bird .....	..	85	4	.38	3,167.25
Game fish .....	5	161	3	.91	3,921.25
Sale of game animal, bird, fish.....	1	3	..	.16	1,000.00
Trapping:					
Closed season .....	..	7	1	....	180.50
Prohibited areas, or methods.....	2	4	1	....	100.00
With unbranded traps.....	3	5	..	.03	100.00
Trespassing on fishway.....	..	3	..	....	75.00
Unlawfully disturbing traps.....	..	2	..	.19	70.00
Using license of another.....	..	2	..	....	50.00
Wanton waste of game.....	..	23	2	.16	1,593.50
<b>TOTALS.....</b>	<b>686</b>	<b>2,908</b>	<b>121</b>	<b>28.75</b>	<b>\$110,295.96</b>

15.79 years suspended—\$15,758.50 remitted.

## Multiflora Rose

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provement program. One hundred thousand rooted cuttings of this rose are on order for delivery this spring. It is planned to set them out in test plantings on sites selected or approved by the resident district agents in the upland game bird habitat of all eastern Oregon counties. Contracts are being negotiated for several times this quantity of roses, plus smaller amounts of other promising shrubs, for delivery in the spring of 1950.

The majority of these shrubs will be planted by Game Commission personnel on areas under agreement with the Game Commission, such as suitable public lands, railroad rights-of-way, demonstration areas and refuges. However, insofar as funds and available supplies permit, some plantings will be made, at least in this early period, at the request of individual farm landowners, under stipulated conditions, on the approval of the district agent. Approval is based on the potential value of the prospective planting to upland game birds. The landowner in these cases will prepare the planting site, preferably with plow and harrow. He will agree to give the young planting reasonable protection. There is to be no charge to the landowner. Game Commission personnel generally will conduct or assist in the actual planting. Farm landowners interested in obtaining further information or desiring to test this shrub may contact either the local district agent or the Portland office of the State Game Commission.

It appears at this time that because of the values of multiflora rose through serving as windbreaks, reduction of wind and water erosion, functioning as a permanent fence, as a control of field border weeds and as upland game habitat, wide use of this or similar shrubs in farming practices will be seen over the state at an early date.

Killing an elk out of season and canning the meat cost Robert E. Butts, Seaside, \$400 when brought before the justice court in Astoria. Sharing in the meat cost his brother-in-law, Albert T. Harris, Astoria, \$100 and costs. Butts was arrested and pleaded guilty after State Police found a packing box alongside the road with elk hide, bones and remnants, all untagged. On the box was Butts' name and address.