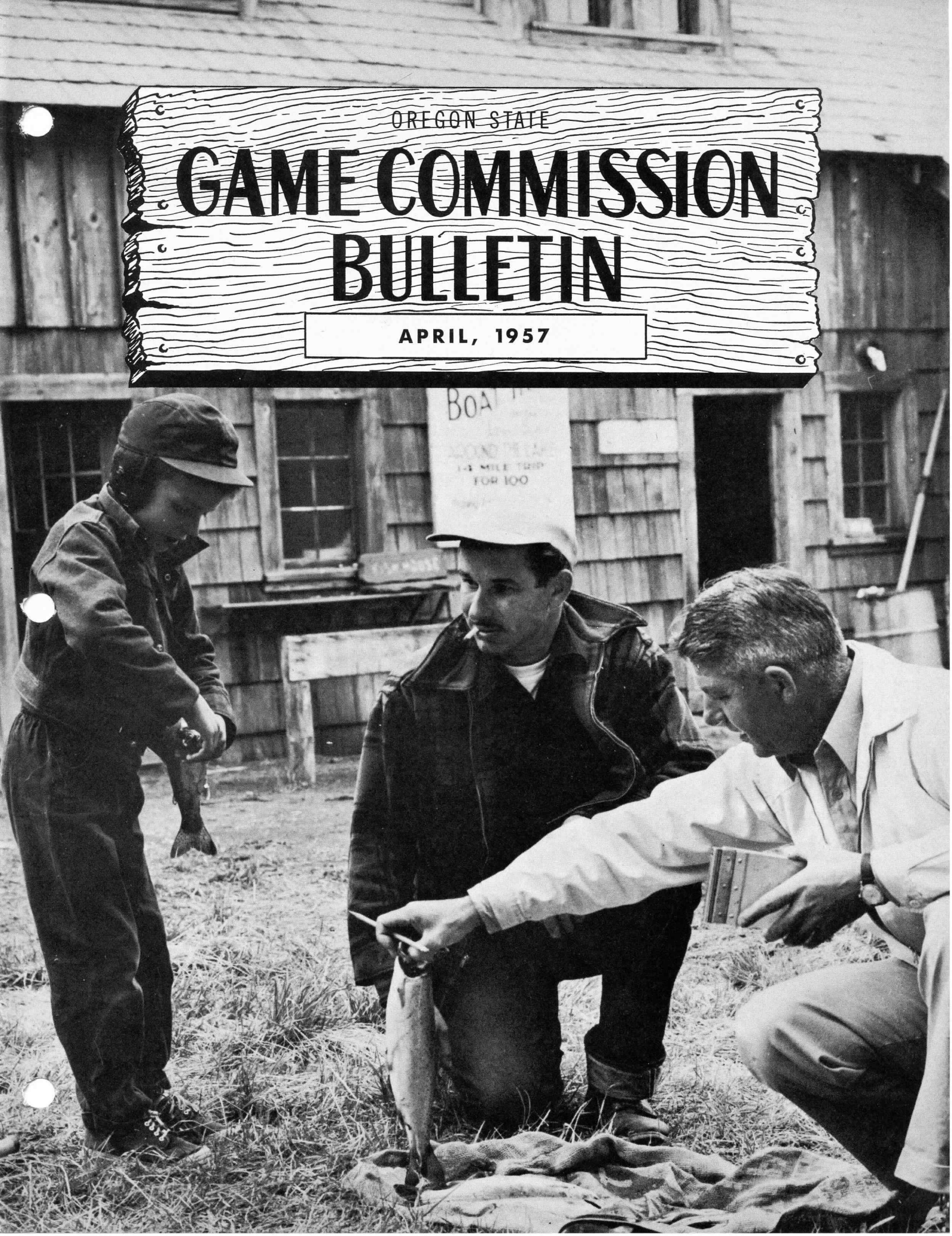
OREGON STATE

GAME COMMISSION BULLETIN

APRIL, 1957



Quail trapping operations during the month of February netted over 300 valley quail and 70 mountain quail. A total of 260 valley quail were trapped at Summer Lake and released at habitat improvement sites in Sherman county. Remaining valley quail were trapped in Gilliam and Wheeler counties and released in Umatilla and Morrow counties. The 70 mountain quail were taken in the Snake river area of Baker county. About 30 of these will be kept as breeding stock at Hermiston farm and the remainder released.

* * *

During January and February, 4,200 ducks were banded in Oregon.

* * *

A general field survey has been initiated on all waters within the Central Willamette district to locate diversions in need of screens. Fish ladders in the district also are being checked to assure spring fish passage.

* * *

More than 200 anglers participated in the winter opening of the trout season below Fern Ridge Reservoir. In the borrow pit, which was by far the better fishing area, cutthroats averaged about 11 inches in length and rainbows 12 inches.

* * *

Copies are available of the 1956 Game Commission Bulletin index.

COVER

One of the ways to test the results of the Diamond Lake rehabilitation program was to get as complete a creel census as possible the opening day of the 1956 season, following a complete closure of the lake for chemical treatment and restocking. Here a proud young angler shows his catch to fishery agent Ken Cochrun, who had a busy day checking anglers. (Photo by *Milt Guymon*)

STATES SEEK LICENSE FEE CHANGES

Of interest to the Oregon sportsman is the financial means by which the fish and game management program is being maintained. This is of interest to him first because he knows that this program, like any other business, requires appropriate goods, services and related activities which cost money. Second, the maintenance of that program comes directly from his pocket since the program is financed solely by license revenue and excise taxes on sporting arms, ammunition and sports fishing tackle. No general tax monies are available to the program.

In this connection, it is interesting to note that many states are finding it necessary to seek an increase in license fees in order to carry on their program. A recent survey completed by the Pennsylvania Fish Commission reveals that at the present time 27 states are asking increases in hunting licenses, fishing licenses, or both. In addition, 6 states reported they got increases in their licenses at the last sessions of their legislatures. Furthermore 4 states re-

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Oregon State Game Commission Bulletin

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At the present time the Bulletin is circulated free of charge to anyone forwarding a written request.

MARCH MEETING OF THE GAME COMMISSION

At its meeting on March 15, the Game Commission took the following actions:

Access . . . Authorized acceptance of access easements to the Seitz pond in Wheeler county and the Forrest and King ponds in Grant county. Also authorized expenditure of $1,250 for access and parking site at Devils lake.

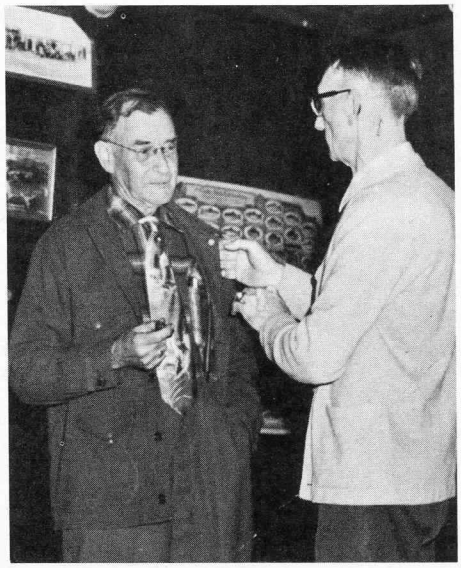
Game Bird Production . . . Approved following production schedule for 1957: 25,500 pheasants, 1,500 grey partridge and 4,000 chukar partridge.

Research . . . Authorized cooperative project with state forest department to study interrelationships between big game and forest management.

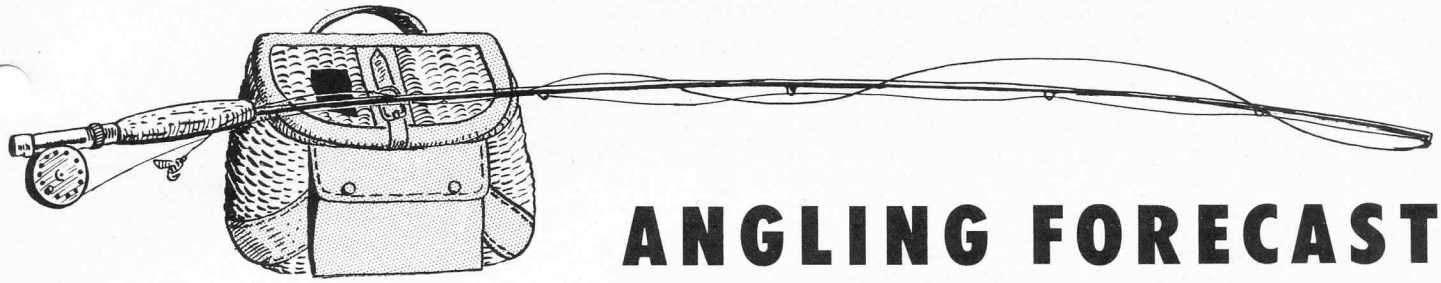
Trash Fish Control . . . Authorized treatment with toxaphene of Ana River system in Lake county; and investigation of feasibility of using toxaphene at Davis and Miller lakes.

Fish Stockings . . . Authorized an experimental trial of concentrated trout plantings in certain key streams to determine whether a greater return to the creel can be obtained from hatchery stockings. Test areas chosen are the West Fork of Hood River, Necanicum river and certain streams in Fort Klamath area. Also for the same reaso Floras lake will receive allocations normally intended for Sixes and Elk rivers.

25 YEARS AS PRESIDENT



Active in western Lane county fish and game affairs for many years, Larry Derrin was honored at a special ceremony in February by the Siuslaw Rod and Gun Club in recognition of his quarter century service as president of the club. Gib Houghton, new president, pins a gold past president's pin on Mr. Derrin. (Photo by *Siuslaw Oar*)



ANGLING FORECAST

Fishery Agent Style

By FRED E. LOCKE, Chief, Lake and Stream Management

SOME ANGLERS have pet theories based on the rise and fall of the barometer, moon phases, direction of the wind, and so forth, which are thought to give a clue as to when the fish are hitting. Regardless of the theory advanced, one factor is essential for success of the angler—fish must be present.

Let us look at the findings of the fishery agent to learn what is in store for the Oregon angler in 1957 in the way of fish stocks in several lakes, reservoirs and streams. The work schedule of the fishery agent includes such activities as setting nets, examining anglers' creels, electro-fishing, all of which are aimed toward obtaining information on the fish populations of lakes and streams. It is only through a thorough knowledge of the stocks of fish present that we can expect to manage and stock waters effectively.

East Lake in the Paulina Mountains has produced many limit catches of fish over the years and is one of the most popular bodies of water with the Oregon angler. Fishery workers have been examining the production of East Lake for the past ten years and have become intimate with the stocks of fish the lake supports from year to year. Test netting in East Lake at the close of the 1956 angling season produced large numbers of eastern brook trout. These fish ranged from 6 to 18 inches in length. The early season angler on East Lake should enjoy good fishing for brook trout, including some fish up to 18 inches. The bulk of the season's catch will consist of brook and rainbow trout from the 600,000 fingerling planted in 1956. In spite of the fact that approximately 88,000 trout were taken from East Lake in 1956, the population was at a sufficiently high level at the end of the season to assure good fishing in 1957.

Test netting at Paulina Lake also revealed that a good population of rainbow trout had escaped the angler in 1956. The rainbow are expected to enter the 1957 fishery as fish from 8 to 13 inches in length. The bulk of the catch at Paulina will be composed of rainbow trout from 6 to 10 inches which were released as fingerlings in 1956.

Creel census returns and net sets on Crane Prairie Reservoir can be used as a basis for predicting angling success in 1957. In addition to a good population of rainbow trout remaining from the 1956 season, a fingerling plant is expected to enter the catch in good numbers. The kokanee, which was well represented in the anglers' catch in the past season, will again make its appearance in 1957. Limit catches of kokanee from 12 to 16 inches in length will probably be taken in 1957.

Test netting in Big Lava Lake indicates the presence of good numbers of brook trout, some of which range up to 18 inches in length. It is expected that anglers on Big Lava Lake will have another good year in 1957 and that many large eastern brook will be taken.

Wickiup Reservoir continues to support a good population of large brown and rainbow trout. Brown and rainbow trout are not taken readily by the average angler until the reservoir is drawn down in late summer. Should irrigation needs in the lower Deschutes require the use of water from Wickiup Reservoir, anglers in 1957 should enjoy good fishing during the latter part of the season when the reservoir is drawn down to normal summer pool level.

At some lakes a volunteer creel census is taken. Anglers are asked to report catches on slips provided. Value of information depends upon angler cooperation.

Experimental nets set in Suttle Lake indicate that the lake supports a large population of brown trout; however, when the fishery agent examines the anglers' creels, he finds very few brown trout. The inability of the angler to take brown trout in Suttle Lake, even though the browns are present in good numbers, clearly demonstrates the reason for the firm stand taken by the Commission against planting brown trout in lakes. It has been learned that in certain lakes brown trout refuse to take lures or bait readily, thus escaping the angler. An accumulation of larger brown trout in a lake will eventually reduce the over-all yield to the angler. In 1956, anglers fishing Suttle Lake averaged three fish per person. The catch was made up primarily of kokanee and rainbow trout. Kokanee were between 7 and 10 inches in length and the rainbow trout from 6 to 18 inches in length. It is anticipated that Suttle Lake will produce good fishing again in 1957.

Fishery agents predict that both the kokanee and lake trout fishing will be good at Odell Lake in 1957. Based on previous creel census checks and the returns of nets set in Odell Lake, they expect good catches of kokanee from 16 to 18 inches will be made. Lake trout fishing is expected to be better than was experienced in 1956 but the majority of fish will be between 18 and 22 inches in length.

Kokanee planted in Crescent Lake in 1954 were taken by the angler for the first time in the summer of 1956. These fish ranged from 8 to 12 inches in their

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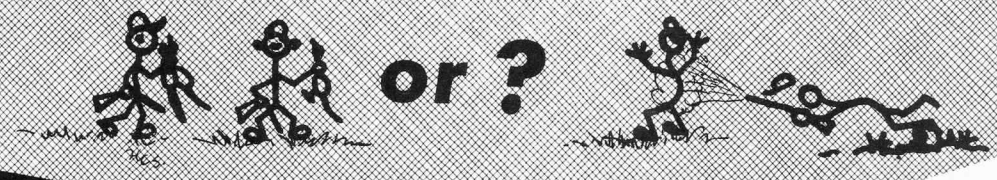
it's YOUR responsibility



"The records . . . disclose the fact that six men were killed and ten seriously wounded while hunting in Oregon during the year_____."

What year was that? Sounds like a recent one doesn't it? The article goes on to say, "Carelessness was undoubtedly responsible for the snuffing out of these lives."

Well, the last statement is just as true today as it was in 1915, the year the records quoted were compiled.

Many persons have expressed great concern over the appalling increase in the number of hunting accidents that have been taking place recently. True, any accident is one too many; however, hunting isn't the sport of trigger-happy nitwits that many would have us believe.

It is useless to compare the number of nonfatal accidents occurring last year to those in 1915 for we know many of the minor accidents were not reported then. Since a uniform hunter casualty report form has been in use, a far more accurate report of accidents in the state has been obtained. However, there is no law in Oregon requiring the reporting of gunshot wounds.

Looking though at the number of fatal accidents in 1915 and 1956, we do get an interesting comparison. In the year 1915, there was one fatal accident for every 8,672 hunters, while in 1956 we had one fatality for every 30,601 hunters in the state. We had half again as many fatalities, but 5.3 times as many hunters!! This certainly would not indicate that hunting is becoming an increasingly dangerous sport.

Just how did we do in Oregon during 1956? The records show we had 9 fatal accidents and 36 nonfatal accidents. As in past years, it is difficult to establish much of a trend or a pattern except for a few things that show up each year.

First, we can see that the mistaken for game category is a relatively small one whereas the accidental discharge category really upped the total. Five of the accidents fell into the mistaken for game group while 27 resulted from accidental discharge.

What about the distances involved? As in the past few years, short-range accidents caused most of the trouble. At least 28 of the accidents happened at ranges of less than 15 yards, many at only a few inches. And, again, a goodly number of the accidents were self-inflicted ones.

	Self-Inflicted	Mistaken for Game	Accidental Gun Discharge	In Line of Fire and Ricochet	Loaded Gun in Boat or Car	Unknown & Other
Total '54-5	25	10	45	16	16	11
1956	17	5	27	10	6	3

As far as the age of the shooter is concerned, Oregon is falling more and more into the national pattern. For many years, the younger hunters of Oregon have had a fairly clean slate, while in other portions of the country they were responsible for a large number of the hunting accidents. Now, in Oregon, they have started to run up their record. As the graphs indicate, 25 of the accidents were caused by hunters under the age of 25 and of that group, 14 were under 17 years of age. This figure, of course, is way out of proportion to the number of hunters in that age group.

What sort of conclusions can we draw from these figures?

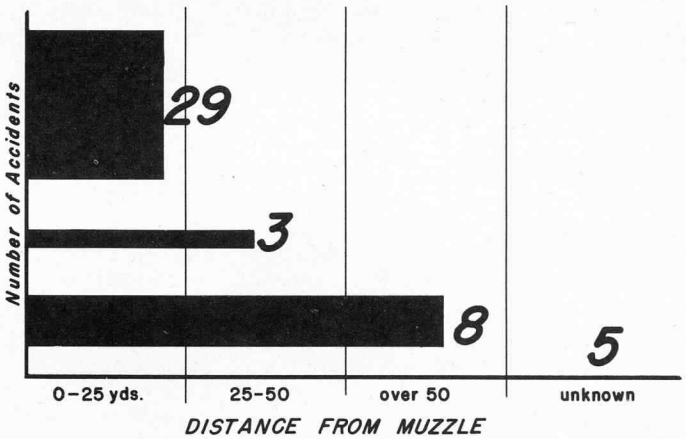
First, as far as the total number of accidents is concerned, we don't have the alarming increase that would be indicated. Our methods of gathering information have become much more efficient during the past few years. Probably we have heard of most of the fatal accidents in the past, but numerous minor accidents undoubtedly go unreported. However, we still have a certain segment of our hunting population that is either completely uninformed as to the basic principles of gun safety, or completely irresponsible, or lacking in common sense. The case histories of the accidents point to the same thing year after year. There is one basic cause for accidents. It's not the weapon used, not the time of day, not the light conditions, but the simple fact that some one was CARELESS.

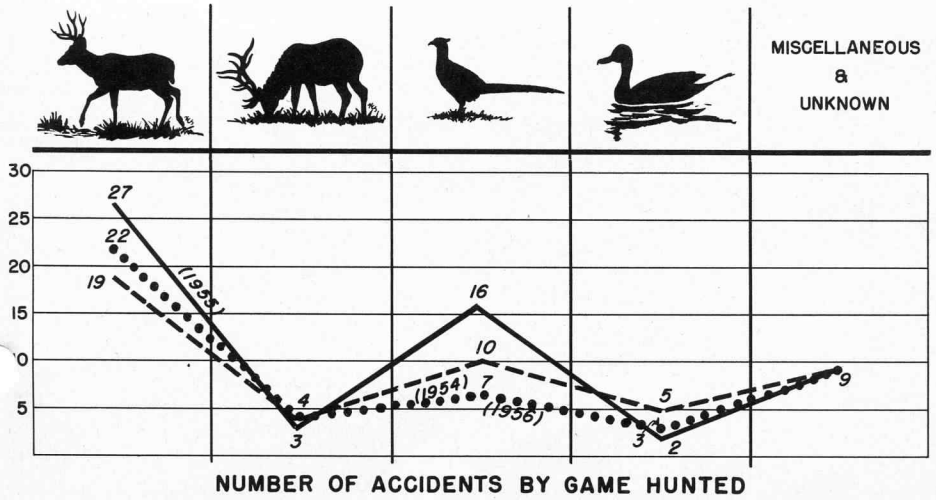
The next question to arise is, what can be done. We had 11 less accidents in 1956 than in 1955. Are we proceeding in the right direction? It appears that it is too early to tell for sure or draw any conclusions. We have had fairly complete reports for the past three years only, and it is not yet possible to establish any definite trend. Some of the other states have adopted various training plans. In California, every young hunter must complete a hunter safety course before obtaining his first hunting license. In New Hampshire, gun safety is integrated into the high schools as part of the curriculum, a method which seems to be paying off. Arizona has a similar plan.

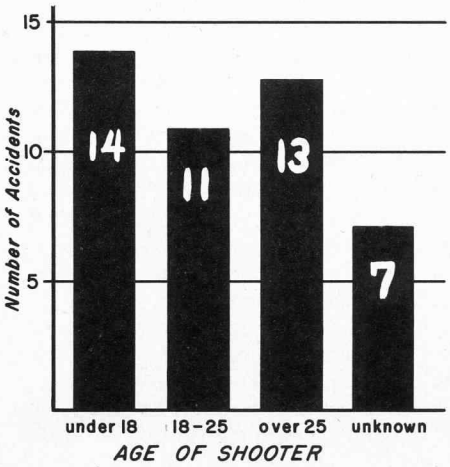
In most states, the penalty for the negligent wounding or killing of another person is much more severe than here in Oregon. Laws or no laws, the problem gets back to one of training. The cardinal rule of gun safety must be high in the minds of everyone who goes hunting. "Treat every gun with the respect due a loaded weapon."

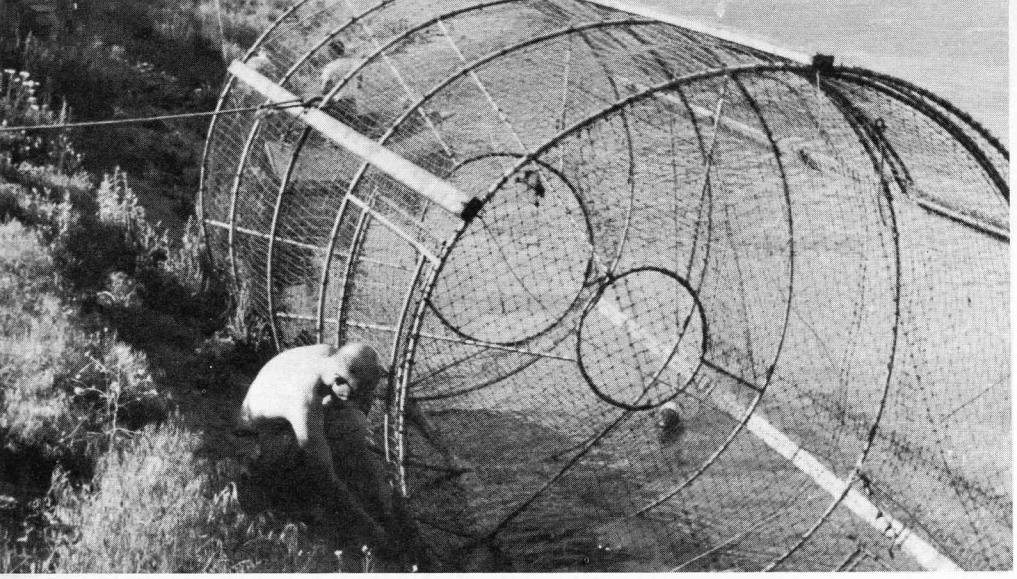
Along the line of education, work is being done. Men of the Game Commission education staff carried a firearms safety class to the majority of the high schools in the state this past year. The Red Hat Campaign has been carried on in Oregon for the past several years. Many sportsmen's and other civic minded groups have given the National Rifle Association's hunter safety course to all interested persons. But, all too often, the groups doing the teaching have to beg to get students.

So in the final summary, it all boils down to one thing. We can analyze the casualty causes, provide a course for hunters and even pass laws making such courses mandatory. Still there is only one basic way to prevent hunting accidents, and one person who can do it. If every hunter treated the weapon he is using with the respect it is due, hunting accidents could be virtually eliminated!! — Ron Shay.









Fyke net is used to test fish populations in larger streams such as the Snake River.

ANGLING FORECAST

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third year of life. They are expected to measure between 12 and 14 inches in 1957 when they reach maturity.

Diamond Lake is another area expected to produce good fishing in 1957. At the close of the past season, some trout in Diamond were about 20 inches in length. Rainbow fry planted in 1955 were entering the creel late in the 1956 season as fish 8 to 9 inches long. Based on previous growth studies of Diamond Lake fish, the rainbow trout from the 1955 fry plant are expected to average about 12 inches at the opening of the 1957 season. In addition, a good number of three-year-old fish escaped the 1956 fishery and will be available to the angler in this season. It is predicted that some rainbow in excess of four pounds will be taken at Diamond Lake in 1957. Many of the larger fish will be entering the spawning run and will not be available to the angler at the start of the 1957 season.

Three reservoirs in southeastern Oregon are looked upon by fishery agents to produce excellent angling in 1957.

Malheur Reservoir in northern Malheur county is expected to provide the best angling in the southeast section of the state. By November of 1956, the trout population in Malheur Reservoir was averaging approximately 11 inches in length. Anglers are expected to catch two size groups of rainbow trout at the start of the 1957 season. One group will average 8 to 10 inches, and the other is expected to go 12 to 14 inches. By the end of the 1957 season, anglers can expect to catch trout up to 20 inches in length and several pounds in weight.

Beulah Reservoir is expected to produce excellent catches during the early part of the spring. The reservoir which is open to angling throughout the year was producing rainbow averaging 14.4 inches in length in November 1956. Rainbow trout up to 22 inches in length could easily be taken in 1957.

Although the rainbow trout will average about 10 inches on opening day at Warm Springs Reservoir, fish up to 16 inches may be taken by the end of the season. Introduced largemouth bass and channel catfish will be too small to be attractive to the angler in the 1957 season.

Where lakes remain somewhat stable throughout the year, streams may undergo extreme physical changes from low water conditions in years of light precipitation to major floods. Both flood and drought conditions in streams are detrimental to fish life. Because of the mortalities that occur as the result of these conditions, fishery workers experience difficulty in making forecasts in regard to fish populations that can be expected in streams four or five months in advance of the angling season.

Where experimental gillnets and traps work well in sampling fish populations in lakes or reservoirs, they are not satisfactory in most streams. In small streams up to 20 feet in width, a motor-driven electric generator is used in sampling the fish population. The generator may be set up on the bank of a stream or operated from a boat with fishery agents operating the two electrodes. The stunned fish are collected in dip nets and placed in tubs of water until they can be weighed and measured. In larger streams and those having some quiet pools, it is possible to collect fish with the use of a fyke net. The fyke net is usually cylindrical with a funnel opening to the downstream side. Seines of various lengths and mesh sizes are used to collect trout and salmon fingerling.

Angling on the Deschutes River above Bend in the 1956 season was below average. Large volumes of water released from Wickiup Reservoir throughout the summer were thought to have been responsible for the poor fishing generally experienced by the anglers. Improved water flows in 1957 should result in better angling on the upper Deschutes River. Because of the light catch in 1956, a good carry-over of resident trout is expected to be available in the summer of 1957.

As in past years the Little Deschutes and Crescent Creek will continue to offer excellent early season brown trout angling in 1957.

Predicting runs of steelhead trout and salmon in Oregon streams is exceedingly difficult because of the many factors affecting both the fresh-water and marine stages of their life cycle.

The spring run of chinook salmon which will enter the Rogue River in 1957 is an example of the complex problem involved in predicting returns of anadromous species. Over 33,000 spring salmon were counted over the Gold

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In small streams electric shock treatment can be used successfully to determine numbers of fish in a given area.

ANGLING FORECAST

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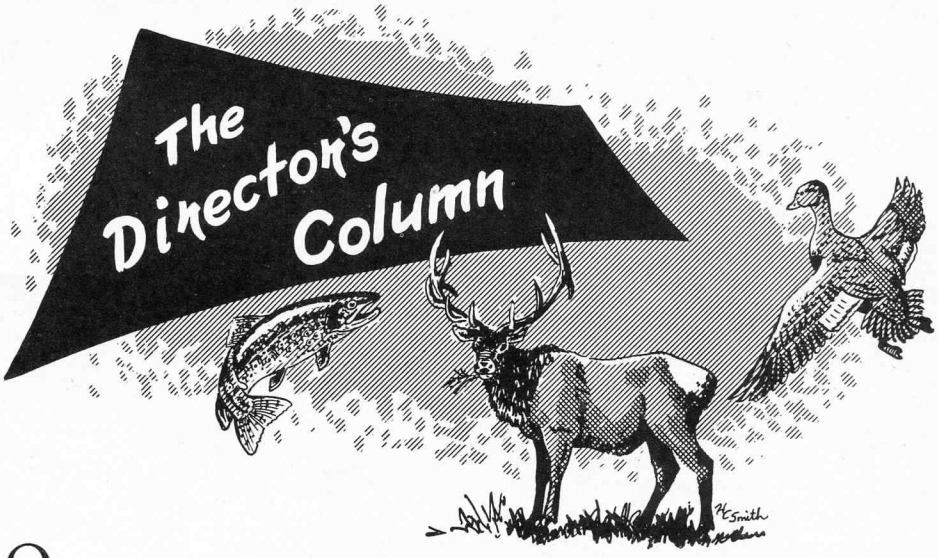
Ray fish ladder in 1953. The run in 1953 was considerably above a fifteen-year average and would be expected to produce a good run in 1957 when their offspring return as mature fish. Although the parent run entering the river in 1953 was considered excellent, fishery workers are aware that severe losses of fry and fingerling occur before the young fish reach the ocean. Scouring action of a flood at the time the eggs or egg sack fry are in the gravel can well result in a very serious loss of eggs and fish. Several unscreened turbines on the Rogue River are known to destroy large numbers of downstream migrating yearlings. High water temperatures in late summer are known to cause losses of downstream migrants on the Rogue through a bacterial disease.

The marine life of the Rogue River chinook salmon is known to extend over a wide area along the Pacific coast. Returns of salmon from Oregon streams have been received from California, Washington, British Columbia, and Alaska. Salmon reaching maturity are taken in both the offshore sport and commercial catch. In addition, large numbers are undoubtedly lost through marine predators such as seals and larger predacious fish. The number of mature fish returning to a parent stream is generally quite small as compared to number of salmon entering the ocean as yearlings.

A gradual increase of spring chinook salmon counted over Winchester Dam on the North Umpqua River from about 2,500 fish in 1946 to 9,314 fish in 1956 leads fishery agents to predict improved fishing in 1957. A good number of spring salmon have already passed the counting station at Winchester and the Umpqua River agents feel that a total run of 12,000 to 14,000 would not be out of line in view of previous gains made in the runs and estimated returns on hatchery plants.

Commission fishery agents keep a running inventory of the fish stocks of all the important lakes and periodically sample less accessible lakes in a program to provide better fishing for the Oregon angler. Only a few of the important lakes and streams can be covered in this article but any angler interested in other bodies of water may obtain information on fish stocks from Game Commission employees familiar with the respective lake, stream and reservoir.



ON MARCH 4, 5 and 6 the twenty-second North American Wildlife Conference was held in Washington, D. C., and just preceding this conference was the annual meeting of the National Wildlife Federation. Other groups holding concurrent meetings on matters directly related to their respective organizations were the International Association of Game, Fish and Conservation Commissioners, American Fisheries Society, Outdoor Writers Association of America, Cooperative Wildlife Research Units, Wildlife Disease Association, National Waterfowl Council, Natural Resources Council of America, and the Wildlife Society.

The significance of such meetings to the future of fish and game resources as well as to all natural renewable resources is considerable. This year's deliberations dealt not only with the latest aspects of professional fish and game technology but with the social, philosophical and practical economic aspects of natural resources in our total national picture. Representatives from industry, labor, theology, agriculture, press and numerous private organizations contributed substantially to the conference.

Such specialized fields as Disease, Nutrition and Controls, Wetland and Inland Water Resources, Upland Game Resources, Marine and Coastal Resources, Waterfowl Potentials and Conservation Education were the subjects of extensive inquiry. More important perhaps was the growing trend to view the natural resource field in its full dimensions and the relationships with the maintenance of fish and game. As our society and economy becomes more complex, the task of maintaining at high levels of abundance such public properties as fish and game becomes more difficult. To the extent that the many interrelationships are recognized and made a part of planned action in the over-all land and water use picture, to that same extent greater success will be achieved in maintaining and improving the status of fish and game.

There has been a growing trend noted in such meetings of a broadening of interest and participation in the general sessions of nontechnical nature. Such a trend speaks well for the future of the conservation field. A greater understanding of the problems confronted by such agencies as state fish and game departments will engender greater cooperation among all groups in the natural resource field.

Underlying these general concepts, however, is the basic development of a technology in a relatively new field employing the tools of the whole broad area of science. It is through the perfection of the knowledge and development of management techniques by the professional fish and wildlife scientist as reported at such a conference that progress can be visioned over the years. The results resulting from such deliberations are important to every individual who has an interest in the fish and wildlife resources of our state as well as the nation.

P. W. Schneider.

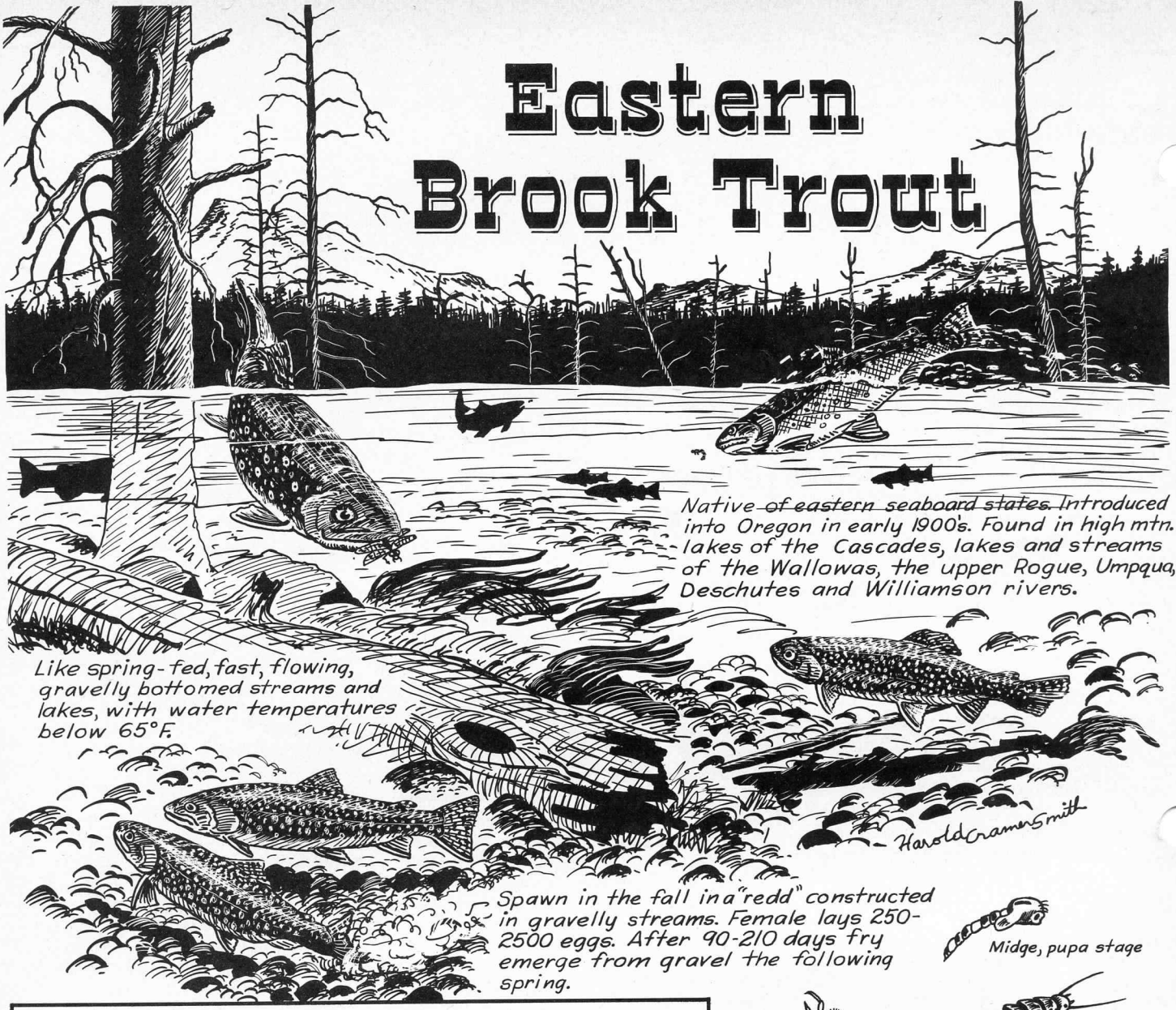
LICENSE FEE CHANGES

(Continued from page 2)

ported special situations and requests involving additional money but not involving specific increases in license fees.

The increases being requested range from 13 to 100 per cent in various fees. Increases granted in the last few years have ranged from 23 to 50 per cent.

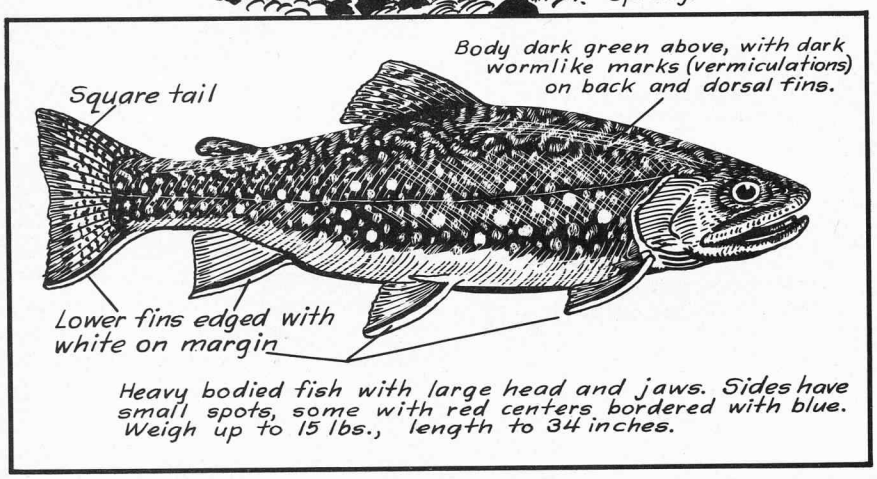
Eastern Brook Trout



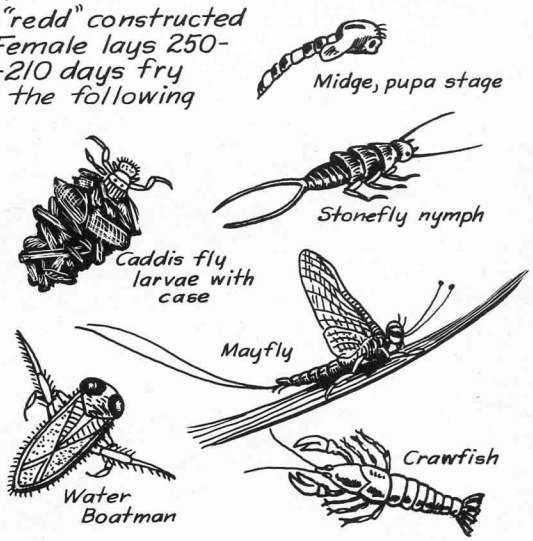
Native ~~of eastern seaboard states.~~ Introduced into Oregon in early 1900's. Found in high mtn. lakes of the Cascades, lakes and streams of the Wallowas, the upper Rogue, Umpqua, Deschutes and Williamson rivers.

Like spring-fed, fast, flowing, gravelly bottomed streams and lakes, with water temperatures below 65°F.

Spawn in the fall in a "redd" constructed in gravelly streams. Female lays 250-2500 eggs. After 90-210 days fry emerge from gravel the following spring.



Heavy bodied fish with large head and jaws. Sides have small spots, some with red centers bordered with blue. Weigh up to 15 lbs., length to 34 inches.



Food consists mainly of insects, crustaceans and other small fish.

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