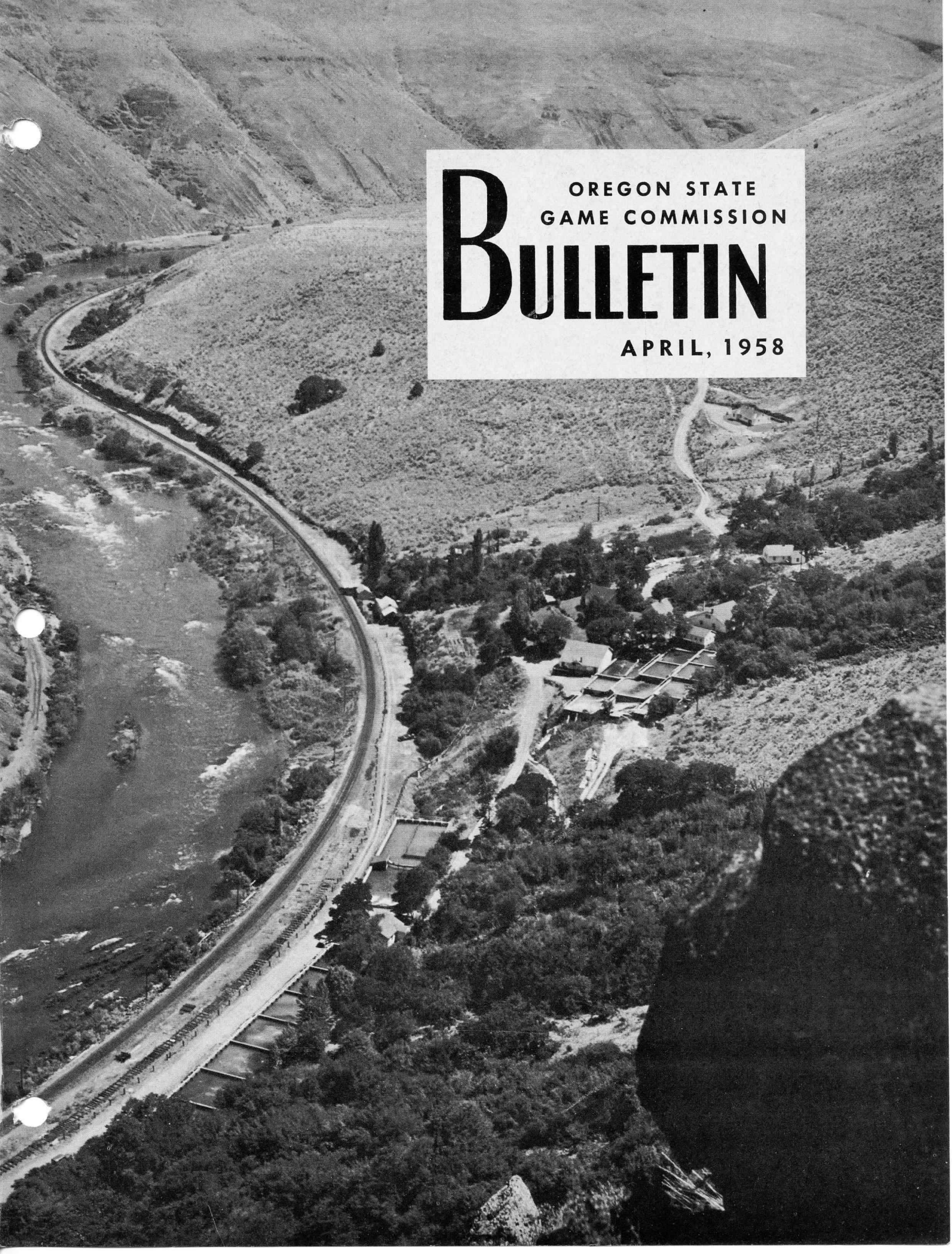

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Please report promptly any change of address. Send in both the old and new address with notice of change.

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

the cover

This view of the Oak Springs Hatchery was taken from the top of the hill just as the road begins its steep descent to the Deschutes River. Ideal rearing conditions for fish are provided by water from springs in the adjacent hills. Water temperature remains constant the year around. (Photo by Harold C. Smith)

Did you know that a child less than 14 years of age may not hunt on land other than his own, his parents or his legal guardian without being accompanied by a parent or legal guardian? (ORS 498.025)

* * *

Did you know that it is unlawful to sell or give firearms or ammunition commonly used for hunting, to any child less than 14 years of age? (ORS 166.480)

Eugene W. Goff Retires After Record Service

RETIRING with the longest service record of any employee of the Game Commission, E. W. (Gene) Goff had worked almost 44 years when he left his position as superintendent of hatcheries on March 31.

Born in Kansas in 1888, Gene came to Oregon in 1897. He was married in 1909 to Ada Rennie of Thurston, Oregon.

One of the first of many "boys" broken into fish culture work by Matt Ryckman, the Game Commission's first superintendent of trout hatcheries, Gene began his career in June 1914 as a helper at the McKenzie hatchery. After a few years' experience there, he was promoted to take charge of the Klamath station.

When in 1921 the present form of the Game Commission was established and Ryckman was transferred to the Portland headquarters, he chose Gene to succeed him at the McKenzie. For the next 26 years the McKenzie was home for Ada and Gene Goff, a period which saw many changes in fish cultural practices. To many a sportsman during those years a fishing trip to the McKenzie always included a stop at the hatchery to enjoy the never-ending hospitality of the Goffs. In 1947, Gene moved to the Portland headquarters to serve as superintendent of hatcheries.

Quiet and kindly, Gene acquired many friends while with the department and about 100 of them gathered in Portland last month to give him a farewell dinner. Also attending were his son and daughter-in-law, the Bill Goffs of Sisters. An older son, Ennis, was superintendent of the Hood River hatchery at the time of his death some years ago. The Goffs also have three grandchildren.

Gardening is a hobby for both the Goffs and their flowers made a show place of the McKenzie station as well as of their present home. During his well-earned retirement, we expect to see Gene busy raising more and bigger flowers and also perhaps taking a few trips now and then — especially to see those grandchildren.

HUNTING AND FISHING LICENSE SALES UP

A RECORD total of 34,195,183 hunting and fishing licenses was sold in the United States during the fiscal year 1957, reports the U. S. Fish and Wildlife Service. This represents an increase of 1,031,352 over the previous high total in 1956.

Fishing licenses accounted for 19,276,767 of the 1957 total and hunting licenses for 14,918,416. For their various licenses, permits, tags and stamps (except duck stamps) hunters and anglers paid a total of $90,617,039 ($47,847,456 hunting and $42,769,583 fishing).

Oregon's total of 272,741 hunting license holders was 22nd highest in the nation and the total of 355,361 fishing license holders was in 23rd place.

Based upon the total number of paid license holders, the "big ten" states for 1956-57 were:

Fishing:

California	1,411,264
Minnesota	1,243,102
Wisconsin	1,142,726
Michigan	1,119,657
Ohio	911,762
Indiana	846,742
New York	828,636
Illinois	826,426
Pennsylvania	718,863
Tennessee	654,419

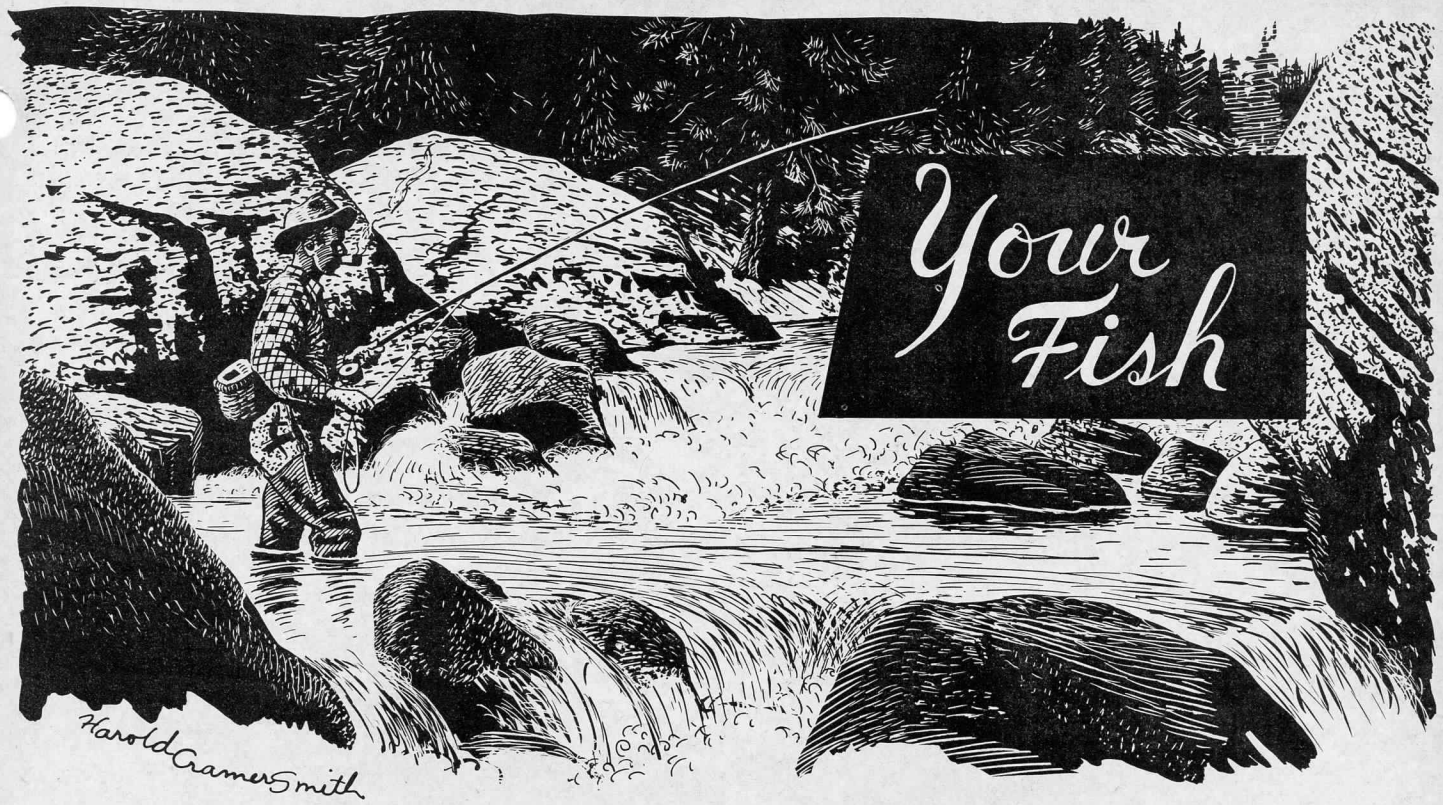
Hunting:

Michigan	1,250,004
New York	1,024,975
Pennsylvania	938,275
Ohio	738,672
Indiana	674,312
California	665,875
Wisconsin	651,669
Illinois	556,215
Minnesota	552,917
Texas	412,961

23rd North American Wildlife Conference Held

"Conservation in an Expanding Economy" was the theme of the 23rd North American Wildlife Conference held March 3-4 in St. Louis under sponsorship of the Wildlife Management Institute. This annual meeting was attended by leading authorities on the management of soil, water, wildlife and forest resources from the United States, Canada, Alaska and Mexico.

Three general and six technical sessions made up the program. Prominent speakers included Congressman John A. Bltanik of Minnesota on the topic of "Stream Pollution: The Shame of America;" and Dr. Ira N. Gabrielson, president of the Institute, on "The Fight for Conservation."



WHERE DO THEY COME FROM?

By Milt Guymon, Information Representative

THE BIG rainbow geysered skyward. All energy was put forth in its final desperate effort to shake the tiny barb embedded deep in its flared jaw. Sides gleaming in the morning sun it splashed downward, then circled on a final, feeble run.

But the relentless bend of the rod soon forced the fish to the surface where it lay exhausted and quivering on its side. Expertly, the angler slid the big rainbow onto the gravel beach, then placed it on the cool moss well above the water's edge. The fish, indeed, had been a worthy opponent, fighting spectacularly to the very last. Several more trout lay in the angler's creel, but this one was by far the largest of the lot.

Satisfied with his morning's fishing, the angler picked up the now still trout and placed it in his creel among the others. As he did so he noticed for the first time that the lower fins along the belly—the pelvic fins—were missing and suddenly realized this was no wild fish that had given him such a grueling battle, but a rainbow trout that had been reared at a Game Commission hatchery. Further examination revealed two more of the smaller trout with identical marks, gone unnoticed before probably because of the excitement of angling.

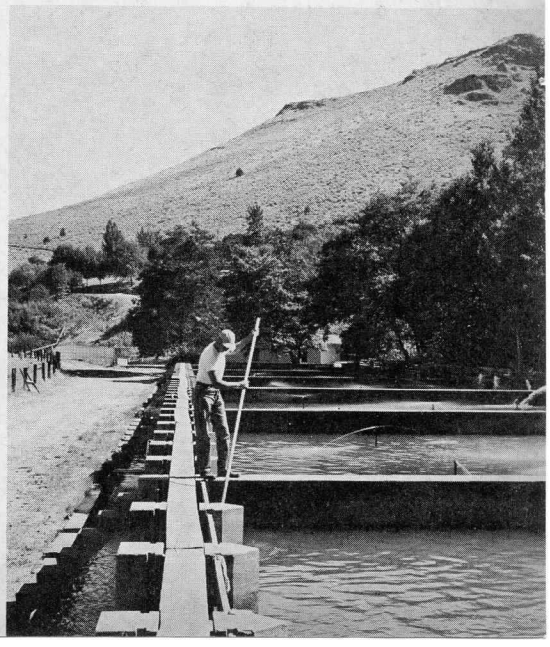
Driving out of the high lake country in late afternoon with the big trout still on his mind, the angler rounded a turn and suddenly espied the rustic marker along the roadside "GAME COMMISSION FISH HATCHERY—Visitors Welcome" and on impulse turned into the driveway. This may have been the origin of that fighting rainbow trout he had battled several hours previously.

The angler was pleased with his impulsive act when he learned that the hatchery had been the birthplace of the marked fish. Hatchery officials surmised that the big rainbow had grown from a mere yearling planted two seasons back, while the smaller fish were in their second year of life stocked the previous summer also as small fingerlings. Scale examination proved this to be true. As he toured the hatchery, the angler learned that the Game Commission operates 16 trout and salmon stations throughout the state with an additional plant under construction. The entire group produces annually around 525,000 pounds of fish of all species. In general, since each hatchery has definite space limitations, the capacity for rearing catchable size trout is much less than is the capacity for rearing fish to the fry or fingerling stage. Since larger fish require more space, the numbers must be reduced accordingly.

On the west side of the Cascade mountains, nine hatcheries produce trout and salmon, while a tenth is soon to be in operation. Coastal plants include the Bandon hatchery, located a short distance north of the town of Bandon; the Alsea

(Continued on Page 4)

Cleaning screens in ponds at Oak Springs hatchery.



General view of the Willamette hatchery near Oakridge.

Your Fish

(Continued from Page 3)

hatchery, located on the North Fork of the Alsea River; the Cedar Creek plant located on Five Rivers just out of Hebo; and the Gnat Creek hatchery now under construction, located about three miles to the east of Knappa.

At Bandon, Willis Baker, hatchery superintendent, keeps a good stock of coastal cutthroat brood trout on hand at all times. These become ripe in January and produce some 100,000 eggs which are hatched and reared to catchable size before release. Rainbow trout and silver salmon are also raised here. The Bandon hatchery has been in operation since 1924 and serves primarily coastal lakes and streams from Florence to the California border.

In 1936 the Alsea station began production as a center for cutthroat and steelhead rearing. Since then silver salmon have also been placed on the rearing schedule. Egg production begins in December for silvers, January for the cutthroat brood stocks, and February for the migratory steelhead. Paul Vroman and his capable crew keep constant watch over the 22 ponds where the young fish are raised to their release size. Silver salmon, steelhead and cutthroat trout are all fin clipped at release in order to measure the contribution to the sport fishery.

Charlie Roadarmel ramrods the Cedar Creek plant which began operations in 1924, the same year as the Bandon station. The hatchery is a supply point for northwest coast and west side Willamette Valley streams and lakes. Cutthroat and rainbow trout eggs are shipped to the station while silver salmon eggs are taken in December and steelhead eggs in February. All fish are reared to catchable or migratory size before release.

The Willamette, Leaburg, McKenzie and Roaring River hatcheries are all located in the Willamette Valley. All are primarily rainbow trout producers and maintain their own large brood stocks.

Twelve rearing ponds produce some 175,000 yearling and one-half million fingerling rainbows annually at the Roaring River station located near Scio just to the east of Albany. Pride and joy of Percy Southwick, hatchery superintendent, are some 4,500 rainbow trout kept in a special pool as brood stocks, some going to eight or nine pounds or more. Almost hand fed, the big rainbows, a great attraction to tourists, become so tame they'll nip at fingers dangled in the water. The station is a tremendous egg producer with the brood stocks yielding somewhere around 2,500,000 annually. About two-thirds of these are sent to other hatcheries around the state.

Probably the oldest hatchery operated by the Game Commission is the McKenzie station activated in 1907 as a salmon producer and changed over to become Oregon's first trout nursery in 1921. The hatchery is located on the north side of the McKenzie River near the Leaburg Dam. Originally, the native McKenzie redside brood stocks were spawned in April. By selecting eggs from the first ripe fish and rearing brood stocks from these eggs, the spawning time has been cut back from April to January. Through this selective process the native McKenzie brood stocks will eventually become fall spawners instead of spring spawners. Advantage of this system is that the young trout will have the spring and

(Continued on Page 5)

Feeding trout fry at Hood River hatchery.

Your Fish

(Continued from Page 4)

summer to put on their best growth. Normally the eggs would not be hatching until late spring and the small fish would not grow rapidly until the following year. About 1,500,000 eggs are taken by Arne Shannon and his crew at the McKenzie plant.

Almost directly across the river Lynn Webb operates the Leaburg hatchery, one of the largest trout hatcheries in the world. Fall spawning brood stocks produce about a million and a half eggs. The hatchery is designed to produce some 500,000 catchable size trout and about the same number of fingerlings annually. The hatchery was built in 1952 by the federal government to mitigate damage to the fisheries caused by dams in the Willamette drainage. As such, the fish raised at the plant are released in the Willamette River or its tributaries.

Located just behind the town of Oakridge, the Willamette hatchery is devoted to raising rainbow trout of legal length, steelhead to migratory size, and hatching eggs of other species such as kokanee. C. C. Green, who prefers to be called "Doc," takes special care of some 500 brood rainbows which are the egg producers for the station. In addition to the 175,000 rainbows reared for stocking purposes, the ponds are usually full of fry and fingerlings hatched from eggs received from other stations. The hatchery began operations in 1921 and has been modernized several times to make it an outstanding unit.

The Umpqua and Rogue River drainages each boast a modern fish rearing plant—the Rock Creek hatchery located near Idleyld Park on the North Umpqua, and the Butte Falls hatchery located on Butte Creek, a tributary of the Rogue.

New ponds built about two years ago at Fall River hatchery.

Seventeen ponds of various sizes are used at the Rock Creek nursery to rear about 100,000 chinook salmon annually in an important attempt to restore the salmon runs in the Umpqua drainage. In addition, some 200,000 spring and fall rainbows are reared for Umpqua and coastal releases. Hank Reed, superintendent, has his hands full taking eggs from the big spring chinook trapped at Steamboat Falls—an impassable barrier—on Steamboat Creek, tributary of the Umpqua. All salmon are marked by fin clipping at release.

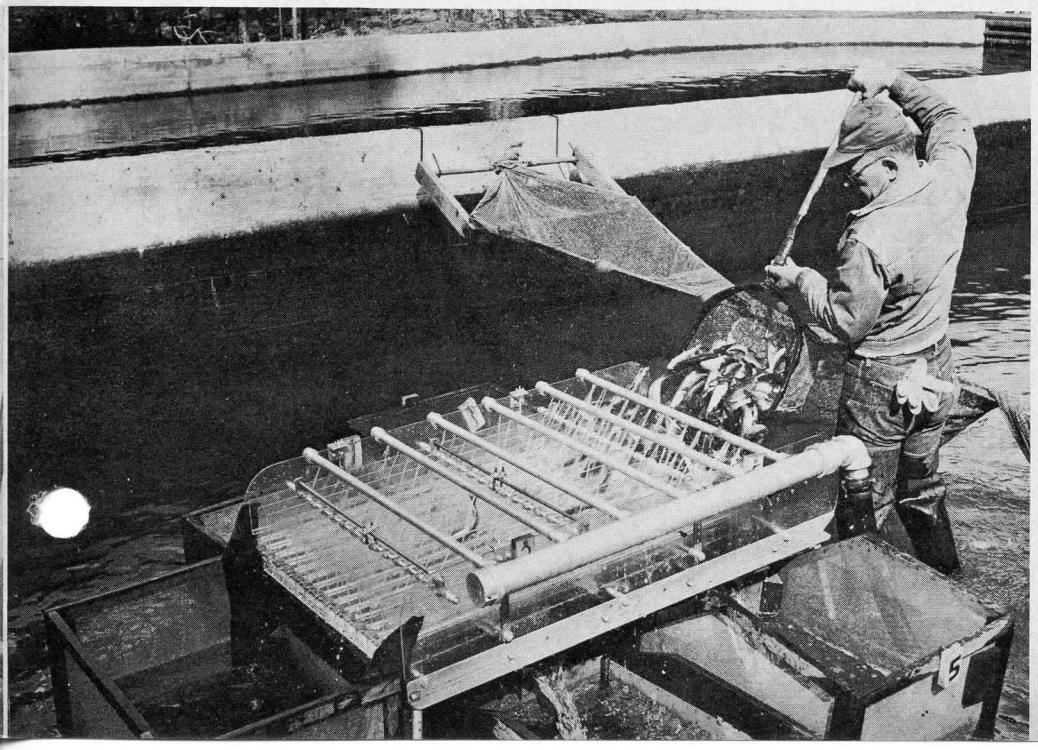
Butte Falls in the Rogue drainage is the Commission's second oldest hatchery, activated in 1916. Like the Rock Creek plant, it is devoted to salmon restoration but in the Rogue River system. Spring chinook eggs are taken in September. Everett Moore, hatchery superintendent, describes his spring chinook as the friskiest fish in the state and has been forced to cover the tanks with screen to keep the youngsters from jumping out. In addition to the fin-clipped chinook and silver salmon released, about 115,000 rainbows are released annually into the Rogue watershed.

Down through central Oregon, six hatcheries are in full production supplying fish for the popular lakes and streams on the east side of the Cascades.

The rock-bound cauldron known as the Punch Bowl creates the noisy and scenic setting for the Hood River hatchery. The Punch Bowl was selected as a hatchery site in 1922 and unlike many water sources selected during early fish culture days, Dead Point Creek has provided an unfailing supply of pure cold water relatively free of sediment. No brood fish are maintained at the hatchery, all eggs being received from other stations. Rainbow and eastern brook trout are the two game fish reared, plus summer-run steel-

(Continued on Page 6)

Grading fish at Wizard Falls hatchery.



Those who save their copies of the Game Commission Bulletin now can obtain the 1957 Index by writing to the Portland office.

* * *

The appearance during February of a goodly number of winter steelhead in Crystal Springs Creek, which runs through Portland, was good news to the fishery personnel of the Game Commission. The fish had been released in the stream in 1955 in an effort to start a run which would provide a source of eggs for the hatcheries and this was the first evidence of success. Since their release, the fish had worked their way down to the ocean, stayed there until this year and then come back up through the Willamette River, Johnson Creek and up to the falls below Crystal Springs Lake. Some of their brothers and sisters did not make it all the way up for enroute they were hooked by anglers who have been reporting some good catches of large fish in Johnson Creek this winter. Over 100 fish were trapped and spawned and the eggs were sent to the Oak Springs hatchery for eyeing. Some of the hatched fish will be returned to Crystal Springs Creek and other streams in the state will receive the rest. Other plantings of winter yearling steelheads have been made subsequent to 1955 and it is hoped that eventually the stream will have a substantial run of fish each year.

* * *

The report on 1957 hunting accidents shows 35 accidents occurred of which 7 resulted in death. Twenty persons received gunshot wounds from accidental discharge of a weapon; 9 were victims in line of fire and ricochet; 5 were mistaken for game and cause of one accident was unknown. Fourteen of the victims were hunting deer, 7 waterfowl, 6 upland game birds, 1 elk and 7 miscellaneous nongame animals.

Your Fish

(Continued from Page 5)

head from stocks in Hood River. Brook trout are raised only to the fry and fingerling size as this station is the supply point for aerial fish planting operations in lakes in the Mt. Hood National Forest. Fish culturist Archie McRae also produces about 100,000 yearling rainbows for summer stocking purposes.

Constant 54° water temperatures make the Oak Springs hatchery one of the finest in the state for trout production. Hugging the walls of the Deschutes canyon just north of Maupin, 30 concrete ponds form a series of terraces with water from Oak Springs cascading down to the ponds. The compactness belies its magnitude as Oak Springs is the second largest trout producing unit in Oregon. This is well illustrated when one considers the annual output to be 250,000 rainbow trout averaging better than seven inches and 2 million large fingerlings weighing about 100,000 pounds. In addition, about 5,000 brood rainbows yield some 2 million eggs for the hatchery system. All operations are under the watchful eyes of Andy Smith, veteran fish culturist.

A combination of ideal water conditions, a balanced feeding program and skilled care by Gene Morton, superintendent, has produced outstanding growth of rainbow trout at the Wizard Falls hatchery on the beautiful Metolius River. Activated in 1948, the rustic setting has become a show place in this popular vacation land. Kokanee eggs are shipped in but rainbow trout, Atlantic salmon, golden trout, brown trout, and the Summit lake strain of cutthroat trout are all maintained as brood stocks. As with the Oak Springs hatchery, anglers may take Wizard Falls hatchery fish in such widely separated waters as the Clackamas, Umatilla, East Lake, or the remote Three Forks of the Owyhee in the extreme southeast corner of the state.

Two unique features distinguish the Fall River hatchery located on the South Century Drive southwest of Bend — snows that often last five months, and an air strip designed for aerial fish transportation. From the first heavy snows in November until the end of March, Fall River hatcheryman, Lloyd Wilson, must plow 13 miles of road to maintain contact with the outside.

The hatchery is ideally located, though, for its important role as aerial trout supply "depot" for the hundreds of "back country" lakes dotting the Cascade range. Within minutes from the time the trout are loaded aboard the plane they are tumbled out into a mountain lake. Only fry or fingerling trout are required for aerial fish plants so no large fish are raised at the Fall River station. Annually, some 2 million eastern brook trout obtained from eggs taken at East Lake are held for aerial planting. An additional million eggs are shipped in along with large numbers of rainbow eggs. Many of the eggs are held only through the "tender" stage, then shipped to other stations. Fall River, which supplies the water for the hatchery, issues directly from the pumice soil at 45°, too cold for rapid growth but excellent for hatching eggs and holding small trout. The first hatching troughs were tried on the site in 1923, and a permanent station established in 1929.

Since 1937 an important factor in the fishing success of southeast Oregon is the Game Commission's Klamath Falls hatchery located just north of Fort Klamath. Large springs issuing from the nearby hills furnish a year around supply of pure water of around 48° temperature. The hatchery is ramrodded by Dick Evans who produces around 200,000 large rainbows and eastern brook trout which are stocked annually for the angler's rod. No brood fish are kept at the hatchery. It receives lake trout eggs from the Odell egg station, and rainbow and eastern brook trout eggs from the East Lake egg station. Extensive rearing of fry and fingerlings for lake stocking purposes makes the Klamath hatchery the third largest in the state.

Across Diamond Lake from towering Mt. Thielsen with Mt. Bailey as a backdrop, the Diamond Lake hatchery holds the distinction of being located at the highest elevation of all Game Commission hatcheries. Operated only during the spring and summer months, the hatchery is an important egg-producing and fry-rearing station. The entire site is abandoned and buried deep in snow during winter months. Rainbow trout are spawned here from late May through June from brood stocks trapped at the famed Diamond Lake. Since only limited natural spawning areas are available in the small tributary streams for the Diamond Lake trout, great numbers of eggs can be taken for artificial propaga-

(Continued on Page 7)

Fin-clipping fish at Alsea hatchery before release.

Your Fish

(Continued from Page 6)

tion which would otherwise be lost. Several million eggs are taken annually, with good years producing more than six million. Diamond Lake is stocked heavily with fry to maintain its excellent angling reputation and the remainder goes to other Oregon lakes and reservoirs.

Far eastern Oregon boasts one hatchery, the Wallowa nursery at Enterprise. The hatchery nestles at the base of the towering Wallowa mountain range making it one of the most picturesque in the state. Ralph Kay, superintendent, depends almost entirely upon eggs from other stations to produce the stocks of legal sized trout for northeastern Oregon waters. Both fall and spring rainbows are reared here in addition to kokanee and lake trout. The only brood fish maintained are the Trout Mountain strain of cutthroat trout, found only in the Trout Creek mountains of southeastern Oregon. Several streams and reservoirs in far eastern Oregon are stocked with this colorful cutthroat.

So here we have the stations which annually produce some 260 tons of fish, a goodly portion of which are taken by some 350,000 Oregon anglers. Not all fish are marked on release, only the steelhead, salmon, and trout stocked in certain waters where the catch success can be measured. Marking is not needed in many places such as East and Paulina lakes where the entire catch is dependent almost exclusively on planted fish. Nor are markings required on the millions of tiny fry flown into the high mountain lake basins. Many of these lakes were barren of fish life at one time, but are now producing fish through the planting program.

Where did your fish come from? Chances are good it may have been of wild stock origin. But the chances are also good it was first nurtured in a hatchery pond. One of these fish factories is not far from your home. Stop in sometime; I can assure you you'll be welcome.

1957 Fish Stocking

*Watershed	Rainbow	Cutthroat	Eastern Brook	Steelhead	Kokanee	Brown Trout	Lake Trout	Golden Trout	Chinook Salmon	Silvers	Atlantic Salmon	TOTALS
1.	87,837 **12,198**	99,710 **14,996**		72,511 **5,355**					42,862 **1,488**	36,921 **641**		339,841 **34,678**
2.	2,158,907 **132,933.5**	6,878 **1,760**	364,432 **1,421**									2,530,217 **136,114.5**
3.	279,869 **25,134.5**	54,210 **886**	51,240 **122**	81,788 **6,938**								467,107 **33,080.5**
4.	81,801 **10,213**		19,740 **47**									101,541 **10,260**
5.	3,455,229 **84,019.5**		1,014,539 **1,992.5**	48,256 **3,512**	1,087,120 **325.1**	324,948 **1,260**	147,796 **16,238**				974 **33.6**	6,178,862 **107,380.7**
6.	95,173 **13,663**		37,121 **135**									132,294 **13,798**
7.	175,397 **5,283**											175,397 **5,283**
8.	221,212 **17,454.5**				664,778 **184.1**		2,424 **165**	35,800 **14**				924,214 **17,817.6**
9.	222,059 **9,691**											222,059 **9,691**
10.	1,244,511 **10,181**											1,244,511 **10,181**
11.	171,545 **2,062**	18,790 **23**										190,335 **2,085**
12.	81,688 **7,057**	5,731 **205**										87,419 **7,262**
13.	66,064 **8,397**	251,612 **85.7**										317,676 **8,482.7**
14.	2,023,064 **15,865.5**		138,495 **969**									2,161,559 **16,834.5**
15.	538,417 **25,448**	3,001 **639**	23,028 **180**	200 **40**					56,683 **3,858**			621,329 **30,165**
16.	462,137 **22,077.6**	1,466 **300**	17,944 **131**						273,300 **2,802**	450,318 **506**		1,205,165 **25,816.6**
17.	42,365 **10,399**	360,528 **11,130.5**		25,360 **1,228**						558,823 **488**		987,076 **23,245.5**
18.	1,051,540 **14,705.7**	174,881 **14,226**		66,239 **4,236**						17,805 **636**		1,310,465 **33,803.7**
TOTALS	12,458,815 **426,782.8**	976,807 **44,251.2**	1,666,539 **4,997.5**	294,354 **21,309**	1,751,898 **509.2**	324,948 **1,260**	150,220 **16,403**	35,800 **14**	372,845 **8,148**	1,063,867 **2,271**	974 **33.6**	19,097,067 **525,979.3**

Note: Bold face figures denote pounds of fish.

*WATERSHEDS

1. Clatsop, Columbia, Tillamook, Yamhill, Washington.
2. Washington, Yamhill, Benton, Linn, Marion, Clackamas, Polk, Lane, Douglas.
3. Multnomah, Columbia, Clackamas, Marion.
4. Hood River, Wasco.
5. Sherman, Jefferson, Deschutes, Crook, Klamath, Lake, Grant.
6. Sherman, Gilliam, Wheeler, Jefferson, Grant, Umatilla, Morrow.
7. Gilliam, Morrow, Umatilla.
8. Umatilla, Wallowa, Union.
9. Baker, Malheur, Union.
10. Malheur, Grant, Harney.
11. Malheur, Harney.
12. Harney, Lake, Crook, Grant.
13. Crook, Deschutes, Lake, Harney.
14. Klamath, Lake, Jackson.
15. Klamath, Jackson, Josephine, Curry.
16. Douglas, Lane.
17. Curry, Coos, Douglas.
18. Douglas, Lane, Benton, Lincoln, Tillamook.

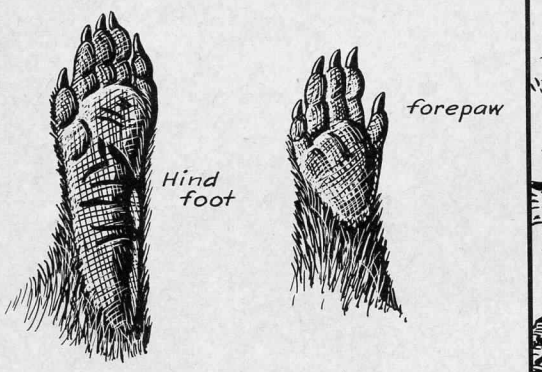
RACCOON

Found along woodland edges, coastal streams and foothills of western Oregon, but only along main streams of eastern Oregon.

They eat almost anything and like to dunk their food before eating it. Frogs, crayfish, clams, mussels, fruits, berries, nuts, corn, mice and small rodents all are part of diet.

Two to five blind, fully-furred kits are born in April or May. Eyes open in about three weeks.

Harold Cramer-Smith



Their forepaws are almost as useful as human hands. Hind feet resemble bear's feet.

Coons are nocturnal. Daylight hours are spent in tree dens or sunbathing high in a tree.

A grizzled gray animal with a black mask over its eyes, tail has six or seven alternating rings of yellowish white and black. 12" high at shoulder 30"-36" long. Weigh 15-25 lbs. Eastern Oregon variety is largest in No. Amer. often reaching 50lbs.

Oregon State Game Commission Bulletin

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OREGON STATE GAME COMMISSION