

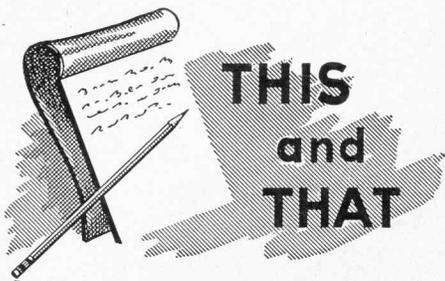
OREGON STATE

GAME COMMISSION BULLETIN

MARCH, 1955



Fifty Years Ago



The 20th North American Wildlife Conference will be held March 14 to 16 in Montreal. Sponsored by the Wildlife Management Institute, this conference annually attracts conservation leaders from the United States, Canada, Mexico and Alaska. "Natural Resources Use—A Continental Challenge" is the theme for this year's meeting.

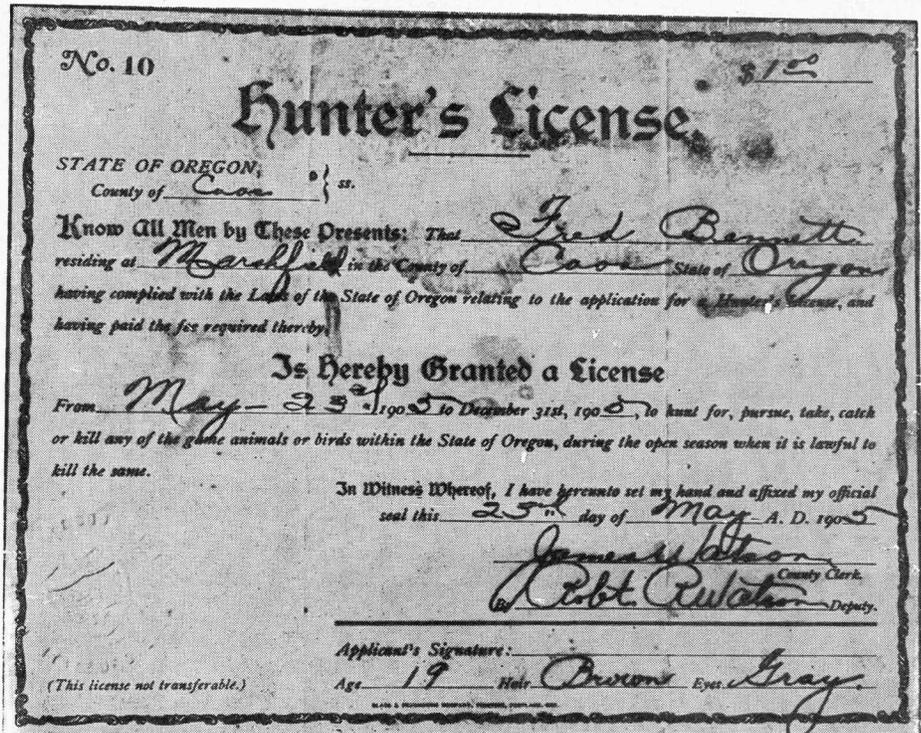
Field agents this winter classified 3,195 black-tailed deer and 14,052 mule deer to get information on sex ratios and production. The black-tailed herds averaged 36 bucks per 100 does, same as last year and above the 4 year average of 34. The ratio of 81 fawns per 100 does is the highest average in 4 years. Mule deer herds averaged 28 bucks per 100 does, higher than the 4 year average of 26. A light decrease in fawns was indicated by the ratio of 79 fawns per 100 does compared to the 4 year average of 82. The highest fawn ratios again showed up in the southeast region where a count of over 100 fawns per 100 does was recorded on 4 of the 11 ranges under observation.

Excellent goose usage has been observed at Fern Ridge Reservoir on the rye grass planted on the mud flats. About 2,000 geese have been using the area since the close of the hunting season.

Winter finds members of the fish liberation crew busy working on their tankers. The old ones are being repaired and readied for next season's releases and a brand new jumbo 1,200 gallon job is under construction. The largest ever owned by the state, it will be used for making long hauls and for steelhead and salmon distribution.

The Commission's wildlife program, "Waterfowl Management" is finding favor with school children throughout the state. Personnel of the Information and Education Department had presented the program to 120 schools up to the latter part of January and will have visited many more by the end of the season.

National Wildlife Week is being observed from March 20 to 26 this year.



This year is the fiftieth anniversary of the resident hunting license in Oregon. The 1905 legislature passed the first law requiring residents to have a license to hunt game and set the fee at one dollar. Prior to this the only license law in effect was the 1901 act requiring non-residents to pay a fee of ten dollars for a license to hunt game for marketing purposes. Angling licenses were not re-

quired until 1909.

As there was no game commission when these laws were passed, license sales were handled by the individual counties until 1912. Each county in the state printed and paid for its own fishing and hunting license blanks, collected the money and forwarded it to the state treasurer to be placed in the game protection fund.

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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.

COVER

Wood duck nest boxes installed last year are shown to a troop of Boy Scouts by game agent Mel Cummings. Numerous youth groups are becoming interested in the project of constructing and installing these nest boxes. Plans may be obtained from the Oregon State Game Commission. (Photo by Ron Shay)

Training in Wildlife Management

PHOTOGRAPHERS
FUR FARMERS
FISH BIOLOGISTS
RESEARCH DIRECTORS

Harold Cramer Smith

By R. E. DIMICK, Head
Department of Fish and Game Management

IN the latter part of 1933, two men traveling by train from Portland to Spokane got to talking about what could be done to stem the general decline of the wildlife resources. They came to a common conclusion that if the same basic approaches were made toward the problems of fishes and game animals as had been employed in the fields of agriculture and forestry — namely, applied research, the college training of fish and game biologists, and eventually an extension program—then there would be hope that the scientific management of the wildlife resources would some day become a reality. These two men were Ira N. Gabrielson and William A. Schoenfeld. Dr. Gabrielson was then regional biologist of the U. S. Biological Survey, later becoming chief of the U. S. Fish and Wildlife Service and now director of the Wildlife Management Institute. Dean-emeritus Schoenfeld was at that time dean and director of the School of Agriculture at Oregon State College.

Although there had been previous isolated beginnings in the teaching of wildlife management at a few universities, Dr. Gabrielson's and Dean Schoenfeld's idea received favorable action in 1935 by J. N. "Ding" Darling, who was in charge of wildlife activities for the federal government, and by others. In that year cooperative wildlife programs were established through-

out the country in seven land grant colleges, of which Oregon State College was one. These were, and still are, cooperative units in that personnel, funds, and facilities come from the colleges, the state game departments, the U. S. Fish and Wildlife Service, and the Wildlife Management Institute. Today there are seventeen such units located in all regions of the United States, including Alaska, and more than thirty other universities give instructions and conduct research with fishes, wild birds and mammals. At least six of the land grant colleges now have wildlife extension specialists on their staffs, including Oregon State College.

The Department of Fish and Game Management at the College was organized in the School of Agriculture in 1935, and the first degrees in fish and game management were granted in 1938. At the beginning there was only one fish and game instructor (the author), and now students entering are taught by a staff of five.

Jay B. Long, who became an instructor shortly after he was graduated from the department in 1939, specializes in game birds. He received his master's degree in 1948 and is now an associate professor. Students from all over the campus enroll in his "wildlife techniques" course and follow their catches from stream to table in the most approved manner. During the war

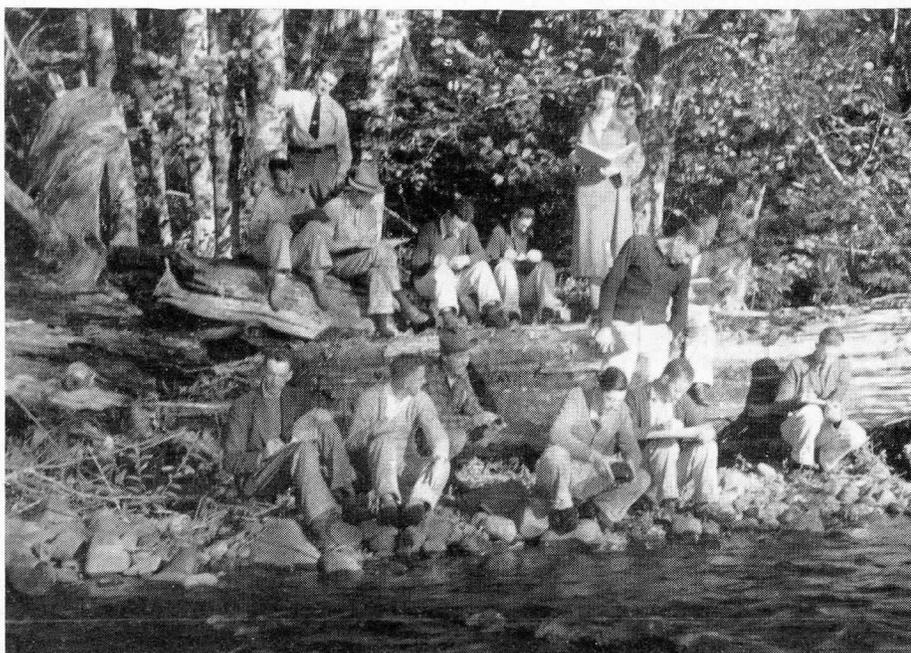
he did rodent control work in the South Pacific.

Lee W. Kuhn, who is a graduate of Iowa State, received his master's degree in 1942 following a study of the Columbian black-tailed deer in the Coast range of Oregon. He became a staff member in 1946 and is now an associate professor. Each spring he takes the senior and graduate students to eastern and central Oregon visiting the big game problem areas and refuges. Another major contribution of Lee's is his contacts with prospective employers for placing students in summer jobs so that as many as possible will have had field training before graduation.

Carl Bond, another of our graduates, received both his B.S. and M.S. degrees from Oregon State. As a graduate student he studied the fishes of Lake of the Woods in Klamath County. He went to the University of California with Dr. Paul R. Needham to help him develop the fisheries work there and to do advanced study. He returned to Oregon State in 1949 and has taught ichthyology classes as well as working with aquatic weed problems of the coastal lakes. Probably no other person knows so much about species and distribution of fishes in the streams and lakes of Oregon.

Charles Warren, the newest staff member, came back to the department

(Continued on page 4)



The first class in game fish management (1937-38) studies fish food production in a stream. Members of the group are, left to right: (top row) Jim Leekley, Dean Painter (standing) Bill Brown, E. Seghetti, Dean Parker, Margaret Whipple; (bottom row) R. C. Holloway, Ralph Rittenour, E. Crawford, Stan Jewett, Jr., Eldon Yeoman, Bill Anderson (standing), Ed Scheiffer (behind Anderson) and John McKean.

TRAINING IN WILDLIFE MGT.

(Continued from page 3)

in 1953 following work toward a doctorate at the University of California. He received both his B.S. and M.S. degrees from Oregon State. "Fisheries Research Methods," largely the application of statistics, chemistry and physics to the solution of fishery problems, is one of the most essential courses that he teaches. Graduates in the field pointed out the need for this course, and we were fortunate in obtaining Warren to offer it. He has the type of contagious enthusiasm for his work that sparks students to greater effort and more interest in fisheries problems.

In my estimation, conservation of any sort attracts a superior group of students. It is, of course, partly for that reason that the graduates have achieved enviable reputations, but it must also be, in part, effective teaching that is responsible for the high ratings of our graduates in competitive civil service examinations. Over 250 graduates from the college are now actively engaged in a variety of careers with fishes, wild birds and mammals, and in various other occupations in the field of conservation. They are located in more than thirty different states and in the territories of Alaska and Hawaii. At various times a few ex-students have had biological assignments in overseas areas including Little Amer-

ica. The majority are employed by state game and fish departments; several by the federal government; and a few are engaged in business and industries having wildlife problems or interests.

Their assignments include fish and game biologists, regional supervisors, state game directors, research directors, district game managers, shellfish biologists, fishery marketing specialists, refuge managers, rodent control experts, pollution biologists, conservation officers, wildlife public relations workers, fish hatchery and game farm operators, college teachers of fish and game management, wildlife extension service workers, and outdoor writers and photographers. In addition, some have highly successful careers in occupations closely allied to wildlife such as biology teachers, park naturalists, soil conservation agents, fur farmers, range managers, curators of museums, and the like.

Oregon's outstanding recreational areas, with its great variety of fishes, birds and mammals, as well as the progressive programs of the state's conservation agencies, have attracted many to study wildlife management and fisheries at Oregon State College, perhaps more than at any other college. Although the majority have been from Oregon, approximately one-fourth of the students have come from other states. At various times there have been students from Alaska, Hawaii,

Jamaica, Germany, Estonia, Turkey, India, China, and South American countries. So great has been the student response and the development of scientific wildlife management throughout the country that a separate curriculum in fisheries was added about eight years ago.

The programs of study at the College from the beginning have made full use of existing courses in other departments and schools, for it was realized that agricultural operations, range and forestry practices, as well as engineering developments and activities, have far-reaching effects upon wild animal populations. In addition, basic courses have been required in English, chemistry, mathematics, economics, social sciences, botany, zoology, and in other subjects. Journalism and public speaking also have been considered essential. The specialized courses such as wildlife conservation and management, game birds, big game, fur bearers, game and commercial fisheries, game law enforcement, and fishery research methods are taught in the Department of Fish and Game Management. In the development of specialized courses much practical guidance was received from various members and employees of the Oregon State Game Commission. They had confidence in young men from the College and frequently counseled with them at the beginning of their careers.

In the applied fish and game courses, the central idea of instruction has been that the production of sustained annual crops of wildlife species for recreational, economic, and aesthetic purposes can best be accomplished in harmony with the major uses of lands and waters. On the other hand, there are areas so important to some wildlife forms in strategic locations that primary use is warranted. Stress has also been placed upon the fact that the wildlife resources should be important components in most multiple-use undertakings. The basic techniques have included instruction in conducting inventories of wild animal populations, evaluating the carrying capacities of lands and waters, measuring the effects of ecological factors on wild animals and the orderly harvesting of the annual crop of game and commercial species. This calls for recognition of a multiplicity of birds, mammals, fishes and other related wild animal and plant forms as well as knowledge of the life histories of the important wildlife species.

Closely associated with the department's activities, the personnel of the

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TRAINING IN WILDLIFE MGT.

(Continued from page 4)

Oregon Cooperative Research Unit has undertaken fundamental investigations of many problems involving the game species of Oregon. From initial studies in 1935 with ring-necked pheasants and deer the projects have been extended to include quail, grouse, Hungarian partridge, antelope, trout, beaver, predators, the effects of various land practices on wild animal populations, and the development of management techniques for game species. Arthur S. Einarson, research biologist of the U. S. Fish and Wildlife Service, has been leader of the unit since its establishment in 1935. He is assisted in these studies by Ross Newcomb and Francis Schneider, research biologists of the Oregon State Game Commission. Graduate students on research assistantships have prepared 25 theses covering the various aspects of these projects.

Other graduate students have taken active parts in a number of research studies. Some of the student investigations include the problems of oyster culture under the direction of Wilbur Breese, research assistant in charge of the Yaquina Bay Fishery Laboratory; the effects of pollution on the fishes of the Willamette River; aquatic weed control at the field station on Siltcoos Lake; biological surveys of a few Oregon lakes; and the classification and distribution of Oregon fishes.

Nutritional studies in the use of marine fishes in the diets of mink are being closely followed by fur farmers

of the country. The experimental fur farm located near the campus gained national recognition under the direction of Phyllis Watt Wustenberg. She now is on the staff in an advisory capacity, although the major part of her time is taken up with caring for young Mark Wustenberg. Kenneth Davis, who worked with her, is now on military leave, and John Adair is research assistant in charge of the fur farm now.

A little over a year ago another important cooperative undertaking was started which should result in needed fundamental research for the control and prevention of stream pollution. The fishery unit of the Robert A. Taft Center of the U.S. Public Health Service was moved from Cincinnati to Corvallis and attached to the Department with Dr. Peter Doudoroff in charge and assisted by Dr. Max Katz. The toxicology and fish physiology investigations now well underway have already attracted several graduate students, and others are applying for admission. The guidance of the unit personnel brings added scope in fish toxicology research to both students and staff.

The main product of the Department, the graduates, have made sizable contributions to the scientific wildlife management not only in Oregon, but throughout the nation as witnessed by the positions they hold and the large numbers of their articles appearing frequently in scientific journals and semi-popular periodicals. The present group of 160 major students give the same promise of furthering the wise use of wildlife resources as did their

predecessors. The fundamental research has contributed greatly to progressive programs of fish and game management in Oregon, and the extension program is just getting underway. There is no question that Dr. Gabrielson's and Dean Schoenfeld's visions of 1933 are beginning to bear fruit.

ABOUT THE AUTHOR



"R. E.," as he is familiarly known to the host of students both present and "ex," who have studied under his guidance, is a native Oregonian born at Hubbard. He spent brief periods of his early youth in

New Jersey, Arizona and California—a fact he studiously attempts to overlook. He graduated from Newport high school and later from Oregon State College where he specialized in zoology and education. Graduate work at the same institution emphasized entomology and marine biology. During the period 1926-1929, Waldport claimed him as its high school principal and biology teacher after which he returned to OSC as assistant entomologist until 1934.

Because of his far-seeing vision and contagious, enthusiastic belief in the importance of proper management of Oregon's wildlife resources, R. E. Dimick is rightly regarded as the "father of game management in Oregon." He became professor of wildlife management and head of the Department of Fish & Game Management in 1935. His efforts have brought the department to a top spot in national recognition.

Anyone who has ever been associated with him knows that his chief interest is his students. That concern is no surface matter for at national meetings where he is always surrounded by "his boys," who now work in all corners of the country, he remembers each one intimately regardless of the length of time since their last contact.

Such spare time as he might have is invariably spent in the vicinity of Yaquina Bay where it is suspected that he becomes engrossed in matters pertaining more to the work of his department than to any diversions which are supposed to rest a man for his regular job. But then, what can one expect from an individual who says his vocation is his vacation?



Clyde Smith, Oregon Game Commission field agent, and group of students examine a winter killed deer.

“HOW IT HAPPENED”



“13 dead

Top of one head blown off

Two right arms missing

Three eyes eliminated

Five legs shattered

Numerous flesh wounds inflicted

Quite a prosperous year!”

As the grim reaper closes his diary for 1954 it is time to take a close look at his record and even more important take a look at “how it happened.”

During 1954, the most complete records in the history of the Game Commission were kept on hunting accidents. Standardized report forms were used in the majority of the cases, and they were well filled out through the cooperation of the Oregon State Police and the county sheriffs' offices in the state. Also close scrutiny of newspaper reports from throughout the state added to the compiled knowledge.

The totals: 13 persons dead and 37 wounded in hunting accidents during 1954.

Since we do have records that are fairly complete, it is possible to analyze to some extent how the accidents happened. Why they happened is easy to explain . . . *Someone was careless!*

Accompanying this article are graphs showing comparisons in some phases of the accident reports. The totals do not in all cases equal the total number of accidents, since information was not always complete; however, some significant facts can be seen.

A great majority of the accidents (75

per cent) happened at a range less than 50 yards. This percentage was brought about largely by persons with loaded guns in cars, in boats, and around camp, all violations of the basic 10 commandments of gun safety.

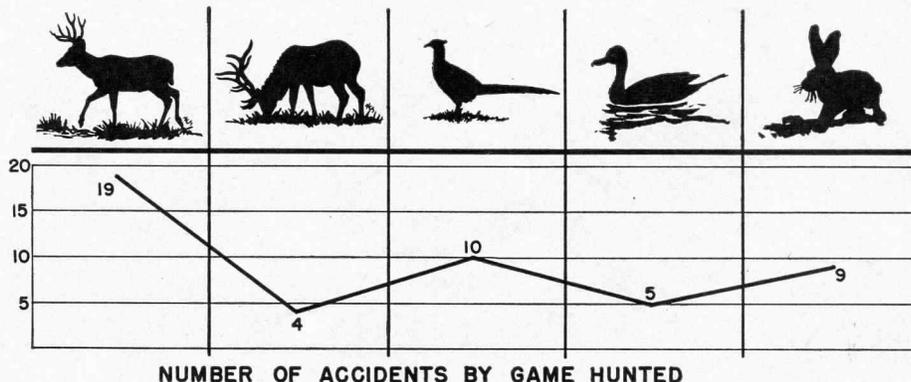
As in the past, the rifle and deer season were the greatest disaster instigators. The shotgun and pheasant season ran a strong second, but in the comparison a very important point arises.

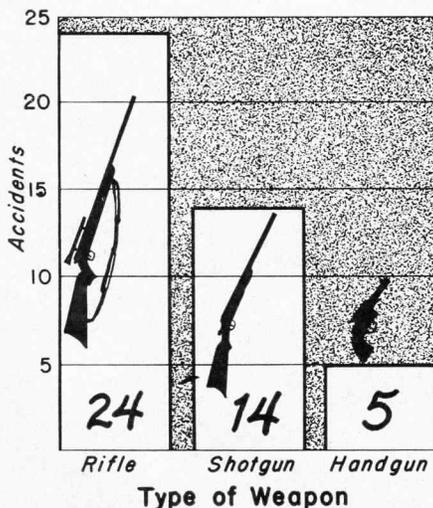
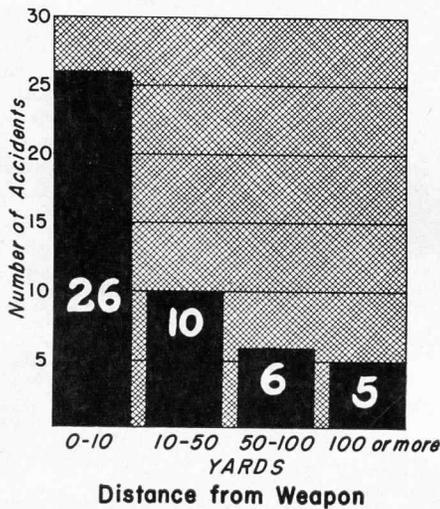
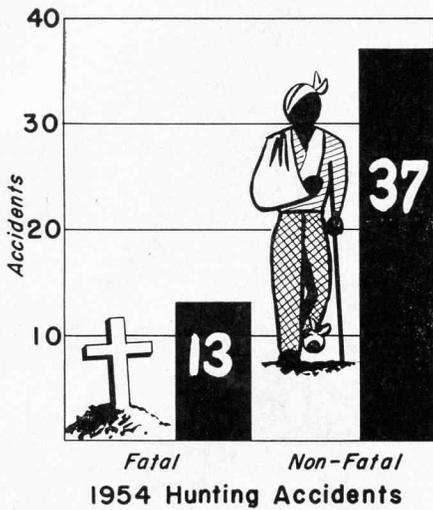
In the past when reports were less complete, many of the minor woundings undoubtedly were not reported. A number of this year's nonfatal accidents consisted of a person being sprayed by shotgun shot, a few of which imbedded in the flesh. The apparent alarming increase in the number of accidents over 1953 is probably not as much an increase as it is a more complete report.

One other surprising development was the number of accidents occurring when the prey was other than game species. People were killed and wounded while after raccoon, squirrels, jack rabbits, rats, and a woodpecker.

Settings for the accidents were the same as in the past years with a new cast of characters. The causes were also generally the same, with such standbys as disrespect for a loaded weapon, not making sure of a target, and having loaded weapons in vehicles leading the list.

There is only one person who can prevent hunting accidents. There is no room for the phrase “Oh, it can't happen to me!” It has happened to a wide variety of persons. Complete respect, understanding, and obedience of the 10 commandments of safety plus the use of common sense by every hunter could eliminate hunting accidents! (Ron Shay)





PROCLAMATION NATIONAL WILDLIFE WEEK

WHEREAS, the wise use of natural resources—soils and waters, forests, minerals, and wildlife—is essential to the welfare and security of the community, state and nation, and

WHEREAS, the sound management of natural resources cannot be achieved without the guidance and support of an informed and interested public, and

WHEREAS, the week of March 20 through March 26 is being observed across the nation as National Wildlife Week, and as an expression of national interest in conservation and as a means of stimulating greater public interest in the pressing problems of natural resource management;

NOW THEREFORE, the week of March 20 through 26, 1955, is hereby designated as NATIONAL WILDLIFE WEEK in the State of Oregon. All citizens are urged to acquaint themselves with the facts pertaining to natural resources problems, and, in keeping with the national theme, to give particular thought and attention to the importance and preservation of wetland resources, including the marshes, sloughs, lakes and stream courses of America, and the wildlife and recreational opportunities produced and afforded by such areas.

(Signed) Paul Patterson, Governor

1954 ANNUAL REPORT DEPARTMENT OF STATE POLICE GAME CODE

	Warn.	Arrests	Acq.	Sent.	Fines
Angling: Closed season	21	58	4	.06	\$ 1,780.50
Prohibited areas, hours or methods	258	342	15	.16	7,249.50
Disguising: Sex of animal		1			50.00
Species, kind of bird	1	7	1		150.00
Exceeding bag limit	67	142	8	.40	3,943.00
Failure to tag properly	471	251	24	2.41	13,167.50
False application for license	7	83	14	.33	3,614.00
Holding game animal no permit	1	1			20.50
Hunting: Closed season	10	114	8	1.94	9,599.50
Prohibited areas, hours or methods	283	460	39	3.97	25,005.50
Protected animals, birds	3	28		.44	2,320.50
Lending angler's or hunter's license		8	2		194.75
Molesting game animals, birds, fish		1	1		
No license: Alien gun		5	1		125.00
Angling	657	338	25	.31	6,964.00
Guide		3	5		95.50
Holding permit		8		.03	167.50
Hunting	280	126	19	.43	2,793.00
Non-resident	6	60	9		1,339.50
Trapping	6	4			250.00
Permitting dogs to run deer					20.50
Possession: Game animal	3	160	18	3.12	14,171.00
Game bird	7	47	2		1,371.50
Game fish	116	85	2	.04	2,018.00
Protected animal, bird	3	10	2		737.50
Sale game animal, bird, fish			1		
Shooting from highway	28	62	1		1,276.50
Stream pollution					50.00
Trapping: Closed season	2	4			85.00
Prohibited areas, or methods		2			50.00
With unbranded traps	4	6	1		100.00
Trespassing		28	2		444.00
Using license of another	3	25	1		1,437.00
Wanton waste of game		14	2	.40	2,060.00
TOTALS	2,237	2,483	207	14.04	\$102,650.75

10.15 years suspended \$19,771.75 remitted

Licenses and bag limits

checked o. k.:

Angling and hunting	137,106
Guide	65
Non-resident	425
Trapping	234

Predatory animals killed

43

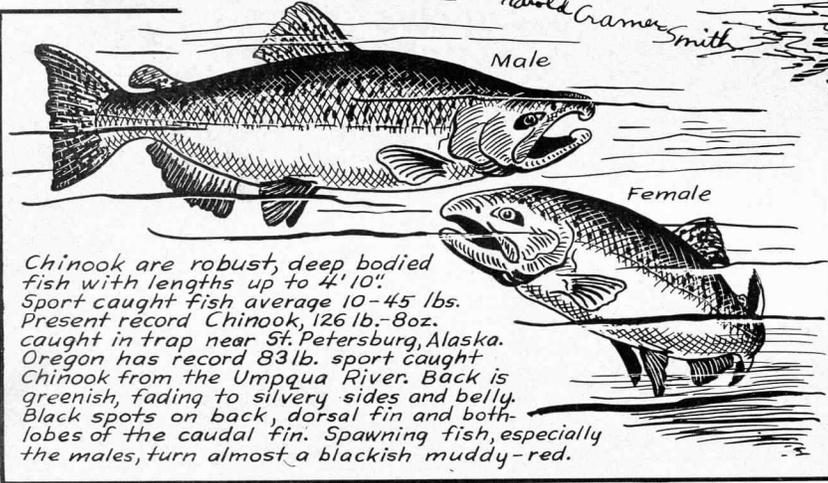
CHINOOK Salmon



"I have lived! The American continent may now sink under the sea, for I have taken the best that it yields, and the best was neither dollars, love, nor real estate.... The salmon tore up stream, the tense line cutting the water like a tide-rip behind him, the light bamboo bowed to breaking.... Partner! Partner! This is glory.... That hour I sat among princes and crowned heads - greater than them all!"
from Sea to Sea - Kipling



Harold Cramer Smith

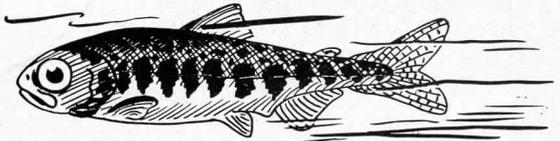


Male

Female

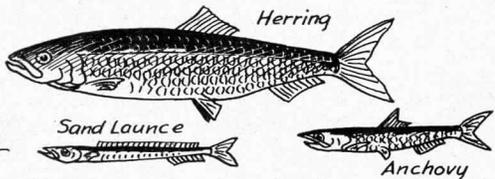
Chinook are robust, deep bodied fish with lengths up to 4' 10". Sport caught fish average 10-45 lbs. Present record Chinook, 126 lb.-8oz. caught in trap near St. Petersburg, Alaska. Oregon has record 83 lb. sport caught Chinook from the Umpqua River. Back is greenish, fading to silvery sides and belly. Black spots on back, dorsal fin and both lobes of the caudal fin. Spawning fish, especially the males, turn almost a blackish muddy-red.

Usually in their fourth or fifth year mature Chinooks return to their parent stream to spawn and die. Spawning runs occur in spring and fall, with spawning act taking place in the fall. In Oregon, Chinook spawn in almost all streams with access to the sea and suitable gravel beds.



Young Chinook hatch in two to four months depending on water temperature. Live on yolk sac about 30 days. Fry go to sea very soon after emerging from gravel or remain in fresh water up to fifteen months. Salmon fry have long vertical bars or parr marks on their sides which disappear as they mature, also have black or dusky coloration inside mouth.

Salmon "Redds" or nests are dug in gravel by female in fairly deep, fast water. Female may deposit eggs in several redds. From 3,000 to 11,000 eggs may be laid, average is 6,000.

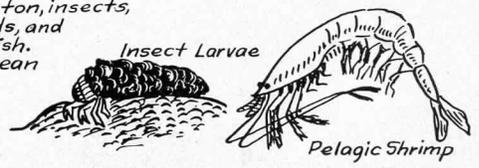


Herring

Sand Lance

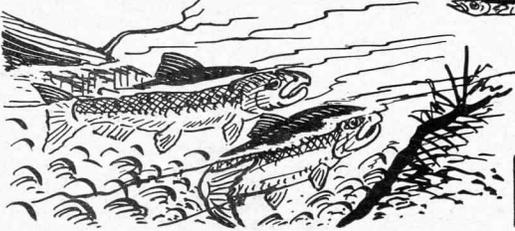
Anchovy

Chinook fry first feed on plankton, insects, insect larvae, crab larvae, mysids, and later pelagic shrimp and small fish. Mature salmon feed in the ocean on sand launces, anchovy, with herring and pilchard being main sources of food.



Insect Larvae

Pelagic Shrimp



Oregon State Game Commission Bulletin

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