





Don't let a little tapeworm scare you and keep you from eating that fish you caught. Tapeworms in game fish do not make the fish inedible. They affect the digestive system of the fish but not the flesh. Many anglers appear to be unaware of this and upon finding tapeworms present, throw the fish away rather than cooking and eating it.

The calculated sports catch of 16,012 chinook salmon this spring in the lower Willamette was the largest of the past eight years and approximately 4,000 more than in 1952. There were 102,805 angler days spent on the river compared to 91,079 for last year. The Game Commission and Fish Commission over a period of years have been gathering statistics through a cooperative study to determine the relation of the catch and escapment and so measure the total number of fish entering the river. Boat counts were obtained by making airplane flights over the area and catch records secured through cooperation of moorage operators.

The game division's annual staff conference and training program was held June 24, 25, and 26 at the E. E. Wilson Management Area near Corvallis. Besides reviews of the various wildlife programs of the department, the program included a panel discussion of "Wildlife and Recreational Use of Public Lands" by representatives of the State Board of Forestry, State Land Board, U. S. Bureau of Land Management, and U. S. Forest Service. Procedures of arrest and trial were discussed by State Police.

* * *

A boat slide for the use of anglers has been built by the Game Commission on the McKenzie River near Hayden bridge on the Marcola road. It is located on property leased from Mrs. Georgiah V. Staten.

COVER

Bank fishing for jacks along the Columbia River in the Sauvies Island Management Area provides pleasant relaxation. (Photo by Tom McAllister)

Frank Wire Retires

Frank B. Wire retired on June 30 after over 21 years of service with the Oregon State Game Commission.

Appointed state game supervisor on April 11, 1932, he served in this position a record 15 years until September, 1947, when ill health forced him to step down. Since that time he has acted as secretary of the Commission.

During his service with the Game Commission he witnessed many changes in the game department operations. At the time he joined the department it was only about one-fifth as large as today with its approximately 50 full-time employees and annual income

of \$400,000. The present expanded organization with its varied activities relating to management of fish and game on a fact-finding and scientific basis was slowly evolved under his direction from an organization whose chief function was the artificial propagation of fish and game birds.

Although born in Illinois, Frank came to Oregon while a boy and was raised in the Willamette Valley where he learned to hunt and fish. Hunting and fishing in all their forms have been his chief hobbies and without a doubt will occupy most of his time

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June Meeting of the Game Commission

The Oregon State Game Commission met in Portland on June 13 and among matters acted upon were the following:

Low bids were accepted and contracts authorized for:

Excavation and water control structure at Diamond Lake.

Construction of cold storage plant, chlorinator and residence at Bandon hatchery.

Construction of one residence each at Willamette, Wizard Falls and Roaring River hatcheries.

Other capital outlay items approved were installation of water line and purchase of grain augur for E. E. Wilson Management Area; installation of trash rack for water intake at Alsea hatchery; and construction of garage and warehouse for Southwest Region headquarters at Roseburg.

Several additional options for land within the White River and Wenaha winter range projects were approved.

A letter was read from Oregon Wildlife Federation concerning registration of big game trophies. The Director was authorized to help prepare a plan for recording not only big game trophies but also include such other game and fish as appeared desirable.

A resolution was passed in which the Commission went on record as being opposed in principle to hunting and fishing derbies.

In view of F. B. Wire's retirement, the duties performed heretofore under position of Commission Secretary were ordered to be reassigned by the Director to other positions in the department, and previous resolutions of the Commission relative to the position of Secretary were repealed.



By Curtiss M. Everts, Jr., State Sanitary Engineer Oregon State Board of Health

One of the most spectacular "fights" to save Oregon's waters has occurred in the Willamette River Basin.

The battle began at the turn of the century when it was realized that drinking water taken from the sewageladen Willamette River was one of the chief sources of typhoid fever which had appeared in explosive fashion in cities for a number of years. Cities and industries continued to use the river and its tributaries as a convenient and inexpensive method for disposal of sewage and other wastes in spite of the warnings of health authorities, conservationists, and others. Over the years the volume of these wastes became so great that during the summer season when river flows are low, oxygen which is vital to fish and aquatic life in the stream disappeared in the Portland harbor area, nuisance conditions developed, and the river had almost reached the stage of becoming an open sewer. The immensely valuable tourist industry was unquestionably affected, cities abandoned the river as a source of water supply, and manufacturing firms needing large quantities of pure water may well have been kept from constructing plants on Oregon streams. It was not until the valuable fall run of chinook and silverside salmon was wiped out, however, that the movement to clean up the Willamette and its tributaries began to gain momentum.

Because of the close affinity of the pollution abatement program of the Oregon State Sanitary Authority to the future of the fish and wildlife resources of Oregon and the encouraging progress being made in this difficult field, we have requested Mr. Everts to prepare the following article covering the activities of the State Sanitary Authority for the benefit of readers of the Oregon State Game Commission Bulletin.

Factual information on the condition of the river from Cottage Grove to its confluence with the Columbia was gathered by investigators from the Oregon State College, City of Portland, the State Board of Health, and others. The results of these studies prompted the adoption of pollution abatement laws by the 1937 legislative assembly, but unfortunately the bill was vetoed and for a time it appeared that a lot of good work had gone unrewarded.

If it had not been for the determination of a lot of conservationists, sportsmen, and other public-spirited citizens, the program to clean up the Willamette River and other public waters may have been delayed for years. This group didn't know the meaning of the word "defeat", and promptly took steps to place the measure on the ballot by initiative petition.

At the general election of 1938 the

new statute was adopted by a threeto-one majority. The law established a public policy for the cleanliness of the waters of the state, created the Sanitary Authority, and gave it the job of cleaning up existing pollution and preventing the occurrence of any new sources.

The experiences of the Authority in the Willamette pollution abatement program is a story almost too long to relate, but briefly this was the picture in 1939.

There were only fourteen municipal sewage treatment plants in the Willamette Basin. Gresham, Hillsboro, Estacada, and Silverton were the only cities that could boast of modern units, for the rest had septic tanks that had long since outlived their usefulness. In addition, millions of gallons of liquid wastes from pulp and paper mills, canneries, meat packing plants, flax retting plants, and milk processing plants were discharged into the Willamette and its tributaries every day.

In addition, it was obvious from the very beginning that the city of Portland was a very formidable obstacle in the path of the Authority program to promote compliance with the statutes. Portland discharged more domestic sewage into the river than all the rest of the Willamette Valley towns. Cities in the rest of the state were reluctant to meet the Authority's de-

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Willamette Clean-Up

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mands until they could be assured that Portland would comply with the new law. Industries wouldn't budge until cities did, and as a result of this situation the Authority initiated action against the city over a period of six years to get abatement of pollution in Portland harbor. Eventually a bond issue of \$12,000,000 was authorized in 1944, and the project, which will cost about \$17,000,000, is now nearing completion.

This is how the Authority works: At almost every meeting for the past fourteen years cities and industries that had no program for treatment plant construction were required to appear and discuss their problems before the Authority. Authority staff members worked with local officials in the development of programs for sewage treatment, cooperated with industry on special studies, and made investigations of stream conditions. The Authority itself held hearings, formulated a comprehensive program, and in instances where lack of cooperation was evident, it instituted legal action.

After fourteen years of work in which a major war intervened to slow progress, the score stands about like this:

There are forty-two public sewage treatment plants in operation in the

valley today. Only four of these are antiquated and need replacement. There are eight new plants under construction, and it can be expected that four more will be built before the end of the year. That leaves only eight communities with a total population of about 7,000 which must provide treatment for their sewage in the near future.

The industry situation is also of interest. In 1950 pulp mills at Lebanon, Salem, Newberg, and Oregon City were ordered by the Authority to provide adequate facilities for disposal of their wastes by not later than May 1, 1952.

The Crown Zellerbach Corporation at West Linn and the Oregon Pulp and Paper Company at Salem complied with this order by impounding the concentrated waste sulphite liquors in large lagoons or reservoirs during the period of low stream flow in the Willamette River. By this method the pollution loads from these two mills were reduced about 65 per cent.

Extensions in time were granted to the other three pulp mills because they were unable to install the necessary waste disposal facilities before the period of low stream flow in 1952. The use of waste sulphite liquor as a road binder made some reduction in industrial waste loadings by the Publisher's Paper Company at Oregon City and by the Spaulding Pulp and Paper Company at Newberg. This method of dis-

posal, however, was not adequate to meet the requirements of the State Sanitary Authority order. The Spaulding Pulp and Paper Company had planned to use a lagoon for storage of the waste sulphite liquor but a defect in construction prevented the use of this basin during 1952. It is expected, however, that this unit will be placed in operation this year. The Publisher's Paper Company plans to continue the use of spent sulphite liquor as a road binding material, and any excess amounts will be disposed of by dilution in the Columbia River. At Lebanon, the Crown Zellerbach Corporation is instilling the necessary equipment for the concentration and burning of the waste liquor as a means of solving that pollution problem. Practically all of the equipment has been installed and the process will be placed in operation this summer.

Twenty-one canneries, milk plants, and other industrial establishments have made provisions for treatment of their wastes with municipal sewage. Fifty others are now providing treatment or adequate disposal for their wastes.

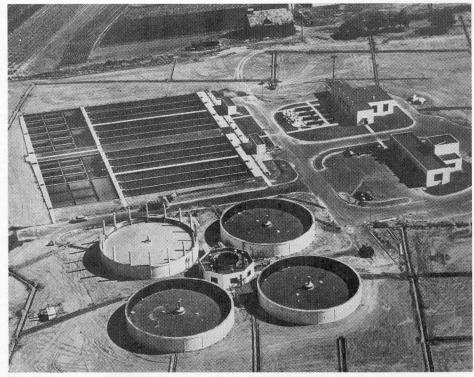
The presence of small quantities of oxygen in Portland harbor last summer was one of the first encouraging signs that the Willamette River was beginning to recover from more than twenty-five years of suffocation. Biological investigations conducted by the State College have indicated that considerable improvement has occurred in the aquatic life of the stream and the use of the river for boating increased last year.

The Willamette River has been mistreated for so many years that it is doubtful that a complete recovery can be expected. With the completion of the clean-up program, however, it can be used for industrial and domestic water supplies, for the propagation of fish, and for almost all recreational purposes except swimming; and it might be used for swimming in some areas.

As the program for improvement continues, it can be anticipated that minor pollution problems will appear that were completely obscured by the heavy pollution loads that have accrued in the past. These will be investigated and remedied as quickly as time and personnel permit.

Pollution has been a problem which has robbed both our pocketbooks and our pleasure, but for the first time, its control is in sight.

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The \$2,000,000 Portland sewage treatment plant completed in 1951. (Courtesy of Oregon State Sanitary Authority.)

Willamette Clean-Up

(Continued from Page Four)

Increases in population and prospective industrial development will surely bring with them additional problems of waste disposal. These must be met when they arise, and once the river is again in good condition, we must keep it that way. Otherwise, we will have the job to do all over again.

About The Author

Curtiss M. Everts, Jr. (better known



as "Cy") has been in the employ of the Oregon State Board of Health since 1936 except for a period of military service.

In 1941 he was appointed State Sanitary Engineer

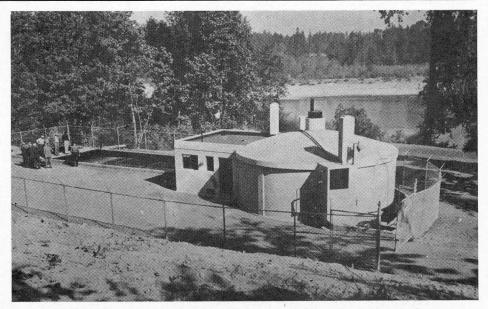
for the State Board of Health and Secretary of the State Authority. Under his vigorous direction, considerable headway has been made in the control of pollution in Oregon waters, Particularly, the progress being made with the Willamette River pollution problems stands out as a major accomplishment for Mr. Everts and his department.

As a member of the Advisory Committee on Natural Resources, which was first created by Governor McKay and then given official status by act of the 1953 legislature, he keeps in close contact with all agencies having to do with the natural resources of the state. Liaison with the game department has been especially close.

Mr. Everts is a civil engineer graduate of Agricultural and Mechanical College of Texas and holds an M. S. in sanitary engineering from Harvard University.

Frank Wire Retires

(Continued from Page Two)
upon retirement. However, for those
times when weather or other conditions forestall hunting and fishing
trips, there will always be fly tying, rod
building or an occasional bit of writing to take up the time, plus, of course
visits to the Game Commission office
to see how everything is going. Knowing this, his fellow workers can cheerfully bid him Godspeed and good hunting and fishing for his well-earned
retirement.



The West Linn treatment plant located along the banks of the Willamette River. (Courtesy of Oregon State Sanitary Authority)

Western Game Association Meets

The Western Association of the State Game and Fish Commissioners held its thirty-third annual conference in Long Beach, California, on June 1, 2 and 3.

Oregon game department representatives attending included Commissioners Kenneth G. Denman and Don-Mitchell; P. W. Schneider, Clark B. Walsh, John McKean, John Rayner, W. C. Lightfoot, L. F. Schneider, and Ross Newcomb. A. S. Einarsen of the Research Unit also attended.

The meeting was divided into general sessions and technical sessions on wildlife. The Western Division of the American Fisheries Society met concurrently and held technical sessions on fisheries.

One of the general sessions was devoted to a symposium on organization of state game and fish departments under chairmanship of Ira N. Gabrielson, president of the Wildlife Management Institute. P. W. Schneider, state game director, presented a paper for this panel.

Other papers written by Oregon game department members were "Future Evaluation of Fish and Game Resources" by C. J. Campbell; "Big Game Harvest Methods" by R. U. Mace; "Introduction of Pheasants on Newly Irrigated Oregon Lands" by L. F. Schneider; "Band-tailed Pigeon Study" by Arthur S. Einarsen. Dr. H. J. Rayner acted as a discussion leader for a fishery session on "How Can We Best Use Our Hatchery Products?"

Resolutions passed by the group in-

cluded the following:

Urged passage of legislation to reiterate the right of state wildlife departments to properly administer wildlife on military establishments.

Requested the Fish and Wildlife Service to continue to give study to making game harvest plans for their refuge system.

Opposed H. R. 4023 and S. B. 1491 sponsored by the National Livestock Assn. and reaffirmed confidence in the principle of multiple land use.

Favored, passage of H. R. 334 and S. 783 amending present mining laws; and opposed passage of H. R. 4983 and S. B. 1830 which do not correct the fundamental weaknesses of the mining laws.

Favored, in the event under the President's administrative reorganization program the two agencies in charge of the administration of public lands used for livestock grazing are consolidated, placing of such lands under the custodianship of the Department of Agriculture for administration by the Forest Service.

Urged legislation be enacted to apportion to the various states on a full allotment basis the presently existing surplus in Pittman-Robertson funds.

Formed committee consisting of representatives of each member state to outline and coordinate a browse research program to develop new plants and techniques of use in revegetating browse ranges for game use.

Requested Bureau of Land Manage-(Continued on Page Six)

FUR CATCH REPORT

1952-53 TRAPPING SEASON

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*Catch of beavers compiled from beaver report cards. # Includes 90 gray fox @ 32e and 6 red fox @ \$1.00. *Includes 8 opossum @ 15c, 12 badger @ 59c, 7 nutria @ 50c, 377 wildcat @ \$1.00, and 266 coyote @ \$1.

1952-53 Trapping Season

regon trappers reported catching 85,692 animals, during the winter of 1952-53, which had a commercial sale value of \$229,888.80. The take of 69,-701 muskrats led the list in total pelt production, but beaver pelts produced the greatest revenue. The accompanying table gives a complete breakdown of marketed species and revenue brought into the counties from trapping. Tabulations are based upon the reports of 1,188 trappers. In addition, 766 or 39 per cent of the 1,954 licensed trappers failed to submit reports.

The second consecutive open beaver season resulted in the catching of 10,374 animals as compared with 15,257 trapped during the 1951-52 season. A few streams in agricultural areas were trapped quite heavily, but on a statewide basis the harvest of beavers during the past two years has not removed the annual increase. Fewer beaver trappers and reduction of the number of seals allowed each trapper from 200 to 50 were the main factors contributing to the reduced take.

Fur prices were low on all species. with mink, muskrat, otter and beaver the only animals sought by trapper. Marten pelt values dropped so low that only a few trappers sought this animal in the high mountainous country. Long-haired fur was again practically worthless on the market.

Western Assn. Meets

(Continued from Page Five) ment to proceed as rapidly as possible

in completing study of sheep-tight fences believed to be impeding movement of antelope to range and water.

Urged National Park Service to reevaluate its wildlife management practices on national parks in the light of present day knowledge and thinking.

Urged the Department of the Interior to seek congressional action to protect the remaining key waterfowl areas of the Lower Klamath and Tule Lake Refuge for primary development and use for the maintenance of the Pacific Flyway waterfowl resource.

CHANGE OF ADDRESS

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

Rock Creek Hatchery

Located in southwestern Oregon 25 miles east of Roseburg, the Game Commission's Rock Creek Hatchery is playing an important part in a attempt to restore salmon runs in the North Umpqua River. As the name implies, the hatchery is located on Rock Creek and is dependent on the creek for its water supply. This site is just east of Idleyld Park on the North Umpqua River road.

The Rock Creek Hatchery has 17 ponds of various sizes using water having a temperature variance from 34 to 68 degrees. In 1949, the rearing of 80 to 100 thousand salmon per year was started as a move toward the rehabilitation of the runs in the nearby North Umpqua. Eggs from the spring and fall chinooks and silvers are obtained by trapping the adult fish during their upstream migration. All fish are fin clipped by hand before release.

In addition to raising salmon, the hatchery produces approximately 150,000 spring and fall rainbow each year, which are planted in the streams of the Umpqua River system.

Hatchery Superintendent Henry J. Reed started working with the Game Commission in 1938 at East and Paulina lakes and Crane Prairie Reservoir during egg-taking operations. Also some of his first fishery experience with the Commission was gained during two seasons he spent working with

"POISON" OAKES

a pack string hauling fish into the high mountain areas of the Cascades. Following this, more time was spent at egg-taking stations located at Diamond Lake and Spencer Creek.

In 1945 Reed was appointed assistant superintendent of the Fall River Hatchery, followed by promotion to superintendent in 1948. When J. W. Vaughn was promoted to regional supervisor in 1950, Reed replaced him as superintendent at Rock Creek.

Several fish saving innovations developed by personnel are in use at Rock Creek Hatchery. One of them is a bell system on the indoor troughs that acts as a warning device if for some reason the water supply ceases. Often a frog or piece of wood in the pipes will cause a stoppage and the invention immediately causes bells to ring in all of the residences at the hatchery. Another fish saver is the screens placed around the water intakes on the outside ponds to catch any fish coming down the pond water supply. If wild fish enter the ponds, they will feast on the small fry being held there.

Some major changes have taken place at Rock Creek in recent years, including the building of new rearing pools and a new dam and water supply system. Also one new residence was completed in 1950 and a cold stor-

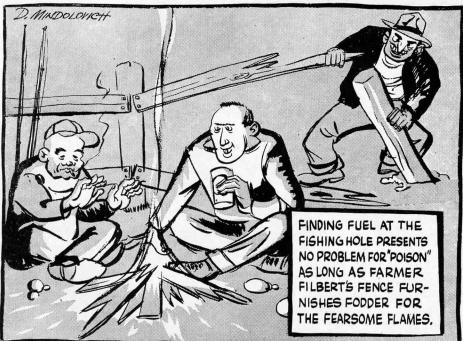


"Hank" Reed checks screen at water intake of fish pond.

age room and grinding room was added to the hatching house.

Some of this progress was almost erased last year when a large section of one of the nearby bluffs slid down around one of the residences blocking the driveway and flowing around the foundation. Luckily there was not enough dirt or pressure to force the house down the hill with the slide, but it took several days to put things back in order again and the deeply gashed hillside remains as a reminder of the near disaster.

By Dan Mindolovich New (



New Cartoon Introduced

Poison oak is a pest in western Oregon.

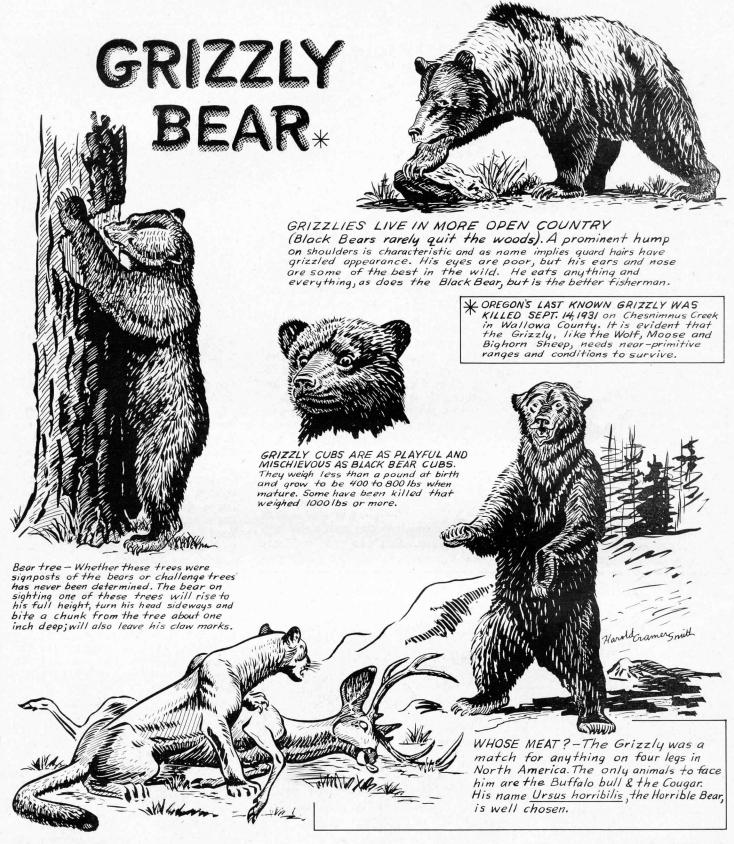
So is "Poison" Oakes.

"Poison" Oakes is the new cartoon character recently introduced by The Roseburg News-Review as a public service feature.

Created by Charles V. Stanton, editor of The News-Review, and Dan Mindolovich, News-Review staff artist, with an assist from C. T. "Chuck" Duncan of the School of Journalism, University of Oregon, "Poison" Oakes is personification of all outdoor vandals, hoodlums and litterbugs.

"Poison" is the fellow who shoots holes in road signs, boats, windows, car headlights, knocks insulators off power and telephone lines or plinks away at any handy target.

He thinks nothing of dragging his spinner through water where fly fishermen are fishing. He crowds his boat into line, knocking three or four neighboring boats off their anchorage.



Oregon State Game Commission Bulletin

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