

The Rogue River Fisheries

# Stream Protection Is Important in Control

## Natural Habitat Reported Best for Preserving Runs

(Editor's note: This is the 10th in a series of articles on the Rogue fishery and its management. Today's article is a general discussion of the need to preserve the natural characteristics of streams and lakes to maintain adequate fishing. The program to correct some of the more serious losses of fish is outlined.)

By COLE M. RIVERS

Fisheries Agent

State Game Commission

Stream protection is one of the most important phases of fishery management work.

The most successful proven method for maintaining fish populations, particularly salmon and steelhead, is to protect the natural characteristics of our streams and give Mother Nature a chance to do her job well.

Hatcheries can be used to solve isolated problems, but the most effective method to preserve and restore fish runs is to protect the habitat and let the fish do the job for themselves.

Poorly designed and carelessly constructed roads from the fish management standpoint can damage streams so that many years may be required for recovery. Some streams are already so badly damaged that they may never recover. Much progress has been made in the past decade to encourage road building agencies to modify their designs for the protection of streams and fish life.

**Destroy Habitat**

Logging operations often destroy many miles of fish habitat in streams. The damage is commonly caused by skidding logs into the channel, stripping the banks of valuable cover, and leaving debris from which jams can be formed.

Abandoned, exposed soils may erode and, as a result, fish eggs and aquatic fish foods in the gravel are smothered. Abusive disturbance of cover often causes changes in the pattern of runoff so that the streams suffer from scouring floods in the winter and dry beds in the summer.

Not many years ago, little was known on just how to prevent damages to streams by logging. Trial and error methods were studied by co-operating agencies, such as the private timber companies, forest service, soil conservation service, and the game commission. Improved logging and road building techniques were found to protect water, soil, and cover.

**Good Management**

Private landowners are usually interested in the protection of their own lands. They, too, are learning that stream protection practices needed for fish follow the principles of good land management.

Fishery people are attempting to secure the cooperation of private agencies engaged in land-use practices to protect the streams and watershed. More important is the need to inform the general public which methods are damaging and which procedures are beneficial.

Inventory of log jams and ladders, building fish passage at dams, recommending solutions to problems at bridges, culverts and irrigation facilities are other routine responsibilities of fish managers.

**Method Sound**

When a method was found to prevent the extensive losses of downstream migrant steelhead and salmon in irrigation ditches, the game commission constructed a plant at Central Point to develop and manufacture the Oregon rotary fish screen. Because of multiple shortages through World War II, the program was not started on a large scale until 1945.

This is now one of the most time-consuming and expensive programs the game commission undertakes. Yet it ranks high in importance for the protection of salmon and steelhead. A state law requires that all ditches and diversions under eight feet in width be screened and maintained by the commission. On larger diversions, this responsibility lies with the building agency.

As many as 194 fish screens have been operating in the



**LOG JAM**—This shows a typical log jam that was formed by unorderly logging practices. These jams block runs of steelhead and salmon from valuable spawning areas, and represent only a part of the damage to tributaries and fish life, according to the Oregon game commission.

Rogue watershed at one time. In 1960, 156 screens were being used and maintained.

**Worth Expenditure**

The game commission feels that this screening program is well worth the expenditure involved. As many as 27,000 wild migrants have been counted from one screen on a tributary. Larger screens which divert migrants from ditches off the main channels of the Rogue and Applegate divert many more in a season.

A 1950 study showed that the numbers of fish saved from all screened ditches in the Rogue system that year represented more fish than 10 of the Butte Falls hatchery. More important, these were rugged, wild salmon and steelhead that are known to be maintaining the Rogue river stocks.

Because of adverse flow conditions, not all screens can save 100 per cent of the migrants in a ditch. Many changes are being made every year to eliminate the escape of fish through and around screens and to try to attain 100 per cent efficiency.

In the past, fish ladders were constructed along a common pattern. When it was realized that most of these old-type structures provided fish passage at only one stage of water, biologists, engineers and hydrologists combined their knowledge to design ladders that could be used by fish at all stages of flow. The joint efforts of these specialists have also made it possible to remove fish from large volumes of water such as from canals and forebays above turbine intakes.

**Laws Inadequate**

Generally, the laws which protect fishery habitat are inadequate in Oregon. The law prohibits trees, logs, brush and drift placed in or near a stream without "forthwith removing the same" is a valuable tool for controlling damage created by logging.

There is no strong legislation to control silt loads. Laws do not exist to control the removal of gravel from valuable stream beds, but some operators are showing excellent cooperation with the game commission by separating their borrow area from the main stream flow with an undisturbed dike.

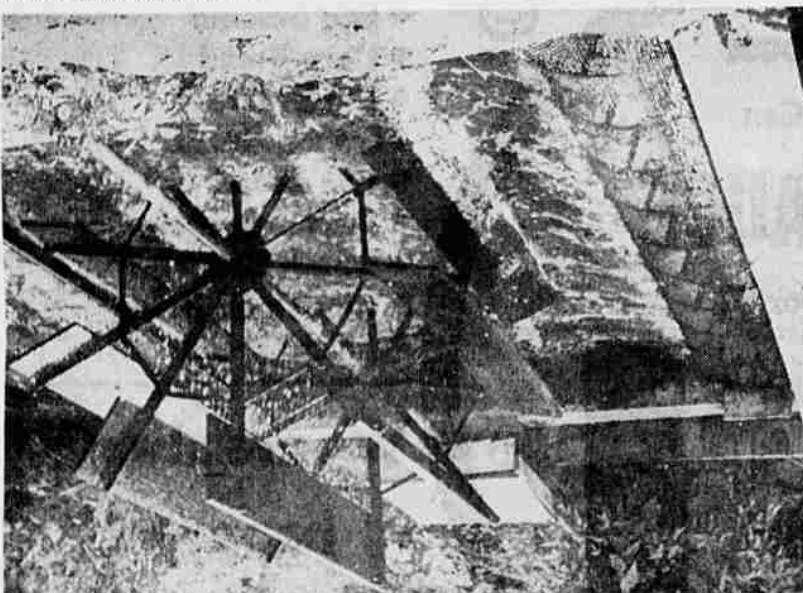
Stream protection work will become more important in the future as development of the Rogue valley continues. Complete understanding and cooperation of the general public are necessary for the protection of natural stream characteristics. Without them, the use of the Rogue fishery resource on a high recreational and economic level cannot continue.

**Group Lays Callers**

**Boleyn's Assurances**

Fort Arthur, Tex. (AP) — City Commissioner C. R. Eiler has what he believes is an effective method to handle telephone calls from querulous constituents who phone at a late hour.

"Just call them back the next night about the same time, of a little later, to give them their answer."



**PREVENT LOSSES** — Oregon rotary fish screens prevent the loss of hundreds of thousands of downstream migrant salmon and steelhead in irrigation ditches. These screens are built and maintained by the Oregon game commission.

## Lung Cancer Tissue Grown In Laboratory

San Francisco — (AP) — A University of California scientist has succeeded in growing human lung cancer tissue in the laboratory, the American Cancer Society has reported.

The scientist is Dr. Reda Cailleau of the Medical Center's Cancer Research Institute.

She has been able to grow lung cancer cells in flasks for the past two years, enabling her to study the physical and chemical behavior of lung cancer under controlled conditions.

**Patient Still Alive**

The cancerous tissue which provided the cells was removed from a portion of lung from a 53-year-old barber in January, 1959. The patient still is alive and in good health, the society said.

The original tissue, about the size of a walnut, was cut into small bits and grown in covered dishes. Most of the pieces, the society said, were made up of groups of delicate strands.

One of the strands, about the size of a pin head and contained 200 to 300 cancer cells, was placed in a special flask and covered with a nutrient liquid.

After living dormant for a month, the cells began to multiply, and since that time they have been transferred nearly 70 times by placing about one-twenty-fifth of the old cells in a new flask every two weeks.

**More Chromosomes**

Dr. Cailleau said she has found the cancer cells have an average of 49 chromosomes instead of the 46 found in normal tissues. Chromosomes appear in the nucleus of the cell and contain the genes which control the individual's



**DEEPEN CHANNEL**—A deeper channel is blasted through the rocks at Rainie Falls on the Rogue river downstream from Galice to improve fish passage.

## Inflation Causes Not Guilty Plea

Dallas, Tex. (AP) — Assistant District Attorney Frank Wells says he was prosecuting an armed robbery trial recently in which the defense made an unusual plea—not guilty because of inflation.

The defense attorney claimed that the \$100,000 cash stolen was worth only \$29.95 because of inflation.

Dr. Cailleau worked for three years before successfully growing the cells under artificial conditions, the society said.

legally stole may sound like a lot of money, but it really isn't when you consider a dollar is worth only about 59 cents.

The plea must have cost the jurors to brooding. They possibly figured that in these days of 59 cents, instead of making \$5 a day for jury duty they were actually getting \$2.95.

They returned a 30-year verdict against the defendant.

Australia's population is estimated as 9,800,000.

# OAKDALE

## Super Market

STORE HOURS:  
8 A.M. TO 9 P.M. EVERY DAY  
PHONE SP 3-5337  
We Reserve the Right to Limit

# FREE! COTTON CANDY

## SPUN FROM WHITE SATIN SUGAR

Children Under 12 Years Must Be Accompanied by Adults  
10 am. to 6 p.m. Friday and Saturday

**SKIPPY DOG FOOD**  
TOPS IN QUALITY!  
#1 CAN  
LOW IN PRICE

13 cans  
**\$1.00**

**FLUFFO SHORTENING**

3-lb. can  
**59¢**

**Orange Grape Pineapple Grapefruit Drink**

46-oz. Cans  
**4 FOR \$1**

**Hi-C FRUIT DRINKS**  
ROSE PARADE OF VALUES  
Mix 'n' Match SPECIAL for "BLOOM OF HEALTH" High in Vitamin C

46-oz. Cans  
**4 FOR \$1**

**WHITE SATIN SUGAR**

10 lbs.  
**79¢**

**GHIRARDELLI CHOCOLATE FLICK-ETTES**

6-oz. Package **5 for 1.00**

**LOU-Z-ANA SHRIMP**

4 1/2-oz. Can **3 for 1.00**

**JIF PEANUT BUTTER**

18-oz. Jar **49¢**

# THE BEST COSTS NO MORE

**FLORIDA TANGERINES**

**19¢ LB.**

**YELLOW ONIONS**  
Medium Size  
**5¢ lb.**

**TEXAS GRAPEFRUIT**  
48 Size  
10 For **89¢**

**ORANGES**  
Extra Large Sweet & Juicy Calif. Navels  
**12¢ lb.**

**Bologna ANY SIZE CHUNK**  
**39¢ LB.**

**SALAMI**  
Chunk Sliced  
Pound **49¢**  
Pound **69¢**

**CORNERED BEEF**  
**69¢ lb.**

**TORNADO BOWL PRESENTS**  
**HAMBURGER** WITH ALL OF THE TRIMMINGS  
and a 10c COKE  
**BOTH FOR 25¢** Fri. & Sat. ONLY

**OAKDALE Market**  
CORNER OF 11th & OAKDALE  
Personalized Service

**Group Lays Callers**

**Boleyn's Assurances**

Fort Arthur, Tex. (AP) — City Commissioner C. R. Eiler has what he believes is an effective method to handle telephone calls from querulous constituents who phone at a late hour.

"Just call them back the next night about the same time, of a little later, to give them their answer."

As many as 194 fish screens have been operating in the