

# Crew has fish counting down to a science

By D. "Bing" Bingham  
Spilyay Tymoo

Soon it will be time for Geoff FitzGerald, a fisheries biologist with the Confederated Tribes Natural Resources Department, to watch his step at work.

He'll walk carefully, and make sure he and his crew never works alone. They'll be focused on what they're doing with the fish, but they'll be listening for the familiar buzz of a rattlesnake along Shitike Creek.

Increasing the number of chinook salmon in Shitike Creek is the name of the game. FitzGerald and his crew are in charge of setting, checking and maintaining the migratory screw traps that are used for counting salmon smolts headed for the ocean.

The traps are operated five days a week from March through June. The traps will be placed back in the streams during the fall to count fish overwintering in the Deschutes River.

"We remove all the fish from the trap," says FitzGerald. "We anesthetize them and take a length and weight measurement on each one."

It's important to anesthetize the fish before handling them - it reduces stress and makes it easier for them to survive when released back into the stream.

"It's very important not to stress the fish," he says, "we use a slime coating that protects their skin after handling, and the anesthetic has a buffer, so it makes it easier on the fish. Plus we keep oxygen bubblers at all times in the holding tank."

For bull trout and chinook, the crew scrapes a couple of scales off and takes a tiny fin clip - about half the size of the average pinkie fingernail - for a genetic sample. They take a sample of genetic material from steelhead to establish age and pedigree.

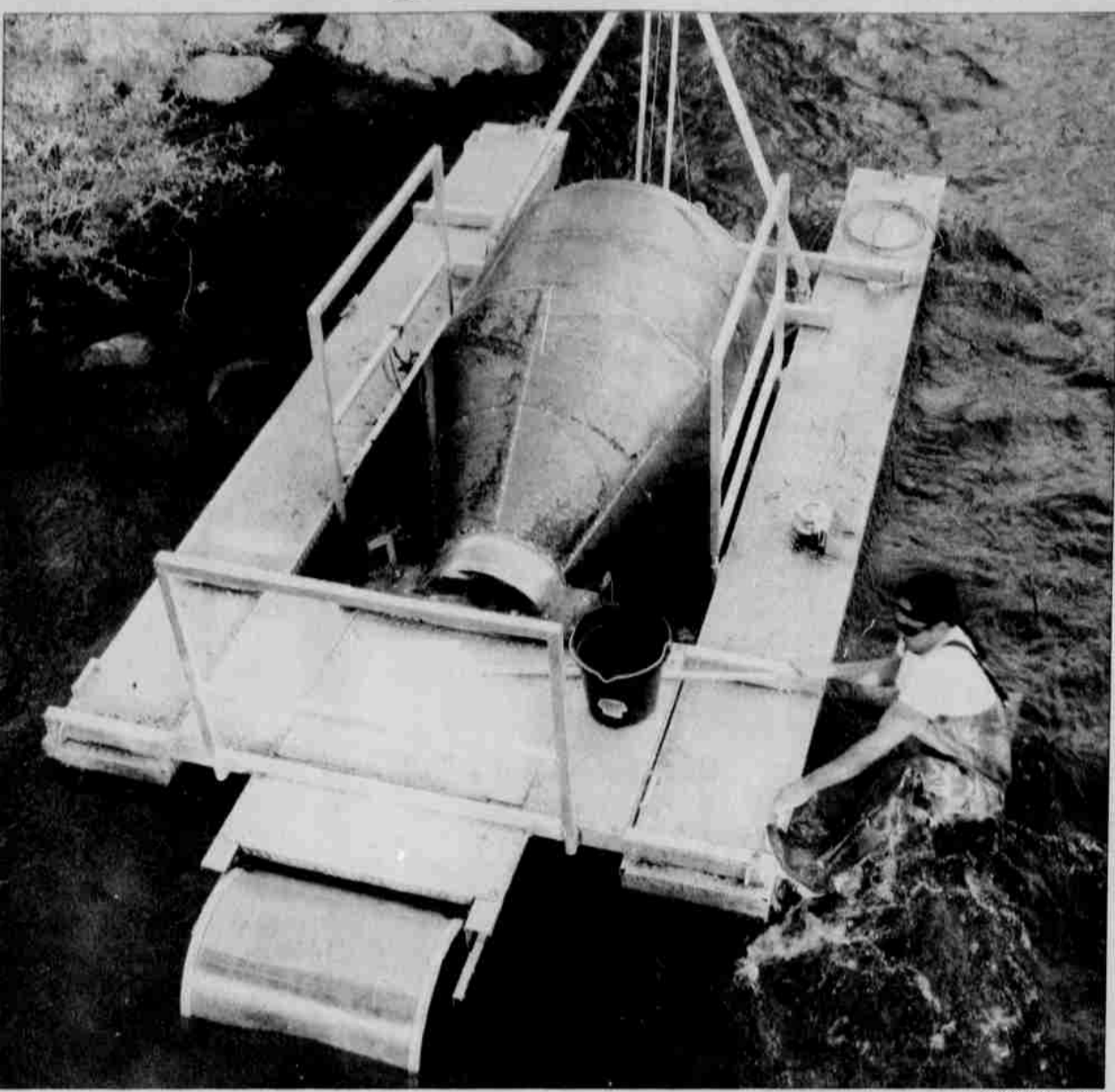
For rainbow, steelhead and bull trout, they haul the fish about a mile upstream and release them once again. They count the number of marked and unmarked fish that are recaptured, plug the figures into a formula, and that gives them a population estimate. This happens on Shitike Creek and the Warm Springs River.

The genetic sampling helps them identify fish populations, not specific fish. The fin clip will grow back after about two weeks.

### Trapping the fish

The rotary screw trap looks like a floating cement mixer. The movement of water pressing against a plastic screw turns the drum. That steadily forces water through the drum funnel and into a live well where the tiny fish wait to be counted.

There's a debris drum on the downstream side that removes leaf matter and sticks. Some of the flotsam sinks to the bottom, the rest rolls back out into the stream. The debris drum keeps



Bing Bingham photos

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the live well from getting clogged up and suffocating the fish.

The rotation of the drum is important. If the rotation drops to less than four per minute, the efficiency of the fish trap is greatly reduced and fish can swim back out. If the drum stops turning, an adult could enter and find itself in the middle of a juvenile fish smorgasbord.

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Screens over the openings have, mostly, solved that problem. If that doesn't work, the crew live-traps the predator and moves it completely out of the area.

"Checking traps usually takes up six to eight hours of our day, depending on the number of fish," FitzGerald says. "Tuesday and Wednesday it takes a little longer because we have to collect scale

and genetic samples. With our free time, we check and repair riparian fences and work at the hatchery when they need assistance."

Right now adult fish are starting to move up into their spawning areas.

"It's really important if people are out in the stream to watch out for redds," he says. Redds are salmon spawning beds located in the stream.

He goes on, "It's difficult to see redds, because in Shitike Creek it gets pretty warm, so algae grows over the rocks quickly. You'll be looking for a small depression and a mound of rocks right behind it."

FitzGerald says that it's important for people to prevent any stream blockages, because if chinook salmon hit a barrier they can't get around, then they don't try very hard. Instead they turn around and leave.

The traps and weirs are deactivated on weekends.

"This year we've added an underwa-

**Above, Geoff FitzGerald maneuvers a fish trap on Shitike Creek; below, a fish is measured and weighed.**



ter video camera and we're video taping all fish passage," says FitzGerald. "Even though we're not collecting a genetic sample of the fish, we know how many adults are moving up into the stream."

But checking weekend videotape means the fisheries crew will be spending just that much more time on the streams during the summer. Maybe, it's not such a tough job after all - when they're not dodging rattlesnakes.

## Columbia spring chinook below forecasts

PORTLAND (AP) - Spring chinook salmon returning to the Columbia River this year are running far below the forecasts, but still represent a strong return.

Based on counts at Bonneville Dam, the preseason prediction of 360,700 was revised downward 44 percent on Monday to 200,000 by the Technical Advisory Committee.

Five-year-old fish, which make up 6 percent of the run, were expected to be coming back in reduced numbers. They migrated to the ocean in 2001, when drought and the energy crisis combined to reduce river flows and the water spilled over hydroelectric dams to spare fish being drawn into turbines.

Nobody, however, knows why the 4-year-old fish that migrated out in 2002 - and make up 94 percent of returns - have fallen so far below the forecast, said Cindy LeFleur, Columbia River policy coordinator for the Washington Department of Fish and Wildlife. The 200,000 fish still represent the fifth-best run in the past 30 years, noted Curt Melcher, marine salmon manager for the Oregon Department of Fish and Wildlife.

The reduced run will likely mean fewer fish than expected for tribal fishermen, who began a three-day commercial gillnet season on the Columbia on Tuesday of last week, said Charles Hudson, spokesman for the Columbia River Inter-Tribal Fish Commission. Any extension of the season will depend on fish numbers.

Because spring chinook migrate out in May, they will not be affected by the proposal by the Bonneville Power Administration to reduce the amount of water spilled over dams to help salmon later this summer.

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### Museum seeks objects for collection

The Museum at Warm Springs is seeking to enhance its permanent collection by obtaining objects from Warm Springs tribal members through acquisitions.

Objects for consideration must be accompanied by a completed object history form.

The forms are available at the museum.

Objects for consideration must be

relevant to and consistent with the permanent collection.

The museum policy is one object per household or family. Objects for consideration will be accepted on May 17, 18 and 19, during regular business hours, no exceptions.

If you have any questions, please contact Natalie Kirk at 553-3331, extension 412.

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