OPB NEWS

Scientists Determine Hatchery Salmon Threaten Wild Fish

By Rob Manning

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It took years for Oregon State University scientists to determine that hatchery fish in Hood River created genetic problems for migrating wild fish.

It's one of a number of studies to raise questions about salmon and steelhead grown in hatcheries.

Rob Manning reports on an international conference underway in Portland Wednesday meant to influence how hatcheries are managed, going forward.

Recovering salmon is complicated. So, experts often break the effort down into four areas, each with its own research, policies, and politics. Hatcheries is one of those areas.

Glen Spain: "It's one of the four H's – hydropower, hatcheries, habitat, and harvest. We do need to take a look at all four of them."

Glen Spain with the Pacific Coast Federation of Fishermen's Associations has a complicated relationship with hatcheries.

On one hand, they produce 80 percent of the salmon his members catch. But he says raising fish in containers is outdated technology, and the problems are getting more and more obvious.

Hatcheries serve several purposes: they can provide fish to catch, so that native stocks are left alone.

They can introduce fish to a river where they've vanished entirely. But Peter Rand, with the non-profit State of the Salmon, says when they mix with wild fish to boost a depleted run, they can cause trouble.

Peter Rand: "There's a big question about how to use hatcheries as a tool to recover endangered runs of salmon – salmon that are on the Endangered Species list."

Rand's group works to help wild salmon. He says hatcheries cost a lot – hundreds of public dollars per hatchery fish, according to a recent Washington state study.

Rand says genetic problems from hatchery fish are already well documented. But he says the Portland conference he helped organize is looking at problems that aren't understood as well – like predation.

Peter Rand: "Many cases, hatchery fish are raised to a larger size, and when they're released, they often feed on wild fish, they actually prey on them. This is often an effect that's not acknowledged or not understood."

Rob Walton: "We're hoping that the scientists that participate are going to be able to tell us more about what we know, and don't know."

Rob Walton supervises the salmon recovery program out of the National Oceanic and Atmospheric Administration's Portland office. In that role, he has a hand in how hatcheries are run.

He wants to hear from the conference's international scientists on three main issues.

Rob Walton: "Competition between hatchery and wild fish, predation of one on the other, and disease transfer."

Conference organizers hope to recommend changes to hatchery policies. For instance, State of the Salmon's Peter Rand would like to see hatchery managers start marking all of their fish.

Peter Rand: "Marking, I think, is key. We need to be able to distinguish what's a hatchery fish and what's a wild fish when they return."

But marking isn't universally popular. Commercial fishing groups say current marking practices cost a lot, and can harm fish. Mike Matylewich with the Columbia River Inter-Tribal Fish Commission says marking perpetuates a myth – that hatchery and wild salmon can be kept apart.

Mike Matylewich: "Even if you have 100 percent marking, and a lot of people want to do that to separate hatchery and wild fish, you never will have a system where you can completely separate hatchery and wild fish."

Scientists say better marking would lead to better data, and therefore, better policy. Glen Spain, with the Pacific Coast Federation of Fishermen's Associations, says the best policy is to make hatcheries more like a salmon's natural habitat.

Glen Spain: "They will never be as good as a free-flowing natural river system, but they can be better than they are."