

For Immediate release
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Fisheries researchers hope acoustic transmitters implanted in seagoing steelhead trout from the Seymour River Hatchery will ultimately lead to increased survivability of the juvenile fish.

NORTH VANCOUVER: Fisheries biologists hope to determine the best release method of steelhead hatchery smolts in order to rebuild stocks and provide more angling opportunities. However, little is known about what happens to salmonids when they leave the safe haven of a river or stream and enter the ocean.

When it comes time to migrate to the open ocean, hatchery smolts on the Seymour are normally trucked to the lower river and released. It's believed many of the juveniles succumb to predation near the river mouth.

The Seymour Salmonid Society (SSS) is expanding an experiment this year in which a number of juveniles will be implanted with acoustic transmitters, which will be monitored using the receivers of the Pacific Ocean Shelf Tracking Project (POST). This ocean observing system comprises a highly engineered system of bottom-anchored acoustic receivers deployed in lines that stretch from the shoreline to the edge of the continental shelf. The POST array stretches from SE Alaska to central California: Seymour steelhead cross two of the listening lines in the Northern Strait of Georgia and Queen Charlotte Strait during their normal migration to the open Pacific.

The 2008 project saw 60 fish tagged. Of the 30 released at the mouth of the Seymour River, signals were picked up from three steelhead on the Northern Georgia Strait line and one on the Queen Charlotte Strait line. The ocean releases produced more favourable results, with seven tracked on the Georgia Strait receivers and three on the Queen Charlotte Strait line. "This group showed a much greater survival, suggesting this type of release method could mitigate early losses in the river mouth area from predation or any other causes" said Al Lill, Manager, Living Rivers-Georgia Basin/Vancouver Island (LR-GB/VI).

This May, staff from Kintama Research in Nanaimo will implant 150 summer run steelhead smolts with acoustic tags and release them in four test groups; two into the lower river and two into the ocean in the vicinity of Point Atkinson May 20th and 21st.

An additional ten thousand smolts will be released into the marine environment via two methods to further document if bypassing the mouth of the river reduces early saltwater mortality rates. A production group of 5,000 will be kept in a tank truck, which will be driven onto a barge at Cates Park and transported to the vicinity of Point Atkinson. The smolts will be gradually acclimated to the salt water during transport. The other 5,000 will be released from a tank truck at the Department of Fisheries and Oceans (DFO) dock at the West Vancouver laboratory without salt-water acclimation. To determine whether the apparent increase in early marine

survival results in an overall increase in return of adult steelhead to the river, these two groups of steelhead have been clipped for future identification.

Additionally, half the released fish will have been vaccinated against common saltwater pathogens to determine if disease plays a significant role in early ocean mortality.

LR-GB/VI is covering the cost of the barge for the marine release. The SSS and the Freshwater Fisheries Society of BC (FFSBC) are providing the labour and the tank truck. The POST sponsored project is being cost shared by LR-GB/VI and the Pacific Salmon Foundation (PSF) – Community Salmon Program with the work being conducted by Kintama Research Corp. of Nanaimo, SSS and FFSBC. Other partners include UBC/CAER and MOE. Metro Vancouver and DFO provide funds for the hatchery operation.

Added Lill, “LR-GB/VI was excited to be a participant in this project. By knowing where the high mortality of newly released smolts is taking place, we might be able to develop strategies to increase marine survival at Seymour and elsewhere where smolts are being transported for release into the wild, usually from a hatchery, but also around obstructions such as the Cleveland dam on the Capilano River.”

Media interested in the tagging (May 6th) are advised to contact Seymour River Hatchery Manager Brian Smith. The hatchery is in a secure watershed requiring clearance of individuals through the security gate.

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