

September 7, 2017
Fish Health Report Summary
Prepared by Jed Varney, WDFW

All medical opinions are preliminary. Final assessments will be out in 30 days or when all laboratory evaluations have been processed.

1. Initial assessment of released (sample size 12) Atlantic salmon is that they appeared healthy at time of release.
 - No common bacterial, viral, or parasitic pathogens were detected in the early group.
 - Mortality data from Cooke has not been submitted as yet but by verbal communication it did not appear that mortality was excessive or abnormal at release time.
 - Cooke has submitted an evaluation by Fish Vet Group in Portland, Maine that cultured 10 kidney samples that were negative for bacterial pathogens on TSA agar.
 - Fish Vet Group did not look for virus, or SRS or parasitic organisms in that report.
 - Testing for Salmon Rickettsial Syndrome (SRS) takes 28 days to elucidate, it cannot be seen on routine bacterial culture. It requires culture on live cell lines, and can also be determined by histopathology. This is one of the most serious bacterial infections seen by Cooke's operation but has not been found to date in our specimens.
2. It does not appear that this species (Atlantics) fares well long term in Puget Sound.
 - Anorexia is apparent given gall bladder size and GI tract analysis.
 - Necropsy findings indicate an active inflammatory process of unknown origin originating in the gastrointestinal tract in the later September capture group.
3. This is a domesticated species that is adapted to hatchery conditions much like our domestic rainbow trout stocks. The stress of a different environment and lack of food may play some role in disease seen as time goes on post release, reducing survival. Previous accidental releases in 1996, 1997, 1999 and others have not seen this species establish itself in Puget Sound.

This report will be up dated as further information comes available.

From Bruce Stewart, NWIFC
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9.14.17

The NWIFC tribal fish health program is continuing to test escaped Atlantic salmon for fish pathogens in an effort to determine if any are diseased.

- To date, NWIFC has received tissues from 68 fish that were intercepted by tribes in North Sound between August 23rd and September 13th, 2017.
- Tribal feedback on these sampled fish has been that their (1) stomachs are empty and (2) gonads are under developed.
- We are testing the kidney and spleen tissues from these fish for regulated viral pathogens (IHN virus, VHS virus, and IPN virus) and bacterial pathogens (primarily those that cause furunculosis, vibriosis, and yellow mouth diseases) using the same assays that we use to test Pacific salmon

broodstock. To date, we have not detected any fish pathogens in the tests that have been completed.