

UNITED STATES FISH & WILDLIFE SERVICE
LOWER COLUMBIA RIVER FISH HEALTH CENTER
 201 Oklahoma Road, Willard, WA 98605 • (P) 509-538-2400 • (F) 509-538-2404

FISH HEALTH REPORT

FISH SOURCE	FISH EXAMINED
Location: Columbia River Bonneville Dam AFF Contact: Ben Hausmann Phone: (541) 374-4598 Water Source/Temp: Columbia River/ Temp 67°F	Species: Pacific lamprey Age: Adult Fish Examined: 9 Date of Exam: 6/03/2016 – 07/15/2016 CHN: W16-070, W16-074, W16-075, W16-079, W16-086

OBSERVED	RESULTS	PROPORTION	METHOD
Kidney	<i>Aeromonas salmonicida</i> (Furunculosis) growth on BHIA medium, confirmed by API strips	+8/9	Culture
Heart	<i>Aeromonas salmonicida</i> (Furunculosis) growth on BHIA medium, confirmed by API strips	+8/9	Culture
Liver	<i>Aeromonas salmonicida</i> (Furunculosis) growth on BHIA medium, confirmed by API strips	+8/9	Culture
Gonads	<i>Aeromonas salmonicida</i> (Furunculosis) growth on BHIA medium, confirmed by API strips	+8/9	Culture

Nine adult Pacific lamprey mortalities found at the Bonneville Dam Adult Fish Facility (AFF) and Bradford Island along the Columbia River. Seven females and 2 males. Externally, the fish were mottled and grayish in color. Two fish had bruising along mid body probably caused by the pickets it was found resting on. Internally, one fish had a black liver. Liver color ranged from coffee cream color to a dark bronze. Eight fish tested positive for Furunculosis. The bacterium *Aeromonas salmonicida* grew up on BHIA medium and was found in several organs (kidney, heart, liver, and gonads). One fish tested positive for *Aeromonas hydrophila* and had a black liver.

I believe the cause of death in at least 8 of these fish is due to a systemic *Aeromonas salmonicida* infection. *Aeromonas salmonicida* is a serious septicemic bacterial disease and can be found in salmonids, warm water fish, and Pacific lamprey. It occurs naturally and can enter susceptible fish through a wound or digestive tract. Infections often occur when water temperatures are 13°C or higher. Furunculosis is the only known pathogen of concern which can kill the returning adult Pacific lamprey.



Adult Pacific Lamprey mortality.



Female with dark bronze color liver

Remarks