



# River-Run Atlantic Salmon Restoration

## Lake Champlain Fish and Wildlife Conservation Office

Landlocked Atlantic salmon were extirpated from Lake Champlain in the mid 1800s. Management actions, such as sea lamprey control and stocking, provide for a popular salmon fishery in the lake. However, spawning runs of salmon to rivers have remained low. In 2010, we initiated a long-term adaptive management project focused on increasing river-runs of salmon to enhance in river fisheries and restore natural populations.

### Major Accomplishments

- Developed new hatchery methods to improve adult returns to rivers 3-5 fold.
- Captured wild fry. First time in 150 years! (Winooski 2016, Boquet 2017, 19).
- Expanded in-river salmon fishery.
- Improved fish passage at dams.
- Identified reproductive success and habitats used in river.
- Linked efforts for restoring salmon habitat, river function, and water quality.
- Developed low thiamine tolerant broodstock at White River NFH.
- Implement genetic marking for salmon at USFWS hatcheries.
- Salmon in schools program and Richmond salmon festival.
- Publication of 12 scientific papers on salmon restoration.



Applied research on L. Champlain salmon restoration featured on cover of international scientific journal.

### Optimize Hatcheries



L. Champlain salmon eggs at White R. NFH for broodstock resilient to VitB1 syndrome.

### Improve Passage



Trap and truck program on Winooski R. to move salmon above three dams.

### Reestablish Populations



Wild salmon fry from Winooski River. First in 150 years!

### Engage Youth



Students stock salmon in Huntington R.

### Enhance Fishery



Angler with salmon in Huntington River.

### Restore Habitat



Assessing salmon habitat and juvenile survival.