

Ohop Lake Summary

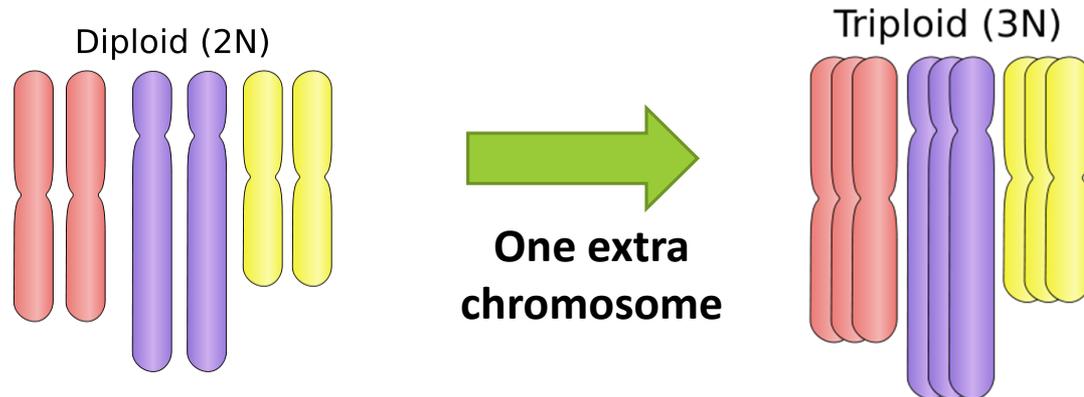
Triploid Trout Evaluation

REGION 6 FISH PROGRAM TEAM



Introduction: Why Triploid Trout?

- Triploid rainbow trout are infertile
- Wild *O. mykiss* are listed as threatened under the Endangered Species Act and are present in the rivers that stocked lakes drain into along with native cutthroat trout.
- Sterile triploid trout would minimize the risk of cross breeding between stocked hatchery trout and natural trout and steelhead.



Triploid Trout Evaluation

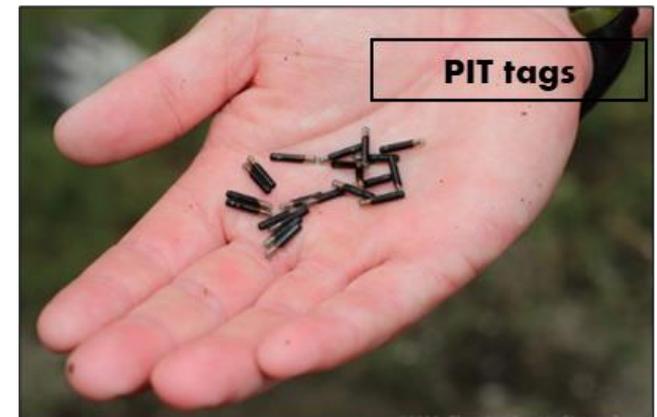
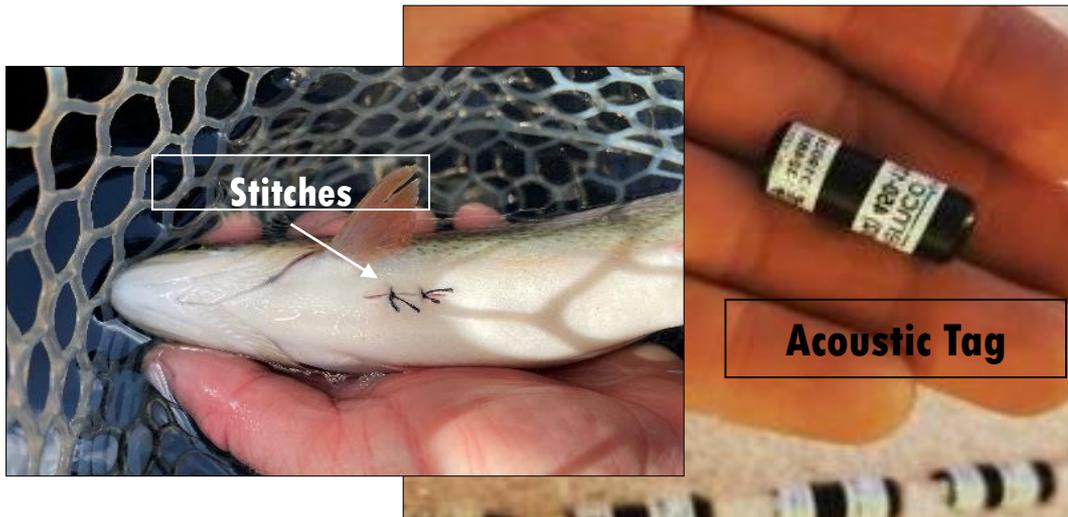
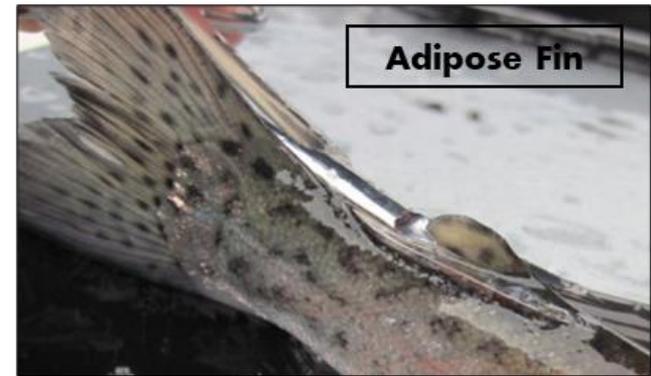
Objectives

1. Evaluate the relative contribution that triploid vs. diploids make to the put and take sport fishery
2. Compare movements of triploids vs. diploids within Ohop Lake.
3. Estimate natural mortality of both diploid and triploid trout.



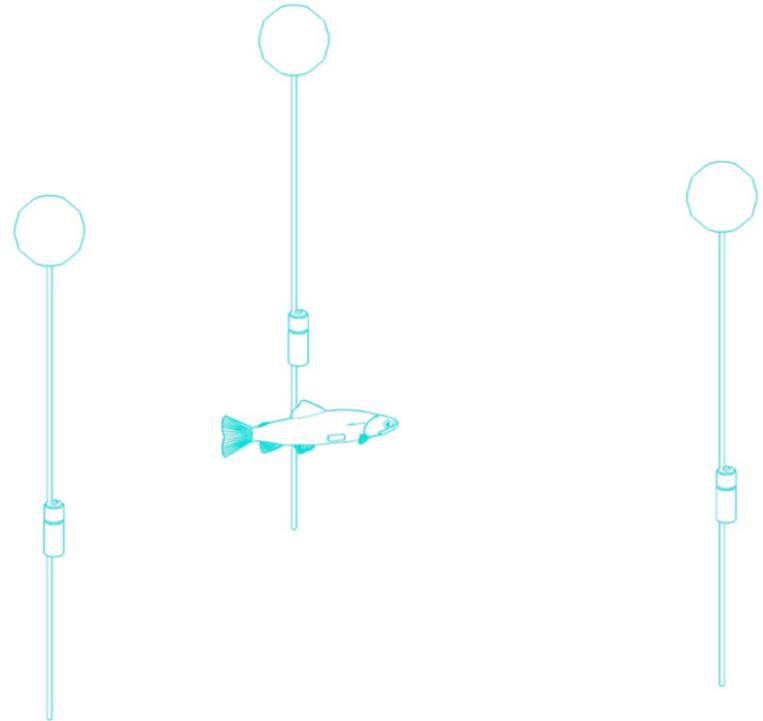
Methods - Tagging

- Adipose fin clipped (triploid) and unclipped (diploid) to ID the two types
- Surgically implant 40 acoustic tags to track movements (20 diploid and 20 triploid)



Methods – Acoustic Tagging

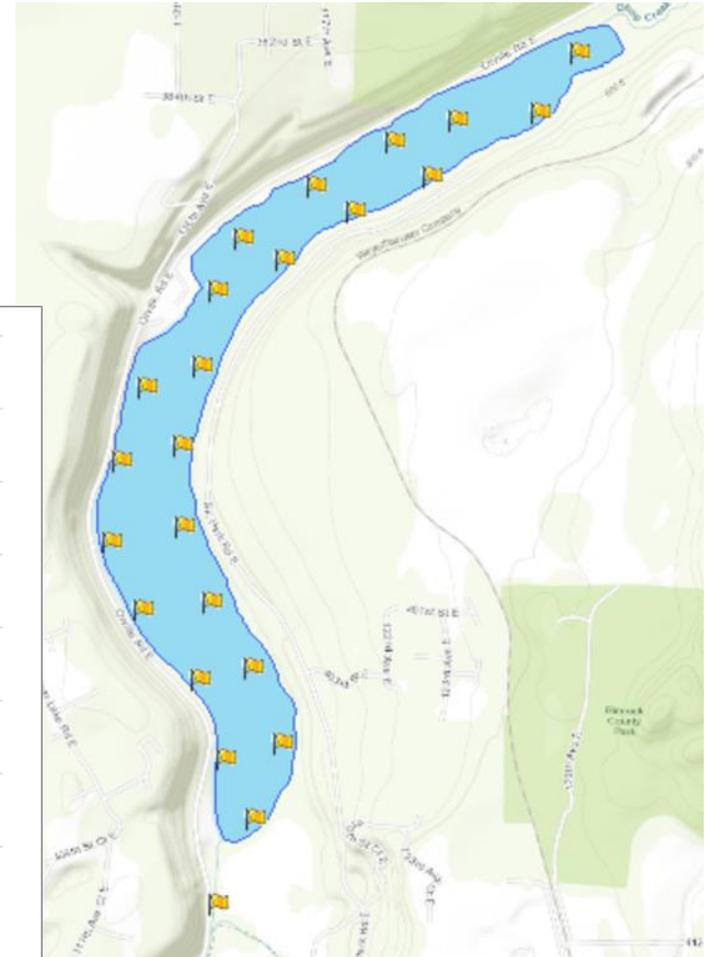
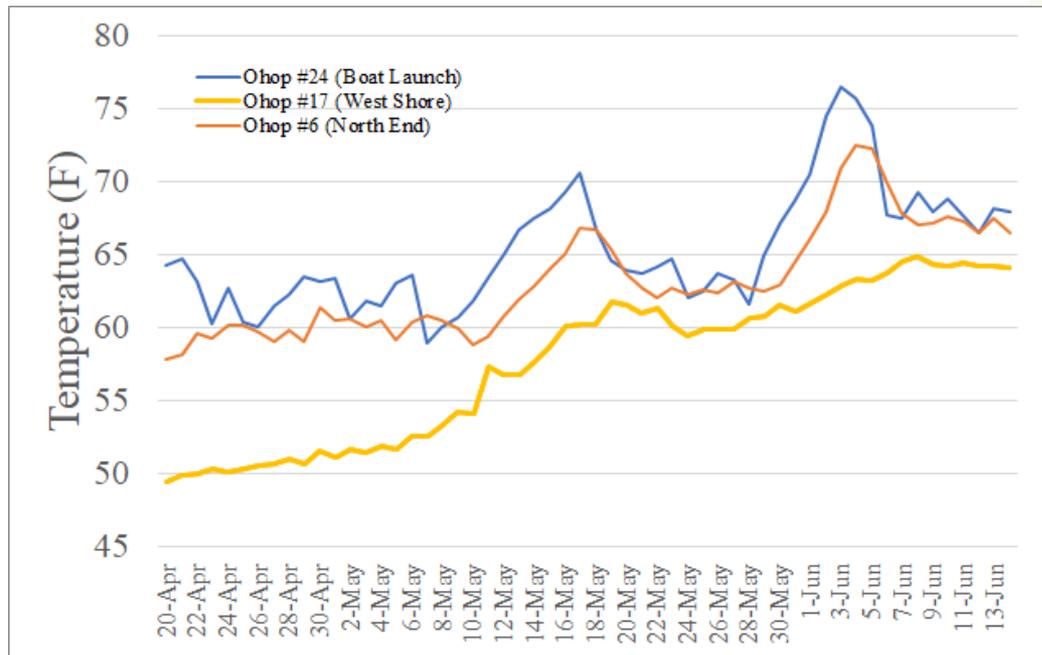
- Receivers were deployed to detect the individual acoustic tags when the fish swims close to one of the receivers
- Temperature loggers monitor temperature
- We were able to determine differences in movement and behavior between the two types and in response to temperature changes.



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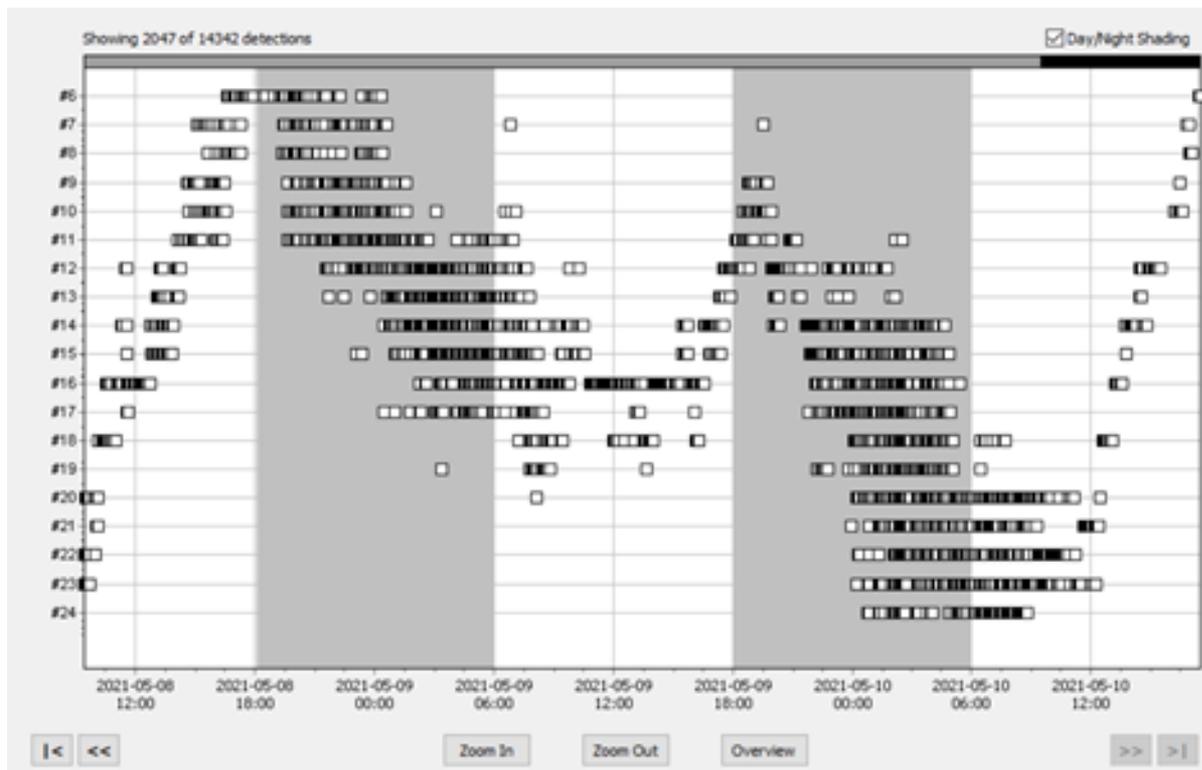
Methods – Acoustic Tagging

- 24 receivers were deployed throughout the lake to get an appropriate coverage to track fish movement



Results: Diel Movements

- Movements to open water during the day and return to the shore at night. 1 Fish below being heard by receivers from the North end (#6) to the South end (#24). Shaded area is night.



Preliminary Results: Diploid vs. Triploid

- Similar number of diploid and triploid caught by anglers, removed by predators and dying naturally.
- Overall, Triploids performed well and anglers were a big help!



Results: Temperature

- Temperature in the lake reached suboptimal (>64 degrees) by middle of May.



Management Implications

- Triploid trout performed well!
- Triploid will work well to improve rainbow trout fishing opportunities in lakes draining to rivers.
- Understand the role temperature plays in trout movements and catch rates.

