

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Mobile Tracking of Lake Trout on Yellowstone Lake, Yellowstone NP

Discipline: Natural

Type of Project: Research/Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: USGS Montana Cooperative Fishery Research Unit

Student Involvement: Yes, GRA/M.Sc. student

Effective Dates: 09/01/2015 - 08/31/2019

Funding Amount: \$90,017

Investigators and Agency Representative:

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Investigator: Christopher S. Guy, Assistant Leader, USGS Montana Cooperative Fishery Research Unit, P.O. Box 173460, Montana State University, Bozeman, MT 59715; (406) 994-3491; cguy@montana.edu

Project Abstract: Suppression of lake trout (*Salvelinus namaycush*) in Yellowstone Lake is a high priority for Yellowstone National Park. Acoustic tracking in 2014 showed that lake trout spawning had moved into different areas of the lake showing the importance to reevaluate and thoroughly use all available resources over time (Rosenthal et al 2015). There are limited confirmed spawning sites on Yellowstone Lake, finding more will be invaluable for suppressing the lake trout population. The project will identify precise location, including UTMs and depth, of each tagged individual lake trout weekly, preferably daily, throughout the summer and fall seasons (June-October) and identify timing and location of spawning activities of tagged lake trout. Researchers will relay location data daily to NPS and contracted suppression crews and synthesize movement data to further inform suppression efforts of movement corridors or diel patterns.

Outcomes with Completion Dates:

Final results will appear in an MS thesis and in peer-reviewed publications - August 31, 2019.

Keywords:

Yellowstone National Park, Montana State University, Lake Trout, mobile tracking