

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Fish Survey on Going to the Sun Highway - continuation of MSU 63
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: USGS – Cooperative Fishery Research Unit
Effective Dates: March 22, 2004 - March 30, 2005
Funding Amount: \$2000
<p>Investigators and Agency Representative: NPS KEY OFFICIAL: Bill Michels, Glacier National Park, West Glacier, MT 59936; (406) 888-7917; bill_michels@nps.gov</p> <p>PRINCIPAL INVESTIGATOR: Christopher S. Guy, Montana Cooperative Fishery Research Unit, Montana State University, Department of Ecology, Bozeman, MT 59717; (406) 994-3491; cguy@montana.edu</p>
<p>Project Abstract: The following streams will be sampled in Glacier National Park for their fish fauna: (West of the Continental Divide) Avalanche Creek; Snyder Creek; Logan Creek; Sprague Creek; Jackson Creek: West of Continental Divide on west side of Lake McDonald: Apgar Creek; Fish/Fern Creeks, Kelly Creek. (East of the Continental Divide) Rose Creek; Baring Creek, Two Dog Creek.</p> <p>Fish will be sampled using standard electrofishing methods and will be done at a suitable stream reach above and below the Going-to-the-Sun Road. The minimum electrofishing segment will be 75 feet, and the maximum shocking segment 150 feet. Fish sampled will be identified by species, total length will be measured, then returned to the stream. (Note: unidentifiable species may be retained for further lab analysis, i.e sculpin identification).</p> <p>In addition to the fish sampling, the following stream parameters will be assessed: (The parameters listed are the same as those found in the "Bull Trout Biological Assessment - Effects Matrix Checklist." Most of these parameters are coarse assessments developed during the fish sampling).</p> <ol style="list-style-type: none"> I. Water temperature II. Percent of fines in substrate III. Physical barriers (Are there man-made barriers present that obstruct fish passage). IV. Large woody debris (Expressed in pieces per mile and diameter of pieces, i.e. 20 pieces per mile greater than 12 inches in diameter.) V. Pool frequency and quality (Expressed in wetted width and pools per mile, i.e. wetted width 0-5 feet; 40 pools per mile.) VI. Large Pools (Large pools are those that are >1 meter deep - expressed as many/few/none.) VII. Off-Channel Habitat (ponds , oxbows, backwaters, and other off-channel areas with cover - expressed as many/some/few or none.) VIII. Refugia (Does the habitat appear to be capable of supporting significant populations of fish?) IX. Channel Condition and Dynamics (What is the average wetted width in feet; What is the maximum depth?) X. Streambank Condition (Expressed as % of stream reach has % stability, i.e. >80% of stream reach has 90% stability.) XI. Floodplain Connectivity (Are the off-channel areas frequently hydraulically linked to the main channel?) XII. Road Density and Location (< or > 1 mile per square mile; are these valley bottom roads?)

Outcomes with completion dates:

The results of the fish survey and stream data collection will be furnished to Glacier National Park in the form of a written report; all data will be delivered in digital form and in format useful to the Inventory and Monitoring Program. Included in the report will be an explanation of the data collected and a narrative describing techniques used in data collection. The final study report is due December 31, 2004.

Keywords: Fish Survey, Going to the Sun Highway, Glacier National Park, Montana State University, bull trout, stream habitat

For Administrative use only:

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: