

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Examination of Yellowstone Cutthroat Trout Infection Risk as part of the Yellowstone National Park Whirling Disease Study
Type of Project: Research/biological science
Funding Agency: National Park Service
Other Partners/Cooperators: N/A
Effective Dates: June 15, 2003 - June 15, 2006
Funding Amount: \$33,839
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Project Abstract: SPECIFIC OBJECTIVES OF THIS RESEARCH INCLUDE: 1) Develop a risk-assessment tool for fishery managers based on localized factors influencing whirling disease prevalence and severity in Yellowstone cutthroat trout (YCT). <i>To reach this objective we must:</i> a) Conduct a detailed examination of YCT infection risk in three spawning streams (Yellowstone River, Pelican Creek, Clear Creek) where past studies have shown varying disease risk using sentinel YCT, wild YCT, tubificid assemblages, and prevalence of infection in tubificids, b) Examine the potential physical and chemical features of these three streams and determine which factors best explain infection risk, and c) Develop a qualitative risk-assessment tool based on these results. 2) Examine several sections (e.g., head, gills) of the heads of YCT (Objective 1-a above) histologically for <i>M. cerebralis</i> infections 3) Compare infections histologically among between YCT held in the laboratory for three and five months.
Outcomes with completion dates (reports, publications, workshops, videos, etc.): All information collected during this study will be provided in electronic format to the Fisheries and Aquatic Sciences Section, Yellowstone Center for Resources. Final product describing overall research results will be in the form of a technical report and/or draft Ph.D. Dissertation.
Keywords: Yellowstone cutthroat trout, Yellowstone National Park, whirling disease, tubificid worms
<u>For Administrative use only:</u> <i>Date Annual Report Received:</i> <i>Date Final Report Received:</i> <i>Publications, etc. on file:</i>