Yellowstone Lake Cutthroat Trout—Last Gasps of Life or Beginnings of Renewal: Will Non-Native Species Removal Efforts Aid Yellowstone Cutthroat Trout?

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Yellowstone Lake cutthroat trout (*Oncorhynchus clarkii*), an icon of western trout fishing and once the bright spot in a dim outlook for native cutthroat trout populations throughout the west, are seriously threatened by a nonnative lake trout population. Soon after discovery, Yellowstone National Park initiated an intensive gillnetting program aimed at suppressing lake trout numbers to levels that would allow cutthroat trout to sustain a healthy population. From 2001 to date we have removed almost 270,000 lake trout (*Salvelinus namaycush)* from the system. Despite this effort, lake trout in Yellowstone Lake are still present in high numbers and evidence suggests that the population is continuing to expand. A new spawning site was discovered in 2006; 2004 saw the highest number of mature lake trout removed from the lake to date; and increasing numbers of smaller, immature lake trout have been removed for the last six years. Suppression efforts are surely slowing the rate of expansion of lake trout in Yellowstone Lake, but will the program be able to decrease lake trout enough to provide adequate protection for native cutthroat trout? Recent increases in catch of cutthroat trout

juveniles throughout the lake are very encouraging. However, an upward trend in catch-per-unit-effort of lake trout by gillnets is cause for concern. In addition, and perhaps even more serious is the three-fold increase in lake trout catch by anglers in 2007. In past years this statistic has been a good indicator of catch rates on the spawning grounds during the following year.