

LAKE TROUT IN THE LAKES OF GLACIER NATIONAL PARK, MONTANA

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Glacier National Park, Montana, contains a significant portion of natural lake habitat available to adfluvial populations of bull trout (*Salvelinus confluentus*) throughout the United States. Because of the complex landscape in Glacier National Park some bull trout populations are relatively isolated; however, other populations are less isolated and susceptible to

deleterious effects of invasion by nonnative species. Of particular concern is the invasion by nonnative lake trout (*Salvelinus namaycush*), which was introduced into the Flathead drainage in the early 1900s. Past research has shown that invasion by lake trout may result in significant declines in bull trout populations. However, little effort has been made to manage the invasion in lakes within Glacier National Park. Using historical and contemporary data we examined the effect of lake trout invasion on bull trout populations in the four largest lakes in Glacier National Park west of the Continental Divide; Bowman Lake, Kintla Lake, Lake McDonald, and Logging Lake. Dramatic declines in bull trout numbers were observed over the last 36 years, these declines were associated with an increase in the numbers of lake trout. In 2005, relative abundance (mean catch/unit effort) of lake trout was 2.85 to 4.06 times higher than that of bull trout among lakes. These data suggested that further invasion by lake trout in this system may have a negative effect on native bull trout populations under a management strategy of “no action.”