

MONITORING COMMON LOONS IN GLACIER NATIONAL PARK

Steve Gniadek, Glacier National Park, P.O. Box 128, West Glacier, MT 59936

The common loon (*Gavia immer*) has been documented from Glacier National Park since at least the early 20th Century. Sporadic observations were recorded until 1986 when the Montana Loon Day Survey was initiated. Efforts by park employees and volunteers increased during the 1990s; number of lakes surveyed on Loon Day increased from 31 to 50, the number of lakes with loons varied between 13 and 19, the number of adults varied between 26 and 48, and the number of chicks detected varied between 2 and 14. Mean chick production for the park during 1989-2004 was ~ 5/yr. Some lakes, particularly in the northeast part of the park, appeared to decline in loon productivity, although others on the west side exhibited increased chick production. However, prior to the advent of the Citizen Science Loon Project in 2005, variability in annual survey effort, inconsistencies in the abilities, dedication, and dependability of volunteers, and the limited time devoted to sampling loons in the park together cast doubt on survey results and reliability of trends. Lack of adequate staff and funding to coordinate loon surveys precluded intensive educational efforts, confirmation of questionable observations, clarification of ambiguous information, or maintenance of long-term data bases. Non-biologist volunteers have been a powerful force in some wildlife survey efforts, but coordinating and supporting such endeavors can be very labor and time-intensive. Because Glacier NP is host to ~ 20 percent of Montana's breeding Common Loons, a state species of special concern, improving reliability of park

estimates of status and trend are necessary to ensure persistence of this species. A Citizen science approach is one way to help achieve that goal.