**FEWER SURVIVING CHICKS SPELL TROUBLE FOR LOONS**

Ontario’s common loons, a species symbolic of northern wilderness, are rearing fewer chicks to maturity, a new study reports. The research, based on Birds Canada’s volunteersupported Canadian Lakes Loon Survey data, suggests that this decline in reproductive success has been underway for four decades.

According to study co-author Kristin Bianchini, a postdoctoral researcher working with Acadia University and Birds Canada, loon populations are currently stable but fewer surviving loon chicks could mean fewer adult loons. And since loons are indicators of ecosystem health, their reproductive difficulties suggest serious problems with Ontario lakes.

Researchers measure loon reproductive success by the annual number of six-weekold chicks pairs of loons have. By that point in their development, young loons are nearly two-thirds of adult size and are able to elude predators. Ontario loons successfully raised 0.8 six-week-old chicks per pair per year in the 1980s. Now, they raise fewer than 0.6 sixweek- old chicks. Other studies suggest that if this rate falls below 0.48, the number of loon adults may decline. “Our study shows that Ontario may be on its way to dipping below the 0.48 threshold,” says Bianchini.

What is behind this decline? Acid rain caused by air pollution in the 1970s and 1980s deposited toxins such as aluminum and mercury in Canadian lakes. These toxins deplete fish stocks on which loon chicks rely for food. Accumulated mercury also affects loon behaviour, decreasing nest incubation, chick feeding activity and the young birds’ resilience. Warmer conditions due to climate change may further raise mercury levels in the food chain, the study suggests.

Loons encounter other challenges in rearing their chicks, including shoreline development and boating activity. Cottagers and homeowners can help by letting shoreline native plants grow to provide shelter for loons and support habitat for species the birds eat. Additionally, minimizing the presence of boats and their wakes can lower the risk of damaging loon nests or separating adults from their progeny.

People can also advance research by participating in the Canadian Lakes Loon Survey. The upcoming third Ontario Breeding Bird Atlas, on which fieldwork will start in 2021, will reveal more details about loon and other bird population trends.

For both new and seasoned naturalists, the call of the loon is indelibly connected with Ontario’s wilderness areas. “To me, hearing loons has always been associated with being in a secluded wild place,” says Cecilia La Rose, a member of Ontario Nature’s Youth Council. “The sound has made me happy for as long as I can remember.” Ontario Nature hopes future generations of nature lovers will continue to enjoy those iconic sounds.

Many thanks to Ontario Nature and the author Noah Cole.

