

Alberta Conservation Association
2023/24 Project Summary Report

Project Name: Piping Plover Recovery

Wildlife Program Manager: Doug Manzer

Project Leader: Lance Engley

Primary ACA Staff on Project: Justine Anklam, Meagan Butler, Lance Engley, Sabrina Hotton, Kris Kendell, Garret McKen, Stephen Nadworny, Terri Perron, Sue Peters, Amanda Rezansoff, Ariel Schlereth, Dan Sturgess, and Kira Vanderveen

Partnerships

Department of Defence

Environment and Climate Change Canada – Habitat Stewardship Program

Government of Alberta

Landholders

Key Findings

- We collaborated with the Government of Alberta and Canada’s Department of Defence to survey 35 waterbodies, on which we located 58 adult piping plovers, a slight increase from 2022, but still the second lowest count since comprehensive annual surveys began in 2000. This decline may be due to the substantial reduction in available breeding habitat since 2012 resulting from vegetation encroachment on some lakes and from flooding of nesting habitat on other lakes.
- We reduced vegetation encroachment to improve nest and brood rearing in a gravel habitat area that we created on one lake in 2015.
- We completed work on 7 km of shoreline habitat in 2023 and have enhanced in total over 58 km of shoreline habitat since 2002, with the majority considered “critical” breeding habitat.

Details

Piping plovers are *Endangered* shorebirds that nest and feed along gravel beaches. They face several threats including high rates of predation and damage to their habitat. Alberta Conservation Association is working with landholders across east-central and southern Alberta to improve habitat and promote awareness of the challenges facing piping plovers. Each year, we conduct piping plover surveys on key breeding lakes to monitor local trends and distribution, and this helps target our habitat improvement activities. We surveyed 35 waterbodies in 2023 and found 58 adult plovers on nine lakes. Despite the 2023 population count being slightly higher than 2022, this year's count is still the second lowest since comprehensive annual surveys began in 2000.

We contacted 15 landholders throughout the year and worked with several to improve 7 km of shoreline habitat through the removal of old fencing material, as well as the implementation of seasonal grazing and other treatments to reduce the encroachment of vegetation. The growth of vegetation along gravel shorelines impairs habitat that otherwise would be suitable for nesting piping plovers. Since large-scale recovery efforts began in 2002, we have improved over 58 km of shoreline habitat through cooperation with landholders.

As part of our outreach initiatives, we gave a presentation at the Alberta Lake Management Society's 2023 conference, highlighting the unique relationship between piping plovers and fluctuating water levels on Alberta lakes. An extended period of low water levels in north-central Alberta has permitted shoreline vegetation encroachment on key habitat. At the same time, unusually high water levels over the past 12 years in eastern and south-central Alberta has further reduced available breeding habitat on many lakes. High water levels can have a detrimental effect on the population in the short term but are crucial in helping keep vegetation from encroaching on gravel nesting habitat. Water levels began receding in many key areas this year, and if this continues, there should be an abundance of high quality, vegetation-free habitat available for plovers to nest on in the coming years. Many of the conference participants indicated they would keep an eye out for plovers and emerging gravel on lakes throughout the province, highlighting the importance of outreach activities in helping with our piping plover recovery efforts.

Going forward, we will continue to monitor Alberta's piping plover population and associated habitat conditions each spring and will continue working with our partners to help recovery piping plovers in Alberta.

Photos



Photo 1. Piping plover breeding habitat. Photo: Garret McKen



Photo 2. Alberta Conservation Association biologist, Garret McKen, surveying for piping plovers. Photo: Amanda Rezansoff