Alberta Conservation Association

2024/25 Project Summary Report

Project Name: Piping Plover Recovery

Wildlife Program Manager: Doug Manzer

Project Leader: Lance Engley

Primary ACA Staff on Project: Justine Anklam, Aneilia Ayotte, Meagan Butler, Lance Engley, Sabrina Hotton, Garret McKen, Stephen Nadworny, Claire Peters, Sue Peters, Amanda Rezansoff, Dan Sturgess, and Alyssa Yorke

Partnerships

Department of Defence
Environment and Climate Change Canada – Habitat Stewardship Program
Government of Alberta
Landholders
Nature Saskatchewan

Key Findings

- We participated in a Canadian Prairie census and located 75 adult piping plovers, an increase of 17 plovers from 2023, but still one of the lowest counts since comprehensive annual surveys began in 2000. We speculate that the decline may be due to the substantial reduction of 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 have enhanced 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, which helps target our habitat improvement activities. As part of the 2024 Canadian Prairie Piping Plover Census, we surveyed 54 waterbodies and found 75 adult plovers on 11 lakes. Despite the 2024 population count being 29% higher than 2023 (n = 58) this year's count is still 39% lower than when the last prairie-wide census was conducted in 2016 (n = 123).

We contacted over 15 landholders throughout the year and worked with several to improve 5 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 multiple landholders.

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 in 2023, and if this trend continues, there should be an abundance of high quality, vegetation-free habitat available for plovers to nest on in the coming years.

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: Amanda Rezansoff

Photo 2. Alberta Conservation Association staff member Sue Peters surveying for piping plovers. Photo: Amanda Rezansoff