



WAYNE LYNCH

Alberta's Piping Plover

(*Charadrius melodus*)

endangered

status

Alberta: Endangered;
uplisted from
Threatened in 2000

Saskatchewan:
Endangered

Manitoba: Endangered

Canada (COSEWIC):
Endangered

USA: Atlantic and Great
Plains populations are
Threatened; Great
Lakes population is
Endangered. Listed as
globally Vulnerable by
the IUCN

Description

The piping plover is a bluebird-sized shorebird occasionally seen on the isolated beaches, mudflats and sandflats of lakes and sloughs. It is well camouflaged in its habitat, with a white underside and a pale brown to grey back, head, and wings. It has a black stripe across the forehead from eye to eye, a long white stripe above each eye, and a single black band across the chest.

Distribution

Three distinct populations of piping plover are recognized in North America: the Atlantic coast population, which breeds from southwestern Newfoundland to South Carolina; the Great Lakes population, which is restricted to southern Lake Superior and northwestern Lake Michigan; and the Great Plains population, which breeds from central Alberta to Lake of the Woods in Ontario, and south to northern Oklahoma.

The piping plover occurs in the southeastern part of Alberta, in a patchy distribution bounded by Edmonton, Lethbridge and St. Paul. This range includes the Parkland and Grassland (northern fescue and mixed-grass areas) Natural Regions. The piping plover is migratory, staying in Alberta from late April to early August. Most individuals banded in Alberta have been observed overwintering on the coast of Texas, although others have been seen in Florida, Georgia, and Mexico. Some birds also winter on the Caribbean islands.

Population

The North American population of this species is declining. In Alberta, evidence indicates that piping plovers no longer breed on lakes where they traditionally occurred. Only 150 plovers were counted during the 2001 International Piping Plover Census, down from 276 in 1996. The majority of the Alberta population is generally found on fewer than 10 lakes in any one year, making them particularly susceptible to disturbance. The use of specific lakes within the piping plover's range, as well as the population size, varies from year to year in Alberta.

Habitat

Breeding sites are usually situated on unvegetated or sparsely vegetated sand and gravel beaches adjacent to hypersaline or alkali (rich in mineral salts) water bodies. The piping plover nest is a shallow bowl in sand or gravel, usually lined with pebbles. Periodic high-water events may restrict beach width and temporarily limit the availability of nesting habitat, but as water levels recede, unvegetated shorelines and gravel deposits are exposed, which provide breeding habitat for several years thereafter.

Threats

Natural water level fluctuations are critical to the piping plover as they remove encroaching vegetation and expose appropriate nesting habitat on



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lake or pond shorelines. Problems may result when water levels of lakes are stabilized for recreation or other uses or during long periods of drought. Other threats include development of habitat on the winter range, nest predation, livestock activity, industrial development, off-road vehicles and competition with people for the use of beaches. Human activity, particularly ATV use, on the shores of breeding beaches can destroy nests and interfere with nesting behaviour.

Management

The piping plover is an "Endangered" species in Alberta, and it is illegal to harm these birds or their nests in the province, anywhere or at any time.

The Alberta government and other partners have been monitoring the piping plover population in our province since the 1980s. Management to support this species has included protecting habitat by means of long-term cooperative agreements with landowners, protecting nests by using predator exclosures, managing nesting beaches to reduce the impacts of cattle, land purchase and public education. Alberta also participates on the Prairie Piping Plover Recovery Team, coordinated by the Canadian Wildlife Service. Despite these efforts, the Alberta piping plover population remains very small and vulnerable.

Key to conserving this species is the continued and increased protection of its nesting sites from disturbance. Because the breeding population moves between lakes from year to year, all potential breeding sites must be protected, even when they are not in use, to prevent any reduction in habitat.

The Alberta Piping Plover Recovery Team, consisting of representatives from government, industry, non-governmental organizations, and land users has been established, and a provincial recovery plan has been approved. As a result, government land use management systems on Crown land and

government-regulated activities will be strengthened to ensure no loss of nests due to managed activities. A variety of approaches are being used to protect habitat in cooperation with landowners. Landowners and disposition holders will be contacted to discuss voluntary conservation measures and/or negotiate cooperative management strategies.

What You Can Do To Help

As a member of the public, a land manager, or an industrial developer:

- Report any observations of piping plovers or their nests to the nearest office of the Fish and Wildlife Division, Alberta Sustainable Resource Development.
- Adopt grazing management practices that avoid livestock use of breeding beaches during the plover breeding period (early May – mid-July).
- Limit your recreational activity on and preferably avoid piping plover breeding beaches during the nesting period.
- Facilitate access to piping plover beaches for Fish and Wildlife staff and partners to conduct inventories on this species.
- Contact wildlife management staff at the nearest Fish and Wildlife Division office to discuss ways that you can modify industrial activity to minimize impacts on the piping plover and ways that you can help monitor populations or assist in the recovery of this species.

