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PIPING PLOVER

(CHARADRIUS MELODIUS)

AN EXAMPLE OF U.S./CANADA COOPERATION IN THE PROTECTION AND RECOVERY OF ENDANGERED SPECIES

The history of international cooperation between the United States and Canada on the recovery of the piping plover extends back for more than a decade, and will continue into the future, thanks to a variety of activities and partnerships. Some of the joint efforts are in the form of information exchange and some are hands-on recovery actions.

Two cooperative international censuses of breeding and wintering plovers (1991 and 1996) have given Canada and the U.S. the first global population counts of this endangered bird. The 1996 International Piping Plover Census was a great success, with 1,100 biologists and volunteers from eight countries participating. The Census coordinated activities of participants from 11 Federal, 16 Provincial, 37 State, and two Tribal agencies, 70 conservation and business organizations, and hundreds of unaffiliated volunteers. Overall, census results suggest that the status of this beach-dwelling shorebird remains precarious given its low population numbers, sparse distribution, and continued threats to habitat and reproductive success throughout its range.

Recovery efforts in breeding areas include directing human traffic around the fragile nest scrapes found on beaches, erecting wire fencing around nests to keep out predators, and water level management on large bodies of water such as the Missouri River. Public education and volunteer beach guardian programs are underway in both countries. Less is understood about problems facing plovers in the winter. Current efforts, however, focus on conservation of the vast piping plover habitat found in the Laguna Madre regions of Texas and Mexico. In addition to piping plovers, this area provides critical habitat for waterfowl, shorebirds, wading birds, and endangered species such as whooping cranes, peregrine falcons, and various sea turtles.

DESCRIPTION

A piping plover is a small, stocky shorebird resembling a sandpiper. Adults weigh approximately 2 ounces (50 g), have a length of 7 inches (18 cm), and a wingspan of 15 inches (38 cm). Both sexes are similar in size and color; upper parts are pale brownish, underparts are white. A black band across the forehead over the eyes, and a small black ring (sometimes incomplete) around the base of the neck are distinguishing marks of adults during the summer, but these features are obscure during the winter. The bird's call is a plaintive Apeep-lo@ whistle. Like other plovers, it runs in short starts and stops. The piping plover eats worms, fly larvae, beetles, crustaceans, molluscs, and other invertebrates, which are plucked from the sand.

Chicks begin feeding on smaller sizes of these same foods shortly after they hatch.

RANGE AND HABITAT

Piping plovers breed on the northern Great Plains and Canadian prairies, along the Great Lakes, and along the Atlantic coast from Newfoundland to North Carolina. They winter on the Atlantic and Gulf of Mexico coasts from North Carolina to Mexico, and in the Bahamas West Indies. Rangewide in 1996, there were approximately 5800 breeding individuals in all three populations scattered across beaches in 20 States, 9 Canadian Provinces, and a small number on the French islands of St. Pierre et Miquelon.

THREATS

The primary threats to piping plovers are habitat modification and destruction, and human disturbance to nesting adults and flightless chicks. Recreational and commercial development and dune stabilization have contributed greatly to the loss of piping plover breeding habitat along the Atlantic Coast and Great Lakes. In the Great Plains region, damming and channelization of rivers also have eliminated sandbar nesting habitat. Wintering habitat has probably also been lost to coastal development, and inlet and shoreline stabilization features. A lack of undisturbed habitat has been cited as a reason for the decline of other shorebirds, too, such as the black skimmer and least tern.

Recreational pressure, and particularly pedestrian and vehicular traffic can seriously affect breeding success. Over the past 40 years, the number of vehicles and people on beaches has increased significantly. Human presence can indirectly lower productivity by disrupting territorial establishment, courtship, egg laying, and incubation activities. Foot traffic, dune buggies, and other vehicles (including raking of beaches for trash) can damage habitat and directly crush eggs or chicks; the ruts left by off-road vehicles can trap flightless chicks.

Increased urbanization and recreational pressure along the Great Lakes and Atlantic Coast has created an unnatural proliferation of predators. Human developments near beaches have resulted in an increased number of foxes, skunks, racoons, and gulls that are attracted to large quantities of trash. The result has been higher than normal predation of plover chicks and eggs and abandonment of nesting areas.

RECOVERY EFFORTS

At recovery planning meetings, Canada and the U.S. share information about management techniques such as habitat enhancement, predator exclosures and beach wardening, as well as educational materials. Canada and the U.S. also coordinate assessments of population status and recovery goals, and pool breeding population counts annually.

All five U.S. and Canadian Recovery Teams for the Atlantic Coast, Northern Great Plains, and the Great Lakes Working Group coordinate exchange of information and expertise on cross-population issues such as protection of plovers on wintering grounds. In addition, both countries exchange biologists to assist with specific projects. For example, the U. S. sent two biologists to Canada in 1992 to help trouble-shoot problems with predator exclosures in Nova Scotia.

Future cooperative efforts look even more promising. A proposed 5-year project for managing alkali lake habitats on the Great Plains where piping plovers concentrate has numerous potential partners in both countries, ranging from Federal agencies, States and Provinces to the private sector, including many landowners. Objectives include increasing the fledging rate, habitat management, protection, enhancement and creation, and data-sharing and monitoring.

INTERESTING FACTS

- Piping plovers raise only one brood per year, but may re-nest several times if their clutch is lost.
- Piping plovers nest only in North America.
- The piping plover has been listed in Canada as endangered. In the U.S. the Great Lakes population has been listed as endangered while the Atlantic Coast and Northern Great Plains populations are threatened.

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