



Common Name: PIPING PLOVER

Scientific Name: *Charadrius melodus* Ord

Other Commonly Used Names: Ringneck, sand plover, clam bird, belted piping plover, mourning bird, beach plover

Previously Used Names: *Aegialitis meloda*

Family: Charadriidae

Rarity Ranks: G3/S1

State Legal Status: Threatened

Federal Legal Status: Threatened

Federal Wetland Status: N/A

Description: The piping plover is about 17.5 cm (7 in) in length. The crown of the head, cheek, and back is a pallid, sandy-gray color, much like the color of beach sand. White on the forehead tapers into a white line that extends over the top of the eyes to the back of the head. The throat, breast, abdomen, and vent are white. The white of the throat extends around to the back of the

neck as a thin collar. During the breeding season, and often into winter, a black collar-like band occurs on the throat, and a thin black band extends over the top of the forehead from eye to eye. The bill is yellow to orange with a black tip, although sometimes completely black during winter. Legs are yellow to orange-yellow in color. A distinct white rump patch is visible during flight; other small plovers lack this distinctive field mark.

Similar Species: The semipalmated plover (*Charadrius semipalmatus*) is similar in appearance but has a darker brown plumage on the head and back, and a wide brown or black collar on the neck. The snowy plover (*C. alexandrinus*) is very similar to the piping plover in appearance and size, but has dark legs, a thin black bill, and is rarely seen in Georgia. Wilson's plover (*Charadrius wilsonia*) is slightly larger than the piping plover and its head and back are more brown in color and its bill is large and always black.

Habitat: Northern Great Plains breeding habitats include sparsely vegetated sand and gravel beaches adjacent to large alkali lakes, washed-out hillside beaches near smaller semi-permanent alkali wetlands, pastures and rangeland near these areas consisting of mid- to short-grass prairie (the less vegetated and more graveled microhabitats within these grasslands), and sparsely vegetated beaches, sandflats, dredge islands, and drained river floodplains of some of the larger rivers in this region. Breeding birds nesting along the Great Lakes, larger inland lakes in the northern Great Plains, and along the Atlantic Coast prefer sparsely vegetated sandy beaches, gravel, or cobble; frequently near sand dunes. Wintering areas include beaches, mudflats, and tidal ponds that are periodically inundated by water from high tide.

Diet: Invertebrates, including marine worms, fly larvae, beetles, crustaceans and mollusks, and small fish when available.

Life History: Nest sites include open sparsely vegetated sand, gravel, or shell-covered beaches or flats and sparsely vegetated areas within some prairie habitats. The nest is a small depression scraped in the ground, lined with pebbles or small pieces of shells. Clutches usually consist of four eggs laid within 6 days. Both sexes take part in incubation, which lasts about 25-28 days. The precocial young usually leave the nest within several hours of hatching and are capable of sustained flight within 3-4 weeks. They remain with the adults for approximately one month after hatching. Piping plovers feed in intertidal areas of beaches, mudflats, sandflats, shorelines of coastal ponds, lagoons, and salt marshes. Most of their feeding activity is concentrated during daylight hours, but they have been known to feed at night. Some wintering birds arrive in Georgia as early as late June and early July, but most do not arrive until October. The earliest arrivals are usually adult females and immature birds that were born that summer. In spring most piping plovers depart the state for breeding areas by late April.

Survey Recommendations: The best time to survey this species is from December through mid-February. Walking beaches within two hours on either side of high tide when birds are concentrated is the best time of day to survey. Extreme weather conditions (heavy rain or strong winds) can reduce effectiveness of surveys since birds will often congregate in inaccessible marsh areas when these conditions exist.

Range: This species breeds in the northern Great Plains of the U.S. and Canada, on the beaches of Lake Superior, Lake Michigan, and Lake Huron, and on the northeast Atlantic coast from very southern Newfoundland south to northern North Carolina. Wintering areas include the southeast Atlantic Coast from North Carolina to central Florida, the Gulf Coast from Florida to south Texas, portions of the Gulf Coast from south Texas to the Yucatan Peninsula, several Caribbean islands, and areas along the northern Gulf of California on the Pacific Coast of Mexico. Barrier islands along the Georgia and South Carolina coasts are a major wintering area for this species and a few of Georgia's barrier islands, particularly Little Egg Island Bar and Little St. Simons Island, harbor a substantial number of wintering individuals from the Great Lakes breeding population.

Threats: The greatest threats to nesting piping plovers are loss of nesting habitat to beachfront development; destruction of adults, nests, and young by humans and vehicles; disturbance by humans and pets; and predation by wild, feral, and domesticated animals. Beach-front development often directly eliminates habitat, while associated activities such as construction of sea walls, jetties, and other beach stabilizing structures reduce the natural forces which maintain, renew, and create piping plover habitat. Inadvertent destruction occurs when nests or birds are stepped on or driven over. In addition, people, pets, and vehicles traveling in the vicinity of nests can lead to disturbance and subsequent abandonment by the adult plovers. Along the migratory pathway, and on the wintering grounds, loss of critical stopover and wintering sites can greatly reduce the survival rate of individuals by increasing the distance between "refueling" stops (stopover sites) and increasing competition with other piping plovers and shorebird species. These birds are also susceptible to disturbance by humans, pets, and vehicular traffic, which often cause repeated flushing, thus depleting vital fat reserves needed for successful migration. Georgia's coast provides habitat for a significant number of the birds that winter on the Atlantic Coast.

Georgia Conservation Status: Piping plovers do not nest in Georgia but can be found regularly during migration and wintering on Little Tybee, Williamson, Wassaw, Ossabaw, St. Catherines, Blackbeard, Sapelo, Wolf, Little St. Simons, Jekyll, and Cumberland Islands and Wolf Island Bar, Little Egg Island Bar, and St. Catherines Island Bar (Little St. Simons and Cumberland Islands have particularly large numbers).

Conservation and Management Recommendations: On the breeding grounds this species has been protected by excluding people, pets, and vehicles from nesting areas during the breeding season. Wire enclosures have been used to protect nests from predators where predation is a problem. Entire public beaches have been closed in Massachusetts to protect nests and young from disturbance. It appears these efforts have helped the plover population increase. Preliminary estimates for the Atlantic Coast breeding population (in 2008) are 1848 breeding pairs. The interior breeding population is estimated at about 150 pairs while the Great Lakes population numbers about 70 nesting pairs. Since 1996, a mid-winter survey for piping plovers and other shorebirds has been run annually in Georgia to track wintering populations. This one-day event covers all beach habitat suitable for piping plovers and other shorebirds. A total of 124 piping plovers were documented on the Georgia Coast during the first survey in 1996 and the following year 123 piping plovers were counted. During the last five years (2006-2010) the mid-winter survey has averaged 168 piping plovers per year, an increase that may be due to a growing

population. Identifying and protecting important migratory stopover and wintering sites as well as the birds on these sites will ensure opportunities for these birds to breed in subsequent years.

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Authors of Species Account: Todd M. Schneider and Bradford Winn

Date Compiled or Updated:

T. Schneider, 1999: original account

T. Schneider and B. Winn, July 2010: modified and edited text

K. Owers, July 2010: updated status and ranks, added picture

G. Krakow, April 2016: updated link to BNA