

Piping Plover, *Charadrius melodus*

Status: *State:* Endangered *Federal:* Threatened (Atlantic Coast population)

Identification

The piping plover is a small shorebird with a black neck band and a black bar across the forehead. The upperparts are light sandy-brown and the underparts are white, providing the plover with camouflage against sandy beach backgrounds. The legs are bright orange and, in breeding plumage, the bill is also orange with a black tip. Although males and females are similar in



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appearance, males typically have darker, more extensive neck bands. The call of the piping plover is a ventriloquist-like peep-lo which is hard to pinpoint before the bird itself is sighted which is often heard before the bird is seen.

Juvenile and winter-plumage adults are similar in appearance. Both lack the black neck and forehead bands characteristic of breeding adults. Rather, there is a pale band around the neck. The bill is solid black and the legs are pale yellow.

Piping plovers may be confused with other shorebird species. The killdeer (C. vociferus), a larger plover of open uplands, has rich brown upperparts and two black neck bands. In both size and pattern, semipalmated plovers (C. semipalmatus) are similar to piping plovers but are much darker brown on the upperwing, back, and head. The sanderling (Calidris alba), which frequently feeds at coastal beaches along the water's edge, lacks neck bands and has a longer, black bill and a broad, white wing bar that is visible in flight.

Habitat

Piping plovers inhabit oceanfront beaches and barrier islands, typically nesting on the stretch of beach between the dunes and the high-tide line. Nests are often located in flat areas with shell fragments and sparse vegetation. The coloration of piping plovers and their eggs blend in remarkably with sand and broken pieces of shell. Sparse vegetation, such as American beach grass (Ammophila breviligulata) or sea rocket (Cakile edentula), is favored, as it provides cover against predators and the elements. However, areas with dense vegetation, such as dunes, are avoided by nesting plovers, since these sites provide cover for predators.

During the nonbreeding season, piping plovers inhabit coastal beaches, barrier islands, inlets, sandflats, mudflats, and dredged material islands. Piping plovers forage on

intertidal beaches, washover areas, exposed mudflats and sandflats, wracklines, and shorelines.

Status and Conservation

Although common during the 1800s, the piping plover was on the verge of extirpation by the 1890s and early 1900s due to market hunting and egg collecting. Protection afforded by the Migratory Bird Treaty Act of 1918 and changing fashion trends allowed plover populations to gradually recover during the 1920s and 1930s. However, since the late 1940s, coastal development and the elevated recreational use of beaches have caused plover population declines. Human habitation along the shore has also resulted in elevated populations of many mammalian and avian predators.

In 1984, the piping plover was listed as an endangered species in New Jersey. The New Jersey Natural Heritage Program considers the piping plover to be globally “very rare and local throughout its range,” and “critically imperiled in New Jersey because of extreme rarity” (Office of Natural Lands Management 1992). In 1986, the Atlantic Coast piping plover population was listed as Threatened in the United States. A recovery goal of 2,000 pairs was set for the Atlantic Coast population, including 575 pairs in New Jersey and New York region. Another goal set by the recovery plan is to achieve a five-year average productivity of 1.5 fledged young per pair. Active monitoring and management of the birds by the ENSP are integral parts of federal recovery efforts.

Since its date of listing, the Atlantic Coast piping plover population has increased, growing from 790 pairs in 1986 to 1,386 pairs in 1999 (U.S. Fish and Wildlife Service 2000). As numbers have increased in New England during the 1980s and 1990s, the number of plovers nesting in New Jersey has remained essentially stable at around 120 pairs. Due to its precarious existence, the piping plover remains one of New Jersey's most endangered species. The threats that it faces, including increased beach recreation and predation, continue to act as serious impediments to the recovery of this species. Without intense protection and management, it is unlikely that the piping plover would survive in New Jersey.