

PIPING PLOVERS (*Charadrius melodus*) BREEDING AT JOHN F. KENNEDY INTERNATIONAL AIRPORT IN NEW YORK CITY

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ABSTRACT

The Piping Plover is a "fairly common breeder and migrant on sandy beaches and spoil banks of coastal Long Island", (Paxton 1998) In New York City's Queens Co., a breeding colony is protected by the National Park Service at the Breezy Point Unit of Gateway National Recreation Area and they have bred nearby at John F. Kennedy International Airport, although they have not been recorded there since 1985. The JFK site, however, was not along the coast, rather it was near Jamaica Bay, and right under the flight path of hundreds of planes each day, and not on sandy beach, but on newly deposited dredge spoils in an area regularly taxed by and/or flown over.

INTRODUCTION

Due to its declining numbers and rarity the Piping Plover (*Charadrius melodus*) was listed as "Endangered" on the Great Lakes and "Threatened" on the Atlantic Coast by the United States Fish and Wildlife (U.S. Fish and Wildlife Service 1985). Along the Atlantic Coast of the United States, Piping Plovers breed on sparsely vegetated beaches either composed of sand, gravel, or cobble, frequently adjacent to sand dunes (Haig 1986; Brown 1987; Burger 1987). In the northern Great Plains they use sparsely vegetated sand or gravel beaches next to some alkali lakes (Whyte 1985; Haig and Oring 1988) and washed out hillside beaches on small alkali wetlands (Prindiville Gaines and Ryan 1988; Weber and Martin 1991). On rivers they use beaches, sandflats, dredge spoil islands, and drained river floodplains where vegetative cover is usually less than 20% (Haig 1986; Schwalbach 1988; Ziewitz et al. 1992). The Piping Plover literature, to my knowledge, does not include information about this

species' utilization of airports and surrounding environments. Because airports that occur within the range of the Piping Plover may be required to complete either an Environmental Impact Statement, Environmental Assessment, or a Biological Assessment taking these birds into account whenever planning modifications such as a runway extension or new equipment installment, experience with this species at John F. Kennedy International Airport is significant.

RESULTS

Piping Plovers have never been involved in any bird strike incidents at JFK. Although several pairs breed at Breezy Point, the part of Gateway National Recreation Area that is on the westernmost tip of Long Island, and they are fairly common in the area, Piping Plovers have not been recorded at JFK since 1985. In conjunction with Sam Chevalier, breeding was documented during the years 1970, 1983, and 1984 (Garber 1998). Some Piping Plovers were banded there too (Chevalier 1998, pers. comm.).

Chevalier and I conducted Piping Plover breeding surveys at JFK over the years. In 1983 two pairs nested at JFK; 1984 one pair bred there; none bred there from 1985-1988; the airport was not surveyed from 1989-1990; none nested here from 1991-1993; the airport was not surveyed in 1994; and none nested here from 1995-1997.

A former member of the Bird Control Unit at JFK, Chevalier, trapped a female Piping Plover on its nest at JFK on May 20, 1970 (Garber 1996). This bird was previously trapped and banded two years earlier, when she was on her nest on June 29, 1968 at Shinnecock Bay, Long Island, 62 miles away (Garber 1995). The JFK nest occurred in a highly disturbed area where fill had just been deposited on the airport. This record documents Piping Plovers do not always nest in the same location, rather, they sometimes move 50-100 miles to a new nest site.

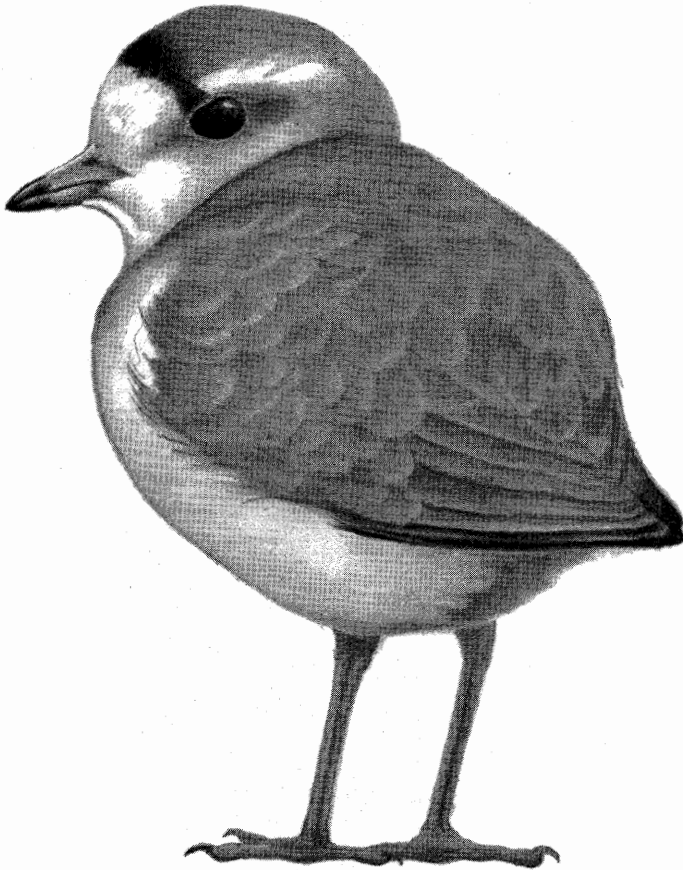
DISCUSSION

From what we know about the nesting sites chosen at JFK, it is clear that Piping Plovers do not require natural pristine habitats to breed. At JFK they chose newly created, highly disturbed areas not always immediately adjacent to the shore, let alone along the first dune line, as is the case where they breed at Breezy Point. At JFK they have bred on newly deposited dredge spoils and in areas where planes regularly taxied and flew over.

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