# Roseate Tern: North American Subspecies

## Sterna dougallii dougallii

#### Introduction

The roseate tern is a federally protected and endangered seabird that is mainly found in the Northern Hemisphere on the northeastern coast of North America, extending from Nova Scotia to the southern tip of Florida, as well as several islands in the Caribbean Sea. It is also found in northwestern Europe, south and west Africa, and Western Australia.

The roseate tern is divided into four subspecies based on small differences in size and bill color. The North American subspecies is divided into two separate breeding populations; one in the northeastern U.S. and Nova Scotia and another in the southeastern U.S. and Caribbean. Roseate terns are most common in the central portion of this range, from Massachusetts to Long Island, N.Y.

Populations in the northeastern U.S. greatly declined in the late 19th century due to hunting for the millinery, or hat trade. In the 1930s, protected under the Migratory Bird Act Treaty, the population reached a high of about 8,500, but since then, population numbers have declined and stayed in the low range of 2,500 to 3,300. The species was listed in 1987 as endangered in the northeastern U.S. Populations in Florida, Georgia, North Carolina, Puerto Rico, South Carolina and the Virgin Islands are listed as threatened.

#### **Characteristics**

The roseate tern is a medium-sized, gull-like tern about 15 inches long. When not in breeding season, it has a black bill, black legs, white forehead and most of the crown, and a long, deeply forked tail. During this time, the roseate tern is often difficult to



Roseate tern

distinguish from common terns, among which it nests in the Northeast.

During breeding season, it is paler than other terns, with most of its plumage turning silver-gray above and creamy white below a rosy-pink chest and a black cap. It also develops long white tail-streamers that it loses after the breeding season. In the northeastern birds, the black bill becomes orangered at the base and the black legs also turn orange-red.

The roseate tern is a specialist feeder eating almost exclusively small fish, primarily the American sand lance in northeastern populations. It captures food mainly by plungediving, completely submerging its body underwater to catch prey, but it also feeds in shallow waters and even steals food from common terns.

### Life Cycle

Roseate terns nest on small barrier islands, often at ends or breaks. They nest in hollows or under dense vegetation, debris or rocks hidden from predators. Roseate terns in northeastern North America almost always nest in colonies with common terns. Roseate terns begin arriving to breeding areas at the end of April and begin laying eggs as early as the third or fourth week of May. They lay about one to two eggs, rarely three, and rely on the more aggressive Arctic and common terns in the surrounding colony to defend them.

In the winter, roseate terns migrate south in late August to early September. They migrate from the northeastern U.S. to the waters off Trinidad and northern South America from the Pacific coast of Columbia to eastern Brazil.

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European roseate populations usually migrate to western and southern Africa.

#### **Threats and Recovery Efforts**

Habitat for northeastern North American populations has been greatly reduced by human activity and development on barrier islands, predation, and competition from expanding numbers of large gulls. Roseate terns are highly sensitive to disturbances and will desert a whole colony if they feel threatened. The move to less desirable, often inadequate areas exposes the roseate tern to high predation and affects its ability to reproduce.

Roseate terns often desert their colonies and eggs at night when they become subject to predation, leaving eggs and young exposed and vulnerable to predatory mammals such as foxes, skunks and brown rats. Predatory birds, such as the great-horned owl and black-crowned night heron, pose a greater threat because they can fly to the more protected island nesting sites. Roseate terns are quick to abandon a nesting site when predators are active.

An increase in great-blacked gull and herring populations has displaced roseate terns from their traditional nesting colonies in the Northeast. Roseate terns compete with gulls for nesting sites and food; the aggressiveness and larger size of the gulls give them an advantage. Gulls also compete for habitat with terns by nesting before the terns do, leading the roseate terns to retreat and abandon their historical sites.

The loss of habitat from erosion, a possible result of rising sea levels, is another major factor contributing to the decline of roseate tern populations.

The spit—a narrow land comprised of gravel and sand extending into the ocean—on Falkner Island, in the Long Island sound, is home to one of the largest tern populations in the northeastern U.S. It is estimated that Falkner Island is losing about 800 to 900 square feet per year due to erosion, and in the next two to five years, the spit will be in a tidal zone, leaving roseate terns without their prime habitat.

In areas like Falkner Island, biologists work hard to create artificial habitats for the terns to counteract the move and make new, less desirable sites appealing. Inverted boxes or half-buried tires are commonly used to provide covered nesting sites.

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