

THE STATUS OF THE TERN COLONIES AT SANDY POND (NORTH POND), OSWEGO COUNTY: SUMMER, 1956

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Scheider and Evans (1956, *Kingbird* 6:81-85) have presented an excellent survey of the interesting avifauna of the Sandy Pond area and have mentioned the precarious balance which exists on the barrier beach due to human interference.

Two species of the family Laridae, the Black Tern and the Common Tern, breed at Sandy Pond. These colonial nesters offer an excellent example of divergence between two closely related species. The Black Tern is a bird of the cat-tail marshes while the Common Tern nests on the *Ammophila*-covered dunes and open beaches of the area. This location is unique in having both species nesting within a few hundred yards of each other. The present status of the Sandy Pond populations of these two species reflects the difference in human and predatory pressures on these diverse ecological niches.

The "success story" is that of the Black Tern. Although predation does take its toll, it is not as heavy as one might expect in a marsh habitat. Out of 12 nests observed in 1952, only one was destroyed by predation. This occurred during the egg state and the offender was not determined. Aside from one other nest that was destroyed during a storm, all the young from the remaining nests reached flight stage safely. Out of fifteen nests observed through the summer of 1956, one was destroyed by children. The rest of the young (two or three per nest) reached flight stage.

Potential predators are numerous in the Sandy Pond marshes. The Bowfin, Large-mouthed and Small-mouthed Basses, Northern Pike and Snapping Turtle are common inhabitants of the shallow water where the terns nest, while the Great Blue Heron, American Bittern and Florida Gallinule roam the marshes in large numbers. Mink are probably present also and Marsh Hawks are occasionally seen flying over the nesting areas. Any of these might be classed as a possible threat to the young or, in several cases, to the eggs of this species, but none can be considered as a serious predator.

During 1956, the Black Tern had the most successful breeding season in the last decade at Sandy Pond. Between 40 and 45 pairs nested in the marsh at the south end of the pond. This has always been the site of the main colony in spite of its proximity to the largest and most active camping community in this area. The remaining marshes supported approximately 25 pairs. Between 1948 and 1955, the number of breeding pairs in the south marsh varied from 14 to 25 with an average of approximately 35 pairs for all of the Sandy Pond marshes. The breeding seasons have been consistently successful with a very high percentage of survival.

The success of the Black Tern depends upon several factors. One of these is that the colonies are fairly well isolated from the human population. Few people enter the marshes and fewer still penetrate deeply enough to discover the nesting sites. Probably the most important factor, however, is the nature of the habitat itself. Protective cover is heavy and the young take advantage of it by fleeing from the nest when the alarm call is given by a parent bird or a group of birds, and hiding among the nearly masses of emergent vegetation. The fact that the species is colonial and that an alarm

call given by a single bird will instigate a well-coordinated social attack has considerable survival value.

For the past ten years there has been a steady decline in the breeding population of Common Terns. In 1946, approximately 40 pairs nested on the dunes south of the outlet to Lake Ontario. In 1956, only one pair of birds nested in the former colony site and the young of these were killed, presumably by a dog, shortly after hatching. About half a dozen pairs nested on the dunes north of the outlet and were moderately successful.

Even when the Common Tern colony was large, survival was very poor. It was rare to find young produced from the first nesting attempt. Often three attempts were necessary before any young were produced in the colony because of human interference, predation or storms.

This unfortunate situation can be blamed primarily on the growing popularity of this narrow strip of land as a picnic area and bathing beach. Dogs are responsible for the destruction of many young birds and children and even adults have taken their toll in the past. I recall a noteworthy example of this which took place about nine years ago. The first attempt of the colony to nest had been unsuccessful due to predation by gulls. The birds had moved to a wide expanse of beach immediately south of the outlet and had renested. When I discovered the new site, a few nests had full clutches, but most of the birds were in the process of scraping out nests and laying eggs. Several days later, while scanning the area through binoculars, I saw a man and woman, each carrying a pail, busily picking things up from the beach. When I reached the colony, I found that the things which they had been collecting so avidly were Common Tern eggs and not one remained on the beach.

Gulls are known to have destroyed eggs in the past, but apparently this is not a regular occurrence. Foxes are present on the barrier beach and probably feed on young terns when they are available. As far as I have been able to determine, rats, a serious predator in other localities, do not inhabit the area.

Unlike the Black Tern habitat, that of the Common Tern is open and very accessible. The only chance that the young have to escape predation is by hiding in rather loose clumps of beach grass. This is of little effect when the predator is endowed with a keen olfactory sense. Predation and human interference have been so heavy in recent years that it is remarkable that the colony, small though it is, has persisted.

Another species which formerly nested regularly in the same area has suffered to the extent that it has become an uncommon resident of the barrier beach. This is the Piping Plover. The last breeding record of which I am aware was in 1948. The eggs were deposited in a low section of the branch on the windward side of the dunes. During a severe storm, they were covered with water and sand and were deserted. Although a pair was present irregularly through the summer of 1956, they apparently did not breed in the immediate vicinity.

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