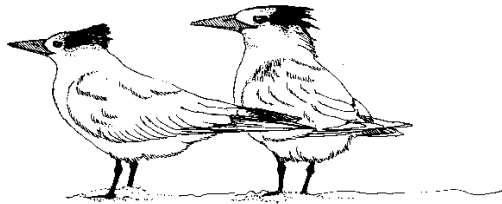


[From Fall 2000]

Predatory Pressures on Breeding Seabirds

A study on the impacts of predation on colonial nesting seabirds was undertaken this summer on Fisherman Island NWR. From June through August, monitoring was done several times a week to observe active predation and identify sources of it. The focus of the monitoring was the breeding Royal Terns and Brown Pelicans. In addition to the terns and pelicans, Fisherman Island is home to significant numbers of nesting Herring, Great Black-backed and Laughing Gulls. All of these species are potential candidates for creating predatory pressures on nesting terns. Proximity to the mainland also presents the opportunity for mammalian predation.

Regular monitoring of the nesting Royal Terns was facilitated by the use of a blind to minimize disturbance and allow behavior to be as natural as possible. Interaction between the resident gull species and terns was duly noted. Terns with eggs were particularly vulnerable to Herring Gulls, especially when the gulls had nests close to the tern colony. Eggs left unattended in nests and wandering chicks were easy targets for watchful gulls. In addition, adult terns returning to the colony with food were often harassed by Laughing Gulls. Sometimes these individuals would be chased by several gulls until the prey item was dropped. Despite these pressures, a large proportion of the 1200 or so tern chicks that hatched reached fledgling age.



Approximately 600 pairs of Brown Pelicans breed on Fisherman Island. The nests of Herring and Great Black-backed Gulls are found on the edge of the pelican colony. Even with this close association, these species present little problem although occasionally gulls were observed pirating food from fledglings.

Weekly track surveys were done to provide a picture of potential mammalian predators. Each survey involved walking the edge of the dunes and the borders of creeks and ponds and was checked for tracks. The most visibly abundant mammal on the island is White-tailed Deer. Deer and their tracks were seen daily throughout the island, including the areas of the colony. Disturbance from this source was probably minimal. Otter tracks were often encountered, although rarely near the nesting birds. There was no evidence to suggest that otters were a problematic predator. Other than the initial survey in mid-June, no additional raccoon tracks were encountered. This species is very much a problem around seabird colonies on other barrier islands and also represents a potential problem on Fisherman Island because of the closeness to the mainland, where raccoons are common. A single track of mink was discovered. Mink are an uncommon species and don't represent any great threat as a potential predatory species. No feral cats were encountered and no tracks were noted. Cats are fairly common on the Eastern Shore of Virginia NWR but the waters of Fisherman Inlet are probably a sufficient barrier to exclude predation from that source.

Although numbers of breeding Royal Terns were below recent averages, the colony as a whole had a successful season. Pelicans were again successful breeders this year. Continued monitoring of the colonies will help us to maintain the success of these two important colonies in Virginia.

Calvin Brennan, ESVNWR Intern

