CASPIAN TERN NESTING IN SOUTH CAROLINA

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Although the Caspian Tern (Hydroprogne caspia) is known to be a year-round resident of South Carolina, the 1970 edition of South Carolina Bird Life (p. 608) lists it as a non-breeding species because no nest or eggs have been collected in the state. E. Milby Burton, T.A. Beckett III, and others who have studied the colonial birds breeding on the islands along the coast of South Carolina during the past 50 years have never found a Caspian Tern nest or chick. Wayne's statement that the species nests in the Royal Tern colonies at Cape Romain (Birds of South Carolina, 1910, p. 4) has been widely accepted, though in retrospect it appears to have been based upon questionable information received from others rather than upon field work actually conducted by the distinguished ornithologist of Oakland Plantation near Mt. Pleasant.

On 5 June 1970 Travis H. McDaniel, then manager at Cape Romain National Wildlife Refuge, made a routine check of nesting birds on Cape Island. As he walked through a Black Skimmer and Gull-billed Tern colony at the south end of the island, he noticed two tern eggs that were appreciably larger than those normally laid by Royal Terns, which are common nesters. During three years at Cape Romain, he had noted that Royal Terns usually lay only one egg. As McDaniel returned to his patrol truck, the birds began to settle back on their eggs. At this time he saw a very large tern dropping down from the air to settle on a nest despite harassing by Black Skimmers. Immediately he ran to the site and discovered that the two large eggs were exactly where the large tern was trying to alight. Looking the bird over carefully, McDaniel identified it as a Caspian



Figure 1. Note dark crown and unforked tail of Caspian Tern chick captured at Cape Romain National Wildlife Refuge. (Photo by S.C. Langston)

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Tern. The second bird of the nesting pair appeared, and they both began diving upon him. Noting the location of the nest in relation to some driftwood, McDaniel departed.

The nest was an unlined depression in the sand. The two eggs were about $\frac{1}{2}$ inch larger than the average Royal Tern eggs found on the refuge. While of the same general color pattern as Royal Tern eggs, the Caspian Tern eggs were darker both in the dark and the light splotched areas and had much less white than the Royals.

The single Caspian Tern nest was within about 4 feet of several Black Skimmer nests. Approximately 150 pairs of Black Skimmers and 20 pairs of Gull-billed Terns were present. The colony was located on the south end of Cape Island, which is a long and narrow sand spit with little to no vegetation and subject to ocean flooding during above normal tides.

McDaniel checked the Caspian Tern nest site again on 2 July, finding two eggs and both adults. On 17 July the two adults were still present, but the eggs were gone. He saw no tern chicks during this brief visit.

On 24 July McDaniel advised E. Milby Burton, director of the Charleston Museum, that a Caspian Tern nest had been found at Cape Romain National Wildlife Refuge. The next day S.C. Langston, Beckett, and Edward Murray met McDaniel at the Cape Island skimmer colony and quickly confirmed his identification of the adult Caspian Terns. The four men began to cover the beach area, where the terns buzzed them persistently, in search of the large tern chick McDaniel had seen through binoculars running near the surf shortly before the other men arrived. As they approached the beach the chick headed into the surf and swam out of camera range before a picture could be taken. McDaniel attempted to swim after the chick, but he was unable to catch it in the heavy seas. Langston and Beckett pursued the bird by boat and were successful in netting it. One of the adult Caspian Terns circled over and near the chick while it was in the water.

After being brought ashore the chick was examined closely and positively identified as a Caspian Tern by Beckett. Beckett banded the Cape Romain chick, and Langston photographed it (Figures 1 and 2).

The Caspian Tern chick appeared to be about three weeks old. This healthy young bird was not capable of flight, but it could run and swim very well. Beckett, who has banded thousands of Royal Terns, commented that no Royal chick could swim as fast as did the Caspian chick. Its outstanding features in comparison to a Royal Tern chick were the very dark head and much larger bill. The upper half of the young Caspian Tern's head was all dark with a black eye stripe and crown of dark slate or charcoal color. The juvenile Royal Tern also has a black eye stripe, but its crown is white. The juvenile Caspian had a slate-colored mantle, and the outer three or four primaries were already black as in the adult. The juvenile Royal has a lighter colored mantle without black primaries. The young Caspian's tail was almost straight across, while the young Royal's tail is slightly notched.

In addition to being the first positive evidence of Caspian Terns breeding in South Carolina, and the Cape Island nest is of interest for several other reasons. Bent (*Life Histories of North American Gulls and Terns*, 1921, p. 202-211) gives the incubation period for the Caspian Tern as about 20 days. McDaniel first saw these eggs on 5 June, and they were still not hatched 28 days later (2 July). While Caspian Terns are known to build fairly elaborate nests in some localities, the unlined depression seems to be typical for nests on sandy southern beaches. Bent mentions Caspian Tern nests found in colonies with several different species of sea birds, but he cites no instance of one in a Black Skimmer colony. In Louisiana, according to Bent, Caspians avoid nesting with Royal and Sandwich Terns, and this appears to be the case at Cape Romain where both these smaller terns breed regularly.

Although many ornithologists visit Cape Romain, their activities are usually confined to Bulls Island, which is open all year for bird study. Nesting sites of the various colonial birds, such as the Black Skimmer colony on Cape Island, are usually posted as "Closed Area" with visitors permitted only at the discretion of the refuge manager. Birders from the Carolinas will be especially interested to know if during the 1971 breeding season



Figure 2. Ted Beckett holds the Caspian Tern chick banded 25 July 1970 at Cape Romain. Note the dark outer primaries. Although well feathered and able to run and swim swiftly, the young bird was still flightless. (Photo by S.C. Langston)

refuge personnel will once again find a pair of Caspian Terns nesting successfully in South Carolina.

- Cape Romain National Wildlife Refuge, Box 288, McClellanville, S.C. 29458 and Magnolia Gardens, Route 4, Charleston, S.C. 29407.
- [Mr. McDaniel's present address is Piedmont National Wildlife Refuge, Round Oak, Georgia 30180.-ED.]