



Fig. 1. Map showing location of Turtle Island near the mouth of the Savannah River.

THE BIRDS OF TURTLE ISLAND, S.C.

W. DAVID CHAMBERLAIN

The avifauna of South Carolina's barrier island complex is not well documented. Historically, much of what is known was provided by Wayne (1910) and by Sprunt and Chamberlain (1949). In later years considerable information has been generated by the establishment of annual Christmas and spring bird counts resulting in a data base for Bull's, Caper's, Dewee's, Pawley's, and Hilton Head islands. Additionally, more in-depth work has been conducted on Bull's Island (1972) and Kiawah Island (1975), but the remaining 19 barrier islands do not have adequate exploration. In the interest of providing a broader perspective, the inclusion of a species list for Turtle Island seems of value.

Located just north of the Savannah River mouth in Jasper County (Fig. 1), Turtle Island is South Carolina's southernmost barrier island. It is a small island, accessible only by boat, comprised of approximately 1,745 acres (Warner 1976). The majority of this acreage is *Spartina* salt marsh, but a narrow band of high ground, 140 acres, includes a beach about a mile long (Fig. 2). The vegetation of this area is largely limited to dune associations and a maritime forest (Fig. 3) dominated by pine with palmetto and *Ilex* understory (Stalter 1977).

On 1 December 1975, Union Camp Corporation donated Turtle Island, then valued at more than \$400,000, to The Nature Conservancy. That organization immediately transferred ownership to the State of South Carolina, which now manages the island as part of its Heritage Trust program. Union Camp, a leading firm in the forest products industry,

has made similar generous gifts of natural areas to the State of North Carolina, including the recently acquired Green Swamp Natural Area near Wilmington. Figures 1, 2, and 3 are used through the courtesy of Union Camp.

The species list was compiled from the field notes of the late Ivan R. Tomkins. Tomkins was employed by the Savannah District office of the U.S. Corps of Engineers for 31 years. During his career he worked extensively in the Savannah River delta and was afforded the opportunity of almost daily field study. Tomkins' field work continued after his retirement in 1956 until his death in 1966.

The observations on Turtle Island represent 52 visits over a period of 31 years. It must be remembered, however, that Ivan Tomkins was a naturalist, not a trained scientist. His records are nevertheless accurate and highly detailed, although not quantitative. They do provide interesting, needed information on a relatively unknown area.

Tomkins' bird list is given below with asterisks indicating breeding species. Nomenclature follows the 1957 A.O.U. *Check-list* and its supplements.

Common Loon	*American Oystercatcher
Horned Grebe	Semipalmated Plover
Brown Pelican	Piping Plover
Gannet	*Wilson's Plover
Double-crested Cormorant	Killdeer
Great Blue Heron	Black-bellied Plover
Green Heron	Ruddy Turnstone
Little Blue Heron	Common Snipe
Great Egret	Whimbrel
Snowy Egret	Spotted Sandpiper
Louisiana Heron	Solitary Sandpiper
Yellow-crowned Night Heron	*Willet
*Least Bittern	Greater Yellowlegs
Wood Ibis	Lesser Yellowlegs
Glossy Ibis	Red Knot
Snow Goose	Least Sandpiper
Black Duck	Dunlin
Gadwall	Short-billed Dowitcher
Green-winged Teal	Semipalmated Sandpiper
Blue-winged Teal	Sanderling
American Wigeon	Herring Gull
Northern Shoveler	Ring-billed Gull
Canvasback	Laughing Gull
Scaup Duck	Bonaparte's Gull
Common Goldeneye	Gull-billed Tern
Ruddy Duck	Forster's Tern
Hooded Merganser	Common Tern
Common Merganser	*Least Tern
Red-breasted Merganser	Royal Tern
Sharp-shinned Hawk	Caspian Tern
Cooper's Hawk	Black Tern
*Red-tailed Hawk	Black Skimmer
*Bald Eagle	Barn Owl
Marsh Hawk	*Great Horned Owl
*Osprey	Yellow-shafted Flicker
Peregrine Falcon	Red-bellied Woodpecker
Merlin	Tree Swallow
Sparrow Hawk	Bank Swallow
*Clapper Rail	Barn Swallow
Virginia Rail	Common Crow
Sora	Carolina Chickadee



Fig. 2. Turtle Island's brackish water marsh contains ponds interconnected with a narrow channel system that snakes through the marsh grass. It lies between the barrier island's Atlantic Ocean beach and the high ground in the island's interior. Beyond the high ground is the salt water marsh. The view is to the southwest.

- *Carolina Wren
- *Long-billed Marsh Wren
- Short-billed Marsh Wren
- *Blue-gray Gnatcatcher
- Ruby-crowned Kinglet
- Cedar Waxwing
- Loggerhead Shrike
- Swainson's Warbler
- Northern Parula
- Prairie Warbler

- Palm Warbler
- Bobolink
- *Red-winged Blackbird
- *Boat-tailed Grackle
- Sharp-tailed Sparrow
- *Seaside Sparrow
- White-throated Sparrow
- Swamp Sparrow
- Song Sparrow

Tomkins' findings on Turtle Island are important both from the standpoint of those birds listed and those absent. The total of 103 species is respectable, particularly for an area that did not receive regular intensive investigation. The absence of the Ipswich form of the Savannah Sparrow comes as no surprise, but the lack of such common species as the Cardinal, Savannah Sparrow, Pine Warbler, and Yellow-rumped Warbler seems unusual. Similarly, the Ground Dove and Blue Jay were absent, but this phenomenon has been noticed on other barrier islands (Folk 1938, Tomkins 1965).

The total of 14 breeding species includes the four largest raptors found in the Lowcountry. Observation of an active Red-tailed Hawk nest is significant because the species was long regarded as a non-breeder in the coastal plain (Wayne 1910). The first



Fig. 3. Viewed from the high ground just beyond the ocean front dunes, the brackish water marsh of Turtle Island extends beyond the high ground to the horizon. The view is to the northwest.

Lowcountry breeding record was recorded from Beaufort, S. C., in 1932 (Sprunt and Chamberlain 1949). Tomkins' record from April 1931 can now be regarded as the first.

Eleven raptors were recorded including regular sightings of the Great Horned Owl, Cooper's Hawk, and Merlin. It is interesting that the Peregrine Falcon appears to be uncommon during this period for it was observed only once.

The most unexpected species was a male Swainson's Warbler collected on 4 April 1931. This appears to be the first record of this warbler for a barrier island in South Carolina. Obviously a migrant, the collected bird was prepared as a study skin (specimen no. 296) and sent to the Reading Museum, Reading, Pennsylvania, in 1932.

Tomkins' visits to Turtle Island dropped off sharply after 1950, when he noted that the island was much changed and the beach had silted up. So drastic was the change that the beach breeding species, once counted in hundreds of individuals, were reduced to one pair of American Oystercatchers. His last visit was in May of 1958, completing the longest study to date for this little known barrier island.

ADDENDUM

Recent trips to Turtle Island indicate that the Bald Eagle, Osprey, Red-tailed Hawk, and Great Horned Owl are no longer breeding residents. The Osprey, however, is currently breeding on the southern end of nearby Daufuskie Island.

LITERATURE CITED

- American Ornithologists' Union. 1957. Check-list of North American Birds. [Supplements in *Auk* 90:411-419 and 93:875-879.]
- Chamberlain, W.D., and E.B. Chamberlain. 1975. Avifauna of Kiawah Island. In: Environmental Inventory of Kiawah Island, Environmental Research Center, Inc., Columbia, S.C.
- Folk, G. Edgar, Jr. 1939. Easter on Wassaw Island. *Oriole* 4 (3).
- Sprunt, Alexander, Jr., and E.B. Chamberlain. 1949. South Carolina Bird Life. University of South Carolina Press, Columbia, S.C.
- Salter, Richard. 1977. The Flora of Turtle Island, Jasper Co., South Carolina. *Castanea* 38 (1).
- Tomkins, Ivan R. 1965. Absence of the Blue Jay on Some of Georgia's Coastal Islands. *Oriole* 30 (2).
- U.S. Dept. of the Interior. 1972. Birds of the Cape Romain National Wildlife Refuge.
- Warner, Langdon. 1976. The Status of the Barrier Islands of the Southeast Coast. Open Space Institute, New York, N.Y.
- Wayne, Arthur T. 1910. Birds of South Carolina. Contributions from the Charleston Museum.

ACKNOWLEDGMENTS

The Georgia Historical Society, Savannah, Georgia, is gratefully acknowledged for the use of the Ivan R. Tomkins Collections, and special thanks are given Mrs. Connie L. Stephenson for her help with the materials.

301 McCants Drive, Mt. Pleasant, S.C. 29464, 13 July 1977.

