

considered to reflect the general background contamination of the environment. The low levels found in the kites correspond to the low levels found in the apple snails. The significance of these levels of pesticides in these species is not known.

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Nesting of the Sooty Tern in Louisiana.—The A.O.U. Check-list (1957) includes coastal Louisiana in the breeding range of the Sooty Tern (*Sterna fuscata*). This is based on a nest found on Curlew Island in the Chandeleur group 5 June 1933 (Oberholser, 1938). The species then went unrecorded in Louisiana for 28 years when, on 16 September 1961, two specimens were obtained at widely separated coastal localities (Imhoff, 1962), their presence apparently a product of Hurricane Carla which struck the central and upper Texas coast 11 September. This note documents the subsequent reappearance of the species in Louisiana and the establishment of a small breeding colony on the Chandeleur Islands.

The Chandeleurs are a chain of barrier islands approximately 50 miles long some 20 miles off the Mississippi delta. The islands are a part of the Gulf Islands National Wildlife Refuge. The Sandwich Tern (*Thalasseus sandvicensis*) and Royal Tern (*Thalasseus maximus*) breed on several of the islands in large numbers, and formerly the Brown Pelican (*Pelecanus occidentalis*) nested there. Other common nesting species are the Laughing Gull (*Larus atricilla*) and Black Skimmer (*Rynchops nigra*); the Reddish Egret (*Dichromanassa rufescens*) and American Oystercatcher (*Haemantopus palliatus*) also breed in small numbers.

On 7 June 1962 (Stewart, 1962) and on 25–26 June 1963 (Stewart, 1963) the Sooty Tern was seen in the Chandeleurs, and on 10 June 1964 a nest was discovered on Curlew Island (Stewart, 1964) for the second Louisiana breeding record. J. M. Valentine (pers. comm.) reported the species again nesting on the islands in 1965, and in 1967 it became clear that a significant, if small, breeding colony had been established. On 27 June of that year the author, Sidney A. Gauthreaux, and other members of a party from Tulane and Louisiana State Universities found on Stake Island of the Chandeleur chain 8 nests containing 6 eggs and 3 young, and counted a total of 20 adults. Photographic evidence was obtained and deposited at the L. S. U. Museum of Zoology. More recently Valentine (pers. comm.) found two nests and seven adults on Stake Island on 22 May 1968 and a single nest on Curlew Island on 6 June. He also reported seeing several immature Sooty Terns near Curlew and North Islands 12 August 1968.

All 14 Sooty Tern nests that have been reported in Louisiana were on either Curlew or Stake Island, generally in or near Sandwich or Royal Tern colonies. Most were built to take advantage of the limited protective cover available, placed among the roots or under branches of dead black mangroves (*Avicennia nitida*), or partly hidden in a depression at the base of a clump of grass.

Also of interest is the finding of six Sooty Tern nests on Pelican Island, Texas on 27 May 1967 (Webster, 1967). The species has bred only irregularly along the Texas coast.

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Shorebirds leaving the water to defecate.—A report that some Old World shorebirds when feeding in water go ashore to defecate and then return to the water (Reynolds, Brit. Birds, 58: 384, 1965) appeared while my note on such behavior by several American herons was in press (Wilson Bull., 78: 316, 1966). I have since watched intensively such shorebirds as occur along Gwynns Falls at Woodlawn, Maryland, and find that this is also a habit—with exceptions—of the Solitary Sandpiper (*Tringa solitaria*), Spotted Sandpiper (*Actitis macularia*), and Killdeer (*Charadrius vociferus*), but not of the Least Sandpiper (*Erolia minutilla*). The manifestation of the habit appears to be proportional to the degree each species is a water feeder.

The uneven crest of a concrete dam at Woodlawn sporadically has one or two dry sections and one or two with a mere film of water flowing over. Foraging back and forth across the crest, Spotted Sandpipers may defecate while crossing a dry strip. They may walk out onto a dry spot, defecate, and then turn back into the flow they had left, or they may fly from the water to an abutment to defecate or to a rock in shallows below the dam. Foraging in those shallows they fly onto a rock to defecate or do so while crossing a rock or mud bar in their path. Walking a sinuous course in and out of the water's edge, they defecate while on shore. While foraging they sometimes walk a few feet from the water up the sloping shore, defecate, then go back into the water. Of 57 defecations that I have seen water-foraging birds make, 49 were in these ways, and after 44 of them the birds reentered the water, after 5 they stayed ashore. Seven times I have seen birds on the dam defecate in very shallow water or on barely moist spots, only once in water of appreciable depth. Apparently water above toe depth normally inhibits defecation. In contrast I have eight times seen flying birds defecate into the stream.

On 17 occasions that I have seen water-foraging Solitary Sandpipers defecate, they have left the water to do so and then returned, but one bird that spent long periods idling in very shallow water twice defecated there. Five out of eight Killdeers have left the water and returned; only one of the others defecated in water of any depth. These species did not forage on the dam; elsewhere they have behaved like the Spotted Sandpipers.

Only 4 out of 10 times did Least Sandpipers defecate on shore; twice birds came out of the water, defecated, then stayed ashore, and twice birds that were weaving in and out of the stream defecated while on shore; another time a weaving bird defecated in the water, and 5 times birds standing or feeding in the water did so.—HERVEY BRACKBILL, 2620 Poplar Drive, Baltimore, Maryland 21207.