## Noteworthy ornithological records from Abaco, Bahamas

An update of the ornithology of a little-studied island

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V ISITS TO ABACO ISLAND, Bahama Islands, November 13-19, 1976 and May 16-28, 1977 produced several records of breeding or occurrence that are worth recording in view of the scarcity of published information on the birds of this island. We know of only two previous papers that deal wholly or mainly with the birds of Abaco, both written in the first decade of the century (Bonhote 1903, Allen 1905).

Most of our observations were made in the large area of cutover pine, *Pinus caribbea*, of southern Abaco, but we visited several other areas as well, including the hardwood coppice along the eastern coast and the uncut, mature pines of Little Abaco Island that, like all areas of pine, or formerly of pine, show signs of periodic burns. Henry (1974) discussed at length the climate and geology of Abaco and the ecology and history of its forests.

Table 1 summarizes the evidence of breeding seasons of the birds of Abaco. With the exception of recently fledged Barn Owls, *Tyto alba*, there was no evidence of breeding in any of the birds observed on the November trip. Breeding was in early to mid-stages for most species observed in late May.

Several observations deserve detailed treatment, as follows. The Least Grebe, Podiceps dominicus, has been recorded on most of the Bahama Islands with the notable exception of Grand Bahama and Abaco (Paterson 1972, Brudenell-Bruce 1975). We noted a single Least Grebe (Fig. 1) daily May 18-27, 1977, on a small deep pond less than 50 m diameter on southern Abaco. There was no evidence the bird was mated. A lack of emergent aquatic vegetation around the shoreline presumably made the pond unsuitable for nesting. No potential vertebrate prey were observed in the pond, although large unidentified dytiscid beetles and crabs were common.

THE MAJOR PURPOSE of our expeditions to Abaco was to study the biology of the Bahama Parrot, Amazona leucocephala bahamensis. Results of these studies will be reported in detail elsewhere. Here we note only that Bahama Parrots were found to be moderately common locally in southern Abaco, nesting in vertical solution holes in the flat limestone rock that constitutes the substrate of the island. To our knowledge this nesting habit is unique in New World parrots, although several Amazons are known occasionally to utilize rock cavities in cliffs, including the Hispaniolan Parrot, Amazona ventralis (J. Wiley, pers. comm.), the Puerto Rican Parrot, Amazona vittata (Snyder et al., ms.), and the Yellow-shouldered Amazon, Amazona barbadensis (Rooth 1968). Nesting in hole in flat terrain is known elsewhere among psittacines only in the extraordinary Kea, Nestor notabilis, and Kakapo, Strigops habroptilus, of New Zealand, the Antipodes Green Parrot,

Cyanoramphus unicolor, and in the Rock Parrot, Neophema petrophila, of Australia (Forshaw, 1973). Whether the other extant population of the Bahama Parrot found on Inagua Island similarly nests in vertical solution holes is unknown. Cory (1880) reported native accounts that the Inagua population nested in holes in trees. All other subspecies of Amazona leucocephala have been reported to use holes in trees (Bangs 1916, Barbour 1923, Noegel 1976).

HE WEST INDIAN RED-BELLIED WOOD-PECKER Melanerpes superciliaris blakei, is Abaco's only endemic subspecies. Although Vincent (1966) suggested it was possibly endangered, it occurs throughout Abaco in pines and hardwood coppice. We observed these birds several times daily and found three active nests and several abandoned holes. Two of the active nest sites were in boles of dead palmettos, Sabal palmetto (Fig. 2), and one was in a dead Caribbean pine. We know of no previously published description of the nest of this species, although study of M. s. nyeanus is underway on San Salvador (Miller 1978). The nest holes in palmetto stubs were 1-2.5 m above the ground. Three entrances averaged 6.6 cm across and 5.9 cm high. One nest had an internal diameter of 12.7 cm; two others were of similar internal dimensions but were not measured. Frequent changeovers of adults carrying small food items at one of the nests suggested that it contained



Fig. 1. First sighting of a Least Grebe, Podiceps dominicus, on Great Abaco Island.

Table 1. Evidence of nesting seasons on Abaco, Bahamas.

Species	Date	Status
Red-tailed Hawk Buteo jamaicensis	Mar. 26, 1902 May 19, 1977	nest with 2 eggs (Bonhote, 1903) 2 fledglings ready to leave nest
White-crowned Pigeon Columba leucocephala	July 12-14, 1904	hundreds of eggs and young on Moraine Cay (Allen, 1905)
	May 18, 1977	pair returned repeatedly to crotch of tree, possibly early stages of nesting
Ground Dove Columbina passerina	July 4, 1904	nest without eggs or young on Elbow Cay (Allen, 1905)
Bahama Parrot Amazona leucocephala	May 27, 1977	active nests with 4, 3, 1, 0, 0 eggs
Barn Owl <i>Tyto alba</i>	Nov. 16, 1976	minimum of 2 recently fledged young
West Indian Nighthawk Chordeiles gundlachii	May 23, 1977	"nest" with two eggs
Emerald Hummingbird Chlorostilbon ricordii	May 15, 1977	collecting nesting material
Bahama Woodstar Calliphlox evelynae	May 23, 1977	carrying nesting material
West Indian Woodpecker Melanerpes superciliaris	May 23-25, 1977	nest hole maintenance at 2 nests, 1 nest with young
Hairy Woodpecker Picoides villosus	May 23, 1977	1 nest with 1 young, 1 nest under excavation
Gray Kingbird Tyrannus dominicensis	July 5, 1904	nest and fresh eggs on Elbow Cay (Allen, 1905)
Stolid Flycatcher Myiarchus stolidus	early Apr. 1902 May 21, 1977 May 24, 1977	nest begun (Bonhote, 1903) nest hole under investigation nest with young
Bahama Swallow Callichelidon cyaneoviridis	May 21, 1977	nest hole under investigation
Northern Mockingbird Mimus polyglottos	latter half May, 1902 May 27, 1977	laying starting (Bonhote, 1903) nest with eggs
Bahama Mockingbird Mimus gundlachii	July 13, 1904	adult and 2 fledged young on Moraine Cay (Allen, 1905)
Blue-gray Gnatcatcher Polioptila caerulea	May 21, 1977	nest with young in Caribbean pine about 11 m from ground
Thick-billed Vireo Vireo crassirostris	July, 1904	full grown young common (Allen, 1905)
Black-whiskered Vireo Vireo altiloquus	July 4, 1904	nest with 1 egg (Allen, 1905)
Bananaquit Coereba flaveola	end Mar., 1902 July 4, 1904	breeding starting (Bonhote, 1903) nest with 4 eggs on Elbow Cay (Allen, 1905)
Yellow-throated Warbler Dendroica dominica	May 21, 1977	adult carrying food
Bahama Yellowthroat Geothlypis rostrata	July 14, 1904 May 21, 1977	male feeding grown young (Allen, 1905 nest under construction
Red-winged Blackbird Agelaius phoeniceus	first week July, 1904	breeding season almost over (Allen, 1905)
Stripe-headed Tanager Spindalis zena	May 21, 1977	nest under construction
Black-faced Grassquit Tuaris bicolor	end Mar., 1902	incubation starting (Bonhote, 1903)

small young, but contents were not visible from the entrance. Another of the active sites was empty, and contents of the third site, approximately 10 m up in a dead pine, were not determined.

Although Bonhote (1903) found the Bahama Mockingbird, Mimus gund-

lachii, fairly numerous on Great and Little Abaco, Allen (1905) encountered the species only on small offshore cays, and J. Bond (1976, pers. comm.) did not see it on three trips to Abaco in the 1930s. Brudenell-Bruce (1975) overlooked Bonhote's observations in noting its appar-

ent absence from Abaco. Paterson (1972), who lived on Abaco for several years, stated, it was uncommon on Great and Little Abaco. Bruce Radabaugh (unpub. report to Nat'l Aud. Soc., 1973) saw the species on five of 20 days he spent on Abaco in 1972. We saw the species several times daily and considered it common in hardwood scrub with or without pine overstory in the interior of the southern part of the island. Possibly there has been no major increase in the species but rather improved access to the island's interior, since construction of a logging road network in the 1950s and 1960s may account for the increased number of observations. Alternatively, an increase in scrub habitat following logging may have favored an increase of this species.

On May 21, 1977 we found a female Bahama Yellowthroat Geothlypis rostrata building a nest in a mature pine stand on Little Abaco. The nest was in a burst of fresh shoots 1 m from the top of a pine 6 m tall along an overgrown track (Fig. 3). Two other nests of this species have been described, one in a tree stump on Eleuthera (Brudenell-Bruce 1975), the second from Grand Bahama "a foot off the ground, concealed in a rank growth of grass" (Bond 1972: 6). A tree crown site is unprecedented for the species and possibly for the genus. G. trichas of the continental United States, for example, is well known as a ground or near-ground nester (Bent 1953). The terrain surrounding the nest tree had been recently burned, and there was little underbrush to conceal a nest near the ground.

Allen (1905) reported a Black-cowled Oriole, Icterus dominicensis, specimen on Little Abaco in July 1904, and another from near Mangrove Cay. Bond (1976, pers. comm.) found orioles common around Marsh Harbor, Abaco, in the 1930s. Paterson (1972) noted their presence on Great and Little Abaco but made no note of their abundance. Radabaugh (op. cit.) failed to observe this species on Abaco. During 64 observerdays in March and November 1976, and May 1977, on both Great and Little Abaco we observed only one bird, in mature pine toward the southern end of Abaco May 24, 1977, and a bird in the same place the following day, likely the same individual. We suspect this species has declined on Abaco. If it is restricted to mature pines there is good reason for a decline since these were removed between 1959 and 1967, save for a 1620-

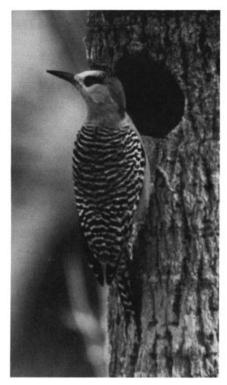


Fig. 2. The nest, previously undescribed, of the West Indian Red-bellied Woodpecker, Melanerpes superciliaris, in the bole of a dead palmetto, Sabal palmetto, on Abaco.



Fig. 3. The nest of the Bahama Yellowthroat, Geothlypis rostrata, under construction toward the top of a Caribbean pine, Pinus caribbaea, on Little Abaco.

ha tract on Little Abaco and a smaller area toward the southern end of Great Abaco, where we made our sightings. The species occurs elsewhere in the Bahamas only on Andros.

We thank John Roberts, Richard Warner, Deborah Shaw, and Cameron and Kay Kepler for their important contributions to the work that resulted in these observations. All photographs were by N. F. R. Snyder.

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Fig. 4. Bahama Parrot, Amazona leucocephala bahamensis, emerging from ground nest, a 1.57 m deep vertical solution hole in limestone rock.