

Even with these six smallest islands omitted, area (ranging from 0.1 to 19.4 ha) was still not correlated significantly with Herring Gull colonies ($\rho = -0.19$, $P = 0.32$).

The rank correlation statistics tested for a linear relationship between colony presence and area; but, as Burger and Lesser (1978) have shown for Common Terns (*Sterna hirundo*), islands intermediate in size may be preferred. Harris and Matteson (Univ. Wisconsin Sea Grant Technical Report No. 227, 1975) found the densest Herring Gull colonies in Lake Superior on islands intermediate in size. The two densest colonies found on Lake Nipigon were on intermediate-sized islands (0.4, 1.1 ha).

The data suggest that islands between 0.1 and 6.0 ha may be more favorable nesting sites than islands <0.1 or >6.0 ha (Kruskal-Wallis test, $\chi^2 = 6.9$, $df = 2$, $0.05 > P > 0.03$). No breeding colonies were observed on the six islands <0.1 ha, while 17 of the 35 islands between 0.1 and 6.0 ha supported Herring Gulls. Of the seven islands >6.0 ha, one supported Herring Gulls. Conclusions based on these results should be considered tentative as non-significant results ($P > 0.10$) were obtained when tests were run on data split into various objective size classes.

Herring Gulls on Lake Nipigon seem to nest on islands intermediate in size. Small islands are subject to inundation and colonies on large islands may be more susceptible to predation.

The occurrence of Herring Gull breeding colonies was correlated positively with distance from mainland ($\rho = 0.47$, $P = 0.0032$). All 12 sample islands within 1.1 km of the mainland lacked colonies, and all four islands beyond 6.5 km supported colonies. Islands supporting Herring Gull colonies were located significantly farther from the mainland than islands lacking colonies (Kruskal-Wallis test, $\chi^2 = 8.6$, $df = 1$, $P < 0.005$). The average distance from mainland of the 18 islands supporting Herring Gull colonies was 4.0 km (SD = 2.8), and that for the 30 islands lacking colonies was 1.9 km (SD = 1.8).

Acknowledgments.—We thank R. Kowal for his enthusiasm and his modification of Kendall's Tau to accommodate ties in the ranks. R. Kowal, R. Howe, and anonymous reviewers provided helpful criticism of the manuscript.—KEVIN TIMONEY, JIM ROGERS, AND ANNE ROBINSON, Dept. Botany, Univ. Alberta, Edmonton, Alberta T6G 2E9, Canada. Accepted 13 Feb. 1985.

Wilson Bull., 97(3), 1985, pp. 379–381

Interactions between House Sparrows and Common Ground-Doves on Walker's Cay, Bahamas.—Between 14 and 16 March 1984, we observed at least eight male and seven female House Sparrows (*Passer domesticus*) around the hotel on Walker's Cay (27°17'N, 78°25'W) at the north end of the Bahama Islands. Previous records of House Sparrows from the Bahamas have included an unsuccessful introduction at Nassau on New Providence in the 1870s (Brudenell-Bruce, *The Birds of the Bahamas*, Taplinger Publ. Co., New York, New York, 1975) and scattered records of individuals on New Providence and Grand Bahama (Brudenell-Bruce, 1975, *American Ornithologists' Union, Check-list of North American birds*, 6th ed., Allen Press, Lawrence, Kansas, 1983). Recent records are believed by Brudenell-Bruce to be of birds that had "stowed away" on boats from Florida. Emlen (*Ornithol. Monogr.* 24, 1977:128) lists House Sparrows as "common . . . permanent residents in urban Freeport and around hotels," although none was seen on his transect routes on Grand Bahama. Emlen (1977:9) also recorded the species on other north, south, and east

Bahama islands, but provides no details. Buden (Ph.D. diss., Louisiana State Univ., Baton Rouge, Louisiana, 1979) did not record House Sparrows from the southern Bahamas.

We were unable to learn either the origin of the birds or the length of time that the House Sparrows have been present, but from their numbers we assume they had nested successfully on Walker's Cay. There are regularly scheduled airline flights from Ft. Lauderdale, Florida, and the island is a frequent stopover for large sport-fishing and cargo boats from Florida, any of which could bring birds from the mainland. The birds might also have arrived on inter-island ferries from Grand Bahama or other populations. Finally, Broun (Auk 89:187–189, 1972) presents evidence of migratory movements of House Sparrows, and an alternative hypothesis is that the population on Walker's Cay resulted from natural dispersal of birds that might have accompanied migrant species from the mainland. Woolfenden and Robertson (Florida Field Nat. 3:23–24, 1975) summarize evidence to suggest that such was the case for a breeding population established briefly on the Dry Tortugas.

On 16 March, at 14:00, we observed a male House Sparrow carrying a piece of dried grass to a 40-cm-high × 25-cm-wide mass of dried grasses. The nest was ca 9 m up in a 10-m strangler fig (*Ficus* sp.). Subsequently two males simultaneously brought grasses to the same structure—one to an entrance near the top and another to an entrance on the underside. The males often perched near these entrances and within 25 cm of one another without interacting.

At 14:15 we noticed a Common Ground-Dove (*Columbina passerina*) nest on a horizontal limb 5 m up in the same tree and about 8 m from the sparrow nest. The female dove was on the nest, and the male had just flown from the ground with a piece of dried grass. As the male dove arrived at the nest, one of the male House Sparrows flew from its nest and landed 10 cm from the dove nest. It seized the end of the dove's piece of grass in its beak, whereupon the dove relinquished it, and the sparrow flew to the upper part of the sparrow nest and added it to the structure. The dove then flew to the ground for another piece of grass and flew back to its nest. The male House Sparrow flew to within a meter of the dove nest, but the dove had already given the grass to its mate on the nest, and she was incorporating the grass into the nest. The sparrow remained close and, in the next 6 min, the dove made 7 more trips with grass and was met twice more by the male House Sparrow who took the grass and added it to the upper part of the duplex sparrow nest. At no time did either dove resist the robbery.

After the loss of the third piece of grass, the doves left together and flew to the ground 50 m away. They did not return to the nest site during the next hour, although they did return to the nest tree to copulate on a branch 5 m from their nest and 5 m below the sparrow nest.

At 14:45 both male House Sparrows were away from the nest tree when a female House Sparrow flew to the lower part of the sparrow nest and removed two pieces of grass, dropping them to the ground. She then flew to the dove nest and began pulling grasses from it, also dropping them to the ground. A male House Sparrow then flew to a branch ca 1 m above the dove nest where it began calling and preening. The female sparrow also began preening, stopping every 3–4 min to pull a piece of grass from the dove nest and drop it. Within 30 min the dove nest was completely dismantled. At 15:30 both sparrows left the tree, and our observations were terminated.

Our observations are of significance not only because of the novelty of House Sparrows in the Bahamas and of their stealing nest material from the Common Ground-Doves, but also because of the "duplex" tree nest, and the lack of response from the doves. Summers-Smith (*The House Sparrow*, Collins, London, England, 1963:53) notes that tree nests are used when other sites are not available and reports up to 17 nests in a single tree (p. 55). He adds, however, that tree nests are "usually well separated" (plate 12) and that House

Sparrow males, while not maintaining large territories, do defend their nests vigorously against other male House Sparrows (p. 57). At no time was any sign of aggression shown by the male House Sparrows at this duplex nest.

Brudenell-Bruce (1975:67) noted that Common Ground-Doves in the Bahamas were very aggressive and belligerent toward other species, a trait that certainly was not manifested in this instance.

Concern has frequently been expressed for the potential negative impact of introduced House Sparrows on native cavity-nesting birds (e.g., Jackson and Tate, *Wilson Bull.* 86: 435–449, 1974). Our observations suggest that under some conditions they also may have a negative impact on noncavity-nesting species. This might be particularly true on an island such as Walker's Cay (total area ca 40 ha) where populations of all species are very small.

The paucity of information concerning the distribution and status of this species in the Bahamas is disconcerting. Available information suggests that the species has either been overlooked or is rapidly expanding its range. In view of the House Sparrow's impact in other parts of the world and its importance as a subject of evolutionary studies (e.g., Johnston and Selander, *Am. Nat.* 107:373–390), we feel that the status of Bahamian populations is worthy of further study.—JEROME A. JACKSON AND BETTE J. SCHARDIEN JACKSON, *Dept. Biological Sciences, Mississippi State Univ., Mississippi State, Mississippi 39762. Accepted 19 Jan. 1985.*

Wilson Bull., 97(3), 1985, pp. 381–385

Commentary and observations on the alleged transportation of eggs and young by caprimulgids.—Austin and Singer (*Birds of the World*, Hamlyn, London, England, 1961) state that "Nightjars are among the few birds that will move their eggs or young when disturbed or alarmed by the threat of discovery. This has been questioned ever since Audubon described a Chuck-will's-widow moving its eggs in its capacious mouth a century ago. But the phenomenon has been observed in this species often enough since to validate it."

Commentary.—Statements such as the one above persist in the ornithological literature despite the fact that there is no satisfactory evidence that anyone since Audubon (*Ornithological Biography*, I, Edinburgh, Scotland, 1831) has seen a Chuck-will's-widow (*Caprimulgus carolinensis*), or any other nightjar for that matter, carrying an egg in its mouth. Several ornithologists have deliberately tried to induce Chuck-will's-widows to perform this feat by handling the eggs and provoking the birds, yet none has succeeded (Ganier, *Wilson Bull.* 76:19–27, 1964). After a critical reading of Audubon's biographies, Ganier (1964) concluded "... it is my belief that Audubon had no such personal experience on which to base this story. It does not fit in with my own long experience with these birds, nor have I been able to find in the literature any ornithologist since Audubon's time who claims to have witnessed such an episode."

Extensive studies of Common Nighthawks (*Chordeiles minor*) by Weller (*Auk* 75:48–59, 1958), of Paurques (*Nyctidromus albigollis*) by Skutch (*Parent Birds and Their Young*, Univ. Texas Press, Austin, Texas, 1976) and of Whip-poor-wills (*Caprimulgus vociferus*) by Raynor (*Bird-Banding* 12:98–104, 1941) also failed to produce evidence for oral egg-carrying in these species.

In Africa, the Mozambique Nightjar (*C. fossii*) is credited with transporting an entire clutch in its bill (Mackworth-Praed and Grant, *Birds of Eastern and North Eastern Africa*, Longmans, London, England, 1952). I have been unable to trace the authority for this