First Nesting of the House Sparrow at Dry Tortugas

To date only three land birds are known to have bred at Dry Tortugas, the Mourning Dove (*Zenaida macroura*), Mangrove Cuckoo (*Coccyzus minor*), and Mockingbird (*Mimus polyglottos*) (Robertson and Mason 1965). For the latter two species, nesting was a singular and apparently unsuccessful event. Mourning Dove nesting was suspected in 1959, confirmed in 1962, and continues to thrive.

The first record of a House Sparrow *(Passer domesticus)* on Dry Tortugas was in June 1941, when a single bird was seen. The second record is of 3 individuals seen on 13 April 1953 (Robertson and Mason 1965). Since 1963 the species has been seen there almost every year in spring, which is when most observers frequent the area. On 10 May 1965 a specimen was obtained and is housed at the University of South Florida. It is a female (ovum 2 mm), 23.4 g with little fat, from Garden Key, prepared by Sievert A. Rohwer (SAR 313) The high count of House Sparrows for any one day prior to 1974 is 4 individuals, with a great majority of records being of females.

In 1974 on Garden Key, P. W. Sykes *(in litt.* to WBR) saw a lone male 5-7 April, and O. T. Owre and students saw a male and female together 20-21 April. Following departure from the area some of Owre's students reported seeing these sparrows carrying nesting material, but they could provide few details (Owre, pers. comm.). Only 2 females were seen 23-27 April when we visited Dry Tortugas, but during our visit of 14-26 June a lone pair was first seen on 17 June, and the same day a nest was found. Building and copulation were observed during the next several days. The nest was about 15 feet off the ground in the lone Coconut Palm *(Cocos nucifraga)* growing outside Fort Jefferson just east of the moat bridge. The nest was tucked behind a group of coconuts and dead frond bases with the entrance hole facing southwest. On 24 June Chet E. Winegarner found that the nest contained 4 eggs. Unfortunately no additional nest inspections were made, but circumstantial evidence suggests young were fledged despite the generally acknowledged scarcity of terrestrial invertebrates at Dry Tortugas.

On 24-25 September, Betty Robertson (pers. comm.) saw up to 5 House Sparrows, including one adult male, feeding together near the nest site. On 21-23 October, at the same place, James A. and Marilyn Kushlan (pers. comm.) could find only 2 female-plumaged House Sparrows, including one with the yellowish mouth corners of a young bird. On 31 January 1975, David and Ruth Shea (pers. comm.) visited Garden Key for about 6 hours specifically to search for House Sparrows. They found none, and unusually few land birds of any kind (14 individuals of 5 species).

Predation by migrating Sharp-shinned Hawks *(Accipiter striatus)* may have eliminated the population of House Sparrows. Banders from the U. S. Fish and Wildlife Service who worked at Dry Tortugas 8-22 October reported flights of "thousands" of Sharp-shins and noted that many of those they handled were emaciated and apparently starving (James L. Rous *in litt.* to Jack E. Stark, Superintendent, Everglades National Park). The unusually large concentration of hawks greatly reduced numbers of small land birds in the area. In late October, when fall migrant land birds normally are abundant at Dry Tortugas, the Kushlans could locate fewer

than 25 individuals of 5 passerine species on Garden Key along with an equal number of Sharp-shinned Hawks. It appears that the observations reported here are an instance of successful colonization of a remote island by a land bird, followed by natural extirpation.

For reasons discussed earlier (Robertson and Mason 1965), we suspect that the House Sparrows that reach Dry Tortugas are either true migrants or birds from the West Indies that accompanied north-bound migrants of other species, rather than, for example, waifs that arrived from the Florida Keys aboard boats. A considerable accumulation of evidence, including observations of apparent migratory movements, band recoveries, and birds killed at TV towers (Summers-Smith 1963, Broun 1972, Kendeigh (chm.) 1973, Crawford 1974), suggests that House Sparrows may be less sedentary than is commonly supposed. If those occurring at Dry Tortugas originate in the West Indies, the most likely source is Cuba, where the species is said to be "widespread" (Bond 1971, p. 223). The House Sparrow population formerly established in northeastern Jamaica has evidently disappeared (Spence 1973).

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