YELLOW-BELLIED ELAENIA (*Elaenia flavogaster*). Male (1560) collected 1 October 1975 near Torres within 50 m of the site of the Glittering-throated Emerald. It was engaged in courtship behavior and an apparent female was present. Its territory centered on a large, broad-leaved tree in open fields. Another male (1747) was collected 23 January 1976 at Fazenda do Pontal, Osorio. Previously recorded from Misiones, Argentina, but not south of São Paulo in Brazil.

WHITE-TIPPED PLANTCUTTER (*Phytotoma rutila*). Female (1234) and male (1235) collected 5 and 6 May 1974 at 30°11′S, 57°30′W, near Barra do Quaraí. The male was one of a group of four which included both sexes. All were found in a region dominated by low, spiny espinilho, but were themselves perched at the top of taller, broad-leaved trees about 10 m high. These are the first records for this family in Brazil. Previously recorded in southern Uruguay, and as a winter migrant in adjacent Argentina.

CREAM-BELLIED GNATCATCHER (*Polioptila lactea*). Female (979) and male (1076) collected 2 August and 27 November 1974, respectively, near Garruchos, São Borja. Several individuals were observed on each of these occasions, and one was seen in the same area on 23 October 1975. In this area the species usually inhabits the canopy of more open areas of mixed forest, sometimes as part of mixed flocks, but individuals were also seen in bushes at the forest edge. Previously recorded south to Paraná, and in Misiones, Argentina.

COMMON WAXBILL (*Estrilda astrild*). Sick has informed me (*in litt.*) that he saw this introduced African species at Santa Vitoria do Palmar, 33°31′S, 53°21′W, on 20 January 1966. Walter Voss (in press) has records of its presence in Novo Hamburgo, 29°42′S, 51°07′W, during most months of the year.

UNICOLORED BLACKBIRD (*Agelaius cyanopus*). Two males (1238) and (1345) collected in the Banhado São Donato, a saw-grass marsh at approximately 28°57′S, 56°11′W, on 7 May 1974. No. 1238 had female plumage. The species was seen again in the same area on 23 November 1974 and 2 November 1975. Previously recorded so far south only from adjacent areas of Argentina.

HOODED TANAGER (*Nemosia pileata*). Flavio Silva (in press) collected a male on 7 December 1975 near Garruchos, São Borja, where he also saw other individuals of both sexes. The closest previous record is from western São Paulo.

CHESTNUT SEEDEATER (*Sporophila cinnamomea*). Sick, Oswaldo Camargo, and I saw one apparent male of this little-known species about 35 km east of São Borja in a marshy roadside area at approximately 28°45′S, 55°40′W on 7 March 1971. We all noted the dark brick-red back and underparts and the gray cap. The closest previous Brazilian record is from Campo Grande, Mato Grosso, but it has more recently been found in Entre Rios, Argentina (Narosky, S. 1973, Hornero XI: 169–71).

BLACK-CAPPED WARBLING-FINCH (*Poospiza melanoleuca*). Male (963) collected 12 July 1973 near Barra do Quaraí, and female (964) collected 13 July 1973 about 20 km south of Uruguaiana at 29°57′S, 57°10′W, both in riverine brush at the edge of espinilho vegetation. The closest previous record is from adjacent areas of Uruguay.

I am indebted to Helmut Sick for providing me with information on his observations and for confirming my identification of Baird's Sandpiper and the Glittering-throated Emerald; to Melvin Traylor for confirming my identification of the Yellow-bellied Elaenia; to John Farrand, Jr. for determining the subspecies of the Common Nighthawk; to Flavio Silva and Walter Voss for advancing information to me on their discoveries, and to the Smithsonian Institution, the Museu Nacional, Rio de Janeiro, and the Frank M. Chapman Memorial Fund for support that has made these investigations possible.—*Received 13 November 1976, accepted 28 December 1976.*

Cowbird Parasitism on the White-crowned Sparrow

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The Brown-headed Cowbird (*Molothrus ater*) is a widespread brood parasite found throughout North America. Baptista (1972) noted that White-crowned Sparrows (*Zonotrichia leucophrys*) have been infrequently recorded as cowbird hosts, and reported 10 parasitized broods of the race *nuttalli*. Lewis (1973) reported one case of parasitism and Lavers (1974) three additional cases of parasitism of *Z. l. pugetensis*. In addition to the five records reported by Friedman (1963) for *Z. l. leucophrys*, King et al. (1976) observed seven cases of parasitism of *Z. l. oriantha*.

Here we report a rather heavy influx of cowbirds into a breeding population of *Z. l. nuttalli*, assess its effect on the reproductive success of the hosts, estimate the reproductive success of the parasites, and consider whether or not the parasitized and non-parasitized nests differed in any obvious ways.

TABLE 1. Reproductive success of parasitized White-crowned Sparrow nests and Cowbird reproductive success

	Non-parasitized nests		Parasitized nests			
			Sparrow		Cowbird	
	1975	1976	1975	1976	1975	1976
Number of nests	143	227	1	11	—	—
Mean number of eggs	2.66	2.47	0	3.09	1	1.09
Mean number of nestlings	1.57	1.23	0	1.27	0	0.73
Mean number of fledglings	0.82	0.61	0	0.45	0	0.64

The observations were made over a period of 6 years while we studied other aspects of the behavior of *Z. l. nuttalli*. These studies were done in the San Francisco Bay Region, primarily at Twin Peaks, the Presidio, and Point Reyes in Marin County, California. In these same areas, Baptista (1972) either saw or received reports of nine instances of cowbird parasitism on *Z. l. nuttalli* between 29 June and 21 July 1969. Baptista received one report of parasitism in 1970 (date unknown) and we saw no cowbirds or any evidence of cowbird parasitism during 25 days in the field between 25 April and 25 July 1970. In 1971 Baptista received three reports and we observed none during 38 days in the field between 26 April and 6 August. We were in the field for 37 days between 24 March and 3 August 1972, and 52 days between 1 March and 19 June 1974, during which time we saw no cowbirds nor observed any evidence of parasitism. In 1975 we spent 74 days in the field between 21 March and 14 July and found only one abandoned cowbird egg in the nest of a White-crowned Sparrow. In 1976 we spent 76 days in the field between 29 March and 17 July and observed 14 instances of cowbird parasitism on the White-crowned Sparrow.

Detailed data were kept on the reproductive success of all nests in 1975 and 1976. In 1976 reproductive success was slightly lower (but not statistically significant) for parasitized nests than for those not parasitized (Table 1). With a much smaller expenditure of reproductive energy the cowbirds seem to achieve almost the same production of fledglings per nest (0.61 for non-parasitized White-crowned Sparrows compared to 0.64 for cowbirds). This may represent an extremely large difference in success since the evidence gathered by Payne (1976) indicates that each cowbird female lays about 24 eggs during the breeding season in central California.

Although only 5% of the total nests in 1976 were parasitized, all of the parasitism occurred at the end of the breeding season. The first cowbird egg was found on 23 May and the last one on 29 June. During this period we located a total of 52 nests in which cowbirds could have deposited eggs, i.e. white-crowns were either laying or brooding eggs. Viewed in this way, 21% (11/52) of the available nests were parasitized. Payne (1973) found that the breeding season for Brown-headed Cowbirds begins in late April and early May and ends in late June and early July. He hypothesized that these breeding dates were adapted to coincide with the peak breeding dates of the common hosts. The time of cowbird breeding would cause them to miss the early nests of the common hosts, but this might not be serious since about half of the early breeding species (late April and early May) have never been recorded to rear a young cowbird successfully. This leads us to speculate that White-crowned Sparrow breeding activity does not constitute one of the important factors in the development of cowbird nesting patterns. The White-crowned Sparrows in our breeding population begin nesting in early April and the incidence of nestings is constant until July.

Another way to look at reproductive success is to consider how many nests are abandoned with eggs (non-parasitized, 9/41 = 22%; parasitized, 2/11 = 18%), how many were lost due to predation (non-parasitized, 9/41 = 22%; parasitized, 3/11 = 27%), and how many of the total nests produced at least one fledgling White-crowned Sparrow (non-parasitized, 23/41 = 56%; parasitized, 6/11 = 55%). Thus, the parasitized birds seem to be no more likely to abandon a nest with an odd egg, they suffer no greater predation of eggs or nestlings, and they are just as likely to produce at least one fledgling (although the total number is smaller) as non-parasitized birds.

Are there any differences in the nature of the available nest sites that were parasitized as compared to those that were not? The mean height of the 41 non-parasitized nests was 39.0 cm while that of the 11 parasitized nests was 67.2 cm. A t-test for independent means was calculated on the heights after they were subjected to a square root transformation to eliminate skew, and the t of 2.36 is significant ($P < .05$, 49 df).

The type of vegetation in which nests were built did not differ for parasitized as compared to non-parasitized nests. There was no more than one parasitized nest in any one type of vegetation. Five of the

parasitized nests were located in one or the other of the 10 most frequently used types of vegetation for non-parasitized nests (*Baccharis*, sage, lupin, scotch broom, *Baccharis* and berry combination) and only three parasitized nests were located in vegetation not used for non-parasitized nests (fern, berry-grass combination, *Baccharis*-grass combination); only one of these was unique, the other two being a combination of frequently used vegetation.

It is possible that the estimates of the frequency of parasitism are low. Of 41 non-parasitized nests, 4 lost 1 egg during the course of incubation, with the remaining eggs left undisturbed. The egg could have been lost either through predation (which seems somewhat unlikely since the others were intact and the nestlings were successfully hatched in three instances), through ejection by the parent (which has not been reported to occur in this species), or through removal by a cowbird that placed its own egg in the nest and that egg was subsequently removed by the host. If this latter event did occur the frequency of parasitism found here could be as high as 15/51 (29%).

The great variability in the incidence of cowbird parasitism of *Z. l. nuttalli* over different years should lead to caution before deciding whether or not the species is a common or an uncommon cowbird host: it might be both depending on the particular breeding season under consideration and the stage of the breeding season during which observations are made.

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Status and Nesting of the Yellow-billed Cuckoo in Puerto Rico

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Knowledge of the status of the Yellow-billed Cuckoo (*Coccyzus americanus*) in the Greater Antilles has been clouded by the bird's elusive behavior and spotty distribution on the islands, and by a major movement of North American migrants through the area to and from their wintering grounds in South America. Although Bond (1956) states that they breed in the Greater Antilles, nests are known only from Cuba, St. Croix (Bond 1956), and Jamaica (Lack 1976), and Bond considered the bird rare in Puerto Rico. Other students of Puerto Rican ornithology have suggested that the species is "uncommon" (Leopold 1963), "rare" (McCandless 1958), or a regular migrant or resident species (Wetmore 1916). Although no nests have been reported, most authors suspect that it breeds, and agree that it frequents coastal areas in western or southwestern Puerto Rico, primarily from May to September (Wetmore 1916, Danforth 1936, McCandless 1958, Leopold 1963, Biaggi 1970). From 1968 to 1971 we conducted linear strip censuses along pre-selected routes throughout the island, counting all birds heard or seen (Kepler and Kepler 1970); data we obtained on the Yellow-billed Cuckoo helped clarify and amplify existing information on its distribution and status.