

## SHORT COMMUNICATIONS

### Intraspecific Nest Parasitism in the Savannah Sparrow

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Evidence of intraspecific nest parasitism in passerines is rare although some well documented cases do exist (Yom-Tov et al. 1974, *Ibis* 116: 87–90). This note describes an incident whose circumstances suggest that two complete clutches were laid simultaneously in the same nest by two female Savannah Sparrows (*Passerculus sandwichensis*).

On 23 June 1977 at La Pérouse Bay, Manitoba, 40 km east of Churchill, a Savannah Sparrow nest containing 10 eggs was discovered by flushing an incubating bird. Subsequently daily visits to the nest were made. On 1 July the nest contained six nestlings and four eggs and on the following day, nine nestlings and one egg. The status of the nest remained as such until 6 July when all contents of the nest were gone, presumably due to predation. With the exception of 3 July, weights and tarsal lengths were measured daily for all nestlings. The mean clutch size for 80 nests found locally in the same habitat in 1976 and 1977 was  $4.74 \pm 0.55$  (SD) (range = 3–6) eggs. Five was the modal clutch size. Peak clutch initiation date in 1977 was 16 June. Clutch initiation was highly synchronous with 79.4% of all clutches found in 1977 initiated between 14 and 18 June. The incubation period averaged 12 days with incubation usually beginning with the penultimate egg.

Given the distribution of clutch size, a 10-egg clutch is highly improbable, but two 5-egg clutches are likely. An examination of egg appearance tended to support this as eight of the 10 eggs were readily separated into two distinct groups, although the two remaining eggs were not obvious members of either group. The hatching sequence would also suggest two 5-egg clutches laid simultaneously with clutch initiation on 17 June. During each visit to the nest at least 10 min were spent observing alarm-calling adults nearby and on no occasion were more than two birds observed. Due to a lack of marked sexual dimorphism the sex of the birds could not be determined nor was it known if the same birds were observed each occasion. If two females were responsible for the clutch then at least one bird must have deserted the nest at some time between the completion of laying and the discovery of the nest.

Given that our suggestion is correct, the question arises of why two females would lay in the same nest. Shortage of nest sites can be disregarded as the species is ground nesting and quite flexible in the nature of sites that are used. It seems more likely that, due to a breakdown in the normal sequence of nest building prior to egg laying, one female was forced to lay in a nest that was already available. Hamilton and Orians (1965, *Condor* 67: 361–383) discuss several ways that such a situation could occur.

A 10-egg nest represents a "natural experiment" manipulating clutch size. Nine of the 10 eggs were successfully incubated; we do not know whether the tenth egg failed to hatch due to infertility or poor incubation. The daily measurements of weight and tarsus both for nestlings from the 10-egg nest and for nestlings from a total of 52 nests hatching within 2 days of peak hatch (Table 1) reveal remarkably little

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TABLE 1. Nestling measurements from day of hatch

	Days from hatch				
	1	2	3 <sup>a</sup>	4	5
	Weight (g ± SD)				
10-egg nest	2.05 ± 0.26	3.34 ± 0.55	5.05 ± 0.07	7.21 ± 0.91	9.49 ± 1.01
Normal nests	2.10 ± 0.38	3.19 ± 0.67	5.10 ± 0.96	7.28 ± 1.16	9.97 ± 1.48
	Tarsus length (mm ± SD)				
10-egg nest	6.80 ± 0.38	8.72 ± 0.49	10.45 ± 0.35	13.22 ± 0.81	15.50 ± 0.77
Normal nests	6.89 ± 0.60	8.50 ± 0.77	10.69 ± 1.05	13.23 ± 1.23	15.92 ± 1.18

<sup>a</sup> Asynchronously-hatching young are aged from their date of hatch, thereby giving values for the 10-egg nest on day 3 in spite of no measurements being made on 3 July

difference in growth by either measurement up to day 5. This agrees with Hussell's (1972, Ecol. Monogr. 42: 317-364) conclusion from clutch size manipulations that the parents' ability to feed young is unlikely the sole factor responsible for determining the number of eggs a bird will lay. It is nevertheless likely that had the nest not been prematurely terminated by predation severe brood reduction would have occurred, as by day 5 several nestlings were on the verge of being crowded out of the nest.

We thank Judy Smith and John Yee for showing us the location of the nest. Received 28 October 1977, accepted 15 December 1977.

### First United States Record of Paint-billed Crake (*Neocrex erythrops*)

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On 17 February 1972 Donald Baker, then an undergraduate in the Department of Wildlife and Fisheries Sciences, Texas A&M University, caught a small rail in one of his traps for furbearers, along a stream south of College Station, Brazos County, in east-central Texas. The bird was brought to me and subsequently identified as a Paint-billed Crake (*Neocrex erythrops*), a Sora-sized South American rail. The specimen, a male weighing 51 g, was prepared as a skin and partial skeleton and deposited in the Texas Cooperative Wildlife Collections (No. 8930), Texas A&M University.

Meyer de Schauensee (1970) gives the range for *Neocrex erythrops* (*sensu lato*) as Columbia and Venezuela south through Brazil to Paraguay, Argentina, and Peru. Wetmore (1967) regards the northwestern populations (from Colombia west of the Andes and northwestern Ecuador) as a distinct species, *N. columbinaus*, and describes the single specimen known from central Caribbean Panama as a new subspecies, *N. c. ripleyi*. Harris (1973) records *Neocrex erythrops* from the Galapagos Islands, and it occurs widely in South America east of the Andes from Colombia eastward and southward. In examining specimens of *Neocrex*, the Texas specimen resembles material from the Galapagos Islands, i.e., *Neocrex erythrops*; it has the slate gray flanks barred with white, and the more open nostrils (Wetmore 1967). Storrs Olson has examined this specimen and concurs (in litt.) that it is from the *erythrops* rather than the *columbianus* group of populations.

As the occurrence of a single bird this far out of its range is both unusual and unexpected, I have attempted to locate a possible source from zoos and importers. No public zoo in Texas, nor the Audubon Park in New Orleans, Louisiana, the Cincinnati Zoo, Ohio, the St. Louis Zoological Gardens, Missouri, or the Lincoln Park Zoological Gardens, Chicago, Illinois have kept any South American rails. Inquiries to several major importers were also negative; according to F. M. Thompson (in litt.), the species has not been available. Finally, I checked the listings of birds imported into the United States for the years 1968-1971, as published by the Fish and Wildlife Service (Banks 1970, Banks and Clapp 1972, Clapp and Banks 1973a, 1973b). No *Neocrex* rails are included in these four listings.

It is impossible to eliminate every potential source of an escaped bird, whether brought into this country illegally or imported under some other name. However, most of the Rallidae on the import lists are large or brightly colored species, including coots, gallinules, and wood-rails. It is improbable that a person would smuggle into the country a small, secretive, and relatively dull-colored rail such as *Neocrex erythrops*. The possibility of natural occurrence cannot be dismissed, no matter how zoogeographically unlikely. The Texas bird was in good condition and showed no obvious signs of recent captivity (e.g., no noticeable feather wear, bill or toe deformities, and the soft part colors match published descriptions). Certainly, had the bird been in captivity, it had escaped some months prior to its demise and apparently had travelled some distance. Further, as a group, rails are noted for appearing in odd places (see Peters 1934: 157-213, for extralimital records and for the many oceanic islands inhabited by members of the family Rallidae). It is important, I believe, to record the occurrence of such unusual individuals; the credibility of these extralimital records may later be confirmed by similar occurrences.

Finally, I suggest that a method of marking/banding imported birds at the point of importation needs to be implemented immediately. Such a program would eliminate doubt in future cases of unusual, extralimital occurrences in the United States.

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