Record of female Cardinals sharing nest.—The Cardinal (Richmondena cardinalis) has long been known for its aggressive territorial behavior, both the male and female taking part in defense of territory. It appears of value, therefore, to record observations of nest sharing by two female Cardinals in Topeka, Kansas during the summer of 1967.

On 29 June 1967 I was told that a female albinic Cardinal (known to have been in the same neighborhood for about four years) was sharing a nest with another female Cardinal. I visited the site immediately and as I approached, both females flew from the nest, which contained five eggs. Two additional eggs had fallen to the ground.

On 4 July I returned to set up a photographic blind near the nest, and again both females flew from the nest as I entered the yard. No additional eggs had been added to the clutch. While I watched from my blind, the male and normal female returned to a garage roof near the nest after a brief time and hopped about nervously peering down at the nest. The albinic female flew across the yard three or four times without alighting and on two of her flights was aggressively pursued by the normal female into another yard some distance from the nest. The normal female finally returned to the nest and resumed incubation.

As I approached the site at noon on 5 July both females flew from the nest, this time revealing four newly-hatched young and one egg. On this occasion all three adult birds returned at once and began feeding the young, the normal female later settling down to brood. Almost immediately the albinic female brought food and passed it to the brooding female who in turn stood up and fed the young. During this period in the blind I observed no aggressive behavior by any of the birds.

By noon on 8 July when I visited the nest for the last time, the fifth egg had hatched and all three adults were engaged in feeding the young. No brooding, food passing or aggressive behavior was observed during a 45 minute period.

Shared nesting is comparatively uncommon among the birds and for a normally monogamous, strongly territorial species like the Cardinal, this behavior must be rare indeed. Though not conclusive, the clutch size suggests that eggs were laid by both females and that all were fertilized by the one male seen in the neighborhood. Cardinal nesting records in Kansas indicate an average clutch size of 3.31 with extremes ranging from 3 to 5 eggs based on a sampling of 25 nests (Johnson, Directory to the bird-life of Kansas, Publication No. 23, University of Kansas Museum of Natural History, 1960).

—Orville O. Rice, 1663 West 28th Terrace, Topeka, Kansas, 27 February 1968.

Relationships among some South American seedeaters (Sporophila), with a record of S. hypochroma for Argentina.—In an estero (sawgrass area with standing water) 21 km east-southeast of Itá-Ibaté, northern Corrientes, Argentina, on 28 October 1967, my companion Richard S. Crossin collected what appeared to be a bright male of Sporophila minuta. The specimen weighed 9.4 g, and had enlarged testes ( $6 \times 5$  mm), dark brown irides, brownish legs, and a black bill lightly tinged with olive.

While attempting to identify this specimen, I was able to examine and compare specimens of various South Amercian species of Sporophila (listed below), and especially specimens of both sexes of Sporophila minuta minuta (for the purposes of this discussion S. m. parva is included with this form) and S. m. hypoxantha. These two forms are widely allopatric; S. m. minuta occurs in southern Central America and northern South America north of Amazonia, while S. m. hypoxantha occurs in southern Brazil, Paraguay, eastern Bolivia and northern Argentina. I believe that these forms are separate species, and that they are not as closely related as their superficial similarity suggests. Mensural data (Table 1; de Schauensee, Proc. Acad. Nat. Sciences of Philadelphia, 104:191, 1952)

Table 1											
Some Measurements	of	Males	OF	SEVERAL	Forms	of	Sporophila*				

Sample (N)	Wing length	Tail length	Bill length	Tarsal length	Bill width
S. ruficollis (13)	52.8–55.3	38.9-42.5	5.6-6.2	13.2–14.2	4.7–5.4
S. hypoxantha (10)	52.6-55.6	41.5 - 42.8	5.6-6.5	13.2 – 14.2	4.4 - 5.1
specimen	53.6	41.3	5.3	13.4	4.6
S. hypochroma (7)	50.9-53.9	39.1-42.0	5.7 – 6.2	13.2 - 14.2	4.5 - 5.1
S. minuta (10)	49.7-52.4	40.4-42.4	5.7 - 6.4	13.6-14.9	5.3-6.0

<sup>\*</sup> Comparably plumaged fully adult males, except S. hypochroma (males from various times of the year). Specimens of ruficollis and hypoxantha are from Corrientes, Argentina. Measurements are in millimeters, wing length = chord, bill length is from the nostril, and bill width was measured across the nostrils.

suggest that S. m. minuta has shorter wings, a shorter tail, longer legs, and, especially, a bill similar in length to that of hypoxantha, but wider, and thus more massive. From the examination of museum skins of both sexes of these forms, it is apparent that hypoxantha is larger in size. Males of minuta differ from hypoxantha in their browner (even slightly green-brown), less gray coloration, as pointed out by de Schauensee (op. cit., p. 192). They are also darker below on the average than are males of S. m. hypoxantha. The presence of a cheek patch in males of minuta also distinguishes that form from hypoxantha. The latter is, in this respect and in other features of pattern, similar to Sporophila hypochroma, S. ruficollis and S. cinnamomea. Females of S. m. minuta and S. m. hypoxantha are quite different; indeed, the females of a number of species of Sporophila are considerably less different. Females of minuta are yellower brown above, and duller brown below than are females of hypoxantha. The latter are more richly colored below, invariably showing some of the buffy or even rufous coloration of that area in males of this form. Most important, females of hypoxantha have a large white speculum in their primaries and a large white patch at the base of the secondaries and inner primaries; the speculum is lacking in females of minuta, which have only a small, indistinct area of white on their inner wing feathers. I believe that these differences are of sufficient magnitude to warrant species status for Sporophila hypoxantha.

Comparison of the questionable specimen from Corrientes with other specimens of Sporophila available in the American Museum of Natural History disclosed that its underparts (including its throat, ear coverts, breast, abdomen, sides and flanks) and rump exceeded in darkness the range of variation found in S. hypoxantha. These regions are deep rufous-chestnut in our specimen, which was found to match exactly adult male specimens of the central Bolivian Sporophila hypochroma hypochroma. I was able to examine seven of the latter (including the type); these included available American Museum of Natural History specimens, and, thanks to K. C. Parkes of Carnegie Museum, E. R. Blake of the Field Museum of Natural History in Chicago, and R. M. de Schauensee of the Academy of Natural Sciences of Philadelphia, specimens from these institutions. Also available for comparison were adult males of Sporophila hypoxantha (N = 25), S. minuta (18), S. ruficollis (30), S. hypochroma hypochroma (7,) S. castaneiventris (53), a hybrid of S. h. hypochroma X S. castaneiventris (Academy of Nat. Sciences of Philadelphia no. 10742, discussed by de Schauensee, loc cit., pp. 194-195) and S. cinnamomea (3). Critical comparison with S. hypoxantha and S. ruficollis was greatly facilitated by the recently-taken Corrientes material of both forms obtained by W. H. Partridge, and now in the American Museum of Natural History.

There is great similarity in mensural characters (Table 1) displayed by the abovementioned forms. The females of some of them appear to be indistinguishable. These species differ mainly in the pattern of chestnut or rufous and gray of the males. Considering these patterns and mensural characters, the bird in question, although matching S. h. hypochroma is very similar to S. hypoxantha. As indicated in Table 1, these forms are virtually alike in measurements, with hypochroma perhaps tending to have slightly shorter wings and a shorter tail. Males of the two are alike except for the much darker underparts and rump of S. hypochroma. The Corrientes specimen is mensurally within the range of variation of both forms in all characters, except for its inordinately short bill. Since it has the underparts and rump of hypochroma, and exceeds the known variation of hypoxantha in this regard, it appears to represent S. h. hypochroma. The condition of its gonads suggests that it would have bred, thus indicating sympatry of S. hypochroma and S. hypoxantha. However, there exists the possibility that the specimen represents an aberrant individual of S. hypoxantha. The conspecificity of hypochroma and hypoxantha, suggested by their allopatry (except for the Corrientes specimen) and their close similarity in pattern and measurements, would render such an aberrant individual more likely. However, study of the possible area of contact between these two forms in Bolivia, or of further individuals of hypochroma breeding sympatrically with hypoxantha, is necessary to clarify this question. For the present, the conservative course is to consider the Corrientes specimen to be an example of S. hypochroma, thus regarding the two forms as sympatric and separate species. This represents a considerable extension of the range of hypochroma from Bolivia (see de Schauensee, loc. cit.,) but it is possible that this form breeds sporadically between there and Corrientes in the intervening region of eastern Bolivia and Paraguay.

I cannot accept the determination of Singh's (article in the newspaper The Daily Argosy, Georgetown, Guyana, of 25 October 1960, p. 6) Sporophila hypochroma rothi as a race of S. hypochroma on the basis of but one specimen. The tremendous distance between the range of S. hypochroma hypochroma in Bolivia (and Corrientes, Argentina) and Guyana, and the coloration of "rothi" beg another explanation. I feel that S. hypochroma rothi actually represents a hybrid between S. castaneiventris and S. minuta, two species which are common to abundant in the Abary region of Guyana (Snyder, D. E., The birds of Guyana, 1966:277-278) where rothi was obtained. Indeed, the description of the specimen, and even its picture, suggest that it is such a hybrid. The following comments (Singh, loc. cit.) from the description of rothi are noteworthy: "gray of the upperparts slightly darker than in hypochroma—about as in castaneiventris; secondaries broadly edged with gray, not ashy white as in hypochroma; white speculum at base of inner primaries much restricted . . . ; malar region chestnut as in hypochroma (and castaneiventris), but auriculars, sides of head and sides of neck gray as in castaneiventris." By substituting minuta for "hyprochroma" in this description, these features are clearly intermediate between that form and castaneiventris. Nothing else in Singh's description precludes the possibility of his specimen being such a hybrid, which I consider much more likely than its representing a very disjunct, distinct, and rare form of S. hypochroma. The latter therefore reverts to a monotopic species. Regarding Singh's discussion of the relationship of castaneiventris and hypochroma (which have hybridized; see above list of specimens examined), taken from de Schauensee (loc. cit.), I consider these species related, but not conspecific. Indeed, S. hypochroma is probably more closely allied with S. hypoxantha, and possibly S. ruficollis and S. cinnamomea, than with castaneiventris (the latter is small, like minuta, and both sexes lack a speculum).

Finally I suggest the possibility that Sporophila ruficollis is a color phase of S.

hypoxantha. These "species" are identical in coloration and measurements (Table 1), except for the black throat of males of ruficollis. The ranges of ruficollis and hypoxantha almost exactly coincide (de Schauensee, loc. cit.). Both dark and light throated forms are found side by side in the same wet pampas of Corrientes, and probably elsewhere. Specimens exist with an array of throat colors from black through mixed brown (tan) and black to the pale rufous of hypoxantha. Studies are needed to establish whether or not this represents a case of polymorphism.

I am grateful for the support of my field work in Argentina by the National Science Foundation (grant G.B.—5891). I also thank Richard S. Crossin for assistance in the field, and Sheila C. Short for aid in measuring specimens.—Lester L. Short, Jr., The American Museum of Natural History, New York, 16 March 1968.

Status of the Lincoln's Sparrow in Jamaica, West Indies.—The Lincoln's Sparrow (*Melospiza lincolnii*) has been reported only a few times from the island of Jamaica, and it is worthwhile to add three new observations which may clarify the status of this species as a wintering bird in Jamaica and the Greater Antilles.

The first Jamaican record of this species was a specimen taken by James Bond in dense forest below Whitfield Hall, St. Thomas, at about 1,350 meters in the Blue Mountains, on 14 December 1934 (Bond, pers. comm.). This specimen, originally No. 108263 in the Academy of Natural Sciences of Philadelphia was presented by Bond to the Institute of Jamaica where it is now No. 241 in the bird series. The second Jamaican record was a sight observation by Geoffrey Carleton near Torre Garda, St. Thomas parish, in a brushy meadow at about 1,150 meters on 14 February 1952 (Linnaean Soc. of New York, News-Letter. No. 4, 1953). The third record was a bird which struck a window at Haberton, Content Gap, St. Andrews, at 1,030 meters, on 20 April 1959. This specimen, identified by C. Bernard Lewis of the Institute of Jamaica, is preserved in alcohol as No. 260 in the bird series at the institute. Another sight record is reported for Green Hills near Hardwar Gap, St. Andrews, at 1,290 meters (Gosse Club, Broad-Sheet, No. 1, August, 1963).

On 27 December 1964, the author observed a Lincoln's Sparrow in a small brushy ravine on a steep slope on the edge of tropical rain forest, near Hardwar Gap. The location, on the border of Portland and St. Andrew parishes, is at 1,320 meters. The bird was observed for several minutes as it fed in the undergrowth and then perched in an open bush. On 27 January 1965, within 100 meters of the above observation, I observed at least three Lincoln's Sparrows which were flushed from a tangle of a creeping fern (Gleichenium sp.) at the edge of the rain forest. It is possible that one of the three was the same individual seen a month earlier. On 10 January 1965, I observed a Lincoln's Sparrow among bushes in a steeply sloping pasture about 1.2 kilometers east of Whitfield Hall, St. Thomas, at an elevation of 1,430 meters.

To the above records one can add two Greater Antillean reports, both at low elevations. The first West Indian record was a sight observation by Danforth, near La Plata, Puerto Rico, on 14 December 1923. Another bird was recorded on the outskirts of Havana, Cuba, 8 January 1964 (Bond, pers. comm.).

In Jamaica, at least, the bird appears to be restricted to the mountains. Despite the handful of observations, this may be significant, because the island is frequently visited by North American bird watchers and ornithologists, and although the bird is generally secretive it seems unlikely that it would be completely overlooked in the lowlands. The author spent approximately seven times as many hours afield in the lowlands as in the mountains.