

26%, and 6% of the final weight of the yolk during its last 3 days of growth. The chemical composition of the ovum 1 and 2 days before laying resembles that of the fresh egg yolk except that lean dry matter content is slightly higher and water content slightly lower.

During the day prior to laying, the ovulated ovum travels through the oviduct where it acquires its coating of albumen and shell. Because none of the females I examined had newly released ova in their oviducts, Starlings apparently ovulate after 0800. The two oviducal eggs I discovered would probably have been laid within 3 h as most eggs are laid before 1100; the eggs should have been fully formed by this time (see Romanoff 1949, *The avian egg*, Wiley, New York). The oviducal eggs weighed less than fresh eggs because they cracked when the birds were frozen. The loss of albumen evidently consisted of less dense portions because the amount of lean dry material relative to lipid in the oviducal eggs was greater than in whole fresh eggs. Total lipid, 0.35 and 0.37 g respectively, was similar to that of fresh eggs (0.33 g).

The fresh weight of eggs is highly correlated with the weight of the oviduct (see Table 1), possibly because albumen is secreted in proportion to the size of the oviduct (whether length or wall thickness is not known). In a later study I show that variation in egg weight in the Starling is related solely to variation in albumen content; yolk weight and the chemical composition of yolk and albumen are not correlated with egg size.

Finally, the relatively large size of the oviduct in the Starling (6.1% of female body weight) may be related to the high albumen (and correspondingly low yolk) content of the eggs of altricial birds (72.5%) compared to precocial birds (54%; Ricklefs op. cit.). In two other passerine birds, the White-crowned Sparrow (*Zonotrichia leucophrys*) and the Bank Swallow (*Riparia riparia*), oviducts represented 3.5% and 10.9% of female body weight (Peterson 1955, *Wilson Bull.* 67: 235; King et al. 1966, *Condor* 68: 476). In four precocial species, oviducts comprised 2.4–4.3% of female body weight (Ricklefs op. cit.).—ROBERT E. RICKLEFS, *Department of Biology, University of Pennsylvania, Philadelphia, Pennsylvania 19174*. Accepted 23 Dec. 74.

***Accipiter poliogaster* from Peru, and remarks on two collecting localities named "Sarayacu."**—The Museum of Natural History at the University of Kansas recently received a specimen (KU 68795) of the Gray-bellied Hawk, *Accipiter poliogaster*. It is an adult female taken at San Juan, Prov. Oxapampa, Dept. Pasco, Peru (10° 30' S, 74° 53' W), on 20 August 1964, by Arden L. Tuttle. The locality is at 275 m and is in virgin rain forest.

This appears to be the first record of this rare species in Peru. Moreover, our study of the species' distribution uncovered the existence of some confusion about two South American collecting localities. Although this problem was noted some time ago in the literature (see later) a review is necessary here.

Two collecting localities (see Fig. 1), separated by about 600 km, are both named Sarayacu. One (approximately 6° 40' S, 75° 00' W) is near or on the Ucayali River. It appears from the early maps we have studied (Morales 1942) to have been an important settlement through much of the 1800's, and it was an important collecting locality for birds (Sclater and Salvin 1866, 1873). The village was located in the Territory of Acre, an area disputed by Bolivia, Peru, and Ecuador. Although Sclater and Salvin considered the locality to be in Peru, it seems to us that some other early

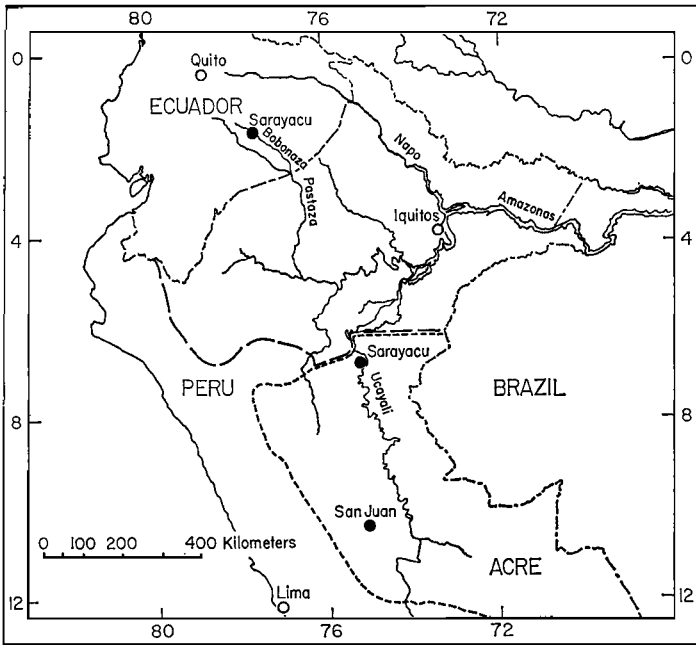


Fig. 1. The present boundaries of Ecuador and Peru with the two Sarayacu localities and the San Juan locality shown. The long dashed line indicates the boundary of Ecuador in the late 19th century, and the short dashed line shows that part of the disputed Territory of Acre that is now included in Peru.

collectors might equally well have considered it to be in Ecuador, particularly as Sarayacu was near what was then considered to be the Ecuadorian boundary. In any event, the locality is now in Peru, although the settlement is not shown on many recent maps.

The other Sarayacu is sometimes listed as "Nuestra Señora de la Palina de Sarayacu." It is at  $1^{\circ} 44' S$ ,  $77^{\circ} 30' W$ , on the Bobonaza River in Ecuador. It seems not to have been as prominent a settlement in the last century as the Sarayacu on the Ucayali River. However, it was an important collecting headquarters for Clarence Buckley, who took over 10,000 specimens of birds in the vicinity (Sclater and Salvin 1880), and it appears on most recent maps of Ecuador.

Any person working with specimens labeled as from Sarayacu, in this part of South America, should determine whether the Ucayali or Bobonaza River locality is being referred to. Various authors of the "Catalogue of the birds in the British Museum" appear to have distinguished these two localities as "Sarayacu, Amazons" (the Peruvian locality) and "Sarayacu, Ecuador."

R. Meyer de Schauensee (1966:51) included Peru in the range of *Accipiter polio-gaster*. He has informed us (in litt., 30 October 1974) that this was on the basis of a specimen reported by Gurney (1881) from Sarayacu, Ecuador; Meyer de Schauensee assumed that the specimen came from the prominent locality on the Ucayali River. Unfortunately his assumption was incorrect, for I. C. J. Galbraith informed

us (in litt., 9 December 1974) that the specimen in question (British Museum of Natural History number S G 1887.1.1.118) was collected by C. Buckley and that Sclater and Salvin (1880) stated: "The greater part of [Buckley's collection] was formed on the upper branches of the Rio Pastaza, and on the spurs lying between this stream and its affluent the Bobonaza, Mr. Buckley's headquarters having been during the greater part of the time the village of Sarayacu on the latter stream, *which must be carefully distinguished from the place of the same name on the Ucayali*" (italics ours). Thus, the San Juan specimen reported here does seem to be the first for Peru.

We are very grateful to I. C. J. Galbraith and R. Meyer de Schauensee for their significant assistance, to Lewis Armstrong, Curator of the outstanding map collection at the University of Kansas, who located several important maps of Ecuador for us, and to Thomas H. Swearingen who prepared our figure.

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***Aimophila strigiceps* new to Paraguay.**—Some specimens obtained by the American Museum of Natural History from the collection of Jacob Unger include two Stripe-capped Sparrows (*Aimophila strigiceps*) recently taken near Lichtenau in the Paraguayan Chaco. This species presently is considered endemic to Argentina (Meyer de Schauensee 1966, The species of birds of South America and their distribution, Narberth, Pennsylvania, Livingston Publ. Co., p. 527). One specimen (AMNH No. 811,153), which is molting the primaries, rectrices, and some body feathers, is a female with ovary somewhat enlarged, taken 29 March 1974. Its molting condition, enlarged ovary, and the very early fall date suggest that the bird had bred locally; the species is not known to migrate. The other, a male (AMNH No. 811,155) in worn plumage, was collected 31 January 1974. Incidentally, Mr. Unger and his family recently emigrated to Canada, ending several generations of collecting in Paraguay by the Ungers.

The distribution of the Stripe-capped Sparrow is not clarified fully in the pertinent literature (Meyer de Schauensee, loc. cit.; Olrog 1963, *Opera Lilloana* 9: 326; Navas 1965, *El Hornero* 10: 215). Meyer de Schauensee listed it as found "from Jujuy, Salta and Formosa south to Córdoba, Santa Fe and Entre Ríos," Argentina, implying