MONROE, B. L., JR. 1968. A distributional survey of the birds of Honduras. Ornithol. Monogr. No. 7.

PAYNTER, R. A., JR. 1955. The ornithogeography of the Yucatan Peninsula. Peabody Mus. Bull. 9.

PETERSON, R. T., AND E. L. CHALIF. 1973. A field guide to Mexican birds. Boston, Houghton Mifflin Co.

RAND, A. L., AND M. A. TRAYLOR, JR. 1954. Manual de las aves de El Salvador, first ed. San Salvador, El Salvador, Instituto Tropical de Investigaciones Certificas.

RUSSELL, S. M. 1964. A distributional study of the birds of British Honduras. Ornithol. Monogr. No. 1.

SKUTCH, A. F. 1967. Cape May Warbler in Costa Rica. Wilson Bull. 79: 118–119.

SLUD, P. 1964. The birds of Costa Rica. Bull. Amer. Mus. Nat. Hist., vol. 128.

C. RUSSELL MASON, *6200 South Orange Blossom Trail, Suite 194, Orlando, Florida 32809.* Accepted 6 Dec. 74.

Morphology of the bony stapes in *Philepitta* and *Neodrepanis*: New evidence for suboscine affinities.—Two species of asities (*Philepitta*) and two of false sunbirds (*Neodrepanis*) are the only members of the family Philepittidae of Madagascar. The asities are small, plump birds that vaguely resemble the pittas, but are entirely arboreal. The false sunbirds, on the other hand, so closely resemble the true African sunbirds (with their long decurved beaks and metallic gloss) that they were classified as members of the true sunbird family, Nectariniidae, until Amadon in 1951 (Oiseau Rev. Franc. Ornithol. 21: 59) showed that *Neodrepanis* was not an oscine on the basis of the syringeal musculature, but closely allied to *Philepitta.* Ames (1971, Peabody Mus. Nat. Hist. Bull. 37) confirmed these findings, stating that (p. 153), "The syringeal structure of both *Philepitta* and *Neodrepanis* is remarkably like that of the broadbills *Smithornis* and *Psarisomus* . . ., even to minute details of the cartilaginous elements, but the whole organ is relatively unspecialized." He further states, "Whatever their affinities, the Philepittidae appear to have retained a primitive syrinx while most other passerines have evolved some modifications for song." Ames (op. cit.) suggested that the very simple nature of the syrinx of *Pitta* provides little evidence for affinities of the Pittidae.

Thus the Philepittidae have been considered suboscine on the basis of retained primitive characters of the syringeal musculature, rather than on the basis of shared derived characters. This paper presents evidence from the morphology of the bony stapes providing the first derived character to illustrate the suboscine affinities of *Philepitta* and *Neodrepanis.*

I have recently examined the morphology of the bony stapes in more than 1000 avian species and have discovered that while the oscine passerines have retained a morphology of the stapes resembling the primitive condition, with the flat footplate, the suboscines possess a derived morphology characterized by the presence of a large bulbous footplate area perforated by one (often one large and small) fenestra (Feduccia 1974, Auk 91: 427). In my previous paper (Feduccia op. cit.) I argued that this derived morphology was strong evidence for common ancestry

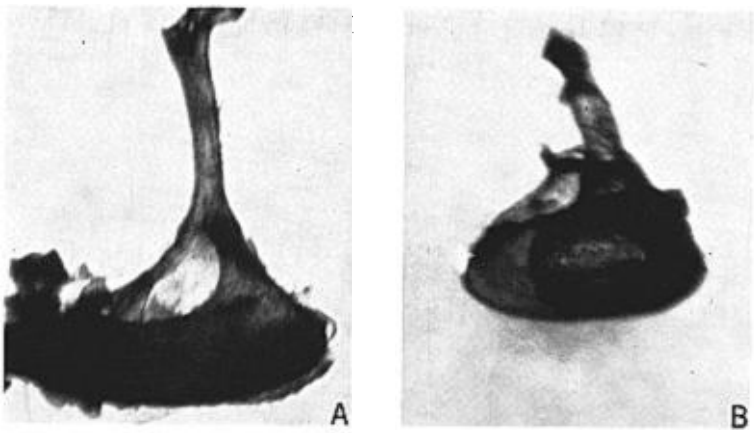

Fig. 1. Alizarin-stained stapes of A, *Philepitta castanea* and B, *Neodrepanis* sp. Both are from American Museum of Natural History alcoholic specimens Nos. 2230 and 2231, respectively. Both approximately × 50.

of the New World Furnariidae (including woodhewers), Formicariidae, Conopophagidae, Rhinocryptidae, Cotingidae, Pipridae, Tyrannidae, and Phytotomidae, with the Old World Eurylaimidae and Pittidae. I have recently been able to dissect the stapes from alcoholic specimens of *Philepitta castanea* and *Neodrepanis* sp. and have discovered that they both possess the derived suboscine type of stapes (Fig. 1), thus illustrating their affinity to the other groups of suboscines.

This work was supported by a grant from the University of North Carolina Research Council. Specimens of *Philepitta* and *Neodrepanis* in the collection of the American Museum of Natural History were lent through the kindness of Wesley Lanyon.—Alan Feduccia, *Department of Zoology, University of North Carolina, Chapel Hill, North Carolina 27514.* Accepted 6 Dec. 74.

Behavioral evidence on skimmers' evolutionary relationships.—The suborder Lari (Charadriiformes) is composed of the families Stercorariidae (skuas and jaegers), Rynchopidae (skimmers), and Laridae (gulls and terns). It is generally accepted that within this suborder the gulls and terns are more closely related to one another than either is to the skuas (A.O.U. 1957), but the evolutionary position of the skimmers within the suborder is less certain.

Schnell (1970a, 1970b) concluded that skimmers are more closely related to terns than to gulls or skuas, based on a phenetic study of skeletal and external characters, as did Zusi (1962, 1971) on the basis of a comparative study of anatomical and behavioral feeding adaptations. We feel that many of the anatomical similarities between skimmers and terns may be the result of convergence caused by similarities in flight and feeding behavior. Mayr (1969) suggested that any set of features arising after the invasion of a new food niche will evolve very rapidly and therefore are poor characters for basing hypotheses of evolutionary relationship.