

**GALLIRALLUS SHARPEI (BÜTTIKOFER), NOV. COMB.  
A VALID SPECIES OF RAIL (RALLIDAE) OF UNKNOWN ORIGIN**

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A considerable number of species of birds are known only from a single specimen, most of which have originated in islands. Apart from the morbid interest that attaches to things extinct, these species have usually elicited little modern attention, not being susceptible to the augmentation of "lifelists" or to experimental manipulation. Furthermore, there is a regrettable reluctance among modern ornithologists to accept unique specimens as representing valid species, the tendency being to regard them as freaks, hybrids, or as a subspecies of some better known form, so that such specimens are often relegated to a status sufficiently dubious to insure that they will be overlooked and ignored. That numerous species of birds should be known from one or very few specimens is not particularly surprising, given the pattern of delayed and sporadic scientific collecting, superimposed on an exaggerated and continuous process of man-related extinctions, particularly on islands.

The situation is exacerbated when the geographic origins and other particulars concerning a unique specimen are lacking, as is sometimes the case, yet even so, these specimens do provide valuable information on avian diversity and sometimes their provenance can be determined. Recently, evidence documenting precise collection data was uncovered for the so-called "Mysterious Starling," *Aplonis mavornata* Buller, based on a single specimen whose origins had remained undetermined for more than 160 years (Olson, 1986). As a sort of perverse compensation for having solved that riddle, I shall here introduce a similar one by raising the species *Stictolimnas sharpei* Büttikofer (1893) from the depths of obscurity.

This is known from a single mounted specimen (Fig. 1) in the Rijksmuseum van Natuurlijke Historie in Leiden, Netherlands, that was "purchased of Mr. Frank in 1865" (Büttikofer 1893: 274). G.A. Frank (1809-1880) was a natural history dealer in Amsterdam who had world-wide trade connections (G.F. Mees, in litt.). The bird was originally identified by Hermann Schlegel as the young of *Pardirallus maculatus* (Boddaert), a New World species with bold white markings but otherwise not very similar. R. Bowdler Sharpe (*in* Büttikofer) pointed out the erroneous nature of this identification, compared the specimen with other rails in the British Museum (Natural History), and found that it did not agree with any species there, whereupon it was briefly but very adequately described by Büt-



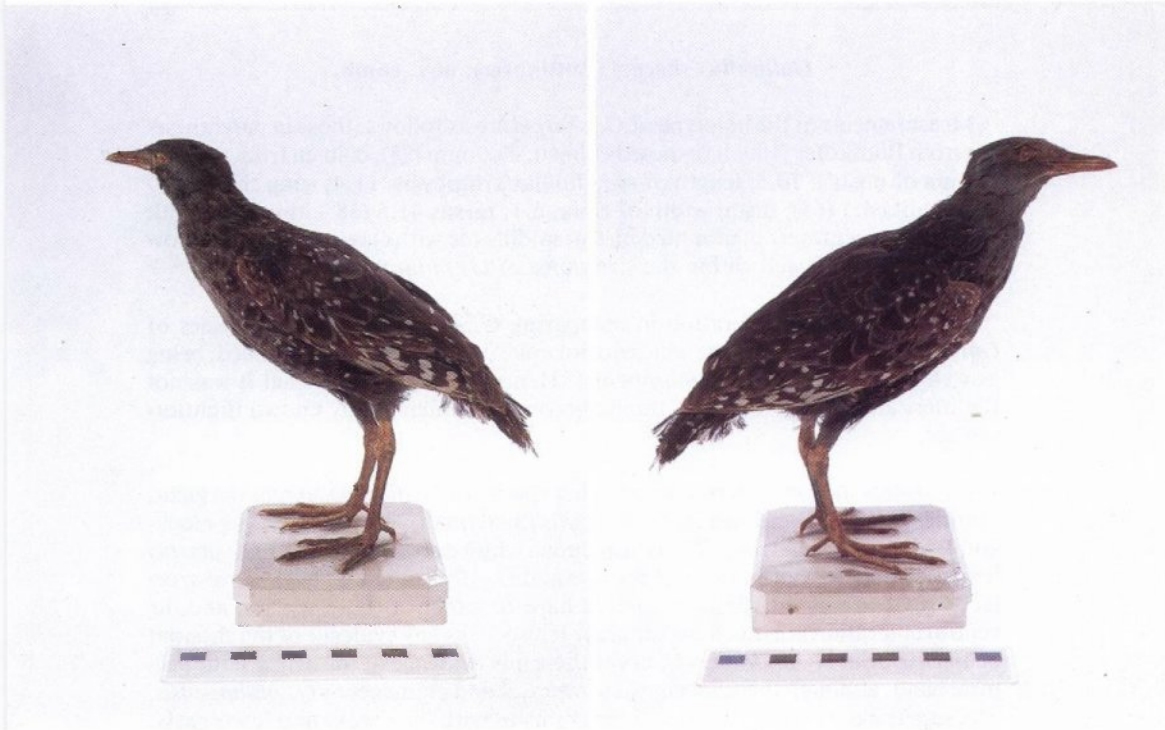


Fig. 1. Views of the unique holotype of *Gallirallus sharpei* (Büttikofer) in the Rijksmuseum van Natuurlijke Historie, Leiden.

tikofer (1893) as a new genus and species, *Stictolimnas sharpei*. He gave the "habitat" as "South America", but this must have been purely an assumption that probably arose through the influence of Schlegel's original misidentification.

In Büttikofer's terse Latin generic diagnosis (which may well have been written by Sharpe, as it is very much in his style), comparisons were made only to *Castanolimnas* and *Crecopsis* (= *Rallina* and *Crex* of modern authors). In April 1929, E.D. van Oort, in response to an inquiry from Outram Bangs, voiced his belief that *Stictolimnas sharpei* "was in reality a 'Hypotaenidia'" (Peters, 1934: 164, footnote), causing Peters to suggest that "if so, it may represent a distinct species, or it may prove to be an earlier name for one of the many rails of this group described since 1893." *Hypotaenidia* is the name formerly applied to the barred-winged rails, often included in *Rallus*, that are more properly placed in the genus *Gallirallus*, for reasons detailed in Olson (1973b). In the strongly barred wings, overall proportions, size and shape of bill, and in all other particulars except pattern and coloration of plumage, the specimen of *Stictolimnas sharpei* agrees very closely with *Gallirallus philippensis* (Linnaeus), with which it is certainly congeneric. It has nothing to do with *Pardirallus*, in which the bill is longer and the wings unbarred. The species should therefore now be known as

*Gallirallus sharpei* (Büttikofer), nov. comb.

Measurements of the holotype of *G. sharpei* are as follows (those in parentheses are from Büttikofer [1893]): exposed culmen, 26.0 mm (25); culmen from anterior margin of nostril, 10.5; length of mandibular symphysis, 11.4; wing chord, 137 (140); tail 64.5 (65); distal width of tibia, 6.1; tarsus 41.5 (38 – this is difficult to measure accurately in mounted birds); middle toe with claw, 41.9. These show *G. sharpei* to fall well within the size range of *G. philippensis*.

An important consideration in comparing *G. sharpei* with other species of *Gallirallus* is the fact that the wings do not appear to be in any way reduced, being as well developed as in *G. philippensis*. Hence we may assume that it was not flightless and that it would not be an aberrant specimen of any known flightless species.

*Gallirallus sharpei* differs from all other species of *Gallirallus*, except the giant, flightless New Zealand species *G. australis* (Sparman), in lacking strong black-and-white ventral barring. The conspicuous white dorsal spotting of *G. sharpei* is similar only to that of *G. philippensis* and *G. striatus* (Linnaeus). *G. sharpei* lacks any trace of the chestnut colored nape of either of those species, and the ventral coloration is a much darker gray. It also lacks any evidence of the chestnut ocular stripe of *G. philippensis*, nor is there any evidence of the ochraceous pectoral band, although this is lacking in some races and plumages of *G. philippensis*. The superciliary stripe is faint and concolorous with the cheeks and lowerparts, unlike the distinct, light superciliary stripe of *G. philippensis*. The remiges in *G. sharpei* are boldly barred with white, whereas in *G. philippensis* the wings are barred mainly or entirely with cinnamon rufous. Furthermore, the size, shape, and positioning of the bars in *G. sharpei* are different from those in *G. philippensis*, the light portions in general being more extensive. *Gallirallus sharpei* bears little resemblance to *G. pacificus* (Gmelin) of Tahiti, which is known only from a painting made by J.R. Forster on Capt. James Cook's second voyage of exploration. That species is depicted as having a ferruginous nape, distinct white superciliary, and white underparts (Rothschild, 1907; Greenway, 1958; Ripley, 1977).

Büttikofer (1893) gives the color of the bill and feet of *G. sharpei* as red. The soft parts are now much faded but they do appear as though they would have been reddish or orangish in life. The bill of *G. philippensis* is described as reddish in life but the tarsus and toes are said to be light brown or light grayish brown (Ripley, 1977: 83) and in skins show no evidence of having been reddish or orangish as in *G. sharpei*.

Although *Gallirallus sharpei* is clearly closely related to *G. philippensis*, one cannot imagine that any combination of melanism, albinism, or dietary deficiency could produce in that species the differences in coloration and plumage pattern exhibited by *G. sharpei*. We must therefore assume that the unique specimen represents a valid species that is either extinct or that remains otherwise undiscovered.

What is the likely geographical origin of *G. sharpei*? Here we must venture into the realm of pure speculation. Paleontological studies on islands have shown pervasive extinction of species of birds associated with the arrival of man (Olson, 1986; Olson and James, 1982; Steadman, 1985; Steadman and Olson, 1985; Steadman *et al.*, 1984). These extinctions have probably removed hundreds of endemic populations of Rallidae from islands within the past 1500 years, including many endemic populations of *Gallirallus* in the Pacific. As noted above, at least one such population of *Gallirallus*, that of *G. pacificus*, survived on Tahiti until the arrival of Europeans.

It would be perfectly reasonable to expect that other populations of *Gallirallus* persisted into the modern era on islands in Oceania and that *G. sharpei* represents one of these, a specimen of which found its way to a natural history dealer in the middle of the nineteenth century. There is one problem with this, however, and that is that *Gallirallus sharpei* was not flightless. Flightlessness evolves very rapidly in the absence of terrestrial mammalian predators (Olson, 1973a). As there are no native terrestrial mammals other than bats east of the Solomon Islands, any endemic species of Rallidae from Oceania could be expected to have been flightless. Therefore *G. sharpei* is less likely to have come from islands east of the Solomons.

Because of its close similarity in size and morphology to *G. philippensis*, it is unlikely that *G. sharpei* would have been sympatric with that species. *Gallirallus philippensis* is a widespread, polymorphic species that occurs in the Philippines, Indonesia south and east of Wallace's line, the Australo-Papuan region, and east to Samoa, Tonga, and New Zealand. The absence of this species from any of the islands of the Sunda Shelf may not have been remarked upon before, but is of considerable zoogeographic interest in the present connection. Indeed, of all the species of *Gallirallus*, only *G. striatus* is known from the Asian mainland or any of the islands that were formerly connected to it. With all of the above considerations in mind, a reasonable guess would be that *G. sharpei* came from one of the islands on the Sunda Shelf such as Java, Sumatra, or Borneo. The fact that this region was long under Dutch influence might have increased the likelihood of a specimen from there passing through the hands of a dealer in Amsterdam.

That *G. sharpei* could still exist and have been overlooked up to the present is not at all improbable given the discovery in 1958 of *Rallus mirificus* on the ornithologically well-known island of Luzon (Parkes and Amadon, 1959), and the even more incredible discovery in 1981 of *Gallirallus okinawae*, as it should be known, on the thoroughly explored and heavily populated island of Okinawa (Yamashina and Mano, 1981).

An even stranger case than that of *G. sharpei* is that of *Argusianus bipunctatus* (Wood), which Beebe (1931), Delacour (1951), and Davison (1983), among others, have regarded as a valid species of argus pheasant known only from a portion of a single primary feather. The provenance of this specimen is unknown but was suggested by Delacour (1951) to have been Java, and by Davison (1983) to have been the island of Tioman off the eastern tip of the Malayan peninsula. In view

of this, it does not seem at all improbable that *Gallirallus sharpei* could be an extinct or overlooked species from the same region.

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#### SUMMARY

The overlooked species *Stictolimnas sharpei* Büttikofer (1893), known from a single specimen of unknown origin, is shown to be valid species of volant rail (Rallidae) belonging to the genus *Gallirallus*. It is most similar to *G. philippensis*, from which it differs strikingly in coloration and plumage pattern. On purely hypothetical grounds, it is suggested that the unique type may have come from the Sunda region of Indonesia.

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### SAMENVATTING

Van de vaak over het hoofd geziene soort *Stictolimnas sharpei* Büttikofer (1983), waarvan slechts een enkel specimen van onbekende oorsprong gekend is, wordt hier aangetoond dat het een geldige soort vliegende ral (Rallidae) is, behorend tot het genus *Gallirallus*. Ze gelijkt meest op *G. philippensis* van dewelke ze opvallend verschilt in kleur en vederpatroon. Op zuiver hypothetische gronden wordt gesuggereerd dat dit enige type afkomstig zou zijn van het Indonesische Sunda-gebied.

### RESUME

*Stictolimnas sharpei* Büttikofer, connu par un seul spécimen d'origine inconnue, et généralement passé sous silence, est une espèce valable de râle (Rallidae), volante, appartenant au genre *Gallirallus*. Il se rapproche le plus de *G. philippensis* dont il diffère, de manière frappante, par la coloration et le dessin. Sur bases purement hypothétiques, il est suggéré que le type pourrait provenir de la région de la Sonde en Indonésie.

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