

A NEW SPECIES OF RAIL FROM THE PHILIPPINE ISLANDS

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ALTHOUGH Mayr (1957:35) predicted that no more than 20 good species of birds would be found in the decade following 1955, the rate at which such discoveries have been announced in the past few years suggests that Mayr's figure may well have been too low. Some of the new species turned up in recent years have reposed in collections, unrecognized, for a long time. Most of the rest have either been small, inconspicuous passerines, easily overlooked, or have come from remote mountains or jungles, attainable only by major expeditions.

Among a collection of some 900 birds from the Philippine island of Luzon, purchased jointly by Carnegie Museum and the American Museum of Natural History in 1959, we were astonished to find no fewer than seven examples of what appears to be a new species of *Rallus*, three of which were taken in the immediate vicinity of a town situated on a main road, only about 50 miles from the city of Manila. In view of the surprising nature of such a discovery, it seems appropriate to call the new rail

*Rallus mirificus*¹, new species

Type: American Museum of Natural History no. 708,000; adult female; Santa Fe (Dalton Pass), near Aritao, Nueva Viscaya Province, Luzon, Philippine Islands; collected November 20, 1958, by A. Concepcion.

Description of Type (Capitalized color names from Ridgway [1912]): Crown and nape Chestnut-Brown, lightening to Chestnut on hindneck, near Auburn on forehead; a narrow line of Sayal Brown between forehead and lores; lores and cheeks Deep Olive-Gray washed with Chestnut-Brown, paling through Light Olive-Gray to white on throat; anterior back near Brussels Brown, darkening toward Prout's Brown on posterior back and rump; feathers of anterior back with vaguely-defined blackish central areas which do not reach tip; feathers of mid-back with small black-bordered spots of Pale Pinkish Buff along edges, these spots decreasing in both size and abundance anteriorly and posteriorly; scapulars Brussels Brown, the edges of the feathers with black-bordered bars of Pinkish Buff; upper tail coverts and rectrices somewhat blacker than Mummy Brown, with small black-bordered marginal spots of Pinkish Buff; breast Deep Gull Gray, heavily washed with Brussels Brown on sides of breast, less heavily across upper breast; center of abdomen Pale Gull Gray; sides Prout's Brown, darkening posteriorly through Mummy Brown to a blacker color (but not black) along flanks, all of these feathers being heavily barred. The bars range from Pale Pinkish Buff anteriorly to Light Pinkish Cinnamon posteriorly, and are narrowly bordered with black.

¹ Latin, "causing wonder."



Rallus mirificus Parkes and Amadon, type. One-half natural size.

Painting by Lloyd Sandford.

Toward the sides of the abdomen, the ground color of the feathers approaches Deep Grayish Olive, with whiter bars lacking the black borders. Under tail coverts Olivaceous Black, broadly tipped with Light Pinkish Cinnamon. Larger upper wing coverts like scapulars, smaller chiefly Brussels Brown; small feathers along bend of wing white; inner secondaries Brussels Brown, becoming blacker toward center of feather, with prominent black-bordered marginal bars of Pale Pinkish Buff or Pinkish Buff, best developed on outer margin; primaries and outer secondaries very dark brown, almost black, the latter with a few small Pinkish Buff spots along outer margin; under wing coverts Olivaceous Black, mixed with white. Soft-part colors in life probably about as shown in Mr. Sandford's painting (frontispiece), judging from comparison of dried parts with those of related species for which color notes are available.

Variation in Color: There are minor variations in shade, particularly of the reddish brown of crown and neck, among three of the four presumed adult specimens. The fourth, a female from the type locality, is markedly darker and richer in all of its shades of brown, and has fewer and smaller bars on wings and scapulars. Its flanks are somewhat blacker, although not the pure black of *Rallus pectoralis*.

Three specimens are assumed to be immature individuals. They lack the decided reddish-brown color of the crown and hind neck, being various shades of dark grayish brown in these areas, and are grayer on the cheeks and upper breast. Their bills also appear to have been darker in life than those of the presumed adults.

Range: Known only from two localities in the western foothills of the southern half of the Sierra Madre Mountains of Luzon, Philippine Islands: Papaya, Nueva Ecija Province (about 50 miles north of Manila), and the type locality, near Aritao, Nueva Viscaya Province, about 70 miles north of Papaya.

Relationships: The new species appears to be most closely related to *Rallus pectoralis* Temminck, a species ranging from Flores in the Lesser Sunda Islands to New Guinea, Australia and Tasmania. All races of *pectoralis*, however, have the back conspicuously streaked with black, a condition only vaguely suggested by the dark central area of the basal portions of back feathers of *mirificus*. In all races of *pectoralis* the reddish brown of the head and hind neck is much brighter and more reddish than in *mirificus*, and in most races is more or less heavily streaked with black, continuous with the black streaking of the back. There is no suggestion of such streaking on the head and neck of *mirificus*. In all races of *pectoralis* the barring of the abdomen and flanks is crisply black and white rather than dark brown and buffy as in *mirificus*. Judging from the color of dried bills and from informa-

tion recorded by collectors of *pectoralis* (soft-part color notes are unfortunately not available for *mirificus* at this time), the bill in all races of *pectoralis* is more extensively red, and of a paler color, than that of *mirificus*. The toes and tarsi of *mirificus* also appear to be darker. The bill of *mirificus* is proportionately shorter than that of any race of *pectoralis* (see measurements, beyond).

Of the known subspecies of *Rallus pectoralis*, the closest approach to *mirificus* in appearance is shown by the two small-billed races, *exsul* Hartert from Flores, and *insulsus* Greenway from northeastern New Guinea, both known only from their respective type specimens. Both *exsul* and *insulsus*, however, are clearly races of *pectoralis* (although *insulsus* was originally described as a race of *Rallus striatus*, which is quite a different species), having the pale bill, streaked back, and black-and-white barring typical of *pectoralis* as a species. The streaks on crown and hind neck, prominent in some races of *pectoralis*, are only faintly indicated in *exsul* and *insulsus*, but are completely absent in *mirificus*.

TABLE I
MEASUREMENTS OF *RALLUS MIRIFICUS* AND *RALLUS PECTORALIS* (IN MM.)

Specimens	Wing (flat)	Culmen from feathers	Tarsus	Middle toe and claw
<i>Rallus mirificus</i> ad. ♀ (TYPE),				
Santa Fe, Luzon, P.I., Nov. 20, 1958	108	27	30	37
ad. ♀, Santa Fe, Luzon, P.I., Nov. 18, 1958	106	25	29	36
ad. ♀, Papaya, Luzon, P.I., Nov. 16, 1958	106	26	29	38
ad. ♂, Santa Fe, Luzon, P.I., Nov. 18, 1958	—	24	28	35
imm. ♂, Papaya, Luzon, P.I., Nov. 16, 1958	107	26	30	37
imm. ♂, Papaya, Luzon, P.I., Nov. 16, 1958	106	25	28	33
imm. ♂, Santa Fe, Luzon, P.I., Nov. 19, 1958	103	25	29	34
<i>Rallus pectoralis exsul</i> ad. ♂ (TYPE)				
South Flores Island	100	27	29	36
<i>R. p. insulsus</i> ad. ♀ (TYPE)				
Wau, New Guinea	99	27	29	34
<i>R. p. alberti</i> ad. ♂				
Angabunga River, New Guinea	92	30	32	37
<i>R. p. captus</i> ad. ♂				
Mount Hagen, New Guinea	100	35	34	41
<i>R. p. mayri</i> ad. ♂				
Kofo, Arfak, New Guinea	104	39	34	39
<i>R. p. pectoralis</i> ad. ♂				
Victoria, Australia	104	33	30	35
<i>R. p. brachipus</i> ad. ♂				
Tasmania	103	31	31	39

Rallus mirificus and *R. pectoralis* may form a superspecies, but the clear-cut differences between them, the remoteness of their ranges, and the absence of representative forms elsewhere, leave little doubt that they are specifically distinct.

The widespread Oriental and East Indian species, *Rallus striatus*, occurs side by side with *mirificus* on Luzon, and is superficially similar to it. *Striatus*, however, is a larger bird, with a much stouter bill, heavier tarsi and toes, a heavily spotted back, and *barred* flight feathers, among other differences.

Measurements: See Table 1. Judging from other specimens in the same collection, the sexing of the *mirificus* specimens may not be completely reliable. Measurements of various races of *Rallus pectoralis* are appended for comparison. Note that in *mirificus* the culmen length is 25% or less of the wing length, in *pectoralis* 27% or more.

We are grateful to J. C. Greenway, Jr., of the Museum of Comparative Zoölogy, for permission to examine the unique type of *Rallus pectoralis insulsus*.

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CARNEGIE MUSEUM, PITTSBURGH, PENNSYLVANIA; AND AMERICAN MUSEUM OF NATURAL HISTORY, NEW YORK, NEW YORK, OCTOBER 12, 1959