

NEW SUBSPECIES OF *DRYOCOPUS JAVENSIS*
(AVES: PICIDAE) AND *FICEDULA HYPERYTHRA*
(AVES: MUSCICAPIDAE) FROM THE PHILIPPINES

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Abstract.—Austin L. Rand prepared descriptions and named two new subspecies of Philippine birds that were never published. After examining specimens of the proposed subspecies and comparing them with closely allied forms, I concur with Rand's descriptions and here formally propose recognition of the two subspecies: *Dryocopus javensis cebuensis*, n. subsp. (Cebu); and *Ficedula hyperythra matutumensis*, n. subsp. (Mt. Matutum, Mindanao).

At the end of his tenure as Chief Curator of Zoology at the Field Museum of Natural History, Austin L. Rand prepared two papers on Philippine birds that were never published. The first manuscript, "The Thicket Flycatcher *Muscicapa hyperythra* of Mindanao," later referred to by Rand (1970 ms) as completed in 1969, contained the description of a new subspecies of the Thicket Flycatcher, which is now usually called the Snowy-browed Flycatcher and placed in the genus *Ficedula*. The second manuscript, entitled "An Annotated List of Philippine Birds" and completed in 1970, was of book length and was the culmination of his more than two decades of work with Philippine birds. It contained the description of a new subspecies of White-bellied Woodpecker (*Dryocopus javensis*).

During the course of my research on Philippine birds, J. T. Marshall, Jr., with the approval of G. E. Watson, kindly provided a copy of each of the Rand manuscripts which are on microfilm in the Division of Birds at the National Museum of Natural History. After discovering the unpublished descriptions, I examined specimens of the proposed subspecies, compared them to other nearby populations and concluded that Rand's diagnoses were accurate but incomplete and that the two subspecies are indeed valid.

Here I formally describe the two subspecies discovered and named by Rand by presenting his diagnoses verbatim and by adding the results of my own comparative work.

Dryocopus javensis:

White-bellied Woodpecker

Bourns and Worcester (1894), McGregor (1907, 1909), Hachisuka (1934) and Delacour and Mayr (1946) reported the occurrence of the White-bellied Woodpecker on Cebu. Recently, however, Parkes (1960), duPont (1971), and Short (1982) failed to mention the Cebu population of this woodpecker in their discussions or treatment of the Philippine subspecies.

Hachisuka (1934) placed the Cebu birds in *D. j. confusus* of Luzon, but this was questioned by Delacour and Mayr (1946). As noted earlier, Rand (1970 ms) examined the Cebu birds and found that they represent an undescribed subspecies to be known as:

Dryocopus javensis cebuensis,
new subspecies

Holotype.—USNM 315188, adult male, 22 Jun 1892, Pandai, Cebu Island, Philippines, D. C. Worcester and F. S. Bourns (collectors' no. 511 from Menage Expedition).

Subspecific characters.—“Most like *D. j. multilunatus* of Mindanao in having an all black back, a moderate amount of white streaking in chin, upper throat and side of head; a scant amount of narrow pale edgings on breast feathers, and bill that is mostly black but with some yellowish or black horn in the lower mandible.

“Differs from *D. j. multilunatus* in the shorter bill [*cebuensis*—(3) 46.5 ± 0.64 , range 46.0–47.2; *multilunatus*—(22) 54.4 ± 2.77 , range 49.0–59.1] and the shorter wing [*cebuensis*—(3) 195.7 ± 2.08 , range 194–198; *multilunatus*—(22) 209.9 ± 8.30 , range 197–229].” (Rand 1970 ms).

Similar to *D. j. suluensis* of the Sulu Archipelago in most plumage characters including the presence of a concealed white patch in the lower back or rump and in being of equal size (*suluensis*: bill (15) 47.6 ± 1.63 , range 44.9–51.7; wing (15) 193.7 ± 5.15 , range 186–203). Differs from *suluensis* in having buffy edgings to some of the breast feathers and in having narrow buffy tips (in two of the three specimens) to the outer primaries; some specimens of *suluensis* have, at most, a tiny buffy spot near the tip of one or more primaries.

Dryocopus j. confusus of Luzon differs from *D. j. cebuensis* in being larger (*confusus*: bill (6) 198.7 ± 1.21 , range 197–200; bill (6) 51.9 ± 2.36 , range 48.0–54.8), in lacking the buffy edgings to the breast feathers, and in having a black bill, a mostly white throat and the black plumage characters a deeper black.

Range.—Known only from Cebu Island, Philippines, where it has not been seen by local and visiting naturalists for several decades.

Etymology.—Rand named this form for the island it inhabited.

Remarks.—“It is interesting that *cebuensis*, most similar to Mindanao *multilunatus* [and to *suluensis*] and less so to Luzon *confusus*, is nearly surrounded by islands of more different forms: the white-backed *philippinus* of Negros, Masbate, etc., and the

black-backed birds with heavily patterned throat and breast, *pectoralis* of Samar–Leyte–Bohol.” (Rand 1970 ms).

Of the three known specimens of *cebuensis*, one (USNM 357282) is a mounted bird that was previously on display. The red of its malar mark and the top of its head are much duller and darker than the other two specimens. Its bill has been painted, and the tip of one primary, although sooty black, looks as if it may have been buffy at one time, like the outer primaries of the other two specimens. All of these plumage characters seem to have resulted from exposure to light and to soot while it was on display.

In comparisons of *cebuensis* with *suluensis*, I noted that *cebuensis* has a concealed white patch in the lower back; thus, Rand’s mention of an all black back is incorrect. However, some specimens of *multilunatus* have a concealed white patch on the back as well. Parkes (1960) mentions one Basilan specimen with some white on the back and I found a concealed white patch on the lower back of at least three Basilan specimens (USNM).

The differences or similarities in plumage characters noted in the description section above are valid for both sexes. Rand did not treat each sex separately presumably because of the few specimens of *D. j. cebuensis* available for comparison.

Specimens examined.—*Dryocopus j. cebuensis*: 2 ♂, 1 ♀ (USNM). *D. j. confusus*: 3 ♂, 3 ♀ (DMNH). *D. j. multilunatus*: Basilan—3 ♂, 2 ♀ (USNM); Dinagat—1 ♂ (DMNH); Mindanao—2 ♂, 2 ♀ (DMNH), 5 ♂, 6 ♀, 1? (USNM). *D. j. suluensis*: 5 ♂, 6 ♀ (DMNH); 3 ♂, 1 ♀ (USNM).

Ficedula hyperythra:
Snowy-browed Flycatcher

As noted by Rand (1969 ms), the written history of *F. hyperythra* on Mindanao is short yet more forms (four subspecies including the one described here) of this species inhabit that island than of any other species (except *Phylloscopus trivirgatus*) with a sim-

ilar range. Such divergence has come about through the isolation of populations of this species in the higher elevations (above 1000 m) of the mountains of Mindanao that have served as habitat islands for the different forms.

The first subspecies discovered was *F. h. montigena* (Mearns 1905) from Mt. Apo, which has since been recorded on nearby Mt. McKinley and on Mt. Katanglad in central Mindanao (Ripley and Rabor 1961), and from the Piagayungan Mts. of Lanao del Sur Province (USNM 580519–580524). It is the only previously described race in the Philippines in which the plumage of the male closely resembles that of the female both in the color of the upperparts and in the rufous colored tail. In 1957, D. Rabor obtained specimens of a second subspecies from Mt. Malindang in the Zamboanga Peninsula that Rand and Rabor (1957) named *F. h. malindangensis*. This form is more closely allied to *F. h. nigrorum* of Negros and shows the sexual dimorphism (including males with gray tails and females with rufous tails) typical of most races of this species.

More recently, J. duPont discovered a third subspecies at Daggayan in Misamis Oriental Province in northern Mindanao, named *F. h. daggayana* by Meyer de Schauensee and duPont (1962). The male of *daggayana* has a dark tail similar to that of *malindangensis* even though the chestnut-tailed *montigena* from Mt. Katanglad and the Piagayungan Mts. occurs between the two populations. A fourth subspecies, a chestnut-tailed form, recognized and named by Rand may be known as:

Ficedula hyperythra matutumensis,
new subspecies

Holotype.—FMNH 275254, adult male, 23 Jan 1964, Tucay E-el, Mt. Matutum, 3300 to 3500 ft, Tupi, South Cotabato Province, Mindanao Island, Philippines, D.S. Rabor (collector's no. 39568).

Subspecific characters.—"Like *montigena* in having tail and outer edges of re-

miges dark red brown in both sexes but differs in having the rufous of the underparts much deeper and more extensive, extending from chin to flanks and undertail coverts; male differs further in having the back more slaty with hardly a trace of olive brown posteriorly. Female differs further in having crown and foreback slaty gray with an olive brown wash on lower back and rump only." (Rand 1969 ms).

Similar to *montigena*, sex for sex, in length of tail and culmen but averages smaller than *montigena*, sex for sex, in wing chord (*matutumensis*—♂ (8) 60.3 ± 0.53 , range 59.2–61.0; ♀ (7) 57.1 ± 1.29 , range 54.9–58.2; *montigena*—♂ (7) 62.0 ± 1.31 , range 60.4–64.5; ♀ (7) 58.8 ± 1.30 , range 56.6–60.7) and in tarsus length (*matutumensis*—♂ (8) 17.3 ± 0.24 , range 17.0–17.7; ♀ (5) 16.5 ± 0.58 , range 15.6–17.0; *montigena*—♂ (6) 18.4 ± 0.26 , range 18.1–18.7; ♀ (7) 17.9 ± 0.60 , range 17.0–18.7).

"Like *daggayana* with underparts deeply and extensively colored from chin to undertail coverts. Male differing in having tail and edges of wing quills red brown as in female; side of head blacker; with little or no olive brown tinge on lower back; female differing also in having back with little or no olive brown, and in having spot in front of eye and eye ring rusty." (Rand 1970 ms).

Measurements.—Culmen ♂ (8) 13.0 ± 0.26 , range 12.5–13.3; ♀ (7) 13.0 ± 0.12 , range 12.8–13.1. Tail ♂ (8) 45.0 ± 1.35 , range 43.3–47.1; ♀ (7) 40.8 ± 1.18 , range 39.8–42.2. See above for other measurements. Weight ♂ (5) 10.1 ± 0.50 g, range 9.7–10.9 g; ♀ (2) 9.33 ± 0.11 g, range 9.25–9.40 g; 1 ♀ with "ripe egg" in the oviduct 12.3 g (collected 21 June 1966).

Range.—Known only from above 1000 m on Mt. Matutum, South Cotabato Province, Mindanao Island, Philippines.

Etymology.—Rand named this form for the mountain it inhabits.

Remarks.—After examining more specimens than Rand had seen, I concluded that the best character distinguishing *matutu-*

mentis from *montigena* is the absence or near absence of the olive brown tinge on the lower back of male *matutumensis* and the restriction of this color in females to the lower back. The more extensive and deeper rufous of the underparts is a general character of *matutumensis* but is shared by some specimens (particularly DMNH 36738 and USNM 580521) of *montigena*.

Differences between males of *matutumensis* and *daggayana* are as Rand described except for the alleged blacker sides of the head, which does not hold for all specimens of *matutumensis*. Females of *matutumensis* do have less olive brown in the back but the spot in front of the eye and the eye ring are rusty in both forms.

Specimens examined.—*Ficedula h. daggayana*: 1 ♂ (type), 1 ♀ (DMNH). *F. h. matutumensis*: 3 ♂ (AMNH); 3 ♂, 3 ♀ (FMNH); 7 ♂, 5 ♀ (USNM). *F. h. montigena*: 1 ♂; 1 ♀ (AMNH); 3 ♂, 1 ♀ (DMNH); 3 ♂, 3 ♀ (FMNH); 4 ♂, 6 ♀ (USNM).

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Literature Cited

- Bourns, F. S., and D. C. Worcester. 1894. Preliminary notes on the birds and mammals collected by the Manage Scientific Expedition to the Philippine Islands.—Minnesota Academy of Natural Sciences Occasional Papers 1:1–64.
- Delacour, J., and E. Mayr. 1946. Birds of the Philippines. Macmillan, New York. xv + 309 pp.
- duPont, J. E. 1971. Philippine birds.—Delaware Museum of Natural History Monograph 2: x + 1–480.
- Hachisuka, M. 1934. The birds of the Philippine Islands with notes on the mammal fauna volume 2, part 3. Witherby, London. 256 pp.
- McGregor, R. C. 1907. Notes on birds collected in Cebu.—Philippine Journal of Science 2:298–309.
- . 1909. A manual of Philippine birds. Manila, Bureau of Science. No. 2. Part 1, pp. 1–412.
- Mearns, E. A. 1905. Descriptions of a new genus and eleven new species of Philippine birds.—Proceedings of the Biological Society of Washington 18:1–8.
- Meyer de Schauensee, R., and J. E. duPont. 1962. Birds from the Philippine Islands.—Proceedings of the Academy of Natural Sciences of Philadelphia 114:149–173.
- Parkes, K. C. 1960. Notes on Philippine races of *Dryocopus javensis*.—Bulletin of the British Ornithologists' Club 80:59–61.
- Rand, A. L. 1969. The Thicket Flycatcher *Muscicapa hyperythra* of Mindanao. Unpublished manuscript. 8 pp.
- . 1970. An annotated list of Philippine birds. Unpublished manuscript. 511 pp.
- , and D. S. Rabor. 1957. New birds from the Philippines.—Fieldiana, Zoology 42:13–18.
- Ripley, S. D., and D. S. Rabor. 1961. The avifauna of Mt. Katanglad.—Postilla 50:1–20.
- Short, L. L. 1982. Woodpeckers of the world.—Delaware Museum of Natural History Monograph 4: xviii + 1–676.

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