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The identity of *Accipiter cirrocephalus rosselianus* Mayr, 1940

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Mayr (1940) described the subspecies *Accipiter cirrocephalus rosselianus* of the Collared Sparrowhawk from two specimens in juvenile (first-year) plumage collected on Rossel (Yela) Island, in the Louisiade Archipelago off southeast New Guinea. They are still the only specimens of this form known from the Louisiade Archipelago, and were taken in March 1898 and December 1915 by the renowned Rothschild collector Albert S. Meek, who sexed them as males. Mayr (*l.c.*) presumed their specific identity and stated that *rosselianus* differed from juveniles of its sister subspecies, *A. c. papuanus* Rothschild & Hartert, 1913 of mainland New Guinea, in the bolder, browner chevrons of the ventrum, darker dorsal plumage with broad rufous feather edging, and distinctively large size. The large size of the specimens, in fact, raises the question of missexing, because they approach female *papuanus* in wing (Mayr *l.c.*). Nevertheless, the collector Meek was careful and experienced in sexing birds (Mayr *l.c.*) and had recorded both specimens as males on separate occasions. In accord with data presented below, it is evident that the specimens were correctly sexed as males.

What was not considered, however, was whether the specimens were correctly identified to species and how, in particular, they differed from juveniles of New Guinean populations of the similar-looking Australo-Papuan Brown Goshawk, *Accipiter fasciatus* (Vigors & Horsfield, 1827). That species occurs on the New Guinean mainland but had never been recorded in the Louisiade Archipelago. Examination of four juvenile males of the east New Guinean subspecies, *A. fasciatus polycryptus* Rothschild & Hartert, 1915, in the American Museum of Natural History shows that they in fact resemble the Rossel Island material closely; they have the same bold, deep umber chevrons on the ventrum and broad rufous scalloping on the dorsum that distinguishes *rosselianus* from mainland New Guinean *A. cirrocephalus papuanus*. Yet juvenile plumages and adult plumages are alike in *A. cirrocephalus* (Vieillot, 1817) and *A. fasciatus*, even to points of sexual dimorphism (Marchant & Higgins 1993: 134–162). Any putative differences are overlapped by wear and geographical differentiation within the two species; subspecies within each species often differ from one another more in plumage tone and markings than do the species themselves. Differentiation, furthermore, is often parallel across regions in apparent response to environmental factors, in accord with Gloger's rule. Except for the ultra-pallid form *Accipiter fasciatus dogwa* in the Trans-Fly region of southern New Guinea, populations of both species in drier and hotter inland and northern Australia are similarly pale in both juvenile and adult plumages, those in more consistently humid southern and coastal eastern Australia rather darker and more heavily marked, and those in humid regions of New Guinea most richly toned of all, with a blurring of pale ventral barring in adults of both species. Plumage pattern and tone are thus unreliable indicators of specific identity in isolates where only one of the species is present, as is apparently the case in the Louisiade Archipelago.

Size, however, immediately separates small *A. cirrocephalus* from large *A. fasciatus* throughout Australia and southern and eastern mainland New Guinea, wherever they are sympatric. Together with different hunting methods involving more aerial chasing in *cirrocephalus* and more perch-and-pouncing in *fasciatus* (Marchant & Higgins 1993: 137–138, 153), difference in body size enables the two species to coexist by prey partitioning. In any one area, there is no overlap in bulk between males of the two species nor between females (Table 1). The Rossel Island specimens, however, lie between the smaller males of New Guinean and north Australian *cirrocephalus* and larger males of *fasciatus* from the same regions (Table 1). They are similar in general size to males of the much paler form of *fasciatus* (*dogwa* Rand, 1941) from the Trans-Fly region of southern New Guinea, however, as well as females of New Guinean *A. cirrocephalus papuanus*. Nevertheless, such a match with *dogwa* could reflect convergence and possible missexing of female *papuanus*, again leaving specific identity in doubt. Although used in different hunting strategies, wing tip shape does not differ significantly between the species: usually $p7 > p6 \approx p8 > p9 \geq p5$ in both (primaries numbered outwards). Other structural proportions are more informative (Table 1). Judged by tail/wing and culmen/tarsus ratios, *cirrocephalus* is consistently shorter-tailed and smaller-billed across populations than *fasciatus*, sex for sex and allowing for rather longer average tails