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THE CRESTED LIZARD HAWK (*AVICEDA JERDONI*)
IN THE PHILIPPINES

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The genus *Aviceda* contains about five species of small hawks distributed through the Old World tropics. Two forms of this genus have been described from the Philippines: *Hyptiopus magnirostris* Kaup, 1847, and *Baza leucopias* Sharpe, 1888. The latter was based on a single specimen from the island of Palawan. The application of these two names to the Crested Lizard Hawks of the Philippines has varied. Modern authors agree that the Philippine birds belong to the Indo-Malaysian species *Aviceda jerdoni*. Peters (1931: 196) used the name *A. j. magnirostris* for the populations of Luzon and Mindanao, and attributed those of the islands of Romblon, Samar, and Palawan to a subspecies to which he attached Sharpe's name *leucopias*. He was followed in this treatment by Hachisuka (1934: 34-35) and Swann and Wetmore (1936: 294-295); the former author adopted the emendation to "*leucopais*" published by Whitehead (1890: 43) at Sharpe's request.

The most recent manual on Philippine birds (Delacour and Mayr, 1946: 40) abandons the concept of two subspecies, using the name *magnirostris* for the birds of all five islands (Palawan, Luzon, Romblon, Samar, and Mindanao) from which *Aviceda* has supposedly been recorded. The description

of the "immature" *A. j. magnirostris* given by Delacour and Mayr, however, is based on the unique type of *leucopias*, which was described as a "young female" by Sharpe.

I have examined the type of *leucopias*, now in the American Museum of Natural History (Rothschild Collection), which remains to this writing the only specimen of *Aviceda* known from Palawan. It is my belief that this bird (figured in color by Whitehead, 1890: pl. 2) is albinistic, and that there is no definite evidence that the *leucopias* coloration represents a normal "immature" plumage of *magnirostris* as described by Delacour and Mayr. Truly "immature" specimens of *Aviceda* of any species are rare in collections, and examination of the entire series of this genus in the American Museum suggests that this is because such plumages are held very briefly, unlike the situation in many other Accipitridae. Two juvenile specimens of *A. jerdoni ceylonensis* in the American Museum are similar to definitively plumaged adults, but have the feathers of back, crown, wing coverts, etc., edged with white, and the upper breast streaked longitudinally. It seems very unlikely that *A. j. magnirostris*, of which the adults rather closely resemble other subspecies, would have a juvenal plumage as radically different as that represented by *leucopias*. As mentioned above, other *Aviceda* hold the juvenal plumage only briefly; the type of *leucopias* is, in part, badly worn and bleached to an extent that juvenile *Aviceda* would not normally have time to attain before molting. It thus seems probable that the type of *leucopias* represents a "dilute" or albinistic adult female. The fate of the name depends on whether a case can be made for two subspecies of *Aviceda jerdoni* in the Philippines.

The presence of the small island of Romblon in the list of Philippine localities from which *Aviceda* has been taken rests on the record of Bourns and Worcester (1894: 33), who reported "*Baza leucopais* Sharpe" from Romblon and Samar. These authors had not seen the unique type of *leucopias*, and identified their specimens from descriptions only. Their single Romblon specimen is now in the collection of Carnegie Museum (no. 137904). It is not an *Aviceda* at all, but an immature female *Spilornis cheela*, collected September 7, 1892, just seven days before Bourns and Worcester collected an adult female

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(C.M. 137902) of the same species on Romblon. The very small size of these two specimens (flattened wing 308, 305 mm) and the pale color of the adult incidentally confirm Rand's identification of his single Romblon specimen as *Spilornis cheela panayensis* (Rand, 1951: 578). The island of Romblon may thus be removed from the known range of *Aviceda jerdoni* in the Philippines.

For many years the status of *Aviceda* on the island of Samar was precisely like the Romblon status described above, resting on a single Bourns and Worcester specimen. This bird was collected at Catbalogan, Samar, on August 12, 1892, and is now in the collection of the Minnesota Museum of Natural History, University of Minnesota (no. 11416). It, too, is an immature *Spilornis cheela* (male, wing 312 mm). There is, however, a bona fide record of *Aviceda jerdoni* from Samar; an adult male was collected by D. S. Rabor on Mt. Capoto-an, May 9, 1957. The statement of Rand and Rabor (1960: 374) that *A. j. magnirostris* had been "collected previously [on Samar] by Bourns and Worcester" is thus erroneous, and theirs is the first specimen from that island.

Leaving out of consideration the single problematical Palawan specimen (the type of *leucopias*), we are left with three islands from which *Aviceda jerdoni* is alleged to have been recorded: Luzon, Samar, and Mindanao. The name *Hyptiopus magnirostris* Kaup was based on *Baza magnirostris* Gray, (List Bds. Brit. Mus., 1844: 19), a *nomen nudum*, which in turn was based on a single specimen received by the British Museum in 1842 among some 175 Philippine specimens collected by Hugh Cuming. Mr. R. W. Sims has kindly examined this type specimen for me, and writes as follows (letter of July 16, 1960): "Cuming never tied collectors' labels on his specimens, hence the only label is that secured in the time of G. R. Gray. The information there reads: 'Baza magnirostris, locality Philippines, ex. coll. Cuming.'" At some later date (apparently), the additional locality "Island of Manilla, South" was entered against this specimen in the British Museum Register (Sharpe, 1893: 555). The source of this additional locality information is problematical. It is highly unlikely that it was supplied by Cuming, the collector; Mr. S. P. Dance of the Mollusca Sec-

tion of the British Museum, who is working on the life and collections of Hugh Cuming, informs me that Cuming never, to his knowledge, employed the expression "Island of Manilla," whereas "Island of Luzon" was frequently used by Cuming. Mr. Sims, of the Bird Room, writes, "I gather from Mr. Dance that in his later years Cuming employed a secretary to do all his writing for him so it is possible that somewhere either on the part of the secretary or perhaps on the part of G. R. Gray there was an error in transcription and that the type of *magnirostris* was collected at some other locality." Mr. Dance (letter of August 29, 1960) says that he "should be inclined to treat any label on a Cuming specimen with circumspection . . ."

Sharpe (1893: 556) pointed out that nobody since Cuming's time had recorded *Aviceda* from Luzon, and this statement is equally true 68 years after Sharpe's words were printed. Although new species are still being discovered on Luzon, it seems highly unlikely that a bird the size of an *Aviceda* would escape detection on this, the most heavily populated Philippine Island, particularly since most Luzon birds collected in Cuming's time, some 130 years ago, came from the vicinity of Manila. In view of the great uncertainty attached to the validity of the locality "Island of Manilla, South," I would suggest that the type locality of *Hyptiopus magnirostris* Kaup be designated as Davao, Mindanao, a source of some early Philippine collections and a locality at which the species is definitely known to occur. A precedent for such an action with respect to a Cuming specimen was set by Rand and Rabor (1960: 429).

An additional published record of *Aviceda jerdoni* "*leucopais*" must be mentioned here. Hachisuka (1941: 72) lists five "light creamy birds" from Mr. Hirazawa's collection as "*leucopais*." As these were collected in Mindanao, where *magnirostris* is also known to occur, Hachisuka stated that the two forms must be separate species unless further investigation should prove them to be age or individual variants within a species. One would suspect that this might serve to confirm Delacour and Mayr's identification of the *leucopias* type as the "immature" plumage of *magnirostris*. This is not the case, however. One of the Hirazawa specimens was obtained by

Hachisuka, and is now in the personal collection of S. Dillon Ripley at the Peabody Museum, Yale University, where I have examined it. This specimen (Hachisuka 3751, SDR 337) was collected near Davao, Mindanao, sometime in 1927-1928. It is neither *Aviceda* nor *Spilornis*, but a pale, very worn example of *Pernis celebensis steerei*! The latter species of Honey Buzzard, incidentally, is highly variable in color, as is its congener *P. ptilorhynchus*, as amply illustrated by the series in the Peabody Museum collection; one would not suspect this variability from the description given by Delacour and Mayr (1946: 42).

An additional specimen in the Hachisuka collection (Hachisuka 3752, SDR 338) was collected at Bitogan, Sigaboy, Mindanao in 1930 (no date given). It was first identified as *Spizaetus limnaetus*, then reidentified as *Aviceda jerdoni magnirostris*. It is, in fact, another specimen of *Pernis celebensis steerei*. I do not know that Hachisuka ever specifically referred to this specimen in print. As for the rest of the Hirazawa series of "*leucopais*," I have been unable to learn of their present whereabouts, if, indeed, the Hirazawa collection survived World War II. One can but assume that all five specimens were of one species, in which case they were not *Aviceda* but *Pernis*, as illustrated by the example seen.

Rand and Rabor (1960: 374) stated that their one Samar specimen of *Aviceda jerdoni magnirostris*, a male, had a definitely shorter wing than two females and an unsexed specimen from Mindanao. There probably is no geographic significance in this difference. The Samar male has a flattened wing of 294 mm; measurements of a Mindanao series run as follows: male 299, 311; female 298, 299, 308, 314, 321, 324. It would appear that males average slightly smaller than females. There is a spread of 26 mm between the smallest and largest females measured, and only 12 mm between the two Mindanao males. The Samar male would undoubtedly fall within the range of variation in size of a larger series of Mindanao males.

The unsexed specimen from Mindanao mentioned by Rand and Rabor is readily identified as a female on the basis of plumage color. Although this is not suggested in the description by Delacour and Mayr (1946: 40), *Aviceda jerdoni* is

markedly sexually dimorphic in color. The difference is well described for *A. j. jerdoni* by Stuart Baker (1928: 174), but the dimorphism of *magnirostris* does not appear to have been correctly described. The descriptions of the "nearly adult female" and "adult male" given by McGregor (1909: 236-237) and Hachisuka (1934: 34) are copied directly from Sharpe (1874: 356), with and without credit, respectively. But, as Sharpe himself pointed out (1893: 555-556), the "nearly adult female" proved to have been a victim of a labeling error, and was not in fact from the Philippines at all. The figure in Delacour and Mayr (1946: 41) may be a composite of the two specimens in the American Museum of Natural History, as it partakes of the characteristics of both sexes. In males the upper breast is more or less clear gray; in females this area is mixed with rufous. The broad brown bars of the posterior underparts are a darker, less rufescent brown in males. The cheeks of males are gray with black shaft-streaks; this area in females is buffy or pale rufous with darker-brown shaft-streaks. Females are much more rufescent dorsally; this is most striking on the crown and nape, which have bright rufous feathers with darker centers. In males the crown is virtually black, with narrow, paler feather-edges, and the nape nearly lacks rufescence. On the outer rectrix of males, the dark bars of the outer web are approximately opposite those of the inner web, whereas in females the dark bars are offset from one another, sometimes to the degree that (as in C.N.H.M. 184011) the dark bars of the outer web are opposite the *light* bars of the inner web. Incidentally, the figure in Delacour and Mayr (1946: 41) shows the outer rectrices with only a narrow pale tipping, whereas there is actually a rather broad pale terminal band (20-28 mm).

The four Mindanao females now before me are rather uniform in dorsal color, making allowances for relative wear and museum age. Only two males are at hand, one of which is the Samar bird reported by Rand and Rabor (1960: 374). This specimen differs slightly in color from a single Mindanao male in being of a darker, colder tone of brown dorsally, lacking almost completely the rufescent tinge on the nape of the latter bird. The Samar specimen also has dark-gray rather than

dark-brown edgings to the black feathers in the center of the crown. Further material must be compared before any geographical significance can be attached to these differences.

The Crested Lizard Hawk is a rare bird in the Philippines. Dr. Rabor writes me (letter of September 17, 1960) that the Samar male is the only specimen he has taken in 26 years of collecting. I have attempted a census of Philippine specimens of *Aviceda jerdoni*, and have managed to locate the following:

British Museum (Natural History)

♂ "Philippines," Cumming coll. (type of *magnirostris*).

♀ Davao, Mindanao, February, 1905.

American Museum of Natural History

♀ Kalusian, Palawan, October 5, 1887 (type of *leucopias*).

♂ Davao, Mindanao, May 17, 1889.

♀ Davao, Mindanao, September 8, 1903.

Chicago Natural History Museum

[♀] Culamen, Caburan, Davao, Mindanao, January 25, 1947.

♀ Mt. Busaw, Caburan, Davao, Mindanao, January 28, 1947.

♀ Mati, Digos, Davao, Mindanao, February 9, 1947.

♂ Mt. Capoto-an, Samar, May 9, 1957.

University Zoological Museum, Copenhagen, Denmark

♀ Talacogan, Upper Agusan, Mindanao, March 8, 1952.

♀ Pulangi River, Bukidnon, Mindanao, November 20, 1952.

National Museum of the Philippines, Manila

♂ Limot, Mati, Davao, Mindanao, April 10, 1949.

[♀ Bunauan, Agusan, Mindanao, December 17, 1909: McGregor, 1910. This specimen was lost with the destruction of the Museum in 1945.]

These thirteen specimens (one lost) are the only examples of *Aviceda* to have been collected in the Philippines to my present knowledge. I have examined the seven now in museums in the United States.

Lint and Stott (1948: 42) published sight records of this species from three localities in Zamboanga, western Mindanao, all in October, 1945. In view of the rarity of *Aviceda jerdoni*, however, the possibility must be considered that some similar species was involved (several Philippine raptors have similar patterns), particularly as a "bare tree within half a mile of the center of the city of Zamboanga" seems a most unlikely situation for a species usually described as a shy resident of original forests. The species has not been collected in Zamboanga.

It is obvious that the principal Philippine range of this rare bird is central Mindanao; only two specimens are known to have been collected elsewhere. It is just possible that a recognizable subspecies may inhabit Samar, but the status of the Palawan population cannot be determined from the single specimen known, which appears to be a freak individual.

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SUMMARY

The Crested Lizard Hawk, *Aviceda jerdoni*, is known from the Philippines by thirteen or more specimens of the endemic subspecies *A. j. magnirostris*. The type locality "Luzon" generally given for this subspecies is almost certainly erroneous, and Davao, Mindanao is substituted. A second supposed race, *A. j. leucopias*, is based on a single specimen from Palawan which is probably an aberrant individual. Other records of "*leucopias*" from Romblon, Samar, and Mindanao are based on misidentified specimens. All but two specimens of known origin of *magnirostris* are from Mindanao; these are the type of "*leucopias*" from Palawan and one from Samar which may represent a recognizable race. Sexual dimorphism in *magnirostris* is described for the first time, and all known specimens listed.

LITERATURE CITED

- Baker, E. C. Stuart. 1928. Fauna of British India. Birds 5. Taylor & Francis, London. 469 p.
- Bourns, F. S. and D. C. Worcester. 1894. Preliminary notes on the birds and mammals collected by the Menage scientific expedition to the Philippine Islands. Occ. Pap. Minn. Acad. Nat. Sci. 1: 1-64
- Delacour, J. and E. Mayr. 1946. Birds of the Philippines. Macmillan Co., New York. 309 p.
- Hachisuka, M. 1934. The birds of the Philippine Islands 2 (4). Witherby, London. 256 p.
- Hachisuka, M. 1941. Further contributions to the ornithology of the Philippines. *Tori* 11: 61-89.
- Lint, K. C. and K. Stott, Jr. 1948. Notes on birds of the Philippines. *Auk* 65: 41-46.
- McGregor, R. C. 1909. A manual of Philippine birds. Bureau of Science, Manila. 769 p.
- McGregor, R. C. 1910. Additional notes on birds from northern Mindanao, Philippine Islands. *Phil. J. Sci.* 5, sec. D: 197.
- Peters, J. L. 1931. Check-list of birds of the world 1. Harvard Univ. Press, Cambridge. 345 p.
- Rand, A. L. 1951. Birds of Negros Island. *Fieldiana: Zool.* 31: 571-596.
- Rand, A. L. and D. S. Rabor. 1960. Birds of the Philippine Islands: Siquijor, Mount Malindang, Bohol, and Samar. *Fieldiana: Zool.* 35: 221-441.
- Sharpe, R. B. 1874. Catalogue of the Accipitres, or diurnal birds of prey, in the collection of the British Museum. British Museum, London. 480 p.
- Sharpe, R. B. 1893. Bornean notes. *Ibis* [35]: 546-563.
- Swann, H. K. and A. Wetmore. 1936. A monograph of the birds of prey 2 (13): 257-352.
- Whitehead, J. 1890. Notes on the birds of Palawan. *Ibis* [32]: 38-61.



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