

# DIURNAL BIRDS OF PREY

## Order ACCIPITRIFORMES

Vol. I., p. 59.

Of this large and very natural group, two important sections, the Vultures (*Egyptidæ*) and the Ospreys or Fish-Hawks (*Pandionidæ*), may at once be excluded from consideration in the present fasciculus, as under no circumstances are they met with in the mountains of the Malay Peninsula. The remainder, which are comprised in the somewhat heterogeneous family *Falconidæ*, includes under the existing classifications the Kites, Harriers, Buzzards, Eagles, Hawks (*sensu stricta*) and Falcons. In the Malay Peninsula the kites, buzzards and harriers are not permanent residents, and do not, so far as is known, frequent the mountains, but of the remainder any or all may be met with at high elevations. For practical purposes the number of species that are definitely known to occur in the montane zone is, however, very limited, and only very intensive observation is likely to add to those which are included in the present volume.

The descriptions of the distinctively montane species are perhaps somewhat lengthy, but it should be understood that in the raptorial birds the adult plumage is attained only after a period that is certainly not less than four years. From the nature of the terrain, observation of the local eagles and hawks in the mountains of the Malay Peninsula is not easy, and the acquisition of illustrative specimens is even more difficult. The bird lover is not willing to unnecessarily destroy these beautiful and graceful birds, but it is hoped that ornithologists visiting or resident in the mountains of the Malay Peninsula will take every opportunity of verifying their observations by collecting specimens of the montane fauna, forwarding them either to the Natural History Museum, South Kensington, or to any of the local museums. Notes on the breeding habits of the local sparrow hawks, of the large black eagle, and of the smaller crested eagle (*Spizactus alboniger*), are specially desired, and also examples of the honey-buzzard, if possible in moult, and obtained during the summer months.

### KEY TO THE RAPTORIAL BIRDS HERE DESCRIBED

I	{	Area between the nostrils and the eye with close-	2
		set, scale-like feathers . . . . .	
		Area between the nostrils and the eye sparsely	3
		clad with hair-like bristles . . . . .	

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|---|---|--|---|
| 2 | { | Crest, longer; plumage beneath, heavily striped and barred with black and white  | } <i>Pernis apivorus ptilorhynchus</i> (adult), p. 25 |
|   |   | Crest, shorter; plumage beneath, much more lightly striped and barred with brown and white   |   |
| 3 | { | Large birds, more or less crested; the tarsi feathered to the toes . . . . . 4   | } <i>Accipiter gularis nisoides</i> , p. 27           |
|   |   | Small birds, not crested; the tarsi bare . . . . .   |   |
| 4 | { | Plumage, mainly black, never cross-banded on the belly; claws, slender, but slightly curved; wing exceeding 20 in.                               | } <i>Ictinactis malayensis</i> , p. 29                |
|   |   | Plumage beneath, striped on the breast, cross-banded on the belly, in adults; uniform whitish or buffy in young birds; wing not exceeding 14 in. |   |

*Pernis apivorus ptilorhynchus*

**The Crested Malaysian Honey-Buzzard**

*Falco ptilorhynchus*, Temm., *Pl. Col.*, 1823, plate 44 (Java).

*Pernis brachypterus*, Blyth, *Journ. Asiat. Soc. Bengal*, xxi., 1852, p. 436; Hume *Stray. Feath.*, ix, 1880, pp. 122-123.

*Pernis tweedallii*, Hume and Gurney, *Stray Feath.*, ix., 1880, pp. 446-448 (Singapore); id. *Stray Feath.*, x., 1887, p. 513, plate; Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 171.

*Pernis ptilorhynchus ptilorhynchus*, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v, 1921, p. 94.

*Pernis apivorus ptilorhynchus*, Robinson and Kloss, *Journ. Fed. Malay States Mus.*, xi., 1923, p. 221.

**Malay Name.**—Lang lebah.

**Description.**—Lores and region in front of the eye with close-set, scale-like feathers; generally with a long black crest.

*Adult.*—Sexes alike. Head and crest, sides of the head, neck and mantle, black, the bases of the feathers white, scapulars, back and rump becoming browner; smaller wing coverts at the angle of the wing, black, the others dark brown. Primaries and secondaries, dark brown, the primaries with narrow black bars, the secondaries with obscure paler brown bars, lighter on the outer web. Inner aspect of quills, greyish, with black bars; under wing coverts and axillaries, blackish, with broad white bars. Tail with broad, black and greyish brown bars, the subterminal pale bar itself with wavy whitish narrow bars, the outer feathers paler on the inner webs. Under surface, throat and upper breast, white, with broad, longitudinal black stripes; lower breast, belly, flanks, thighs and under tail coverts, brownish black with white cross-bars. Dark varieties are very numerous, more so, apparently, in Java and Sumatra, in

which the crest is equally long, the throat blacker than the rest of the under surface, the bases of the feathers white; the flanks with concealed white cross-bars, and with dark shaft stripes showing through the sooty brown of the breast. These forms are analogous to the dark varieties that occur in the changeable hawk eagle (*Spizaetus cirrhatus limnaetus*), and in the European honey-buzzard (*Pernis apivorus*).

*Younger birds.*—Are much browner above, the feathers with light edges; the primaries a good deal paler and greyer, so that the black bars show up much more clearly; under surface, generally browner; the throat surrounded by a cirlet of black feathers; lower belly, barred, as in the old bird, but with rufous brown and white tail as in the adult.

*Immature.*—Head, more reddish brown, with dark shaft stripes; under surface paler still, with dark shaft stripes on the feathers of the breast, but with little cross-barring. Tail with more numerous, narrower bars, the subterminal dark one not broad.

*Note.*—By many ornithologists the very black bird, with the heavy cross-barring on the lower surface, is considered to be a distinct species, *Pernis tweeddalii*, which is supposed to be rather smaller than the true *P. ptilorhynchus ptilorhynchus* to which is assigned the long-crested birds, almost black in the adults, with the under surface with longitudinal stripes, and the tail with more numerous and narrower bars. In the Malay Peninsula the question is further complicated by the occurrence of two migratory races—one from the west, which is usually very pale beneath, nearly always with darker shaft stripes, and with a very short crest or lacking one altogether; wing rarely more than 17 in. This form is common throughout India and is known as *Pernis p. ruficollis* (Lesson). Occasionally, in the winter months, a larger and usually darker bird, also nearly crestless, occurs in Java, Borneo, Sumatra and the Malay Peninsula, and also in South China. Wing not usually less than 18 in. This is a breeding bird in Eastern Asia and Siberia, and may be regarded as an Eastern form of the European honey-buzzard. It has been named *Pernis (apivorus) orientalis*.<sup>1</sup>

**Soft Parts.**—Iris, pale chrome in adults, hazel in younger birds; bill, black; base of lower mandible, plumbeous, sometimes with a pinkish tinge; feet, pale yellow.

**Dimensions.**—Total length, 24 to 26 in.; wing, 16 to 17.5 in.; tail, 10.5 to 12 in.; tarsus, 2 to 2.1 in.; bill from gape, 1.6 to 1.8 in.; culmen, 1.5 in.

**Range in the Malay Peninsula.**—Throughout its length and in Singapore Island.

**Extralimital Range.**—Tenasserim, probably to Pegu, Cambodia and South Indo-China, Sumatra, Java and Borneo, but limits quite uncertain: much confused with migratory birds.

**Nidification.**—There are no records of nesting in the Malay Peninsula. The Indian form builds large nests of sticks, lined with green leaves, and placed

<sup>1</sup> Taczonowski, *Faun. Orn. Sib. Or.*, i., p. 50 (*Mem. Acad. St Petersburg*, vol. xxxix, 1891) (East Siberia).

high in trees. The eggs are usually two in number, very rounded in shape, usually glossless. The colour is described as ranging from white to pinkish white to buffy yellow, and the markings, which are very variable in extent and character, as ranging from reddish brown to intense blood-red, and occasionally purple. Oates gives the average dimensions as 2'03 by 1'72 in. Malayan birds may, of course, differ considerably both in the colour and size of the eggs, and in the situation of the nest, which will probably be found in high trees on the edge of jungle or on river banks, or in trees on the embankments of ricefields.

**Habits.**—It is difficult to disentangle the habits of the resident birds from those of the migrants, common in the winter months, which are met with on the coasts, on small islands, and in the ricefields. The resident birds seem to keep much more to old jungle, and are found along the rivers and streams, amongst high trees, and often in the hills and on the edges of clearings.

A pair of birds travelling up a jungle stream and raiding the bees' nests that are common in such situations will often render the locality almost impassable, as the bees are rendered frantic by the destruction of their combs and attack anything moving. The food seems almost exclusively bees, their combs and larvæ, though small reptiles are occasionally taken. In the ricefields the birds are occasionally seen soaring, but along the rivers and in the jungle the flight is direct, though rather heavy and lumbering—almost as ungainly as that of the jungle fishing-eagle, *Ichthyophaga humilis*. The crest, as a rule, is carried directed backwards, not so conspicuously erected above the head as in the cuckoo-falcons. I am quite unacquainted with the call, but the bird appears to be normally extremely silent.

*Accipiter gularis nisoides*

**The Malayan Resident Sparrow Hawk**

*Accipiter nisoides*, Blyth, *Journ. Asiat. Soc. Bengal*, xvi., 1847, p. 727 (Malacca).

*Accipiter virgatus*, Butler, *Journ. Straits Branch, Roy. Asiat. Soc.*, No. 32, 1899, p. 29.

*Accipiter gularis*, Robinson, *Journ. Fed. Malay States Mus.*, ii., 1909, p. 170.

**Malay Name.**—Burong raja wali.

**Description.**—*Adult male.*—Above, including the external aspect of the wings, a clear grey, paler on the secondaries, bases of the nape feathers, white. Inner aspect of the wing and quills with dark and light bars, the latter paler towards the base; axillaries and under wing coverts, buffy, with rounded dark spots; inner secondaries with broad, white bars on the inner webs, not visible externally. Middle tail feathers, grey, with four dark bars, the remaining feathers browner, the outermost pairs with six dark bars; inferior aspect of tail, whitish, with dark bars. Lores, whitish; sides of the face and ear coverts, grey, with dark streaks. Chin and throat almost white, with a very

fine central hair-streak. Chest, breast, upper abdomen and flanks, deep rufous salmon, the feathers with obsolete, paler bars towards their bases. Thighs, salmon; middle of abdomen and under tail coverts, pure white.

*Female and young.*—I have no birds that I can definitely associate with the above very adult bird, and none which has been obtained in summer and which can therefore be assumed not to belong to the Japanese migratory form, *A. gularis gularis*, described at length in Volume I., p. 51.

**Soft Parts.**—As in *A. g. gularis*. Iris, lemon-yellow; bill, slate-black on culmen; greenish yellow on cere and gape; tarsi, greenish yellow; toes, more yellow; claws, slaty horn.

**Dimensions.**—*Male*: total length, 10 in.; wing, 6·3 in.; tail, 4·8 in.; tarsus, 1·8 in.; middle toe and claw, 1·5 in.; bill from gape, 0·7 in.; culmen, 0·6 in.

**Range in the Malay Peninsula.**—Quite uncertain. Mountains of Perak south to Selangor and Malacca. Males from Khanduli, Chaiya, Peninsular Siam, shot in September, are possibly not true *A. g. gularis*.

**Extralimital Range.**—Equally dubious. North to South Tenasserim and Mergui; possibly parts of West Sumatra at moderate elevations.

**Nidification.**—Butler records what must have been this bird as breeding in April at the foot of the Larut Hills, but states that the tree was unclimbable. Quite small sparrow hawks, probably of this form, are also stated to breed in islands of the Mergui Archipelago.

**Habits.**—Presumably those of the allied migratory race, but specimens and records of this more or less hypothetical resident race are extremely rare, though sparrow hawks are not infrequently seen high on the mountains at all times of the year. A young male, which we cannot certainly identify with this form, was obtained by Mr Kloss and myself on Kedah Peak on 2nd December, and a very fine adult was shot by a Dyak on Mengkuang Lebar, Selangor, on 3rd April, which is rather late in the year for *A. g. gularis*. It is this bird which is described above.

*Note.*—It is more with the idea of attracting attention to this hawk that I have included a description in this volume under Blyth's name. The high mountains of Java, Borneo and Sumatra all maintain a resident species, which is quite distinct from the lowland birds, whether migratory or resident, though their inter-relationships are not understood, owing to their extreme rarity in collections. Those from Sumatra and Java, the true *A. virgatus*, are probably identical, but the form from Kina Balu, North Borneo, *A. rufotibialis*, is possibly distinct. The Malayan mountain bird differs from this in slightly larger size and the obsolete throat stripe. From the typical *A. gularis* it is distinguished by its very much richer colour below.

Any sparrow hawks from the Malay Peninsula, except birds obtained on or near the coast during the winter months, will be most useful in elucidating this difficult question of resident and migratory forms. It is most desirable that they should be carefully sexed.

*Ictinaetus malayensis***The Black Eagle**

*Falco malayensis*, Reinw., Temm., *Pl. Col.*, pl. 117, 1824 (Java).

*Aquila pernigra*, Hodgs., *Journ. Asiat. Soc. Bengal*, v., 1836, p. 227 (Nepal).

*Neopus malayensis*, Sharpe, *Cat. Birds, Brit. Mus.*, i., 1874, p. 257; id. *P.Z.S.*, 1887, p. 433; *id. op. cit.*, 1888, p. 268.

*Ictinaetus malayensis*, Blanford, *Faun. Brit. Ind., Birds*, iii., 1895, p. 347; Robinson and Kloss, *Ibis*, 1911, p. 22; Stuart Baker, *Ibis*, 1918, pp. 51-61, pl. 2, figs. 1-4.

**Malay Name.**—Lang hitam.

**Description.**—*Adult.*—Sexes alike. Almost black, becoming dark chocolate-brown in worn plumage, bases of the feathers of the head and crest, white; primaries with irregular bars of lighter brown towards the base, not reaching the shaft, becoming whiter towards the base, where the bars are composed of a series of rounded spots of greyish white; tail with seven or eight indistinct brownish bars above, narrower than the interspaces, much whiter and clearer on the inferior aspect.

*Immature.*—Generally lighter, the forehead, whitish; sides of the head and neck white; the feathers with dark centres and light edges. Upper tail coverts barred with brown and white; edge of wing and outer under wing coverts, mottled black and white; feathers of the under surface with dark shaft stripes, the edges broadly mottled with rufous brown and buff, producing a longitudinally striped effect. Bars on the tail much more numerous than in the adults.

**Soft Parts.**—Iris, bright yellow; bill, black; feet, dull yellow; claws, blackish or dark plumbeous.

**Dimensions.**—Total length, 27 to 30 in.; wing, 21.5 to 23.5 in.; tail, 12 to 13.5 in.; tarsus, 3.2 to 3.5 in.; bill from gape, 1.6 to 1.7 in.; culmen, 1.8 to 2.1 in.

**Range in the Malay Peninsula.**—From the northern border as far south as Malacca in hilly districts.

**Extralimital Range.**—The mountainous districts of Continental India and Ceylon, Assam and Indo-China, south to Muleyit in Tenasserim; Sumatra, Borneo, Java, Celebes and east to the Moluccas.

**Nidification.**—The black eagle has not been observed to breed in Malaya, though it must, of course, do so. Mr Stuart Baker (*loc. cit.*) gives a very full account of the nest and eggs and general habits of the bird based on his own observations in Assam, Cachar and the Khasia Hills, and on those of Mr Stuart in Travancore and Colonel Rattray in Northern India. The nests found by Mr Baker were built in lofty trees in very rugged and mountainous country, and one is described as over four feet in diameter, and eighteen inches deep, with a well-made depression in the centre, lined with a pad of thick green leaves of creepers and the ends of oak branches. The eggs are one or, very

rarely, two in number, very variable both in texture and colour, which latter ranges from an almost uniform clouded buff to a whitish pink ground-colour, with variable blotches of deep vandyke-brown and cloud-greyish subsurface markings. The average dimensions are given as 2'42 by 1'96 in.

In Malaya, nests may be looked for among the more rocky peaks of the main range, such as Gunong Kerbau and Gunong Batu Puteh in South Perak, in both of which localities the birds have been observed.

**Habits.**—This eagle has been observed in numerous localities throughout the Peninsula, as far south as Malacca, generally in hilly country, and often at great heights, though in heavy jungle, when the surface is not undulating, it cannot be observed above the forest canopy as it can from mountain peaks. On the Larut Hills and on Gunong Tahan it can be seen on most days soaring above the trees, with a very effortless action, occasionally swooping down nearly to tree-level, with its head bent downwards, and feet hanging down, not stretched behind it.

The food is probably varied—birds and mammals, often of fair size, are taken from the tree-tops, and the Sakais say that it even snatches young monkeys from their mothers, but this I cannot vouch for. Old accounts say that birds' eggs enter largely into the diet, and Stuart states that snakes, grasshoppers and lizards are also eaten. The bird is a silent one. Baker says "it has a shrill cry, which it sometimes utters when soaring," and this I have heard. It is said by the same observer sometimes to utter a low croak when perching, and a louder croak when attacking anyone interfering with its nest.

*Note.*—Swann and others have considered the Indian bird as distinct from the Malayan on account of its larger size. Large birds, however, occur in Malaya, and small ones in Travancore, and in a bird of this size, in which the sexes vary in dimensions, an inch or two difference in length of wing in somewhat small series is not, in my opinion, sufficient to constitute a subspecies.

### *Spizaetus alboniger*

#### **Blyth's Hawk Eagle**

*Nisaetus alboniger*, Blyth, *Journ. Asiat. Soc. Bengal*, iv., 1845, p. 173 (Malacca).

*Spizaetus alboniger*, Gould, *B. Asia*, pt. xv., 1863; Sharpe, *Cat. Birds, Brit. Mus.*, i., 1874, p. 271; Oates, *Faun. Brit. Ind., Birds*, iii., 1895, p. 354; Butler, *Journ. Straits Branch, Roy. Asiat. Soc.*, No. 32, 1899, p. 29; Ogilvie-Grant, *Fascic. Malay., Zool.*, iii., 1906, p. 114.

**Malay Name.**—Lang bĕrjambul.

**Description.**—*Fully adult.*—Sexes alike. Coal-black above, including the sides of the head and crest of about three inches length; tail feathers and greater wing coverts, browner. Primaries, dark brown, with narrow black bars and broader tips, secondaries with the bars not so clear. Inner aspect of wing quills, greyish white, with narrow black bars and broader black tips; angle of wing, under wing coverts and axillaries, black, broadly and clearly barred

with white. Tail, blackish brown, with a broad subterminal grey-brown band, paler in the middle, and with a very narrow fuscous brown tip. Beneath throat, white, with a broad, mesial black streak; breast also white, with clear black stripes, broadening to the tips of the feathers; rest of the under parts, including thighs, under tail coverts and sides of the vent, banded clear black-and-white, the black bands broader than the white.

*Younger birds*.—Head, still black, but the crest shorter, generally narrowly tipped with whitish; forehead and lores, mixed grey and black; sides of the head and neck and a collar round the hind neck, ruddy brown, with black shaft stripes and dark centres to the feathers; rest of upper surface and wings, browner; the upper tail coverts barred light and dark brown, with white tips; tail, above, with four brown and four blackish bars, the last black bar the broadest, with a narrow buffy tip; on the lower aspect the bars become black and white and are more irregular. Beneath, the pattern is as in the very old birds, but the fore parts are much suffused with salmon-rufous; the dark cross-bars are narrower, and dark liver-brown, not deep black.

*Still younger*.—Still browner above, only the middle of the feathers of the crown blackish; sides of the head, very rufous-brown, the black streaks reduced or absent. Under wing coverts and axillaries, almost uniform salmon-buff, with an occasional dark streak. Beneath, the upper parts very reddish, the longitudinal streaks reduced to narrow shaft streaks; the dark cross-barring pale reddish brown, and the white tints degraded to a pale buff.

*Juvenile*.—Head, almost white; upper parts, pale earthy brown, with broad white edges to the feathers. Tail, pale brown, with a whitish tip, the four black bars narrower and indefinite. Whole under surface, under wing coverts, axillaries and thighs, a pale buffy white, a few of the flank feathers darker, but without any dark stripes or cross-barring.

**Soft Parts**.—Iris, cadmium-yellow; bill, black; the base of lower mandible and the cere, plumbeous; feet, yellow; claws, black. *Immature*: iris, whitish yellow; bill and cere, lead-blue; feet, chrome-yellow.

**Dimensions**.—Total length, 20·5 to 22 in.; wing, 11·8 to 13 in.; tail, 9·4 to 10·5 in.; tarsus, 3·1 to 3·4 in.; bill from gape, 1·6 in.; culmen, 1·35 to 1·5 in.

**Range in the Malay Peninsula**.—Throughout its length; doubtfully in Penang, but certainly in Singapore at rare intervals.

**Extralimital Range**.—The extreme south of Tenasserim and probably Western Siam; Sumatra and Borneo. An allied form from Western Java has recently been described as *Spizaetus bartelsi*.

**Nidification**.—Unknown.

**Habits**.—This very handsome crested eagle is widely distributed throughout the Malay Peninsula, but is nowhere very common. In contradistinction to the larger species, *Sp. limnaetus*, this smaller bird is largely confined to more heavily forested country, and is rarely seen in or near the ricefields or over cleared areas. In the mountains and at nearly all the hill stations it is perhaps the most frequently seen of all the raptorial birds, and on the Larut



Hills consistently preys on domestic poultry. Normally, its food consists of birds and arboreal mammals, caught among the branches, and occasionally bats. Like others of the genus, this eagle does not soar to the same extent as the serpent eagles, but its flight is light and graceful, and it is extraordinarily agile in threading its way through the trees. It is also fond of perching for hours at a time on lofty dead trees, with its crest erected, though not almost vertically, as is the habit of the crested cuckoo-falcons under similar conditions. It utters an occasional whistle, like that of the changeable hawk eagle, but it is not nearly so noisy a bird as the serpent eagle.

*Note.*—The relationships of the hawk eagles of this genus are obscure, and in this volume I have used a binomial name for our bird. It is probable, also, that the retention of any of the species in the genus *Spizaetus* originally instituted for a South American bird is not justifiable. Ridgway has proposed (*Smithsonian Misc. Coll.* 52, No. 4, 1920, p. 2) *Phacoactus* for the changeable hawk eagle, *Spizaetus cirrhatus limnaetus* (Vol. I., p. 69), with which the present bird is hardly congeneric. W. L. Sclater also has separated the African forms, so that it is not strictly logical to leave any Asiatic species with *Spizaetus*. For the moment, however, pending a fuller revision of this difficult group, I refrain from interference with the existing nomenclature.