

Article XVII.— THREE NEW GENERA OF BIRDS.

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Stringonax gen. nov.

Type *Bubo blakistoni* Seebohm.

Related to *Ketupa* but differing in the form of the bill which has a broad, shallow groove running forwards from each nostril, the sides of the maxilla below this depression being swollen; the tarsus densely clothed to base of toes with short, soft, downy or fur-like feathers, instead of being conspicuously bare for a greater or less distance above the toes; the spicules on under side of toes less pronounced.

The type of this genus and its near ally *S. doerriesi* Seebohm, though heretofore referred to *Bubo* (even by Hartert, as late as 1913, in 'Der Vögel der palaäarktischen Fauna') bear no close relationship to that genus but on the contrary, as noted by Ridgway (Birds of N. and M. Amer., Pt. VI, p. 737) are very distinct generically. They are undoubtedly most closely related to the Fish Owls, *Ketupa*, of which they are doubtless the northern representatives.

In addition to the diagnostic characters cited above, the species of *Stringonax* differ from those of *Ketupa* in superior size, being the largest of all Owls though considerably surpassed by *Huhua nipalensis* and *Scotopelia peli*, at least, in the size of the bill, feet and claws.

The affinity with the Oriental Fish Owls, *Ketupa*, and the Ethiopian Fish Owls, *Scotopelia*, is shown in the compressed claws, with sharp, knife-like posterior edge, the spiculate soles, the fur-like character of the tarsal plumage and the unfrayed outer edge of the outermost primary. In coloration there is a striking resemblance to *Ketupa*. *Ketupa flavipes* (which I have not seen), the northeastern representative of its genus, shows a significant approach to *Stringonax* in larger size and much more extensively feathered tarsus.

From the genera *Bubo*, *Huhua* and *Pseudoptynx*, which are closely related *inter se*, *Stringonax* differs in form of bill, character of tarsal plumage, spiculate toes, knife-like claws (which are relatively shorter and less attenuated), unfrayed edge of outer primary (approached by *Pseudoptynx*) and coloration. It further differs from *Bubo* in the perfectly bare toes and shorter outer primary, from *Huhua* in relatively smaller bill, feet and claws, and from *Pseudoptynx* in form of tail. From *Scotopelia* it may at once be distinguished by its feathered tarsus and the presence of conspicuous ear-tufts. Furthermore, the nostril differs in form and position, the tail is relatively much shorter, and the toe spicules are blunter.

Of the genus *Bubo* I have examined in this connection, *B. virginianus* and allied American forms, *B. bubo*, *B. bengalensis*, *B. coromandus*, *B. lacteus*, *B. verreauxi* and *B. maculosus*. "*Bubo*" *lettii* of the 'Hand-List,' is, according to Sharpe (B. B. O. C., X, lv) referable to *Scops* (= *Otus*).

In the two specimens of *Pseudopteryx philippinensis* examined the central pair of tail-feathers is considerably shorter than the outer pair instead of being decidedly longer as in other Bubonidæ. It has been stated that in the Barn Owls (Tytonidæ) alone, among Owls, are the middle rectrices shorter than the outer (Clark, Proc. U. S. Nat. Mus., XVII, 1895, 565).

Uropsalis gen. nov.

Type *Hydropsalis lyra* Bp.

Related to *Hydropsalis* Wagl. and *Macropsalis* Sel.; differing from the former in having the central pair of rectrices shorter than instead of much longer than the next three pairs; from the latter in the much smaller wing, the outer three primaries not specially enlarged, the tenth shorter than instead of longer than the ninth, three instead of only two primaries emarginate on the inner web; and in the broadly rounded instead of tapering and obtusely pointed tips of the first four pairs of rectrices; the latter much less strongly graduated, the fourth pair exceeding the third by less than one-half the length of the first pair instead of by more than the length of the first.

In addition to the type species, *Hydropsalis segmentata* Cass. is also referable to this genus. This species agrees with *U. lyra* in the form of the wing and differs from *Macropsalis* in the form of the tail even more than does *U. lyra*, the tail (omitting the outer pair of rectrices) being merely emarginate instead of strongly forked.

While Dr. Sclater referred these two species to his subgenus *Macropsalis*, and this course has been followed ever since, they differ so conspicuously from the type and (as here restricted) only species of that genus, *M. creagra*, in the form of the wing and in the shape and graduation of the rectrices, that there is no question of their generic distinctness. In the form of the wing they agree with the shorter-tailed species of *Hydropsalis* (subgenus *Diplopsalis*), the longer-tailed species of that genus slightly approaching *Macropsalis* in this respect.

In *Uropsalis lyra* the longest primary (the ninth) reaches $1\frac{2}{16}$ inches beyond the tip of the seventh, while in *Macropsalis creagra* (a bird of about equal size) the distance from the latter point to the tip of the longest (tenth) quill is three inches. The unusual development of the outer three primaries in *Macropsalis* is to a large degree a sexual character, highly developed in the male only. In the female the eighth, and particularly the ninth and tenth primaries are much less enlarged, the wing in consequence being much shorter than in the male. In *Uropsalis* the wing is of the same length in both sexes.

A further difference is seen in the long outer tail-feathers. In *Macropsalis* and *Hydropsalis* the shafts of these feathers are stout and strong, tapering very gradually to the tip. In *Uropsalis* the shaft, while not conspicuously more slender at the base, is rapidly reduced, and throughout the greater part of its length is very slender, only about half as thick as in *Macropsalis*; in the last four inches, however, it widens out and becomes twice as wide as at the corresponding point in *Macropsalis*. This is shown excellently in *U. lyra*, much less so in the single male specimen of *U. segmentata* examined, the outer rectrices of which, however, are not fully developed, at least as to length.

In *Macropsalis* and *Hydropsalis* the rectrices are conspicuously marked with white on the inner web. This is not the case in either of the species of *Uropsalis*.

Chryserpes gen. nov.

Type *Picus striatus* Müll.

Similar in general structure to *Centurus*¹ but with straighter bill which, seen from above, is relatively narrower basally, the terminal half thicker and with more nearly parallel sides as far as the wedge-shaped tip, the culmen sharply ridged, culminal "shelves" broader and flatter, supranasal ridge better developed, running out distinctly beyond middle of culmen, terminal portion of maxillary tomium distinctly (though not sharply) beveled, the tip deeper (more chisel-like); feathers of crown and nape shorter, those of nape smaller, stiffer and more compact (not lengthened into a short crest as in *Centurus*), the barbs shorter, coarser and closer; upper tail-coverts much less than one-third the length of the tail instead of much more than one-third; middle rectrices narrower and less abruptly acuminate terminally. Tuft of oil-gland more nearly vestigial. Coloration wholly different from the very uniform style of *Centurus*.

The fourth toe is equal to the third instead of shorter as in most of the species of *Centurus*. *C. uropygialis* and *C. hypopolius* however agree with *Chryserpes* in this respect. In the short, rounded wing and relatively long outer primary *Chryserpes* is equalled only by *C. radiolatus*.

The striking color differences between the two genera are set forth in the accompanying table.

The peculiar Haitian Woodpecker for which this genus is proposed passed as *Picus striatus* until 1846 when Gray referred it to *Centurus*, where it was allowed to remain until Hargitt in 1890 (British Museum Catalogue) transferred it to *Chloronerpes*. Judging by the key given in the 'Catalogue,' Hargitt relied on the supposed shorter wing-tip to distinguish this species from *Centurus*, but in this respect it agrees closely with *C. radiolatus* of Jamaica.

¹ All the species of *Centurus* with the exception of *C. nyanus* and *C. hypopolius* have been examined.

	<i>Chryserpes.</i>	<i>Centurus.</i>
Nasal tufts	Ash-gray	Red or yellow (obsolete in <i>C. uropygialis</i>)
Crown of female	With a rectangular black patch	Without black (occiput black in <i>C. superciliaris</i>)
Sides of neck	With a tuft of soft, silky, buffy-white feathers, above which is a large black spot	Uniform gray or ashy-brown like chest
Mantle	Broadly barred with black and yellow	Barred with black and white
Upper tail-coverts	Concealed portion blackish, exposed tips broadly bright red	White, with or without black bars; concealed portion barred with white or wholly white
Tertials	Inner webs uniform clay-color; outer webs black, with few, wide, rounded-off buff-yellow bars which tend to become confluent on outer margin of feathers	Regularly barred on both webs with black and white, the white bars more numerous, narrower and straighter, not tending to become confluent on margin
Outer Webs of primaries	Regularly spotted with yellow, like the secondaries	Unlike the secondaries, scarcely marked or with a subbasal white blotch
Rectrices	Wholly unbarred	Always more or less barred with white
Abdomen	Greenish yellow of mid-belly ill-defined, blending with greenish of flanks	Mid-belly with a conspicuously defined stain of red or yellow
Flanks and crissum	Greenish, unbarred	White or whitish, distinctly barred with blackish
Under wing-coverts	Greenish or cream-color with almost obsolete dusky bars	White, distinctly barred with black
Lower mandible	Light shade lighter and more extensive	Light shade more obscure and restricted or wholly wanting
Iris	Yellow	Red or brown, rarely orange (11 species recorded)

Besides differing even more strikingly in pattern of coloration from *Chloronerpes* than from *Centurus*, it differs also in shorter wings, more graduated tail, longer, stronger bill, which seen from above is narrower basally and thicker terminally, the maxillary tomium less sharply beveled towards tip, the gonys less concave (and longer than in most species of *Chloronerpes*), the lower mandible less attenuated terminally.

There is little doubt that as considered by Ridgway (*cf.* Bds. of N. & M. Amer., Pt. VI, p. 48), *Chryserpes* finds its nearest relation in *Centurus*, which it represents in San Domingo and Haiti; Jamaica and Cuba each being occupied by a species of *Centurus*, and Porto Rico by an isolated form now referred to *Melanerpes*.

In the recent treatment of the *Melanerpes* group by Mr. Ridgway, it is considered as separable into seven genera, the addition of *Chryserpes* making eight. In this group style of coloration is evidently a very reliable index of affinities. Thus a red or yellow stain on the abdomen runs through all the genera except *Balanosphyra*. In the 18 or 20 species of *Centurus* the general pattern is remarkably uniform, and *Tripsurus* while agreeing in most respects with *Centurus* has several peculiarities of its own. *Asyndesmus*, *Leuconerpes*, *Balanosphyra*, *Linneopicus*, *Chryserpes* and (to a less extent) *Melanerpes*¹ are all strongly characterized by coloration, in each case associated with diagnostic structural characters.

Judged both by color and form *Chryserpes* is less closely allied to *Centurus* than is the latter to *Tripsurus*, and while the desirability of recognizing *Tripsurus* is open to question, *Chryserpes* differs from both of these genera in so many points that they share in common that it is entitled to generic rank, even should *Tripsurus* be merged in *Centurus*.

From the other genera of the *Melanerpes* group, *Chryserpes* is distinguished by many peculiarities of coloration. In addition it differs from *Asyndesmus* and *Leuconerpes* in the form of the bill, wing and tail; from *Balanosphyra* and *Melanerpes* in bill and wing, and from *Linneopicus* in bill and tail.

There is little doubt that *Chryserpes striatus* consists of two or three races differing chiefly if not wholly in size. A series of 22 adults, 7 from Haiti (La Coup and Jacmel) and 15 from San Domingo (chiefly the north and northeast coast) shows that the former average decidedly greater in length of wing and tail, the bill being relatively smaller. Within the series from San Domingo there is much variation in size as the figures show and this is

¹ In view of the discrepancies in coloration and structure between *Melanerpes erythrocephalus* and *M. portoricensis* the association of these two species does not seem a happy one, especially when the rather fine distinctions between the other genera of the group and the anomalous geographical distribution of the genus as thus constituted are considered.

apparently largely geographical. Without further specimens and more exact knowledge of the localities it seems inadvisable to subdivide the species. Extreme and average measurements of the series are as follows:

2 males from Haiti: Wing 127-131 (129.), tail 95-97.5 (96.3), bill 32.4.

9 males from San Domingo: Wing 104.5-125 (115.2), tail 72-87.5 (81), bill 31.3-34.8 (32.9).

5 females from Haiti: Wing 115.7-122 (118.8), tail 86-90.5 (88.5), bill 26.5-31.9. (28.5).

6 females from San Domingo; Wing 103-118 (110.6), tail 73-87.8 (78.4), bill 26.2-29 (27.4).