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PART VI.



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# THE BIRDS

OF

NORTH AND MIDDLE AMERICA:

A DESCRIPTIVE CATALOGUE

OF THE

HIGHER GROUPS, GENERA, SPECIES, AND SUBSPECIES OF BIRDS  
KNOWN TO OCCUR IN NORTH AMERICA, FROM THE  
ARCTIC LANDS TO THE ISTHMUS OF PANAMA  
THE WEST INDIES AND OTHER ISLANDS  
OF THE CARIBBEAN SEA, AND THE  
GALAPAGOS ARCHIPELAGO

BY

ROBERT RIDGWAY,  
CURATOR, DIVISION OF BIRDS.

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## PART VI.

Family PICIDÆ—The Woodpeckers.  
Family CAPITONIDÆ—The Barbets.  
Family RAMPHASTIDÆ—The Toucans.  
Family BUCCONIDÆ—The Puff Birds.  
Family GALBULIDÆ—The Jacamars.  
Family ALCEDINIDÆ—The Kingfishers.

Family TODIDÆ—The Todies.  
Family MOMOTIDÆ—The Motmots.  
Family CAPRIMULGIDÆ—The Goatsuckers.  
Family NYCTIBIDÆ—The Potoos.  
Family TYTONIDÆ—The Barn Owls.  
Family BUBONIDÆ—The Eared Owls.

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## KEY TO THE FAMILIES OF STRIGES.

- a. Palatines straight, nearly parallel, approximately the same width throughout, almost concealing maxillo-palatines, which are broader from above downward than from side to side; prefrontal process of ethmoid thick and rounded; inter-orbital region thick, without fenestra; metasternum shallowly 2-notched or entire; no manubrial process; sternal crest dilated; furcula ~~coalesced with keel of sternum~~; third (middle) toe little if any longer than second (inner) toe, its second phalanx considerably longer than basal phalanx, its claw notched or serrated; tarso-metatarsus without bony ring or loop; feathers of the planta tarsi reversed (pointing upward); none of the primaries emarginate on inner web, the outermost developed (tenth) longer than the eighth; tail emarginate; ventral pteryla with outer branch united to main stem posteriorly; oil gland with two or three filoplumes at tip <sup>a</sup>.....Tytonidæ (p. 598).
- aa. Palatines curved, much expanded posteriorly; maxillo-palatines largely exposed, very broad from side to side; prefrontal process of ethmoid a thin plate; inter-orbital thin, often fenestrated; metasternum deeply 4-notched; manubrial process present; sternal crest narrow; furcula incomplete, free from keel of sternum; third (middle) toe much longer than second (inner) toe, its second phalanx about equal in length to the basal phalanx, its claw not notched or serrated; tarso-metatarsus with a bony ring or loop on under surface of upper end; feathers of planta-tarsi (when present) not reversed (always pointing downward); at least one (sometimes six) primaries with inner web emarginated or sinuated, the outermost developed (tenth) primary shorter than eighth; tail usually more or less rounded, rarely truncate, never emarginate; ventral pteryla with outer branch free from main stem posteriorly; oil gland without filoplumes.  
Bubonidæ (p. 617).

## Family TYTONIDÆ.

## THE BARN OWLS.

- =*Strigina* VIGORS, Zool. Journ., ii, Oct., 1825, 393.  
 =*Strigine* BONAPARTE, Prodr. Syst. Orn., 1840, 4.—CASSIN, in Rep. Pacific R. R. Surv., ix, 1858, 47.—GADOW, in Bronn's Thier-Reich, Vög., ii, 1891, 236, 301.  
 >*Strigine* BONAPARTE, Consp. Av., i, 1849, 54 (includes genus *Phodilus*).—GRAY, Hand-list, i, 1869, 52.  
 —*Strigide* SCLATER and SALVIN, Nom. Av. Neotr., 1873, pp. vii, 116.—SCLATER, Ibis, 1880, 403.—SHARPE, Rev. Classif. Birds, 1891, 79; Hand-list, i, 1899, 300.  
 >*Strigide* SHARPE, Cat. Birds Brit. Mus., ii, 1875, 289 (includes *Phodilus*).  
 =*Aluconidæ* COUES, Key N. Am. Birds, 2d ed., 1884, 498, 500.  
 =*Aluconina* BARROWS, Stand. Nat. Hist., iv, 1885, 346, in text.  
 =*Aluconæ* NEWTON, Dict. Birds, 1894, 674, in text.

Striges with inner toe as long as middle toe, claw of middle toe with inner edge produced and pectinated or serrate; feathers of planta tarsi recurved or reversed; outermost developed primary (tenth) longer than eighth, none of the primaries with inner web emarginated or sinuated; tail emarginated; face heart-shaped, with the lower apex very prominent.

<sup>a</sup>The genus *Phodilus* presents exceptions to some of these characters; but its true position can hardly be considered as definitely settled. See footnote on p. 618.

Sternum without manubrium, the metasternum entire or else with but one notch on each side; clavicles united, forming a furculum, and solidly joined to the keel of the sternum; tarso-metatarsus without a bony ring or arch over the extensor tendon of the toes; third (middle) toe with second phalanx decidedly longer than the basal phalanx; skull relatively long and narrow, with palatines nearly parallel to each other, approximately the same width throughout, almost concealing the maxillo-palatines, which are broader from above downward than from side to side; prefrontal process of ethmoid consisting of rounded bones of some width; interorbital region not forming a thin plate anteriorly, but of considerable thickness.

The pterylography is thus described by Mr. Hubert Lyman Clark:<sup>a</sup>

"The head is more uniformly feathered above<sup>b</sup> and shows no signs of longitudinal rows, but the infra-mandibular region is scarcely feathered at all, except for the very narrow lower cervical tract, which begins at the base of the gonys and extends nearly to the furcula before forking widely. It is, however, slightly divided for some distance before it actually forks, so that the upper part of each branch is abruptly wider than the lower, although there is no true inner branch given off. The upper cervical tract is very narrow, while the humerals are narrower than in any other genus, and the parapterum is weak. The femorals are strong, but very diffuse, and are scattered over most of the femur. The feet are not feathered quite to the toes, but the latter are very hairy, the sternal tract is fused with the ventral, not only at its origin near the furcula, but also at the other end of the breast, so that the tracts are really one; very broad on the sternum, and containing a longitudinal apterium, and becoming abruptly narrow on the belly. The hypopterygium is very strongly marked, and the hook connecting it with the sternal tract is composed of larger feathers, and they are much more numerous than in the other owls. Indeed, the whole breast is much more thickly feathered than in *Asio*. Another remarkable peculiarity is the formula for the comparative lengths of the *rectrices*. In all the other owls the middle pair of tail feathers is the longest and the external pair shortest, so that the formula is 1, 2, 3, 4, 5, 6. In *Strix* [i. e., *Tyto*], however, this is exactly reversed, the outer pair being the longest and the formula reading 6, 5, 4, 3, 2, 1. There are fifteen secondaries and the primaries rank as follows: 9, 8, 10, 7, 6, 5, 4, 3, 2, 1, 11."

This family includes a single genus.<sup>c</sup> *Phodilus* Isidore-Geoffroy was formerly included, on account of its superficial resemblance to *Tyto*, but has since been found to more nearly agree structurally with

<sup>a</sup> Proc. U. S. Nat. Mus., xvii, 1895, 565.

<sup>b</sup> As compared with that of *Asio wilsonianus* and other Bubonidae.

<sup>c</sup> The fossil (extinct) genus *Badiostes* Ameghino is placed in this family by Dr. Sharpe (Hand-list, i, 1899, 302).

the Bubonidæ.<sup>a</sup> The range of *Tyto* is nearly cosmopolitan, but there is no representative in Madagascar, New Zealand, the Hawaiian Islands, nor in colder regions. About twenty-seven species (including subspecies) are recognized, of which nine are American.

#### Genus TYTO Billberg.

- Aluco* (not of Link, 1807)<sup>b</sup> FLEMING, Philos. Zool., ii, 1822, 236. (Type, by monotypy, *Strix flammea* Linnæus, 1766, not of Pontoppidan, 1763, =*Strix alba* Scopoli. See Newton, Ibis, 1876, 104; Allen, Auk, xxv, 1908, 288-291.)
- Tyto*<sup>c</sup> BILLBERG, Synopsis Faunæ Scand., i, pars 2, 1828, tab. A. (New name for *Strix* Savigny nec Linnæus; type, *Strix flammea* Linnæus, 1766, not of Pontoppidan, 1763, =*S. alba* Scopoli. See Mathews, Novit. Zool., xvii, 1910, 500.)
- Flammea* FOURNEL, Fauna de la Moselle, 1836, 101. (Type, *Flammea vulgaris* Fournel—*Strix alba* Scopoli. See Mathews, Austral Avian Record, i, 1912, 104.)
- Hybris* NITZSCH, Pterylographiæ Avium, Pars prior, 1833, 16. (Type, *Strix flammea* Linnæus=*S. alba* Scopoli.)
- Stridula* SELYS-LONGSCHAMP, Fauna Belg., 1842, 60. (Type, *Strix flammea* Linnæus=*S. alba* Scopoli.)
- Eustrix* WEBB and BERTHELOT, Orn. Canar., 1841, 8. (Type, *Strix flammea* Linnæus=*S. alba* Scopoli.)
- Megastrix* KAUP, Isis, 1848, 769; Trans. Zool. Soc. Lond., iv, pt. vi, 1859, 249. (Type, *Strix tenebricosa* Gould.)
- Glaux* (not of Morris, 1837) BLYTH, Journ. Asiat. Soc. Bengal, xix, 1850, 513. (Type, *Strix caudata* Tickell.)
- Scelostrix* KAUP, Jardine's Contr. Orn., 1852, 119; Trans. Zool. Soc. Lond., iv, pt. vi, 1859, 248. (Type, *Strix caudata* Tickell.)
- Dactylostrix* KAUP, Jardine's Contr. Orn., 1852, 119; Trans. Zool. Soc. Lond., iv, pt. vi, 1859, 248. (Type, *Strix personata* Vigors=*S. novæ-hollandiæ* Stephens.)
- Glyphidura* REICHENBACH, Av. Syst. Nat., 1850, pl. 92, fig. 2. (Type, *Strix capensis* Smith.)

Medium-sized Striges (Tytonidæ) with complete and conspicuous facial ruff, relatively small eyes, elongated bill, long legs with feathering on posterior side of tarsus reversed (pointed upward), inner toe as long as middle toe, claw of middle toe with inner edge produced and pectinated, tenth (apparent outermost) primary nearly to quite as long as ninth, its inner web not sinuated, tail emarginate, and head without ear-tufts.

Bill elongated, compressed, the top of cere nearly as long as chord of culmen, straight, somewhat depressed. Nostril opening in anterior end of cere, oval, nearly horizontal. Eyes very small (beadlike), surrounded by a very conspicuous line of differently formed feathers—the outline of the facial disk, viewed from the front, distinctly

<sup>a</sup> See Beddard, Ibis, 1890, 298.

<sup>b</sup> For a genus of Mollusks; Besch. Nat. Samml. Univ. Rostock, 3 Abth., 1807, 130.

<sup>c</sup> *Tyto*, the night owl. (Richmond.)