

although 12 years younger, has been generally adopted, but it must give way to the older name, for the suppression of which I see no reason.

The following is the synonymy of the genus :

*Urinator* CUV.

- < 1758.—*Colymbus* LIN., Syst. Nat. ed. 10, I, p. 135.  
 = 1760.—*Mergus* BRISS., Ornith. VI, p. 104 (*nee* LINN. 1758.)  
 < 1777.—*Uria* SCOPOLI, Introd. p. 473 (*neo* BRISS. 1760).  
 = 1799.—*Urinator* CUV., Anat. Comp. I, Tabl. II.  
 = 1811.—*Eudytes* ILLIG., Prodr. Syst. p. 282.  
 < 1811-31.—*Cepphus* TALL., Zoogr. Ross.-As.  
 > 1829.—*Eudites* KAUP, Entw. Eur. Thierw. p. 144.

All the species belonging to this genus occur in North America, viz :

1. *Urinator immer* (BRÜNN.),

usually known among North American ornithologists as *C. torquatus* BRÜNN.; but as the former name also is acceptable to those writers who follow the Stricklandian code of nomenclature, and who reject specific names older than 1766, I have found the name *C. immer* preferable, because it also occurs in the 12th edition of LINNÆI Syst. Nat.

The synonymy of the species is given as follows :

- 1764.—*Colymbus immer* BRÜNN., Ornith. Bor. p. 38.  
 1764.—*Colymbus torquatus* BRÜNN., tom. cit. p. 41.  
 1765.—*Colymbus maximus* GUNN., Tr. Selsk. Skr. III, p. 125.  
 1766.—*Colymbus glacialis* LIN., Syst. Nat. ed. 12, I, p. 221.  
 1790.—*Mergus navius* BONNAT., Enc. Meth. Orn. I, p. 73.  
 1810.—*Colymbus atrogularis* MEYER & WOLF, Taschen. Vög. Deutschl. II, p. 449 (*partim*).  
 1824.—*Colymbus hyemalis* BRM., Lehrb. Eur. Vög. II, p. 883.  
 1831.—*Colymbus hiemalis* BRM., Handb. Vög. Deutschl. p. 972.  
     2. *Urinator adamsii* (G. R. GRAY), 1859.  
     3. *Urinator arcticus* (LINN.), 1758.  
     4. *Urinator pacificus* (LAWR.).  
     5. *Urinator lumme* (BRÜNN.), 1764.

This is the *C. septentrionalis* LIN. 1766. But as LINNÆUS does not give the name either in the 10th edition of Syst. Nat. or in 2d ed. of Fauna Svecica (1761), the name of BRÜNNICH is to be used.

ON THE GENERA *HARPORHYNCHUS*, CABANIS, AND *METHRIOPTERUS*, REICHENBACH, WITH A DESCRIPTION OF A NEW GENUS OF MIMINE.

By ROBERT RIDGWAY.

In treating of the genus *Harporhynchus*, in its comprehensive sense, most authors have alluded more or less strongly to the great difference in form presented by the type of the genus (*H. redicivus*) on the one hand and certain species associated with it under the same generic name

(notably "*H. rufus*"). The various attempts at subdivision, however, have either proven failures, on account of the gradual transition between the two extremes in certain characters, or unsatisfactory, by reason of the line having been variously drawn by different authors.\* As long ago as 1858, however, the line separating *Methriopterus* from *Harporhynchus* appears to have been properly drawn, by Professor Baird in a "Synopsis of the species" under the heading of the latter, on p. 348 of "Birds of North America." While, however, arranging the species in a table under the two separate headings (*Harporhynchus* including *redivivus*, *lecontei*, and *crissalis*, *Methriopterus* comprising *curvirostris*, *longirostris*, and *rufus*), Professor Baird hesitated to separate the two groups generically, but remarked as follows concerning the matter: "The transition from the one extreme in structure in *H. redivivus* to the other in *T. rufus* is so gradual as to render it very difficult to separate them; *T. curvirostris* has a shorter tarsus (about equal to the middle toe) than the others, and the graduation of the tail is less. It is very difficult to say whether it should more properly be assigned to the first section or the second. In the character of the bill there is the most gradual transition from its very long greatly curved shape in *H. redivivus* to the straight and short one of *H. rufus*." It appears, however, that other characters of more importance than the mere size and shape of the bill, serve, when taken in connection with the latter, to very readily distinguish two groups which it seems to me are of generic rank. These distinctions I have been able to verify in the case of all the species known to date, including two (*M. palmeri* and *M. bendirei* unknown when Professor Baird's "Review" was published, besides two others *M. cinereus* (Xantus), and *M. ocellatus* (Scl.) not taken into consideration in the "Birds of North America." These characters are as follows:

1. HARPORHYNCHUS. Tarsus much shorter than culmen; gonyx equal to or longer than middle toe, without claw; tail exceeding the wing by much more than the length of the tarsus. Lower parts wholly immaculate.

2. METHRIOPTERUS. Tarsus longer than the culmen; gonyx much shorter than the middle toe, without claw; tail exceeding the wing by much less than the length of the tarsus. Lower parts more or less distinctly spotted or streaked (markings nearly obsolete in *M. palmeri*).

To *Harporhynchus*, as thus restricted, belong only *H. redivivus*, *H. lecontei*, and *H. crissalis*, while to *Methriopterus* may be referred the

\* Thus, Dr. Sclater, in his "Synopsis of the Thrushes (*Turdida*) of the New World," (P. Z. S. 1859, pp. 338-40), includes *Orpheus curvirostris* Swains. under *Harporhynchus*, along with *H. redivivus*, *H. lecontei*, and *H. crissalis*, "*Methriopterus*" embracing only *O. longirostris* Lafr. and *Turdus rufus* Linn. In his "Catalogue of a Collection of American Birds," published two years later (1862; pp. 7-8), Dr. Sclater adopts essentially the same arrangement, *Harporhynchus* being represented by "*H. curvirostris*, and *Methriopterus* by "*H. longirostris*, "*H. rufus*, and "*H. cinereus*. It is proper to state, however, that the term *Methriopterus* is not used in a generic sense, but merely as a convenient subgeneric heading.

following: *M. rufus*, *M. longirostris*, *M. ocellatus*, *M. cinereus*, *M. bendirei*, *M. palmeri*, and *M. curvirostris*. This arrangement, I am aware, removes *M. palmeri* much further from *H. lecontei* than Mr. Brewster (*cf.* Bull. Nutt. Orn. Club, vi, Apr. 1881, p. 67) has suggested should be its position, but after a very careful comparison with all the species, made in connection with Mr. Brewster's remarks upon the subject, I am convinced that the two birds have in fact nothing in common beyond a general superficial resemblance in coloration. In fact, these two species, which exhibit the nearest approach in the two genera, may be as readily distinguished by the characters given above as may *H. redivivus* and *H. rufus*, although the difference is of course far greater between the two latter. With but a single specimen of *H. lecontei* for comparison, I cannot verify a single one of the characters adduced by Mr. Brewster as distinguishing this species from *H. redivivus*, although I am obliged to indorse his view of their specific distinctness, since very positive specific characters distinguish them, the most important of which, it appears to me, are the following:

1. *H. REDIVIVUS*. Tail slightly darker and somewhat browner than the back; lower parts chiefly ochraceous-buff, the crissum more fulvous; auriculars dusky, with distinct whitish shaft-streaks; no distinct dusky "bridle" or paler malar stripe. Wing 3.90-4.30, tail 4.90-5.80, culmen (to exposed base) 1.35-1.75; width of maxilla at nostrils .25-.30, *the lateral outlines gradually but decidedly divergent toward the base*; tarsus 1.45-1.60, middle toe .95-1.12.

2. *H. LECONTEI*. Tail very decidedly darker but scarcely browner than the back; lower parts (especially abdomen) chiefly dull white, the crissum ochraceous, in marked contrast; auriculars light brownish gray, like occiput, without distinct paler streaks; throat bordered on each side by a distinct dusky "bridle," and a distinct malar stripe of whitish, narrowly barred with dusky. Wing 3.70-3.90, tail 4.57-5.20, culmen (from exposed base) 1.25-1.35; width of maxilla at nostrils .20-.21, *the lateral outlines parallel from near the tip back nearly or quite to nostrils*; tarsus 1.25, middle toe .85.

It will thus be seen that aside from positive characters afforded by the plumage, the proportions of the two species are radically distinct. While the wing and tail average slightly less in *H. lecontei*, the tarsus and middle toe are disproportionately shorter. In fact, both the feet and bill are altogether slenderer, and much more like those of *H. crissalis*, to which there is also a much nearer resemblance in the dusky "bridle" and whitish malar stripe.

The "*Harporhynchus*" *graysoni*, from the island of Socorro, I propose to make the type of a new genus, as follows:

#### Genus MIMODES, Ridgway.

CH.—Somewhat like *Mimus*, but with the bill decidedly stouter the wing much more rounded, and the colors much more uniform.

Tail much longer than the wing, rounded, but with the four middle rectrices of equal length. Fourth, fifth, and sixth quills longest, the third about equal to the seventh; second not longer than the tenth. Depth of the bill through the base decidedly more than half the length of the gonys, or of the maxilla from the nostril to the tip; gonys less than half the total length of the mandible. Colors plain brown, paler below, without distinct white markings on wings or tail.

Type, *Harporynchus graysoni* Baird.

In general appearance, the type and only known species of this genus is somewhat intermediate between the species of the genera *Methriopterus* and *Harporynchus*, having the straighter bill of the former and the uniform brownish coloration of the latter. A close comparison, however, reveals the fact that the species in question is very much more nearly related to the genus *Mimus* than to either of those named above, while at the same time it becomes obvious that it cannot be included in the latter genus, by reason of the very marked distinctive characters pointed out above, in which it differs from every species of *Mimus* with which I have been able to compare it.\* The distinctive characters of the two genera may be contrasted as follows:

**MIMUS.** Depth of bill through base decidedly less than half the length of the maxilla from nostril to tip, and not more than half the length of the gonys; the latter decidedly more than the distance from its base to the malar apex; third, fourth, and fifth quills longest, second longer, equal to or longer than eighth. Tail with more or less of white.

**MIMODES.** Depth of bill through base decidedly more than half the length of the maxilla from nostril to tip, and also decidedly more than half the length of the gonys; the latter decidedly less than the distance from its base to the malar apex. Fourth, fifth, and sixth quills longest, the second equal to the tenth. Tail without white.

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#### ON A PHOSPHATIC SANDSTONE FROM HAWTHORNE, IN FLORIDA.

By **GEORGE W. HAWES, PH. D.,**

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In connection with the work, upon the products of quarries which is being performed under the auspices of the Tenth Census at the National Museum in Washington, analyses have been made of a stone that is

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\* Including the following: *M. polyglottus* (including its West Indian races), *M. triurus*, *M. gilvus*, *M. saturninus*, *M. calandria*, *M. theca*, *M. longicaudatus*, *M. "nigriloris,"* *M. hilli*, and *M. melanotis*. I have not seen specimens of *M. dorsalis*, *M. patachonicus*, *M. trifasciatus*, or *M. parvulus*, but these species (except possibly the two latter) appear to be congeneric with those named above. It may prove advisable, however, to separate the three species of the Galapagoes (*M. melanotis*, *M. trifasciatus*, and *M. parvulus*) on account of their very lengthened and slender bill, but I am not prepared to say that this should be done.