THE RELATIONSHIP OF THE GULLS KNOWN AS LARUS FUSCUS AND LARUS AFFINIS.

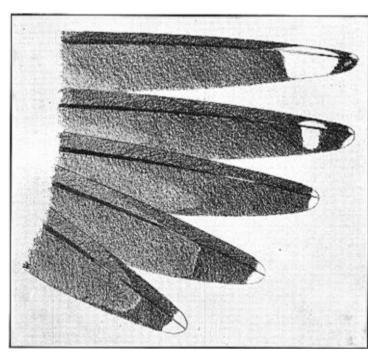
BY JONATHAN DWIGHT, M. D.

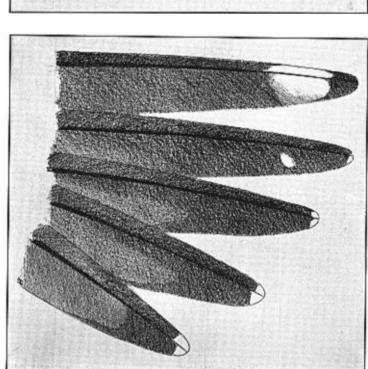
Plates XX and XXI.

In approaching many of the problems in modern systemic ornithology, one is confronted with the necessity of steering a middle course between the Scylla of imperfect knowledge on the one hand and the Charybdis of nomenclature on the other. Either may bring us to shipwreck; but mindful of those who have preceded me in writing about the Lesser Black-backed Gull (Larus fuscus), and the Siberian Gull (Larus affinis), I venture with some hesitancy to take up the tangled question of the relationship of these birds and make another endeavor to fix the proper names upon them.

Larus fuscus, an abundant European species, was described in 1758 by Linnæus, and has never been taken on the American side of the Atlantic. L. affinis, however, has stood as a North American species in the A. O. U. 'Check-Lists' on the strength of a single specimen, the type taken in southern Greenland and described by Reinhardt in 1853 (Videnskab-Meddel., p. 78).

Until 1912 these two gulls were recognized as two full species, and then Lowe (Brit. Birds, VI, no. 1, June 1, 1912, pp. 2–7, pl. 1) started the ball rolling by restricting the name fuscus to Scandinavian birds and describing the paler bird of the British Isles subspecifically as brittanicus. A few months later Iredale (Brit. Birds, VI, no. 12, May 1, 1913, pp. 360–364, with pl.), borrowing the type of affinis from the Copenhagen Museum, where it had rested for half a century, and comparing it with British specimens, found it to be identical with them; but not content with synonymyzing brittanicus with affinis, he reached the conclusion that the Siberian bird was larger and therefore required a new name — antelius. In 1915 Buturlin (Mess. Orn. VI, no. 12, 1915, p. 149) scored Iredale for not providing either type or type locality for antelius, and went on to say that he himself had given the name Larus





LARUS FUSCUS AFFINIS.

affinis taimyrensis in 1911 (Mess. Orn., 2d year, no. 2, 1911, p. 149) to the Eastern race, and therefore the Western race must be known as Larus affinis antelius. Buturlin says, (translated from the Russian) "As the name 'affinis' now is proved to belong to another species (no intergradation is known or is likely to exist between the Lesser Black-backed and Siberian Herring Gulls), the Eastern race of the Siberian Herring Gull must bear the name Larus taimyrensis taimyrensis, Buturl., 1911, and the Western race Larus taimyrensis antelius, Iredale, 1913."

It is at this point I purpose taking up the question which resolves itself into two parts, one, ornithological, concerning the relationship of the gulls under discussion, the other, nomenclatural, concerning the names to be used. At least I may contribute information that I have acquired from the examination of considerable material available in this country. Briefly then I may state that the specimens I have brought together confirm Mr. Lowe's claim that there are two intergrading forms of the Lesser Black-backed Gull, one with a brownish black back or mantle that breeds in Scandinavia and probably southward and another with a paler, slaty mantle that breeds in northern England, Scotland, the adjacent islands, and on the northern coast of Russia. But as for names, there is an extensive literature bearing upon this Gull and it is perhaps worth while to outline the history of some of the names that have been used.

Linnæus (Syst. Nat. ed. 10, 1758, I, p. 136) first described Larus fuscus as "L. albus dorso fusco" (i. e., white gull with swarthy back), and in his ed. 12, 1766, p. 225, added "Rostrum Pedesque flavi" (i. e., bill and feet yellow). This name prevailed until Meyer and Wolf (Naturg. Vög. Deutschl., II, 1805, p. 32, col'd pl.) substituted Larus flavipes, but their description, "back and upper side of wings brownish black," is evidently that of fuscus, and their plate is that of a bird with the back almost black. Meyer and Wolf (Taschenb. Deutsch. Vögelkunde, II, 1810, pp. 469–471, col'd frontisp.) again made use of Larus flavipes, repeating virtually the old description, and the plate, now smaller, is clearly that of a black-backed bird. Curiously enough, at p. 471 they say in conclusion, "The name which Linnæus applies to this Gull (if it is other than his Larus fuscus) does not fit very well, for the back

and wing coverts are not fuscus (aschengraubraun) [i. e., ashy gray brown] but brownish black (braunlichschwarz)." The question may well be asked what did Linnæus mean by fuscus and what value should be attached to the remark of Meyer and Wolf? While Linnæus, perhaps, has used fuscus rather loosely in his descriptions. he surely would not have applied it to the light slaty backed form; and Meyer and Wolf evidently did not have the courage of their convictions, for they described and figured fuscus. Meisner and Schinz (Vög. Schweiz, 1815, p. 276) make use of Larus flavipes and so does Meyer (Kurze Beschs. Vög. Liv. u Esthl. 1815, p. 231), Vieillot (Encyc. Méthod. I, 1823, p. 346; Faune franc. Ois., 1828?, p. 394), Lesson (Traité, 1831, p. 617), and Temminck (Man. Orn. 2d ed., 4th pte., 1840, p. 471), but all of these writers seem to refer without question to fuscus. As for Larus cinereus (Leach, Syst. Cat. Mam., etc., 1816, p. 40), it would be a difficult matter to allocate this name. As early as 1822 Brehm and Schilling (Beitr. zur Vögelkunde, III, pp. 735 +) gave elaborate descriptions of the plumages of the Gulls, but apparently confused the black-backed species under "maximus" and "marinus." Brehm (Isis, XXIII, 1830, p. 993, and Handl. Naturg. Vögel. Deutschl., pp. 746-750) recognized three species of the "Laroidæ harengorum (Larus fuscus)," viz., melanotos, harengorum, and fuscus, saying that they all have a very dark mantle, and using the term slate-back ("schieferschwarz") to describe it, so here again it is evident that these names are pure synonyms of fuscus.

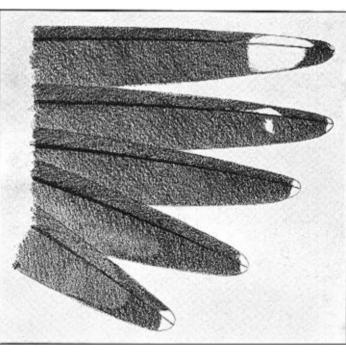
Next in point of time is Macgillivray (Man. Brit. Orn., 1842, pt. II, p. 245), who, in describing "Larus flavipes, Yellow-footed Gull," says in part, "the back and wings blackish-gray tinged with purple or dark slate coloured." This description of the British bird applies to the form that Lowe called brittanicus, which has proved to be Reinhardt's affinis, and it would be most appropriate to use "Yellow-footed Gull" for the popular name.

Summing up, then, the first available scientific name for the grayer-backed bird is *affinis* of Reinhardt, and as there is complete intergradation of every character between *affinis* and *fuscus* there can be no question of two species.

The skins I have examined show a little difference in the size of birds of the two races, although the difference in color of the mantles

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PLATE XXI.





Larus fuscus fuscus.

is usually diagnostic. I would also call attention to another neglected character quite as good as any only less obvious, and that is the wing pattern.

In the adults of fuscus, three or four of the distal primaries are black, the fifth usually being the first to show a pattern which is in the nature of a gray wedge (Plate XXI), while in affinis the gray wedges begin on the first or second primary (Plate XX). As a rule the wedges in *fuscus* are rather obscure and in color much like the mantle, while in affinis the wedges and the color are both clearly defined; that is to say, the dark bird has a dark pattern, the lighter bird a lighter one. Saunders (Brit. Mus. Cat. XXV, 1896, p. 253) noticed these differences and vet he did not rightly appraise them, and being a binomialist he allowed "affinis" to stand as a full species, although he was fully alert to the facts and saw the close relationship. My material from Russia is limited to one specimen, so I do not feel competent to pass judgment on "taimyrensis" of Buturlin, which may perhaps be worth recognizing as a large geographical race. One needs to be very sure Gulls are sexed correctly if they are to be separated on size alone, for while females are regularly smaller in dimensions than males, particularly noticeable in the bills, there is always an overlapping of large females and small males. Buturlin's position that fuscus is a separate species is not well taken, although it is rather a curious distribution by which the dark mantled form of Scandinavia thrusts itself between the gray mantled form breeding to the west of it and to the east as well. The specimens I have examined measure as follows:

Larus fuscus fuscus Linnaeus.

10 adult males, wing 415-438 (423), tail 152-169 (160) tarsus 58-66 (63.6), toe without claw, 45-52 (49.1), culmen, 49-55 (52), depth of bill at base, 15-18 (16), at angle, 16-19 (16.5).

5 adult females, wing 394–410 (400.8), tail 142–159 (149.8), tarsus 57–60 (58.8), toe without claw, 42–47 (45), culmen, 45–48 (46.2), depth of bill at base, 14–16 (14.9), at angle, 15–17 (15.7).

Larus fuscus affinis Reinhardt.

10 adult males, wing 394–428 (412.3), tail 152–167 (160.3), tarsus 63–69 (65.9), toe without claw, 47–53 (50.3), culmen, 49–56 (52.9), depth of bill at base, 16–19 (17.3), at angle, 16–19 (17.8); 4 adult females, wing 382–407 (392.2), tail 151–158 (155.7), tarsus 57–66 (61), toe without claw, 42–51 (45.5), culmen, 44–50 (47.5), depth of bill at base, 14–15 (14.7), at angle, 15–16 (15.7).

FORSTER'S EDITION OF LEVAILLANT'S "OISEAUX D'AFRIQUE."

BY CHARLES W. RICHMOND.

Publication of Levaillant's celebrated 'Histoire Naturelle des Oiseaux d'Afrique' was begun in Paris in 1796, and completed in six volumes in 1808. It was issued in folio, with two sets of plates, black and colored, also in 4°, with colored plates, and in 4°, with plain plates; there was also an edition in 12mo of two volumes.

In 1797 Bechstein began at Nürnberg a translation under the title 'Franz Le Vaillant's Naturgeschichte der Afrikanischen Vögel,' but it was discontinued at the end of the "Erster Band" in 1802. It consisted of 8 parts, each with 6 plates and corresponding text; in all 48 plates, with pages i-xii, 13-210, 4°. It is uncommon, though met with occasionally in the second-hand book catalogues. Additional matter by Bechstein is given in footnotes, but this is of little interest concerning nomenclature, since the translator did not give any new scientific names to the species, except possibly that of Falco lagopus Varietas africana, described on p. 96 (note).

A very little known translation was begun in Halle in 1798 by a publisher named Dreyssig, who secured the cooperation of J. R.