A NEW SPECIES OF LOON (GAVIA VIRIDIGULARIS) FROM NORTHEASTERN SIBERIA.

BY JONATHAN DWIGHT, M. D.

THERE has been a good deal of confusion regarding the status of the Black-throated Loon (Gavia arctica) and its allies. Two instances may be cited. Hartert states that "According to Buturlin both G. arctica and G. pacifica are found breeding side by side in areas of thousands of miles. We cannot therefore treat them as geographical forms of one species" (Hand-List of British Birds, 1912, p. 159), and Hersey in his recent review of this species says that "three Alaskan specimens when compared with available material from Siberia and northern Europe prove to be the Asiatic form Gavia arctica suschkini Sarudny, and not Gavia arctica arctica (Linnaeus)" (Auk, XXXIV, July 1917, p. 289). Mr. Hersey informs me that his birds have green throats, but as a matter of fact, suschkini is a purple-throated bird and undoubtedly a race of arcticus as claimed by the describer, N. A. Sarudny. For the benefit of those who do not read Russian, wherein much of the present tangle lies, I have obtained a translation of the original description kindly made by my friend Mr. Roman de Majewski. It appeared in a Moscow journal which bears a title in three languages. Russian, French and German, and the citation therefore is [Russian], = Messager ornithologique, = Ornithologische Mittheilungen, 3rd year, 1912, No. 2, pp. 111-113, being a continuation of N. A. Sarudny's "[Russian title=] Mittheilungen über die Ornithologie von Turkestan."

142. Urinator arcticus suschkini subsp. nov.

The Striped Diver is to be found in Russian Turkestan during migration, and in winter-time. To judge by the specimens I have collected, they show such divergence from the types of the Pskovskoi and St. Petersburg provinces that in my opinion they should not be given the name *Urinator arcticus* (Linn.) but placed in a separate category. Vol. XXXV 1918

From among the specimens of the Striped Diver which I have collected I will only eite the adults:

- 1. ?♀ Near Amu Daryi, Feb. 2, 1907.
- 2. Q Near Kok Boowak, Nov. 4, 1907.
- 3. J Kasalinsk, April 16, 1908.
- 4. d' Lake Chushka -- Kool (near Turkestan City) June 10, 1908.
- 5. Q Lake Chushka Kool (near Turkestan City) June 10, 1908.
- 6. d At the source of the River Tar Toogi, Dec. 22, 1909.
- 7. ?♂ Nijni Tcherchik, Winter 1909–10.
- 8. $? \circ$ Boowaki, on the lower heights of Koorataou, Spring 1911.
- 9. Joolek, Baiga Kum, March 28, 1911.

The divergences are the following: The gray color of the crown and the back of the neck of the Turkestan bird is lighter, though not quite as light as in *Urinator pacificus* Lawr. The explanation of this should not be sought for in moulting, as one might be led to expect by specimen No. 1, which is in process of changing its winter plumage for its summer one. In specimens Nos. 2, 6, and 7, we can notice very clearly that the parts abovementioned are also lighter. The white horizontal bars on the shoulders and on the back are in most cases wider, even comparing the small Turkestan birds with the large Pskovkoi and St. Petersburg types. Also in most cases the white spots on the wings are larger. The front part of the neck seems to be darker and its purple sheen less developed.

In the greater number of cases our birds are smaller and their beaks are shorter. These two observations were already made by Mr. P. P. Suschkin (Birds of the Ufinskoi Region.— Birds of the Middle Kirgiz Steppes.) in the cases of Divers from the Ural and Turkestan regions. In my specimens the length of the wings and culmen are as follows:

| | Wing | Culmen. |
|----|--------|---------|
| 1. | 11,6 | 2,3 |
| 2. | 12,2 | 2,25 |
| 3. | 12,23 | 2,32 |
| 4. | 12,35 | 2,2 |
| 5. | 12,1 | 2,26 |
| 6. | 12,5 | 2,6 |
| 7. | 12, 12 | 2,35 |
| 8. | 12,7 | 2,3 |
| 9. | 11,8 | 2,27 |

(In typical U. arcticus, the length of the wing varies between 12,15'' and 13,2'', and the culmen between 2,5 and 2,85. In U. pacificus the wing is 11,2''-12,25'' and the culmen 2''-2,35''.)

The extremity of the beak in the Turkestan Diver, is shorter and higher

Auk April

in proportion, compared to the Northern ones; the gonys, in most cases forms a sharper angle.

This notice about the Diver I dedicate to P. P. Suschkin.

It is quite obvious from the foregoing translation that suschkini is merely slightly differentiated from the purple-throated Gavia arcticus and as pacificus is also a like variation, it follows that the green-throated birds are without a name, for the synonyms of arctica refer without exception to European birds. My attention was first directed to the Siberian birds some years ago by Dr. L. B. Bishop when we were examining skins of Loons at the American Museum of Natural History. I propose for them the following name:—

Gavia viridigularis sp. nov.

TYPE.— No. 76665, American Museum of Natural History; adult male; Gichega (or Ghijiga) northeastern Siberia; September 16, 1894; collected by N. G. Buxton.

DIAGNOSIS.— The green coloration of the throat is the essential character that sets this species apart from *arctica* and its races, which all have purple throats.

DESCRIPTION OF TYPE.- Top of head smoke gray, paler and drab-tinged on nape, sides of head darker and purplish, rest of upper surface a slightly lustrous greenish-black, the scapulars with twelve to fourteen broad (6-7)min.) white bars of quadrate spots, the sides of the hind neck with ten or twelve similar though narrower bars and the outer surface of the wings with small semi-ovate white spots. The throat is a velvety dusky olivegreen if held towards the light and an olivaceous black with slight purplish tints if held away from it; the upper part of the throat and the chin are a darker green much like the back. The throat is bordered by narrow white stripes enclosing broader stripes of black and it is crossed at its upper part by about ten short white longitudinal stripes; numerous narrow black and white streaks radiate from its lower border along the sides of the jugulum. The wing quills, the tail, the under tail coverts, the tibiæ, and an obscure line across the anal region are dusky. The lining of the wing is white. The bill in dried skins is a dull grayish-black, and the feet are black. Measurements (in millimeters) - wing 322, tail 59, tarsus 90, toe with claw 115, culmen 69, depth of bill 17.

The sexes are alike in plumage but the female is slightly smaller. Average of two males, wing 321, tail 59.5, tarsus 88, toe with claw 108.5, culmen 68, depth of bill 18:— average of five females, wing 316, tail 58.2, tarsus 82.6, toe with claw 101.6, culmen 64, depth of bill 17.

RANGE,--- Northeastern Siberia and extreme western Alaska.

The Green-throated or Siberian Loon may prove to be only subspecifically separable from its purple-throated relative, the Black-throated or Arctic Loon, but there seems to be a distinct qualitative difference between the green and the purple of the respective throats, that merits specific recognition. Except for this striking difference viridigularis and arctica are much alike in coloration, although the former has wider white bars on the scapulars and the upper parts are green-tinged rather than purplish as in arctica; the former too is, perhaps, a little larger in all dimensions. Specimens of arctica no matter how they are held to the light show a velvety purple on the throat that looks black in a poor light, while those of viridigularis are wholly green when held between the observer and the light and they develop a tinge of brownish-purple only if held in the opposite direction. I have seen one or two specimens that are somewhat intermediate between the two species but there is a gap that remains to be bridged.

We have then Gavia arctica arctica the northern European bird with Gavia arctica suschkini, a southern race in Turkestan and Gavia arctica pacifica its representative in Arctic North America,— all three purple-throated, and Gavia viridigularis a green-throated species that occupies a range in eastern Siberia. Buturlin as quoted may have mistaken viridigularis for pacifica which would account for his "arcticus" and "pacificus" breeding side by side, but however this may be, we have to reckon with a green-throated bird that hitherto has been without a name.