NOTES ON SOME JAPANESE BIRDS RELATED TO NORTH AMERICAN SPECIES.

By ROBERT RIDGWAY.

A very fine collection of Japanese birds, made for the United States National Museum by Mr. Pierre Louis Jouy, includes several species of more or less interest to students of North American ornithology, on account of their relationship to species belonging to our fauna. The very complete series of specimens enables me in each case to make a satisfactory comparison of the representative species.

1. Anthus japonicus Temm. & Schleg.

This is so much like our A. ludovicianus that their distinctness might almost be questioned. Comparing specimens No. 91468, ♀ ad., Yokohama, Japan (Jan. 3, 1883), and No. 90644, ♂ ad., New Orleans, La. (Dec. 13, 1882), the difference in coloration is microscopic—far less, in fact, than between many American examples from the same locality and of same date of capture. The only tangible difference is the darker feet of the Louisiana specimen, in which the toes are nearly black and the tarsi a very dark horn-color, while in the Japanese specimen the tarsi are clear horn-color, the toes slightly darker. In measurement they compare as follows:

<table>
<thead>
<tr>
<th>Wing</th>
<th>Tail</th>
<th>Culmen</th>
<th>Tarsus</th>
<th>Middle toe</th>
<th>Hind claw</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.40</td>
<td>2.65</td>
<td>.42</td>
<td>.90</td>
<td>.60</td>
<td>.45</td>
</tr>
<tr>
<td>3.40</td>
<td>2.65</td>
<td>.45</td>
<td>.85</td>
<td>.58</td>
<td>.45</td>
</tr>
</tbody>
</table>

The shades of coloration, as well as the pattern, are identical to the minutest degree, as is also the form of the bill and the proportions of the primaries. Moreover, three other specimens from New Orleans agree closely in coloration with No. 90644, and are much more like Japanese specimens than any others in a series of more than 50 North American examples, except in the color of the legs and feet, which in all North American specimens examined are nearly black, whereas those of Japanese examples are decidedly brown, or horn-colored.

In the National Museum series of A. ludovicianus, which embraces specimens from all parts of the continent, decided variations are noticeable, which, however, appear to be only in part correlative with difference of locality. Thus, most winter specimens from the Atlantic States (New England to District of Columbia, at least) are decidedly brown above and tawny buff beneath; the pectoral markings are broad and distinct, and sometimes, (though not usually) as dark colored (nearly black) as in A. japonicus. With these, Alaskan specimens obtained in August and September agree strictly. Many western specimens in winter plumage differ from Atlantic coast examples in paler lower parts.
with narrower streaks on the breast; but the difference is not great, except in extreme cases, and by no means constant. As to summer specimens (i.e., those in breeding dress), I am unable to distinguish differences between certain skins from Labrador, Colorado, and Alaska; but I have been able to examine a comparatively small number of specimens. Possibly a large series of specimens in breeding plumage from the proper localities (say Labrador, Alaska, the Rocky Mountains, and the Sierra Nevada) might exhibit differences upon which two or more geographical races could be based, but, with present facilities, I find the attempt to define differences sufficiently characteristic of region quite hopeless.

It is possible that in its breeding plumage, which I have not seen, *A. japonicus* may be quite distinct from *A. ludovicianus*, but the four winter specimens examined appear to differ only, so far as constant characters are concerned, in the paler color of the legs and feet.

In Proc. U. S. Nat. Mus., vol. 6, p. 95, I have with much doubt referred to this species six examples of an *Anthus* obtained by Dr. L. Stejneger on Bering and Copper Islands, Kamtschatka, but being not at all satisfied that they were thus correctly determined, I proposed the name *stejnegeri* in view of their probable distinctness. I now find that they do not at all resemble *A. japonicus*, but are much more like *A. arboreus*, *A. spraguei*, and other species having the upper parts conspicuously variegated. They seem to come near *A. gustavi* Swinh., which Mr. Seebohm says (Ibis, 1878, p. 342) occurs on Bering Island; but I cannot reconcile certain marked discrepancies between the only description which I have been able to consult (the original one by Swinhoe, in Proc. Zool. Soc. London, 1863, p. 90) and the characters presented by the series before me. I therefore incline to the opinion that while the species may be *A. gustavi*, it seems more likely to be different, and probably new.

2. *Regulus japonicus*.

This kinglet is a very near relative of *R. satrapa* and *R. cristatus*, but is sufficiently distinct. The principal differences from the former consist (1) in the absence of the black bar across the forehead, immediately in front of the colored crown-patch, the whole forehead being smoky gray, paler toward the bill; (2) narrower black stripes on side of crown; (3) absence of the whitish superciliary stripe, only the orbits being whitish; (4) absence of the dusky streak through the eye, and (5) much more olivaceous sides and flanks. In all these characters it agrees with *R. cristatus*; but from the latter it differs (as does also *R. satrapa*) in grayish nape and side of hinder head, and in some other minor features. Upon the whole it is most nearly related to the European species, though the coloration of the nape, back, and rump is precisely that of the
American bird. The white terminal spots of the tertials are much larger than in either of its allies, being, in fact, a very conspicuous and characteristic feature.

3. Anorthura fumigata (Temm.).

In the Ibis for January, 1875 (pp. 143, 144), the late Mr. Robert Swinhoe suggested the identity of this species with A. alascensis Baird, his reasons for this determination being given as follows:

"With reference to the birds of Hakodadi, a suspicion crossed my mind that possibly I had made a mistake in identifying the Wren from Hakodadi with the Troglodytes fumigatus, Temm., of Nagasaki, and that while the latter might be the Wren of Southern Japan, the northern bird might be distinct, and identical with T. alascensis, Baird. To clear the doubt I sent a skin to Dr. G. Schlegel, and begged him to get me in exchange from his father, of the Leyden Museum, a specimen of genuine T. fumigatus. His reply I have unfortunately mislaid; but it was to the purport that the museum had no duplicate to spare, but that my bird, which he and his father had carefully compared with the type specimen, was identically the same. We must therefore conclude that T. alascensis, Baird, is a synonym of T. fumigatus, Temm."

As many authors have adopted without question Mr. Swinhoe's erroneous determination, I give below average measurements of an equal number of adult males of the two species, and also, for sake of comparison, those of the same number of specimens of A. troglodytes, A. hyemalis, and A. hyemalis pacifica.

<table>
<thead>
<tr>
<th>Species</th>
<th>Wing</th>
<th>Tail</th>
<th>Culmen</th>
<th>Bill from nostril</th>
<th>Gonyx</th>
<th>Tarsus</th>
<th>Middle toe</th>
<th>Number of specimens measured</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. alascensis</td>
<td>2.65</td>
<td>1.39</td>
<td>.59</td>
<td>.45</td>
<td>.36</td>
<td>.74</td>
<td>.57</td>
<td>Six adult males</td>
</tr>
<tr>
<td>A. fumigata</td>
<td>2.67</td>
<td>1.49</td>
<td>.44</td>
<td>.29</td>
<td>.27</td>
<td>.70</td>
<td>.49</td>
<td>Do</td>
</tr>
<tr>
<td>A. hyemalis pacifica</td>
<td>1.84</td>
<td>1.25</td>
<td>.41</td>
<td>.30</td>
<td>.20</td>
<td>.66</td>
<td>.49</td>
<td>Do</td>
</tr>
<tr>
<td>A. hyemalis</td>
<td>1.91</td>
<td>1.35</td>
<td>.41</td>
<td>.30</td>
<td>.25</td>
<td>.69</td>
<td>.46</td>
<td>Do</td>
</tr>
<tr>
<td>A. troglodytes</td>
<td>1.97</td>
<td>1.36</td>
<td>.43</td>
<td>.31</td>
<td>.29</td>
<td>.68</td>
<td>.49</td>
<td>Do</td>
</tr>
</tbody>
</table>

In coloration, A. fumigata comes much nearer the Pacific coast race of A. hyemalis (A. hyemalis pacifica) than any of the other species with which it has been compared; but the lower parts are much less tawny (though equally dark), and with the dark bars and lighter specks extending further forward. The sides of the neck are also quite conspicuously streaked with whitish or pale brownish.


A specimen from Sapporo is snowy white beneath; the ground-color above is nearly hidden by the unusually broad pale longitudinal markings. Another from Tate-Yama is very tawny above, and hardly distinguishable from some German examples. The bill, however, is unusually small and but little curved, the culmen measuring only .45 of an inch.
5. *Ampelis phœnicopterum*.

This lovely bird is much more nearly related to *A. garrulus* than to *A. cedrorum*, having, like the former, a very long crest, black throat, cinnamon-rufous forehead and cheeks, and rufous crissum; the latter, however, is stained, more or less, with blood-red. It also agrees more nearly with *A. garrulus* in size, and like that species has the outer web (sometimes inner web also) of the primaries tipped with white. The tip of the tail, however, instead of being yellow, as in the two American species, is of an exquisite rose-red color, and the greater wing-coverts are, for their exposed portion, dark purplish red. What is most remarkable, however, is that neither sex possesses the wax-like appendages to the shafts of the secondaries that are so characteristic of both *A. garrulus* and *A. cedrorum*, although in occasional specimens (as No. 91596, 2 ad.) they are developed to a very minute degree on the two innermost feathers. In perfect plumage, the outer webs of the secondaries are tipped with a narrow crescentic bar of pure rose-red; the outer webs of the primaries are tipped with clear rose-pink (or "pink madder"), and the inner webs tipped, transversely, with white. In four out of five specimens sent, however, there is no white at all on the inner webs of the primaries, while the outer web of each has a longitudinal bar of pure white. In a male and a female the red spots are wanting on the secondaries, which are concolored throughout; but in two others, both males, the secondaries have the red spots, very small in one, well developed in the other.


The series includes ten specimens, all in winter plumage, and with yellow bills. Of one, the sex is not determined; but of the others, three are males and six are females. Of the latter, two are quite as brightly colored as the brightest male, while the third is very nearly equal in richness of coloration to the dullest of the three males. The other three females, however, are very much duller colored, and are probably young birds in their first winter.

7. *Ægiothæs linaria*.

There are three specimens, two of them from Sapporo, being caged birds, the third a wild bird from Tate-Yama. They are decidedly referable to *linaria* as distinguished (by me) from *exilipes*, but look a little different from North American specimens, and may, on comparison, prove to belong to a distinct race.

8. *Loxia albiventris*.

This Crossbill is more like *L. curvirostra*, of Europe, than the American species, or race (*L. americana*).