

of the faded adult specimens the black of frontlet runs through all the changes of color from jet black to brown; but nowhere have I seen on the frontlet any chestnut or russet, those tinges of color so peculiar to the side-markings of the *Parus bicolor* and *Parus atricristatus*. In the far western specimens, notably from Missouri (see Baird, B. N. A., 1858, p. 384), the frontlet of *Parus bicolor* is so intensely black as almost to warrant a new variety on that account. Specimens from Middle and Northern Texas and Kansas are fully as black as the Missouri ones. In an almost direct longitudinal line south of where these intensely black ones are found we come to this interesting form with chestnut frontlets.

FURTHER NOTES ON THE GENUS ACANTHIS.

BY LEONHARD STEJNEGER.

SINCE my first paper on the species of the present genus (Auk, I, 1884, pp. 145-156), the National Museum has accumulated a vast additional material which enables me to corroborate some statements and modify others in my previous paper.

The enormous series of *A. hornemanni*, *exilipes*, *linaria*, and *rostrata* collected by Mr. L. M. Turner at Ungava, near the entrance of Hudson's Bay, has become available, and fully proves the correctness of recognizing the four forms. In fact, I am very strongly inclined to accept Mr. Brewster's view, that *A. rostrata* is specifically distinct. The outline of its culmen is quite unique in the genus. At any rate it is simply absurd to refer *A. rostrata* to *A. hornemanni* in light of our present material.

The increase of the collection of Redpolls is well illustrated by the fact, that while in 1884 we had only one very indifferent specimen of the British *A. cabaret*, the Museum now possesses a series of 41 specimens, most of which are in excellent plumage, for which thanks are due to Messrs. Blakiston, W. E. Brooks, E. Hargitt, R. B. Sharpe, and H. Seebohm. This additional material compels me to recede from the position previously taken, inasmuch as it proves to me the necessity of recognizing *A. cabaret* as a good and valid species, not a mere subspecies, easily

characterized by its brown rump and small size. The characters are uniform and well pronounced, and I can find no true transition to *A. linaria* proper. The specimens have been very carefully measured, the result being given in the subjoined tables which should be compared with the measurements recorded in 'The Auk,' I, 1884, p. 154, and in my 'Ornithological Explorations in Kamtschatka,' 1885, pp. 253-256.

Thanks to the energetic endeavors of Mr. W. E. Brooks, of Milton, Ontario, who, through Mr. Tristram, obtained the loan of an Italian specimen from the Florence Museum, I have been enabled to examine a specimen of the Southern Small Redpoll, which breeds in high altitudes in the South European mountains. I am under great obligations to the gentlemen mentioned for the trouble they have taken.

The specimen in question, a female in autumnal plumage, is more like *A. cabaret* than any of the other Redpolls. It differs, however, from all the British specimens before me in the following points. (It should be remarked that the specimens are fully comparable, as they are nearly all killed in October and November, six of them being marked as females on the labels.) The Italian bird has the brownish color much brighter and more ochraceous than any of the British specimens, the difference being particularly striking on the lower surface. On the other hand, the southern bird has the outer margins of tail-feathers and tertials distinctly whitish and not pale umber brown as the English ones. Mr. Brooks has already in a letter pointed out to me that the flanks of the Italian specimen are more heavily streaked with dusky, and I may add that it has small but distinct dusky streaks quite across the fore neck, a feature only observed in one of the English specimens before me. As will be seen from the appended measurements, the dimensions are about the same, but the bill is decidedly smaller.

As a matter of course, no decision can be made from a single specimen in this difficult group. But I think it important to call attention to the above differences, for the question whether the English and the South European Redpolls are identical, is a very interesting one. I am strongly inclined to think that it will be necessary ultimately to recognize *A. rufescens* (Vieill.) as different from *A. cabaret*. From the list of specimens quoted by Dresser as examined by him (Birds of Europe, IV, p. 50) it is

evident that he had not the opportunity of comparing English and continental specimens.

The Southern Redpoll seems to be a comparatively rare bird, though it must be remarked that the mountain regions of Southern Europe are very imperfectly worked up ornithologically. It breeds, however, in the Alps and Apennines (cf. Auk, 1884, p. 151), and Mr. Giglioli has recently added Friuli as a locality where it has been found nesting (*Avifauna Italiana*, 1886, p. 37). According to Dresser (*Birds of Europe*, IV, p. 49), Bailly asserts that it breeds in the Alps of Savoy, and he also gives Adrien Lacroix as the authority for the statement that it is met with *every season* on the northern slopes of the Pyrenees.

When writing my article on *Acanthis* I had no access to the plates of Dresser's 'Birds of Europe,' nor had I any specimens of true *A. exilipes* from the Western Palæarctic Region, *i. e.* from Finnmarken and Northern Russia. In the text Dresser stated that he had *A. exilipes* from Tromsø, in Norway. As it seemed impossible to me that Scandinavian ornithologists who distinguished between *A. linaria* proper and *A. l. holbællii* should have overlooked or ignored so well pronounced a form as *exilipes*, and as I possessed a specimen of a Redpoll from the very same locality, which certainly was not an *exilipes*, but apparently a pale variety of *A. linaria*, I was inclined to think that Dresser did not know the true *exilipes*, and that his birds and mine formed a special race of *linaria*, which should be called *pallescens*. In all this I was mistaken, however. Mr. Seebohm, with a most praiseworthy generosity, has presented the National Museum with a complete copy of Dresser's grand work, and an inspection of pl. 189, fig. 1, at once showed me that Dresser was quite correct. Specimens afterwards received from Messrs. Seebohm and Brooks, collected at the Petshora and in Siberia, confirm this beyond a doubt, and the habitat of *A. exilipes* is therefore proven to be as completely circumpolar as that of *A. linaria typica*, though more northerly. If the Tromsø birds (which, remarkably enough, is not included in Dresser's list of specimens examined) are identical with the one figured from Petshora, then *A. exilipes* is certainly to be included in the Norwegian Avifauna, and the '*A. canescens*' which Sommerfeldt reported as observed in the autumn at Tanen (cf. Collett, Rem. Orn. North. Norw., Forh. Vid. Selsk. Christiania, 1872, p. 209) is, in all probability, *A. exilipes*. Whether it breeds in Scandi-

navian territory is yet to be discovered. The specimens taken by Wolley at Muonioniska, Lapland, were collected in the autumn, and nothing definitely is said about the Tromsø specimens.

As a consequence Severzow's *A. sibirica* and Homeyer's *A. pallescens* are to be reduced to synonyms of *A. exilipes*. The question then arises, what is to become of my *A. linaria pallescens* (nec Homeyer)? I have again carefully examined my specimen, but what can be said from a single pale Redpoll in worn breeding plumage? All that can be remarked with certainty is that it is not *A. exilipes*, and if it represents no special race of its own, it will have to be unconditionally united with true *A. linaria*. However, even taking into account its very abraded condition, it appears to me *unusually* pale; but future material will decide.

I still maintain that *A. holbællii* is a fair local race of *A. linaria* especially characteristic of islands and coast districts during the breeding season, and easily recognizable by the elongation of the terminal portion of its bill, and the generally larger size. It will not do to explain this difference in the length of the bill as due to season, for we have before us both forms in all plumages and collected in all seasons. True, the bills of these birds are very often worn very short, but that takes place in both forms; specimens of *A. holbællii* with very worn bills may easily be mistaken for typical *A. linaria*, but the latter does not assume such a long bill as *holbællii*.

A good series of specimens from northern Japan, eight of which are collected by Mr. Th. Blakiston, forming part of that magnificent collection which two years ago he with unequalled liberality presented to the National Museum, point very strongly in favor of my opinion. Among the specimens before me are some of those upon which Swinhoe based the statement of two forms occurring in Yesso (*Ægiothus borealis* and *linaria*, Ibis, 1874, p. 160). After carefully examining and comparing my material I have come to the conclusion that they all belong to one form only, viz., *Acanthis linaria holbællii*. Some of the specimens have rather short bills—though longer than the average *A. linaria vera*—but on close examination it will be found that the base of the bill is inclosed in a horny layer of a dead look and ready to scale off, from which the fresh and new but yet short tip is protruding; in other words, they are in the process of shedding the outer layers of the horny covering of the bill. The whole

process is finely illustrated by this series of Japanese birds. It seems as if it is also connected with the change of the color of the bill from yellow to black. As yet the phenomenon of the renewal of the bill has received very little attention from ornithologists, notwithstanding its great importance.

Not knowing of any other species of Redpoll having been assigned to Japan based on *unquestionable* identification I can at present only regard *A. holbællii* as entitled to a place in its fauna. It is reasonable, however, to expect that both *A. linaria* and *exilipes* in winter may visit the northern islands.

MEASUREMENTS.

I. *Acanthis cabaret* ♀ from Italy.

Florence Museum No.	Collector.	Sex and Age.	LOCALITY.	DATE.	Wing.	Tail-f.	Bill from Nostril.	Furcation of Tail.
2554	♀ ad.	Colico, Italy.	Oct. 19, 1885.	68	51	6.5	9

II. *Acanthis cabaret* from Great Britain.

(a) Males with red on throat and breast.

U.S. Nat. Museum No.								
102976	Swaysland.	♂ ad.	Hove, Sussex.	Oct. 9, 1884.	72	54	7	11
102977	"	♂ ad.	Lancing, "	Nov., 1883.	69	52	7	9
107044	Seebohm.	♂ ad.	Brighton.	Nov., 1880.	67	51	8	8
107047	T. Gunn.	♂ ad.	Heigham, Norwich.	March, 1875.	68	50	7	8
108283	T. Thomps.	♂ ad.	Newcastle-on-Tyne.	Feb. 8, 1873.	71	53	7.5	8
Average measurements of 5 specimens					69	52	7.3	9

(b) Males without red on throat and breast.

102979	Swaysland.	♂ ad.	Brighton.	Nov., 1883.	71	53	7	8
108284	.....	♂ ad.	Oatlands.	Dec. 8, 1875.	73	56	7.5	10
109227	.....	♂ ad.	Cookham.	Dec. 2, 1879.	71	52	7	10
Average measurements of 3 specimens					72	54	7.2	9
Average of 8 ♂♂ with and without red					70	53	7.25	9

(c) FEMALES.

109223	Swaysland.	♀ ad.	Atmouth, Devon.	Oct. 28, 1882.	68	50	7	10
102970	"	♀ ad.	Lancing, Sussex.	Nov., 1883.	66	52	7	9
109224	"	♀ ad.	Atmouth, Devon.	Oct. 28, 1882.	68	51	7	10
107043	Seebohm.	♀ ad.	Norwich.	Nov., 1872.	66	48	7	8
107045	"	♀ ad.	Heigham.	Oct., 1873.	65	51	7	8
108285	.....	♀ ad.	Oatlands.	Dec. 8, 1875.	66	54	7	11
Average measurements of 6 females					66	51	7	9

(d) SPECIMENS NOT SEXED.

(a) With red on throat and breast.

102978	Swaysland.	ad.	Brighton.	Nov., 1883.	71	53	7	10
109225	.....	"	"	Oct., 1883.	74	53	8	—
109226	.....	"	Cookham.	Dec. 29, 1882.	70	53	7.5	9

(b) Without red on throat and breast.

96599	Blakiston.	ad.	Kent.	Oct., 1862.	68	52	7	9
96600	"	"	"	Feb., 1863.	71	52	7.5	8
107045	Seebohm.	"	Brighton.	Nov., 1881.	70	54	7	9
109232	"	"	"	" 1883.	68	52	7	9
109237	"	"	"	" "	67	51	7	9
109238	"	"	"	" 1882.	68	53	8	—
109244	"	"	"	" "	68	53	7	12
109230	"	"	"	Oct., 1883.	70	54	7.5	10
109231	"	"	"	" "	63	—	—	—
109233	"	"	"	" "	65	52	7	11
109234	"	"	"	" "	68	51	7	10
109235	"	"	"	" "	65	49	7	8
109236	"	"	"	" "	67	50	7	10
109239	"	"	"	" "	65	49	7.5	11
109240	"	"	"	" "	68	—	—	—
109241	"	"	"	Oct. 20, 1883.	71	53	7	10
109242	"	"	"	Oct. 22, 1883.	68	53	7	11
109243	"	"	"	Oct. 26, 1883.	66	51	7	11
109245	"	"	Hampstead.	Nov. 12, 1882.	65	51	7	10
109240	"	"	"	Nov. 10, 1882.	67	—	7.5	—
109247	"	"	"	" "	70	55	7.5	—
109228	"	"	Cookham.	Dec. 29, 1882.	65	52	7	10
109229	"	"	"	Dec. 2, 1882.	65	—	7	—
Average measurements of 26 specimens					68	52	7.2	10

III. *Acanthis holbællii* from Japan.

(a) MALES.

96374	Blak. 1148.	♂ ad.	Hakodadi, Yesso.	March.	75	58	8.5	8*
91543	" 2910.	♂ ad.	Sapporo, "	June.	72	55	9	8*
96372	" 1147.	♂ ad.	Hakodadi, "	March.	73	55	8	9*
96373	" 1143.	♂ ad.	" "	" "	75	58	9	11†
96370	" 1138.	♂ ad.	" "	February.	73	58	8	10†
91439	Jouy, 798.	♂ ad.	Tate Yama, Hondo.	Nov. 21, 1822.	75	58	9	11†
Average dimensions of six males					74	57	8.6	10†

(b) FEMALES.

107039	Blak. 1144.	♀ ad.	Hakodadi, Yesso.	March.	72	55	8	9
91544	" 2911.	♀ ad.	Sapporo, "	June.	—	55	8	—
96341	" 1147.	♀ ad.	Hakodadi, "	March.	72	54	7	9

THE REDISCOVERY OF BACHMAN'S WARBLER,
HELMINTHOPHILA BACHMANI (AUD.),
IN THE UNITED STATES.

BY GEORGE N. LAWRENCE.

MR. CHARLES S. GALBRAITH, of West Hoboken, N. J., an experienced taxidermist and collector, made a collection of birds last spring (1886) in Louisiana, near Lake Pontchartrain. I did not see him after his return until October. Any specimens he obtains, which he is not familiar with, he always thoughtfully

* With red on throat and breast.

† Without red on throat and breast.