

REVIEW OF JAPANESE BIRDS.

BY LEONHARD STEJNEGER.

II.—TITS AND NUTHATCHES.

The present essay has the same aim and scope as the one treating of the Japanese Woodpeckers and published a short time ago in these Proceedings (see *antea* pp. 99–124). It embraces the family *Paridæ*, with which I associate the Nuthatches as a subfamily only. The introductory remarks accompanying the former article apply as well to this and the succeeding papers of the present series, which, I may repeat, is only a kind of a prodromus of a more extensive work, in order to call attention to doubtful points; to instigate investigation by others who possess material not accessible to me; in short, to ask information from fellow-ornithologists, which is hereby earnestly solicited, and for which due credit will be given.

SYNOPSIS OF THE JAPANESE GENERA OF *PARIDÆ*.

*a*<sup>1</sup>. Bill short, from mouth angle to tip shorter than tarsus.

I. *PARINÆ*:

*b*<sup>1</sup>. Culmen and gonyes curved (*PARIÆ*).

*c*<sup>1</sup>. Tail scarcely longer than body; outer pair of tail-feathers more than five-sixths the length of the longest.....*Parus*.

*c*<sup>2</sup>. Tail nearly twice as long as the body; outer pair of tail-feathers less than half the length of the longest.....*Egithalos*.

*b*<sup>2</sup>. Culmen and gonyes perfectly straight (*REMIZÆ*).....*Remiza*.

*a*<sup>2</sup>. Bill long, from mouth angle to tip longer than tarsus.

II. *SITTINÆ* ..... *Sitta*.

**PARUS LINN.**

1758.—*Parus* LINN., S. N., 10 ed., I, p. 189.

1829.—*Cyanistes* KAUP, Entw. Eur. Thierw., p. 99 (type *P. cyaneus*).

1829.—*Pœcile* KAUP, Entw. Eur. Thierw., p. 114 (type *P. palustris*) (nec *Pœcilus* BON., 1813).

1850.—*Pœcila* BONAPARTE, Consp. Av., I, p. 230 (emend.).

1850.—*Penthestes* REICHENBACH, Av. Syst. Nat. Trepidat., pl. lxii (type *P. lugubris*).

1862.—*Poikilis* BLASIUS, List B. Eur., p. 8 (emend.).

1872.—*Pœcilia* TACZANOWSKI, Journ. f. Orn., 1872, p. 443 (emend.) (nec BLOCH-SCHN., 1801; nec SCHRANK, 1802; nec HEIN., 1870).

1884.—*Sittiparus* SELYS-LONGCHAMPS, Bull. Soc. Zool. France, 1884 (p. 76) (type *P. varius*).

1884.—*Periparus* SELYS-LONGCHAMPS, Bull. Soc. Zool. France, 1884 (p. 76) (type *P. ater*).

SYNOPSIS OF THE JAPANESE SPECIES OF THE GENUS *PARUS*.

- a*<sup>1</sup>. Forehead brownish white, crown black\* (*SITTIPARUS*).  
*b*<sup>1</sup>. Larger; a large triangular rufous spot on the interscapilium ..... *P. varius*.  
*b*<sup>2</sup>. Smaller; only a narrow edge of rufous to the black of the nape.. *P. castaneiventris*.
- a*<sup>2</sup>. Forehead black, like the crown.  
*b*<sup>1</sup>. Outer pair of tail-feathers to the greater extent pure white, the outer edge being black from the base (*PARUS*) ..... *P. minor*.  
*b*<sup>2</sup>. Outer pair of tail-feathers uniform dark gray, like the rest, with or without whitish margins.  
*c*<sup>1</sup>. With a whitish nuchal spot; great wing-coverts with white tips, forming two wing bands (*PERIPARUS*) ..... *P. ater* subsp. ?  
*c*<sup>2</sup>. Upper neck without a light-colored spot; wing-coverts without white tips (*PŒCILE*).  
*d*<sup>1</sup>. Crown dull brownish black; longest tail-feathers averaging 52<sup>mm</sup> .....  
*P. borealis*.  
*d*<sup>2</sup>. Crown deep black with bluish gloss; longest tail-feathers averaging 60<sup>mm</sup>.  
*P. brevirostris*.

Subgenus *SITTIPARUS* SELYS.(218) *Parus varius* TEMM. & SCHL.

Japan Tit.

Yama-gara.

- 1849.—*Parus varius* TEMM. & SCHLEG., Faun. Jap. Av. (p. 71, pl. xxxv).—BLAKIST., Ibis, 1863, p. 99.—*Id.*, Chrysanth., 1883, Febr., p. —.—*Id.*, Am. List B. Jap., p. 15 (1884).—SWINHOE, Ibis, 1874, p. 155.—BLAKIST. & PRYER, Ibis, 1878, p. 235.—*Id.*, Tr. As. Soc. Jap., VIII, 1880, p. 218.—*Id.*, *ibid.*, x, 1882, p. 151.—SEEBOHM, Ibis, 1879, p. 33.—JOUY, Pr. U. S. Nat. Mus., VI, 1883, p. 286.
- 1862.—*Parus rubidus* BLAKISTON, Ibis, 1862, p. 321.

I am not aware that the young of this species has been described. The only reference to the young I can find is the remark by Messrs. Blakiston and Pryer (Ibis, 1878, p. 235) to the effect that it is "rather different from the adult, but does not otherwise vary" (?). Specimens of young in their first plumage are, therefore, a special desideratum.

*Parus castaneiventris* GOULD.

Formosa Tit.

- 1862.—*Parus castaneiventris* GOULD, P. Z. S., 1862, p. 280.  
 1863.—*Parus castaneiventris* SWINHOE, Ibis, 1863, p. 295.—*Id.*, P. Z. S., 1871, p. 361.  
 1883.—*Parus castaneiventer* GADOW, Cat. B. Brit. Mus., VIII, p. 37.

This species has recently been collected by Mr. M. Namiye, on Okinawa Shima (Liu Kiu), a discovery which will be treated of in detail in a special paper. It is smaller, and the chestnut mark behind the white nape spot is nearly absent.

\* *Parus (Cyanistes) caeruleus* LINN. with white forehead, azure-blue crown, and a white superciliary stripe, together with its conspecies and subspecies, is confined to the western portion of the Palearctic Region. In Temminck's Manuel d'Ornithologie, 2d ed., III, p. 210 (1835), it is said to occur in Japan, probably on the authority of some drawing; but this is evidently a mistake. "Formosa," referred to under this species in Horsfield and Moore's Catalogue, is a place in England.

## Subgenus PARUS.

(217) *Parus minor* TEMM. & SCHL.

Lesser Tit.

Shi-jiū-kara.

1835.—*Parus major* TEMM., Man. d'Orn., 2 ed., III, p. 209 (part) (*nee* LLN.).1849.—*Parus minor* TEMM. & SCHLEG., Fauna Jap. Aves (p. 70, pl. xxxiii).—CASSIN, Pr. Phila. Acad., 1858, p. 192.—WHITELY, Ibis, 1867, p. 198.—SWINHOE, Ibis, 1874, p. 156.—BLAKIST. & PRYER, Ibis, 1878, p. 235.—*Id.*, Tr. As. Soc. Jap., VIII, 1880, p. 217.—*Id.*, *ibid.*, x, 1882, p. 150.—SEEBOHM, Ibis, 1879, p. 33.—BLAKIST., Chrysanth., 1833, Jan., p. 30.—*Id.*, *ibid.*, 1883, Febr., p. —.—*Id.*, Am. List B. Jap., p. 15 (1884).—JOUY, Pr. U. S. Nat. Mus., VI, 1883, p. 286.

This may finally turn out to be so closely connected with *Parus cinereus* VIEILL.\* by intermediate links that the specific validity cannot be maintained, in which case the Japan bird would have to stand as *Parus cinereus minor* [or eventually *P. nipalensis minor*]. Dr. Gadow (Cat. B. Brit. Mus., VIII, p. 17), under *P. cinereus*, takes pains to show that the two forms are specifically distinct, although two pages earlier he states in regard to *P. minor*, that in China "it gradually changes into *P. cinereus*." The intermediate specimens from China have been called, by Swinhoe, *Parus commixtus* (Ibis, 1868, p. 63). These are the eastern, somewhat faded, representatives of *Parus major* of Europe, which is quite like *P. minor* above, but has the white of the lower surface replaced by vivid yellow. It is interesting in this connection to note, that a brighter colored representative, *P. monticolus* VIGORS, is found in the mountains of Southeastern Asia, an apparent race of which, *Parus monticolus insperatus*,† was discovered by Mr. Swinhoe in southern Formosa.

Mr. Jouy discovered the young of *P. minor* in the first plumage at Fuji-Yama in the beginning of July. It is very interesting, inasmuch as it is distinguished from the young of *P. major* in the corresponding plumage by the same characters which separate the adults: it is smaller, and the under side is whiter.

♂ *juv.*, *first plumage* (U. S. Nat. Mus. No. 88642; coll. P. L. Jouy, No. 333; Fuji-Yama, Hondo, July 2, 1882). Distribution of colors as in the adult, but the whitish nuchal spot apparently larger, and the dark throat patch smaller, and connected with the dark color on the upper neck by a narrow and scarcely continuous streak; on the breast only an indication of the dark middle streak, and none on the abdomen; the green of the back is very dull, and the ashy gray of the rump slightly suffused with olive; all the dark parts on head and neck are of a dull slate color slightly suffused with olive; the white portions are washed with a pale creamy yellow.

\* Nouv. Diet. d'Hist. Nat., xx, p. 316 (1818).—*Parus atriceps* HORSFIELD, Tr. Linn. Soc., XIII (p. 160) (1821).—*Parus nipalensis* HODGSON, Ind. Rev., 1838 (p. 31). I may mention here, however, that not all authors agree in uniting the Javan bird (true *cinereus*) with the Indian and Chinese representative (*nipalensis*). The former is said to have the white nuchal spot entirely surrounded by black, while in the latter it is only bordered in front and on the sides by that color. All the specimens of the latter which I have examined have the white spot immediately adjoining the gray of the back; but without typical specimens of *cinereus* I cannot decide.

† *Parus insperatus* SWINHOE, Ibis, 1866, p. 308.—*Id.*, P. Z. S., 1871, p. 361.

## Subgenus PERIPARUS SELYS.

(215) *Parus ater* subsp.?

Coal Tit.

Hi-gara.

1758.—*Parus ater* LINN., S. N. 10 ed., 1, p. 190.—*Id.*, S. N., 12 ed., 1, p. 341 (1766).—  
 TEMM., Man. d'Orn., 2 ed., III, p. 209 (1835).—*TEMM. & SCHL.*, Fauna Jap.  
 Av. (p. 70) (1849).—*BLAKIST.*, Ibis, 1862, p. 321.—*Id.*, Chrysaeth., 1882, p.  
 522.—*Id.*, *ibid.*, Jan., 1883, p. 30.—*Id.*, *ibid.*, Feb., 1883, p.—*Id.*, Amend.  
 List B. Jap., pp. 15, 50 (1884).—*WHITELY.*, Ibis, 1867, p. 198.—*SWINHOE.*  
 Ibis, 1870, p. 154.—*Id.*, *ibid.*, 1874, p. 155.—*BLAKIST. & PRYER.*, Ibis, 1878,  
 p. 235.—*Id.*, Tr. As. Soc. Jap., VIII, 1880, p. 217.—*Id.*, *ibid.*, x, 1882, p.  
 149.—*SEEBOHM.*, Ibis, 1879, p. 31.—*Id.*, *ibid.*, 1884, p. 37.—*JOUY.*, Pr. U. S.  
 Nat. Mus., VI, 1883, 285.

The Coal Tit of Japan is usually given as *Parus ater*, some authors asserting, however, that specimens occur in Japan which are intermediate between the typical form and *Parus pekinensis* DAVID\* from China, the chief character of which is said to be the elongation of the occipital feathers into a distinct crest.

I have been considerably puzzled about this species, but have concluded to establish no new name in view of the insufficiency of my material, and shall, therefore, simply state what I have found in examining the specimens in the U. S. National Museum. As to *P. pekinensis* proper I shall express no opinion, having seen no specimen. I may state in regard to the alleged occurrence of that form in Japan, that none of the specimens before me exhibit the character by which it is said to differ from *ater*, viz, the elongation of the posterior black feathers of the crown into a crest.†

Speaking of the Japanese specimens before me in a general way, it may be said that they resemble typical *P. ater* on the upper surface, while underneath they agree with the English form, *P. ater britannicus*, except that the colors are purer and clearer. However, a specimen from the Vosges, France (U. S. Nat. Mus. No. 106465), agrees very well in color with the Japan birds, both above and beneath.

The two autumnal males from Tate Yama, Hondo, are nearly identical, except that No. 91347 has the ochraceous wash on the rump a little stronger. Compared with typical *P. ater*, from the continent of Europe, the gray of the back is of a somewhat different and more decided bluish hue. It appears to me that the black on the hind neck goes farther back, (though this *may* be caused by the make of the skin) but differs certainly in one point from that of the European specimens I have seen in entirely encircling the white nuchal spot and distinctly separating it from the gray of the back. It also looks as if the black of the throat

\* Ibis, 1870, p. 155.

† A Japanese drawing, excellent and true to nature in every other respect, and by far superior to the execrating figure accompanying the description of *P. pekinensis* (Nouv. Arch. Mus., VIII, pl. 5, fig. 1), shows a crest fully as long and pointed as that of the latter. But whether it is drawn from a Chinese or a Japanese specimen I cannot say.



goes farther down on the breast, especially on the sides of the latter, but, as above, the make of the skin may be the reason of it.

A female, collected by Jouy at Fuji, June 30, 1882, consequently in the height of the breeding season, is in an extremely worn plumage. The brownish buff tinge on the under side is considerably faded, but the relative extent of black and white is the same in this specimen as in the above ones, the white nape patch being very broadly limited behind by black, and the latter color extending far down on the sides of the breast—about 10<sup>mm</sup> farther than in the middle.

A female from Sapporo, Yesso, in the autumnal dress corresponding to that of the two specimens first mentioned, agrees very well with them, but the black on the breast apparently does not extend so far as in the Hondo specimens. On the hind neck the white patch is closed behind by black.

Whether this character is of any value can only be determined by a larger series of birds from both Europe and Japan than at present at my command. I may point to the fact, however, that a similar difference is said to obtain between *Parus cinereus* from Java and its representative form on the continent.

In regard to the measurements as given in the appended table, I may remark that they agree very well with those of *P. britannicus*, being considerably inferior to those of Central European specimens before me. But also in this respect the series must be considered insufficient.

Measurements.

U. S. Nat. Mus. No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.	Total length.
88645	Jouy, 373	♀ ad.	Fuji, Hondo	June 30, 1882	58	43	8	15	13	.....
91347	Jouy, 683	♂ ad.	Tate Yama, Hondo	Oct. 3, 1882	59	44	8	16.5	.....	.....
81348	Jouy, 688	♂ ad.	.....do	Oct. 8, 1882	59	46	7.5	16	.....	.....
96143	Blak., 3012	♀ ad.	Sapporo, Yesso	Sept. 30, 1882	58	45	7	17	.....	110

Subgenus PŒCILE KAUP.

(216 part.) *Parus borealis* SELYS.

Boreal Marsh-tit.

Ko-gara.

1829.—? *Parus cinereus montanus* BALDENSTEIN, Neue Alpina, II (p. 21).

1843.—*Parus borealis* SELYS-LONGCHAMPS, Bull. Ac. Bruxelles, 1843 (p. 2).

1882.—*Parus palustris japonicus*, BLAKIST. & PRYER, Tr. As. Soc. Jap., x, 1882, p. 150 (part).—BLAKIST., Chrysanth., 1883, Feb., p. —.— JOUY, Pr. U. S. Nat. Mus., VI, 1883, p. 286.

1880.—*Parus palustris* BLAKIST. & PRYER, Tr. As. Soc. Jap., VIII, 1880, p. 217 (part) (*nec* LIN.).

1883.—? *Parus japonicus* SEEBOHM, Brit. B. Eggs, I, p. 477 (*nec* 1879?) (*nec* STEPH., 1817).

The Marsh-tits of Europe have been for nearly half a century the subject of much controversy, and the ornithologists there seem not to

have yet arrived at a conclusion satisfactory to all concerned. It is, therefore, less to be wondered at that the eastern forms are still in a state of considerable confusion. In this group extensive series of specimens are indispensable, and as my material is quite scanty I can throw only little light on the subject; but, so far as it goes, it has some bearings; and, as for the rest, I can only formulate the questions and ask my fellow-workers to furnish me with more material.

I have four birds from Japan before me. Two of these are October birds collected by Mr. Jouy in Hondo—consequently, south of “Blakiston’s Line”; the other two are from the island north of it, one an October specimen from Sapporo, Yesso, the other from “the Kurils,” and probably collected somewhat earlier.

The two birds composing each set are identical *inter se*, but the birds of the north differ from those of the south in the following particulars:

The *northern* birds are slightly larger, but the bill and feet are of the same size as in the southern birds.

The tail is proportionately longer and more rounded; the middle pair of rectrices is longer than that following.

The black of the cap does not extend so far backwards as in the southern birds, and is of a deep black, strongly glossed with blue.

The margins of the remiges and rectrices are broader and lighter.

The under side is slightly washed with pale brownish buff, the flanks and abdomen scarcely contrasted.

The *southern* birds are slightly smaller, but bill and feet are equal in size to the corresponding parts in the northern birds.

The tail is proportionately shorter and less rounded; the middle pair of rectrices perceptibly shorter than that following.

The black of the head extends farther back between the shoulders, being of a rather dull brownish black, without any bluish gloss whatever.

The margins of the remiges and rectrices narrower and duller.

The under side pure white, the flanks washed with pale brownish buff a shade deeper than in the northern birds and pretty well contrasted with the pure white of the middle portion.\*

It should be noted here, that Messrs. Blakiston and Pryer have already pointed to the difference of the black cap in specimens from the Main Island and Yesso (Tr. As. Soc. Jap., x, 1882, p. 150). This, they say, may be attributable to season. Such is hardly the case, however, since the specimens compared above are of nearly exactly the same date; and, as they are quite adult, no argument can be derived from difference in age, the more so since it would be very strange that only young birds should have been collected in Yesso, and old ones in Hondo. Moreover, we know that a similar difference exists between *Parus borealis* and *P. palustris* in Europe.

By now comparing the Japanese birds with others, I find that the southern birds are nearly identical with typical specimens of *P. borealis*, both in size, color, and proportions, and with the present material, at

\* Since the above was set in type I have received another Hondo specimen (U. S. Nat. Mus. No. 109355), the dimensions of which have been incorporated in the table below. It agrees with the other southern specimens in every particular.

least, I should regard it very unwise to apply any other name to the Hondo form.

Mr. Seebohm, who in 1879 named a Marsh-tit *P. palustris japonicus*, has determined the very two specimens from Yesso and the Kurils, mentioned above, as *P. palustris brevirostris* (Ibis, 1884, p. 37). Without having typical examples of the latter, I cannot deny nor verify this determination; but, judging from the literature, I believe he is right, though, if such be the case, his prior diagnosis of *brevirostris* (Brit. Birds and Eggs, I, p. 477) is completely misleading, since the tails of the specimens in question are very strongly rounded, and not "nearly even," as in the diagnostic table alluded to. I shall, however, adopt his nomenclature, at least provisionally, and call the two Japanese forms of the Marsh-tit, *Parus borealis* and *Parus brevirostris*.

Mr. Jony, in July, 1882, collected two young,\* though fully grown, birds at Fuji Yama. They agree pretty well with the autumnal specimens from Tate Yama, and I think there is but little danger in referring them to the same form, though their bills are perceptibly larger. This is said with some reserve, however. The dimensions will be found in the table below.

To which of the two Japanese forms Seebohm's *P. japonicus* should be referred is impossible to say without comparison of the typical specimens. The probability that he based the name upon Blakiston's and Whitely's specimens from Hakodate does not necessarily indicate that it is a synonym of *brevirostris*, since we know that two forms of Marsh-tits may occur in the same locality, at certain seasons of the year at least. On the contrary, if the measurements which he gives as diagnostic of *P. japonicus* are taken from the typical specimens (Br. B. Eggs, I, p. 477), his *japonicus* most probably belongs to the form which we have here called *borealis*.†

The indications are, however, that *borealis* breeds south of "Blakiston's Line," *brevirostris* north of it, a distribution corresponding to the relative range of the two forms in other countries.

It has been observed in Scandinavia, where two forms occur together, that they present considerable difference in their habits and in their

\* In Jony's paper (Proc. U. S. Nat. Mus., VI, 1883, p. 286) these specimens are referred to as adults, but that is certainly a mistake, as they show every sign of immaturity.

† It should be remarked, however, that the name *Parus japonicus* is preoccupied. It was given by Stephens, in 1817 (Shaw's Gen. Zool., X, i, p. 55), to a bird originally described by Latham as a variety of the Marsh-tit from specimens in Sir Joseph Bank's collection, said to have been taken off the coast of Japan. A correct identification is now hardly possible, inasmuch as Latham seems to have had two different species, neither of which are described sufficiently to allow recognition, and, besides, the description by Stephens differs radically from that of Latham. The latter had evidently no idea of the true relation of *P. ater* and *palustris*, for he suspected the latter of being the female, or only a variety of the former, and the reference of the specimens here in question, which he describes as having light nuchal spot, to the Marsh-tit, does, therefore, not prevent their greater resemblance to *P. ater*, or to *P.*

voice. It would, therefore, be a very interesting question for Japanese field-ornithologists to solve, whether something similar takes place in the two forms considered in the present paper.

*Measurements.*

U. S. Nat. Mus. No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	*	Tarsus.
					mm.	mm.	mm.	mm.	mm.
91349	Jouy, 690 .....	♂ ad.	Tate Yama, Hondo ..	Oct. 9, 1882	62	53	8	4	16
91350	Jouy, 791 .....	♂ ad.	do .....	Oct. 17, 1882	59	52	7	4	16
88644	Jouy, 545 .....	♂ jun.	Fuji, Hondo .....	July 18, 1882	59	51	9	5	.....
88643	Jouy, 609 .....	♂ jun.	do .....	July 27, 1882	61	53	9	5	.....
109355	.....	♂ ad.	Musashi, Hondo.....	Nov. 18, 1883	60	51	9	.....	16

\* Distance between longest and shortest tail-feathers.

(216 part.) ? *Parus brevirostris* (TACZAN.).

Long-tailed Marsh-tit.

Ko-gara.

1856.—*Parus kamtschaticus* CASSIN, Pr. Acad. Phila., 1858, p. 193 (nec BP.).—BLAKIST., Ibis, 1862, p. 321 (nec BP.).—WHITELY, Ibis, 1867, p. 198.

1872.—? *Pacilia brevirostris* TACZANOWSKI, Journ. f. Orn., 1872, p. 444.—*Parus b.* SEEBOHM, Brit. B. Eggs, I, p. 477.

1874.—*Parus borealis* SWINHOE, Ibis, 1874, p. 156 (nec SELYS).—BLAKIST. & PRYER, Ibis, 1878, p. 234.

1879.—*Parus palustris* subsp. *japonicus* SEEBOHM, Ibis, 1879, p. 32 (nec *P. japonicus* STEPH., 1817).—BLAKIST. & PRYER, Tr. As. Soc. Jap., x, 1882, p. 150 (part).—BLAKIST., Chrysanth., 1882, p. 522.—*Id.*, *ibid.*, 1883, p. 30.—*Id.*, Am. List B. Jap., p. 50 (1884).

1880.—*Parus palustris* BLAKIST. & PRYER, Tr. As. Soc. Jap., VIII, 1880, p. 217 (part) (nec LIN.).—SEEBOHM, Ibis, 1884, p. 37.

1881.—*Parus japonicus* WALLACE, Island Life, p. 63.

1884.—*Parus palustris* var. *brevirostris* SEEBOHM, Ibis, 1884, p. 37.

It is a very difficult task to locate properly the different quotations pertaining to the Japanese Marsh-tits, without access to the specimens upon which they are based. The above synonymies, therefore, do not claim to be absolutely correct, and may in time require to be consider-

*minor*, for that matter. Latham (Synops. II, ii, p. 542) describes his birds as "not having a black chin, all the under parts being white. One sex had the whole head black, with a band of white across the hind head; in the other, only the top of the head was black, and the nape yellowish." The Latin description in the subsequent "Index Ornith." (II, p. 566) is substantially to the same effect. Stephens, on the other hand (*l. c.*), in his diagnosis of *Parus japonicus*, says: "Titmouse with a black head and throat," and in the description: "differs chiefly in having a black chin and colored nape; all the rest of the under parts of the body white." Had Stephens's description been based upon the specimens themselves, there might have been reasons for supposing the bird to be *P. minor*; but as it appears that he has only made a slip in rendering Latham's description, the name must remain unidentified.

At any rate, Seebohm's *Parus japonicus* will have to be renamed, should it later on be found necessary to keep the bird, separated by him, apart from the true *borealis*.



ably modified. In preparing them, I have had to suppose that all references to Marsh-tits from Yesso belong to *brevirostris*, and those from Hondo to *borealis*, but it is quite probable that both forms may be found together in both islands, though the distribution of the great bulk of each form may be as indicated. The uncertainty is caused by the following circumstances:

When Seebohm, in 1879, named *P. japonicus*, I believe that he had only Yesso specimens before him. If only the long-tailed form occurs on that island, *P. japonicus* is only a synonym of *P. brevirostris*. But in another place (Brit. B. Eggs, I, p. 477) the same author speaks of his *P. japonicus* as differing from *brevirostris* in having a shorter tail.

*Measurements.*

U. S. Nat. Mus. No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	*	Tarsus.	Total length.
96144	Blak., 3131	♂ ad.	Sapporo, Yesso ..	Oct. 12, 1882	mm. 67	mm. 62	mm. 7.5	mm. 6	mm. 16	mm. 170
96145	Snow; B., 2799	ad.	Kurils .....	.....	66	159	8	15	16	.....

\* Distance between longest and shortest tail-feathers.

† Tail molting.

The present form in its proportions closely agrees with *Parus kamtschatkensis* (BP.)\*, which only occurs on the Kamtschatkan Peninsula, but the latter is easily distinguishable at the first glance by having the whole back nearly white. It is a very distinct species, and no intergradation with the other species of this group is at all likely to be found, Mr. Seebohm to the contrary. This is not the same as the form which, in Dresser's "Birds of Europe," is figured and described as *P. kamtschatkensis*. Dresser's bird is *P. baicalensis* SWINH.

**AEGITHALOS† HERM.**

- = 1804.—*Aegithalos* HERMANN, Obs. Zool., I, p. 214 (type *Pipra europæa* HERM.).
- = 1816.—*Mecistura* LEACH, Syst. Cat. M. B. Brit. Mus., p. 17 (same type, *M. vagans* LEACH=*P. europ.* HERM.).
- = 1816.—*Aeredula* KOCH, Bayr. Zool., I, p. 199 (type *A. caudata* KOCH).
- < 1822.—*Aegithalus* BOIE, Isis, 1822, p. 556 (type *Ae. pendulinus*).
- < 1826.—*Aegythalus* BOIE, Isis, 1826, p. 975 (emend.).
- = 1828.—*Paroides* BREHM, Isis, 1828, p. 1284 (type *P. caudatus*).
- = 1841.—*Orites* GRAY, List. Gen. B., p. 32 (same type) (nec KEYS. & BLAS., 1840).
- = 1846.—*Megistura* AGASSIZ, Nom. Zool. Ind. Univ., p. 227 (emend.).
- = 1849.—*Megisturus* TEMM. & SCHL., Faun. Jap. Aves, p. — (emend.).

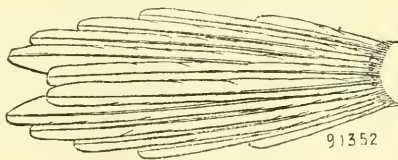
When Boie, in 1822, combined *Parus caudatus* and *pendulinus* to the genus *Aegithalus*, that name had already been applied to the former of these two species by Hermann in 1804. This gentleman in his "Observationes Zoologicae" described a bird, which was caught in the mount-

\* *Pacile k.* BONAPARTE, Consp. Av., I, p. 230 (1850).—*Parus k.* STEJNEGER, Orn. Expl. Kamtsch., p. 297 (1885).

† *Αιγίθαλος*, a titmouse.

ains of Switzerland, as "*Pipra ? europæa*, NOBIS," and after having stated the structural characters, he says: "Si novum genus mereatur, *Aegithalos* vocari poterit," *i. e.*: If deserving to form a new genus, it may be called *Aegithalos*. I have seen no attempt to identify this "*Pipra ? europæa*," which may be considered rather strange, since the name evidently belongs to a European bird, but there can be no doubt, in my mind, that his specimen was a Long-tailed Tit of the form usually called *Aerodula rosea* or *Mecistura vagans*, which, therefore, in the future should stand as *Aegithalos europæus*.

The following is the essential part of his diagnosis and description in translation: "Black, crown of head and underneath white, tail forked (*forficata*), with the lateral rectrices shorter, their outer margin white. The bill is neither that of a *Fringilla*, nor that of a *Motacilla*, nor indeed that of a *Parus*, but agrees more with that of a *Pipra*. Not so, however, the feet, which are not gressorial. The tail is forked (*forficata*), the outer rectrix very short, the following short, the third longer, these three with the outer margin white, but more obscurely so in the third. Size of a *Motacilla* [*Phyllopesustes*] *trochilus*. Feet somewhat high. . . . . Also the anterior [ex<sup>terior</sup>] margin of the secondaries is white, the broader and clearer so the farther behind and nearer the back." The description of the tail is an exact description of that of the Long-tailed Tit. It sounds like a contradiction when he describes it as forked, saying at the same time that the three outer pairs are graduated, but he evidently only means to say, that the middle pair is shorter than the following, and it is just the peculiarity of the tail of this species, that it is, so to speak, forked and graduated at the same time (see the accompanying cut). He also mentions the peculiar shape of the bill,



and the comparatively great length of the tarsus. The coloration of the wings is accurately described, and so is that of the body, though he does not mention the red of the shoulders, it being therefore probable that the specimen he described was a young bird in which this color is absent. To verify the identification it is only necessary to compare it with fig. 6, taf. 95 of Naumann's "*Naturgeschichte der Vögel Deutschlands*," Vol. IV, and there cannot be the slightest doubt as to the accuracy and applicability of Hermann's description.

(219) *Aegithalos trivirgatus* (Temm. & Schl.).

Japanese Long-tailed Tit.

Ō-naga.

- 1835.—*Parus caudatus* TEMM., Man. d'Orn. 2 ed., III, p. 214 (*nec* LIN.).  
 1849.—*Parus trivirgatus* TEMM. & SCHL., Fauna Jap. Av., (p. 60, pl. xxxiv).—*O. trivirgatus* SWINHOE, Ibis, 1874, p. 156.—*Acredula trivirgata* BLAKIST. & PRYER, Ibis, 1878, p. 235.—*Id.*, Tr. As. Soc. Jap., VIII, 1880, p. 218.—*Id.*, *ibid.*, x, 1882, p. 151.—BLAKIST., Chrysanth., 1883, Feb., p. —. — JOUY, Pr. U. S. Nat. Mus., VI, 1883, p. 285.  
 1883.—*Acredula rosea a trivirgata* GADOW, Cat. B. Brit. Mus., VIII, pp. ix + 62.—BLAKIST., Amend. List B. Jap., p. 50 (1884).  
 1884.—*Acredula rosea* SEEBOHM, Ibis, 1884, p. 37.

It is hardly correct to say that “the only claim of *Æ. trivirgatus* to rank as a distinct species rests on the fact that in the majority of skins, though not in all, the black supercilium passes across the lores to the base of the bill,”\* for there are other differences, which, in the case of specimens like that quoted by Mr. Seebohm (Ibis, 1884, p. 37), most likely would show them to be true *Æ. trivirgatus*. A glance at the tables of measurements appended below shows that the Japanese bird has a comparatively shorter tail and a longer bill than the West European *Ægithalos europæus* (HERM.)†; the bill is also perceptibly thicker and stouter. In regard to colors, those of the Japanese bird are purer and clearer, and the vinous tinge on the under parts perceptibly lighter; the white edges of the tertiaries and inner secondaries are purer and broader in *Æ. trivirgatus* than in *Æ. europæus*, and hardly differing from some specimens of true *Æ. caudatus*; the superciliary stripe is more solid and more intensive and shining black, besides, as already remarked by earlier writers, as a general rule extending to the bill. As on the loreal region the blackish color seems restricted to the tips of the feathers it wears off easily, and as some British specimens have the loreal feathers similarly, though less extensively, tipped with dusky, this character alone may not always be sufficient for distinguishing specimens from the extreme west or east of the Eurasian Continent. In view of the many other characters separating the two forms, which have not been mentioned by the authors claiming to have examined intermediate specimens, I refuse to use a trinomial designation for the Japanese Bottle-tit.

The present species is restricted to the Japanese Islands south of “Blakiston’s Line,” north of which *Æ. caudatus* is found. The adults of the two species are very easily distinguished, inasmuch as the former has a very distinct and broad black superciliary stripe which posteriorly is connected with the black of the back, thus encircling the white

\* Cf. Seebohm, Brit. B. Eggs., I, p. 487.

† 1804.—*Pipra? europæa* HERMANN, Obs. Zool., p. 214.

1816.—*Mecistura vagans* LEACH, Syst. Cat. Mam. B. Br. Mus., p. 17 (*nom. nud.*).

1836.—*Mecistura rosea* BLYTH, ed. White’s Nat. Hist. Selborne (p. 111).

1839.—*Mecistura longicaudata* MACGILLIVRAY, Hist. Brit. B., II, p. 454.

crown and nape, while in the northern bird the whole head is pure and uniform white.\*

The young ones, on the other hand, may be rather difficult to distinguish, even more so than the young ones of the corresponding European species, since in the two Japanese forms the amount of white on the tertiaries and secondaries is about the same. Having only a very faded specimen of a young European *Æ. caudatus*, I am unable to point out with certainty any character beyond the relative size; but as seen from the tables, the difference in that respect between the adults is apparently very slim, and an attempt to determine a young bird by means of the comparative measurements would probably prove futile. I am inclined to think, however, that the very distinct black spot above the eye, as distinguished from the brownish color of the rest of the superciliary stripe, shown in the three specimens of young *Æ. trivirgatus* before me, may be a distinctive character, to which I, therefore, call the attention of Japanese ornithologists.

The young of *Æ. trivirgatus* may be described as follows:

♂ juv. (U. S. Nat. Mus. No. 88647; Fuji, July 11, 1882; coll. P. L. Jouy, No. 487.) Wings and tail as in the adults; back, dark sepia with a slight vinaceous tinge; hind neck, ear coverts, and superciliary stripe similar, but lighter and more brownish; above the eye a distinct deep black spot in the superciliary stripe; cheeks, chin, and throat pure white, the rest of the under parts, top of head, and scapulars white, the ends of the feathers faintly soiled with a dusky wash, which behind the throat is so pronounced as to form a rather distinct but narrow band across the breast; crissum and under tail-coverts fawn-colored, slightly suffused with vinaceous. According to Jouy (Pr. U. S. Nat. Mus. VI, 1883, p. 285) the iris of the young birds is "black," and the eyelids of a "brilliant orange color."

Measurements of *ÆGITHALOS TRIVIRGATUS*.

U. S. Nat. Mus. No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Bill, from nostril.	Tarsus.	Middle toe, with claw.
					mm.	mm.	mm.	mm.	mm.
91352	Jouy, 837	♂ ad.	Tate Yama, Hondo	Dec. 4, 1882	58	80	4.5	16	.....
91353	Jouy, 838	♂ ad.	do	Dec. 4, 1882	60	78	4.5	16.5	13
91351	Jouy, 790	♂ ad.	do	Nov. 11, 1882	61	83	4	17	.....
88649	Jouy, 485	♂ ad.	Fuji Yama, Hondo	July 11, 1882	60	(†)	5	17.5	.....
109356	.....	♂ juv.	Iwaki, Hondo	Feb. 4, 1886	60	81	4.5	17	12.5
109357	.....	♂ ad.	do	Feb. 4, 1886	59	77	5	18	13
Average measurements of six adults					60	80	4.5	17	13
88647	Jouy, 487	♂ juv.	Fuji Yama	July 11, 1882	55	82	4.5	16	12.5
88648	Jouy, 477	♂ juv.	do	July 11, 1882	56	80	5	16	.....
88646	Jouy, 464	♂ juv.	do	July 10, 1882	54	79	5	17	13

\* It may be noted as a curiosity, that Dr. Gadow, in the "Key to the Species" (Cat. B. Brit. Mus., VIII, pp. 54-55), includes *Æ. caudatus* in the group of species which have the "centre of crown, from nostrils to nape, pale, either fawn-colored or white," as distinguished from those with the "crown uniformly colored."

† Molting.



In order to facilitate comparison the following table of measurements of the true *Aegithalos europæus* in the collection of the museum has been prepared.

Measurements of *ÆGITHALOS EUROPEUS*.

U. S. Nat. Mus. No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Bill, from nos-tril.	Tarsus.	Middle toe, with claw.
					mm.	mm.	mm.	mm.	mm.
18770	.....	♂ ad.	England	.....	59	84	4	17	.....
95218	.....	♂ ad.	do	.....	62	89	4	18	.....
18777	.....	♂ ad.	do	.....	60	*75	4.5	18	.....
95219	.....	♂ ad.	do	.....	58	82	4	19	12.5
96553	Whitely	ad.	do	.....	62	89	4	.....	.....
98167	.....	ad.	do	.....	61	83	4	.....	12
Average measurements of six adults					60	85	4	18	12

\* Very worn.

(220) *Aegithalos caudatus* (LINN.).

Long-tailed Tit.

Shima-o-naga.

- 1758.—*Parus caudatus* LINN., S. N. 10 ed. 1, 190.—*Id.*, S. N., 12 ed. 1, p. 342 (1766).—*Aegithalos caudatus* BOIE, Isis, 1822, p. 556.—*Acredula c.* SWINHOE, Ibis, 1874, p. 156.—BLAKIST. & PRYER, Ibis, 1878, p. 236.—*Id.*, Tr. As. Soc. Jap., VIII, 1880, p. 218.—*Id.*, *ibid.*, x, 1884, p. 151.—BLAKIST., Chrysanth., 1883, Jan., p. 30.—*Id.*, Amend. List B. Jap., p. 28 (1881).
- 1761.—*Lanius biarmicus* LINN., Fauna Svec. 2 ed. (p. 29, tab. i).
- 1831.—*Paroides longicaudus* BREHM, Handb. Vög. Deutschl., p. 470.
- 1855.—*Mecistura pinetorum* BREHM, Naumannia, 1855 (p. 285).

The white-headed Bottle-tit which in Japan only occurs in Yesso, regularly at least, is identical with the typical European *A. caudatus*. If anything, the tail is shorter than in the European form, and the amount of white on secondaries and rectrices is not greater; consequently it is different from the Siberian form *A. caudatus macrurus*.\* I should mention, however, that the vinous color on the flanks is slightly paler in the Japanese birds before me.

Measurements.

U. S. Nat. Mus. No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Bill from nos-tril.	Tarsus.	Middle toe, with claw.	Total length.
					mm.	mm.	mm.	mm.	mm.	mm.
96147	Blakist., 3206	♂? ad.	Sapporo, Yesso.	Oct. 23, 1882	61	81	4.5	17	.....	"140"
91549	Blakist., 3207	ad.	do	Oct. 23, 1882	62	85	4.5	18	13	.....

The material, as will be seen, is rather scanty, and I would be very glad to receive additional specimens from Yesso, especially young ones,

\* *A[credula] macrura* SEEBOHM, Brit. B. Eggs., 1, p. 487 (1883).

in order to be enabled to establish the difference, if any, between the young ones of the two Japanese species.

The following table is compiled from Captain Blakiston's manuscript notes, and is especially valuable for the measurements of the total length:

Measurements by Capt. Th. Blakiston.

Museum and No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Total length.	Remarks.
	Blakiston, 1122	.....	Hakodadi, Yesso	Feb. 3, 1873	63	140	To Swinh.
	Blakiston, 2163	.....	do	Feb. 12, 1877	65	147	
Hak. M., 295	Blakiston, 2164	.....	do	Feb. 12, 1877	62	136	To Pryer.
Hak. M., 296	Blakiston, 2165	.....	do	Feb. 12, 1877	62	136	
	Blakiston, 2314	.....	do	Apr. 11, 1877	65	140	
Hak. M., 299	Blakiston, 2380	.....	Sapporo, Yesso	May 5, 1877	60	140	
Hak. M., 300	Blakiston, 2381	.....	do	Apr. 21, 1877	65	145	
	Blakiston, 2382	.....	do	Oct. 28, 1877	65	142	
	Blakiston, 3135	.....	do	Oct. 12, 1882	60	143	
U. S., 96147	Blakiston, 3206	.....	do	Oct. 23, 1882	60	140	
Average measurements of ten specimens					63	141	

The young birds differ from the adults in having a dusky superciliary stripe after the fashion of the foregoing species, to which the reader is referred for further remarks on the characters of the young ones. *Æ. caudatus*, from Yesso, in first plumage, is on our list of desiderata.

#### REMIZA\* STEJNEGER.

<1822.—*Aegithalus* BOIE, Isis, 1822, p. 556 (type *P. pendulinus*) (nec HERM. 1804).

<1826.—*Xanthornus* PALLAS, Zoog. Ross. As. I, p. 428 (nec SCOP. 1777).

=1828.—*Pendulinus* BREHM, Isis, 1828, p. 1284 (type *P. polonius* = *P. pendulinus* L.) (nec VIEILL., 1816).

=1835.—*Paroides* REIDER & HAHN, Fauna Boica, p. — (nec BREHM, 1828).

From the above synonymy it will be seen that all the generic names usually applied to the Penduline Tit-mice are preoccupied, and as a new one has become necessary, I have "latinized" the vernacular Polish name by which the typical species *Parus pendulinus* LIN. is most extensively known. Mr. G. R. Gray, in 1842 (App. List Gen. B., p. 8), quotes "*PAROÏDES* Koch (1816)," but this is a mistake, and Gray, in his Hand-list, dropped it from the synonymy altogether.

(221) *Remiza consobrina*† (SWINH.).

Eastern Penduline Tit.

1863.—? *Aegithalus pendulinus* RADDE, Reis. Süden Ost-Sibir., II (p. 195) (nec LIN.).—  
SEEBOHM, Ibis, 1879, p. 33.

\* *Remiz* said to be the Polish vernacular name; also used in French and other languages.

† *Consobrina*, Lat. = a cousin.

1870.—*Ægithalus consobrinus* SWINHOE, P. Z. S., 1870, p. 133.—SEEBOHM, Ibis, 1879, p. 33.—*Id.*, *ibid.*, 1884, p. 37.—BLAKIST. & PRYER, Tr. As. Soc. Jap., VIII, 1880, p. 218.—*Id.*, *ibid.*, x, 1882, p. 152.—BLAKIST., Amend. List B. Jap., pp. 26 and 51.

The only birds of this species yet taken in Japan, so far as I am aware, are the three specimens which were collected by Mr. F. Ringer at Nagasaki, in February, 1877, two of which are now before me, viz, the same two, to which Seebohm's remarks, in Ibis, 1884, p. 37, refer.\* In regard to the third one, we have the assurance that it is a male, "identical" with the male of our collection (cf. Blakiston, Ibis, 1879, p. 33), and "that it agrees exactly with the type [of *Æ. consobrinus*] in the Swinhoe collection from China" (Seebohm, *l. c.*). This specimen is now, probably, in Mr. Seebohm's collection.

The history of the present species is yet involved in considerable doubt. It was originally described by Swinhoe, in 1870, from Chinese examples. Seebohm, in 1879, doubted not only its specific validity, but even its subspecific distinctness, and was inclined to pronounce the skin from Japan and Swinhoe's type of *Æ. consobrinus* to be females, or not fully adult males, of *Æ. pendulinus*, "as they are scarcely to be distinguished from a skin of a female in my collection from Asia Minor, and another from Piedmont, in Dresser's collection;" Dr. Gadow, in 1883 (Cat. B. Brit. Mus., VIII, p. 67), makes it an unconditional synonym of *R. pendulina*, but, in 1884, Mr. Seebohm recedes from his former position, after having seen the specimens now before me, and states that they "appear to prove that this species \* \* \* is a good one."

The Penduline Tit has a winter plumage considerably different from the summer dress, but, like the other members of the family, the molt is simple, taking place during the autumn. The different appearance of the breeding plumage, therefore, is caused by the buff-colored margins of the autumnal dress dropping off, thereby exposing the more basal portion of the feather; consequently, if this portion is colored differently from the margins, the plumage will change color accordingly.

When, therefore, in the European species, the buffy margins drop off in spring, the whole upper side of the head becomes nearly pure white, the whole upper back changes to a rich rusty chestnut brown, and the breast becomes marked with chestnut. In the eastern birds the changes will be less, because the feathers of the back, except a narrow chestnut collar, and those of the breast, are uniformly colored, the former darker, the latter lighter, ochraceous, and as the centers of the feathers covering the crown and hind neck are ashy gray, these parts in spring will assume the last-mentioned color.

If Swinhoe's Chinese type and Blakiston's two males are correctly sexed, the eastern birds are still more different from the European species, for the black ear-patch is much smaller, the black frontal band much narrower, the chestnut spot on the forehead quite absent; the supercilia of *R.*

\* These are also the same birds to which Messrs. Blakiston and Pryer refer (Tr. As. Soc. Jap., x, 1882, p. 152) as being in the Hakodadi Museum.

*consobrina* are pure white in marked contrast with the gray of the crown, and without a trace of black, and a distinct white mustachial stripe separates the black of the cheeks and ears from the ochraceous of the chin and throat. The females from China and Japan may be correctly sexed, but are probably birds of the year, since their general style of coloration is that of the young *R. pendulina*, and it would hardly be justifiable to presume that the adult female of the eastern species should differ from the male in having no black ear-patch, while the two sexes of the European species in that respect are nearly alike.

In regard to size *R. consobrina* seems to be somewhat smaller than its European cousin, for three specimens of the latter in very abraded plumage average, wing 56<sup>mm</sup>, and tail-feathers 47<sup>mm</sup>, with which compare the following:

Measurements of REMIZA CONSOBRINA.

U. S. Nat. Mus. No.	Collector and original number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.
96148	Ringer; B., 2543 ..	♂ ad.	Nagasaki, Kinshiu ..	Feb. 12, 1877	mm. 53	mm. 42	mm. 9	mm. 14	.....
96149	Ringer; B., 2544 ..	♀	.....do .....	Feb. 25, 1877	52	40	8	14	13

I am strongly convinced that Mr. Seebohm is perfectly justified in pronouncing *R. consobrina* a good species.

This interesting bird ought to attract the attention of the Japanese ornithologists especially, and no efforts should be spared in order to find out whether it breeds in the southern parts of the empire or not. I am not aware that the high summer plumage of the present species has been yet obtained and described, and specimens taken during that season would be a great prize. The bird must be looked for in marshy districts near water, where the Penduline Tit builds its elegantly woven retort-shaped nest, suspending it from some reed or thin willow twig. Its habits during the breeding season are exceedingly retired, and the bird may breed in the immediate neighborhood without anybody knowing it. In mild climates it is a resident throughout the year.

SITTA LINN.

1758.—*Sitta* LINN., S. N., 10 ed., I, p. 115 (type *S. europæa*).

Mr. Seebohm has already pronounced the Nuthatches from Hondo *Sitta amurensis*, and those from Yesso different and "almost *uralensis*." I agree to the former being *amurensis* and to the latter being different, but I must dissent from calling them *uralensis* or even "almost *uralensis*." Mr. L. Taczanowski, in a paper in the Bulletin de la Société Zoologique de France (1882, p. 385), has pointed out very nicely the characters which separate the Eastern Asiatic Nuthatches from *S. europæa* and *S. uralensis*, viz, the general smaller size of the eastern birds, and



particularly their smaller and slenderer bill, and the greater straightness of the culmen. The eastern species he divides into three different forms:

- (1) *Sitta baicalensis* TACZAN., similar in coloration to *S. europæa*, having the flanks strongly marked with deep chestnut brown; from the surroundings of Irkutsk, Lake Baikal, and Dauria.
- (2) *Sitta amurensis* SWINH., distinguished from the foregoing form by the ochraceous color occupying the whole surface of the abdomen in strong contrast with the pure and silky white of the breast and fore neck; it occurs from Amur throughout Ussuri and Northern China.
- (3) *Sitta albifrons* TACZAN., characterized by a white forehead, a broad white superciliary stripe, a white band across the wing; by the flanks being pure white with hardly any trace of chestnut; and by the greater extent of the white spot on the tail; this form inhabits the peninsula of Kamtschatka.

As already intimated, the Hondo Nuthatch agrees with typical *S. amurensis*. The Yesso bird, on the other hand, does not agree with *S. baicalensis*, nor with *S. albifrons*. It lacks the chestnut flanks of the former, but has instead a faint ochraceous tinge on the abdomen and flanks, and there are only faint indications of the positive characters distinctive of its Kamtschatkan relative. I have, therefore, concluded to give it a separate name, in order to better keep these nearly allied forms apart. Finally, I have before me a specimen from the "Kuril Islands," which in all essential features is a pretty typical *S. albifrons* TACZAN. Further remarks are to be found later on under the heading of each separate form. Those occurring in Japan may be distinguished by the following

## SYNOPSIS.

- a*<sup>1</sup> Flanks tinged with buff.  
*b*<sup>1</sup> Flanks rufescent buff with a strongly marked chestnut patch; buff extending to the lower breast ..... *S. amurensis*.  
*b*<sup>2</sup> Flanks pale creamy buff, without a distinct chestnut patch; buff not extending beyond the abdomen..... *S. a. clara*.  
*a*<sup>2</sup> Flanks white..... *S. a. albifrons*.

From the measurements to be given further on, it will be seen that the three Japanese forms do not differ materially *inter se*. Another character which they seem to possess in common is that all the superficial frontal feathers which are directed forward and conceal the nostrils are white, even in the southern examples.

(222 part.) *Sitta amurensis* SWINH.

Hondo Nuthatch.

Ki-mawari.

1850.—?? *Sitta roseilia* BONAPARTE, Consp. Av., I, p. 227.1871.—*Sitta amurensis* SWINHOE, P. Z. S., 1871, p. 350.—SEEBOHM, Brit. B. Eggs, I, p. 525 (1883).—BLAKIST., Amend. List B. Jap., p. 51 (1884).1878.—*Sitta europæa* BLAKISTON & PRYER, Ibis, 1878, p. 236 (part) ( *nec* LINN.).—*Ibid.* Tr. As. Soc. Jap., VIII, 1880, p. 219 (part).—BLAKIST., Chrysanth., Feb., 1883, p. —.—JOUY, Pr. U. S. Nat. Mus., VI, 1883, p. 287.1882.—*Sitta europæa* subsp. *uralensis* BLAKISTON & PRYER, Tr. As. Soc. Jap., X, 1882, p. 152 (part).—BLAKIST., Am. List B. Jap., p. 51 (part) (1884).

This form may, or may not, be Bonaparte's *Sitta roseilia*. He only gives the following description: "*S. roseilia*, Bp. ex Japonia. Subtus

*alba, lateribus erissoque pulchre castaneo-roseis!*" As he indicates no specimen the probability is, that he has only named the *Sitta* mentioned in Temminck and Schlegel's Fauna Japonica, which was inserted upon the authority of a native drawing. The name may safely be passed over as absolutely indeterminable; in fact, so far as the description is concerned, it fits better Taczanowski's *S. baicalensis*.

As already remarked, there seems to be no reason to doubt this bird being identical with true *S. amurensis*. I may mention, however, that a specimen from Amur (U. S. Nat. Mus. No. 98531), the only one at my command, has the nasal feathers entirely black, and no trace of a whitish edge to the tips of the greater wing-coverts, while in the Japanese birds, the superficial nasal plumes are pure white, and a narrow white streak runs across the wing. As the Amur specimen, however, is in a somewhat abraded plumage these differences may be insignificant, but I should like to get information as to these features in typical birds in fresh plumage. The specimen mentioned agrees very well with the Japanese birds in regard to dimensions.

Measurements.

U. S. Nat. Mus. No.	Collector and original number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.
					mm.	mm.	mm.	mm.	mm.
96151	Pryer, B., 2679.....	♂ ad.	Nikko, Hondo.....	Aug. 1879	80	41	16	19	22
91335	Jouy, 633 .....	♂ ad.	Chiusenji Lake, Hondo.	Aug. 29, 1882	83	44	15	20	22
91356	Jouy, 663 .....	♂ ad.	.....do.....	Sept. 4, 1882	79	41	15	19	21
91357	Jouy, 671 .....	♂ ad.	.....do.....	Sept. 6, 1882	82	43	16	19	21
91358	Jouy, 745 .....	♂ ad.*	Tata Yama, Hondo..	Oct. 31, 1882	77	39	14.5	18.5	21
109358	.....	♂ ad.	Suruga, Hondo.....	Nov. 21, 1884	79	42	16	18	.....
109359	.....	♂ ad.	.....do.....	Nov. 23, 1884	77	40	14	20	22
Average measurements of seven specimens .....					80	41	15.2	19	21.5

\* No 91358, judging from the colors of the under tail-coverts, and the measurements, is probably wrongly sexed.

In order to substantiate what has been said above concerning the difference of the eastern forms from true *Sitta europaea* the following table of dimensions is appended for comparison :

Measurements of typical *S. EUROPEA*.

U. S. Nat. Mus. No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.
					mm.	mm.	mm.	mm.	mm.
107473	Stejn., 183.....	♂ ad.	Bergen, Norway .....	Apr. 10, 1876	87	47	17	20	23
107474	Stejn., 431.....	♂ ad.	.. do .....	Nov. 14, 1880	83	44	18	20	22.5
107472	Stejn., 286.....	♂ ad.	.. do .....	Dec. 2, 1878	84	45	19	20	.....
107475	Stejn., 30.....	♂ ad.	Christiania, Norway..	Oct. 18, 1872	88	49	18	.....	.....
56745	Schlüter, 564.....	♂ ad.	Sweden .....	.....	89	47	18	.....	.....
Average measurements of five specimens .....					86	46	18	20	23

(222 part.) *Sitta amurensis clara* subsp. nov.

Yesso Nuthatch.

Ki-mawari.

- 1858.—*Sitta sibirica* CASSIN, Pr. Philada. Acad., 1858, p. 195 (nec BREHM, 1855).  
 1862.—*Sitta roseilia* BLAKISTON, Ibis, 1862, p. 322 (nec BONAP., 1850?).—*Id.*, *ibid.*, 1863, p. 99.  
 1863.—*Sitta uralensis* BLAKISTON, Ibis, 1863, p. 89 (nec LICHT., 1834).  
 1867.—*Sitta europæa* WHITELY, Ibis, 1867, p. 196 (nec LINN.).—SWINHOE, Ibis, 1874, p. 152.—BLAKIST. & PRYER, Ibis, 1878, p. 236(part).—*Id.*, Tr. As. Soc. Jap., VIII, 1880, p. 218 (part).—SEEBOHM, Ibis, 1879, p. 34.—BLAKIST., Chrysanth., Jan., 1883, p. 30.  
 1882.—*Sitta europæa* subsp. *uralensis* BLAKISTON & PRYER, Tr. As. Soc. Jap., x, 1882, p. 152 (part).—BLAKIST., Chrysanth., Oct., 1882, p. 522.—*Id.*, Am. List. B. Jap., p. 51 (part) (1884).

DIAGN.—Similar to *Sitta amurensis*, but with the whole breast white, and the abdomen and flanks only faintly suffused with a creamy buff.

HAB.—Yesso, Japan.

TYPE.—U. S. Nat. Mus., No. 91547.

The specimens before me are apparently all females, and male birds from Yesso are, therefore, very desirable. In addition to the character indicated in the diagnosis these females are noteworthy for the nearly complete absence of chestnut on the flanks and the paleness of the brown edges of the under tail-coverts. Probably, the males will show more of the chestnut color, but judging from analogy I think it safe to say that the amount will be perceptibly less than in the Hondo birds.

This, of course, is only a slight northern modification of *S. amurensis*, the white color of which has increased to a perceptible extent. In consequence the trace of white at the frontal line, the white superciliary line, the white line across the wing formed by the ends of the great coverts, and the white band across the external tail-feathers, are more distinct or broader, features still more pronounced in the next form.

Measurements.

U. S. Nat. Mus. No.	Collector and number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe with claw.	Total length.
					mm.	mm.	mm.	mm.	mm.	mm.
96153	Blakist., 2929	♀ ad.	Sapporo, Yesso ...	June 12, 1882	77	41	16	19	21	.....
91547	Blakist., 3167	ad.	.....do.....	Oct. 17, 1882	78	40	15	19	21	"136"
96154	Blakist., 1548	♀ ad.	Nemoro, Yesso.....	Oct. 6, 1874	76	40	15.5	18	21	"130"
Average measurements of 3 specimens .....					77	40	15.5	19	21	.....

The following table is compiled from Captain Blakiston's notes and gives the total length of 17 specimens as measured by him.

*Measurements by Captain Blakiston.*

Blakiston's No.	Sex.	Locality.	Date.	Total length.
				mm.
755	♂	Hakodadi, Yesso	Oct. 20, 1861	134
1109	♂	do	Feb. 1, 1873	128
1153	♂	do	Mar. 29, 1873	128
1381	♂	do	Apr. 6, 1874	128
1382	♂	Shiribets R., Yesso	Oct. 29, 1873	132
1548	♂	Nemoro, Yesso	Oct. 6, 1874	130
1550	♂	Sapporo, Yesso	Nov. 12, 1874	136
1887	♂	do	Oct. 29, 1875	132
2383	♂	do	Apr. 21, 1877	130
2384	♂	do	May 2, 1877	130
2385	♂	do	May 5, 1877	130
2386	♂	do	May 26, 1877	130
3166	♂	do	Oct. 17, 1882	138
3167	♂	do	Oct. 17, 1882	136
3168	♂	do	Oct. 17, 1882	140
3169	♂	do	Oct. 17, 1882	137
3170	♂	do	Oct. 15, 1882	138
Average total length of 17 specimens				133

*Sitta amurensis albifrons* (TACZAN.).

Kamtschatkan Nuthatch.

1840.—*Sitta sericea* TEMMINCK, Man. d'Orn. 2 ed., IV, p. 645 (*part*).

1858.—*Sitta uralensis* KITTLITZ, Denkwürd. Reise, I, p. 321.

1882.—*Sitta albifrons* TACZANOWSKI. Bull. Soc. Zool. France, 1882, p. 385.

The specimen from the Kuril Islands, collected by Mr. Snow, which I have referred to the form recently described by Mr. Taczanowski as *Sitta albifrons*, the type of which came from Kamtschatka, agrees so precisely with the description given by the latter gentleman, that I have no doubt as to the correctness of the identification. Compared with the North European Nuthatch it presents differences which would make it an excellent species; but alongside the two other Japanese forms it proves itself only the northern link of the continuous chain which we call *S. amurensis*. It differs as much, and in the same manner from the subspecies of the latter called *S. clara*, as does the latter from the supposed typical bird which inhabits Honda.

"Kuril Islands" is a rather vague locality, and it is to be hoped that we may soon get more precise information in regard to the exact habitat. More specimens are highly desirable.

*Measurements.*

U. S. Nat. Mus. No.	Collector and original number.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe with claw.
96150	Snow; B., 2798....	ad.	"Kuril Islands" ....	.....	mm. 79	mm. 43	mm. 14.5	mm. 18	mm. 21



APPENDIX TO THE MARSH-TITS (see *antea*, pp. 373-382).

Since the above was written and transmitted for publication I have had an opportunity of examining some additional and very valuable material, which Mr. Henry Seebohm has had the kindness to send me for inspection, a courtesy for which I hereby render my sincere thanks.

Besides two specimens of *Parus songarus* SEVERZ., which present the appearance of a very marked *species*, and a specimen of a Marsh-tit from Peking, collected by Mr. R. Swinhoe, which is very much like the European forms *P. palustris* and *dresseri*, though lighter and clearer than both, and differing from them in about the same degree as does *P. baicalensis* from *P. borealis*, the collection sent by Mr. Seebohm contains two typical *P. borealis*, two *P. baicalensis* from Krasnoyarsk, two *P. brevirostris* from Amur, and two specimens from Yesso, which appear to be the types upon which, in 1879, Mr. Seebohm based his *P. japonicus*. One of these is Whitely's No. 97a, the other Blakiston's No. 1121.

These two specimens confirm the opinion expressed by me, that the name *P. japonicus* belongs to the Yesso bird. They agree in every respect with the two northern specimens in the National Museum (Nos. 96144 and 96145) not only in coloration, but also in the size of bill and tail. The two *P. brevirostris* of Mr. Seebohm's collection (♂ and ♀, collected in April; without numbers) differ only in having a much shorter bill; in other respects they are identical with the Yesso birds; but from our experience with the European forms we are not inclined to lay much stress upon this apparent difference, and unless large series of specimens from the two countries should prove the size of the bills to be a feature generally separating them, the Japanese form will have to stand as *Parus brevirostris*.

The Japanese birds agree with *P. baicalensis* in regard to the size of the bill, but the latter is considerably grayer on the back, and the black cap is more brownish.

I take the opportunity to present a new table of measurements of *Parus brevirostris* including Seebohm's specimens from Yesso and Amur.

## Measurements.

Museum and number.	Collector and number.	Sex and age.	Locality.	Date.	Wings.	Tail-feathers.	Exposed culmen.	Tarsus.
					mm.	mm.	mm.	mm.
U.S. Nat., 96144.	Blakist., 3131.	♂ ad.	Sapporo, Yesso .....	Oct. 12, 1882	67	62	7.5	16
Do., 96145 ..	Snow; B., 2799	ad.	"Kurils" .....		66	59*	8	16
Seebohm .....	Whitely, 97a ..	♂ ad.	Hakodadi, Yesso .....	Nov. 22, 1865	66	(†)	8.5	16
Do. ....	Blakist., 1121 ..	ad.	do .....	Jan. 23, 1873	63	57†	8	16
Do. ....	Dybow .....	♂ ad.	Amur .....	Apr. —, —	67	64	7	16
Do. ....	do .....	♀ ad.	do .....	Apr. —, —	63	62	6.7	16

\* Tail molting.

† Tail defective.