

Contributions to the Ornis of Saghalin.¹⁾

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In the year 1906 Professor I. IJIMA made an expedition to Saghalin for the purpose of zoological researches. This expedition brought back a considerable ornithological material consisting of 99 species represented by several hundred skins and by some nests and eggs. Thanks to the kindness of Professor I. IJIMA and of Mr. ALAN OWSTON, this interesting material was placed at disposal of the present author for examination and to report on.

The ornis of Saghalin has hitherto been known mainly through the investigation of NIKOLSKI, who has published a paper on the "Island Saghalin and its fauna" (in Russian).²⁾ This work was extensively quoted by TACZANOWSKI in his valuable work "Faune ornithologique de la Sibirie orientale"³⁾

NIKOLSKI enumerates and mentions 152 species of birds, which were either collected by himself or had been observed or collected by others in or near Saghalin. Several of these are missing in Professor IJIMA's collection, as is natural, because

1) Communicated by Professor I. IJIMA.

2) Sapiski Imperatorskoi Akademii Nauk. Sankt-Peterburg, 1889.

3) Mém. de l'Acad. Imp. des Sc. de St. Pétersbourg. VII ser., T. XXXIX. 1891.

NIKOLSKI'S list contains a number of accidental visitors and non-breeding birds, besides some 26 species stated or believed to breed in the island. This is probably due to his investigation having extended to other parts of the island, than those visited by IJIMA'S expedition. On the other hand, the latter expedition has extended our knowledge of the ornithology of Saghalin in a high degree. As may be seen in the following pages, no less than 26 species are for the first time proved by the collection to belong to the fauna of Saghalin; and among these, at least 15 species may be regarded as breeders on the island,—perhaps more, since it appears probable that an insectivorous bird, obtained even though in a single example during the breeding season, may be looked upon to breed in the locality.

The collection reported upon below was chiefly brought together at the following places: Mouth of Susuya River, Tretiya Padj, Korsakoff, Vladimirofka, Troitskoe, Khomatofka, Soloviyofka, Yankenai, Chipesani, Melea, Tunnaichia and Arakuri. About the situation and natural conditions of these places Professor IJIMA has kindly communicated the following: "The Susuya River flows into the Lososei Bay, about 10 kilometers north of Korsakoff. My party was encamped at a spot close to the mouth of that river from May 13th to 23rd. The country around is low, for the most part densely wooded with conifers (mainly larch and spruce) and at places marshy or tundra-like. The temperature during the stay was still low, the water in pools and buckets freezing during night-time.

"On May 24th, our camp was removed to a picturesque site, midway between the deserted Russian villages Tretiya Padj and Soloviyofka on the eastern shore of Lososei Bay and only about 6 kilometers distant to the north of Korsakoff. It lay on the

verge of an extensive conifer forest that covered the undulating or hilly country behind. A strip of pasture land ran along the sea coast, and within easy reach of us were some valleys thickly wooded and traversed by streams. I thought a better spot for the site of my head-quarter could not be chosen; and in this anticipation I have not been mistaken. Moreover, towards the end of May as the migration of several of the smaller birds was in its height, we seemed to be right in the road of their passage.

“Early in June an excursion was made to Vladimirofka and neighbourhood. Vladimirofka, now the legislative center of Japanese Saghalin, is a town situated about 38 kilometers north of Korsakoff, on the plain watered by the Susuya River and tributary streams. Khomatofka is a village on the highway to Vladimirofka, 8 kilometers to the south of that town. To the west of Khomatofka and at the foot of hills is the village of Troitskoe, about 10 kilometers distant from Vladimirofka on the road to Lioutoga. The neighbourhood of the localities referred to is well wooded, the trees being mostly conifers with a sprinkling of birches, elms, etc. Farms, pastures, swampy fields and tracts of land deforested by fire are also not wanting. On June 13th, we returned to our head-quarter near Tretiya Padj. Then at last the cherries were in blossom, a circumstance which in Japan is considered to be a sign of the advent of Spring.

“Towards the end of June, the writer made a flying trip to Patience Bay and Robben Island on a steamer commissioned by the government to take provisions to the latter. The trip offered but little chance to make additions to my ornithological collection. Yankenai is one of the spots which the steamer

touched on the northern shore of Patience Bay; it lies about midway between Lake Taraitika and Cape Patience.

Early in July I left Saghalin, but left behind my collectors in a place known by the name of Chipesani, distant a little less than 50 kilometers from Korsakoff. The place lies on the northern shore of Aniwa Bay, in close proximity to Lake Chipesani. Two other lakes, viz., Wawaito and Busse, are situated side by side with the first. The country around is diversified by hills, flat grassy fields and by the usual coniferous forests extending far into the interior. Tunnaicha is the name of a fourth and the largest lake in this part of Saghalin; it opens north into the Sea of Okhotsk by a narrow outlet. Arakuri is a village situated at a visible distance from Chipesani, close to the outlet of Lake Busse into Aniwa Bay. A few kilometers west of Chipesani and on the coast is the village of Melea. My men stayed at Chipesani until October of the year.

“The writer can not close this remark without mentioning his great indebtedness to Mr. ALAN OWSTON for the loan of the collectors as well as of a sailing boat, which greatly helped to ameliorate the discomfort of my camping sojourn in the wilderness of Saghalin.”

1. *Corvus macrorhynchus japonensis* (BONAPARTE).

Chipesani: 1 ♀, July 26.

Wing 336; tail 225; culmen 68 mm. The specimen is thus rather small, a fact which may be due to the sex. It is, however, considerably larger than the allied races from the south of Japan, *C. m. levaillanti* and *C. m. osai*, as may be ascertained by

comparing the above measurements with those quoted by OGAWA for the latter race in the *Annotationes Zoologicae*, Part IV.¹⁾

This subspecies has been recorded from the southern Kuriles in the north, Iturup being especially mentioned by BLAKISTON and PRYER; also from Tanegashima and Yakushima in the south (OGAWA), as well as from the Ussuri-country on the continent.

In Saghalin IJIMA observed solitary individuals of the subspecies here and there on the coast of the Aniwa Bay.

2. *Corvus corone orientalis* EVERS-MANN.

Mouth of Susuya River: 1♂, May 24.

Tretiya Padj: 3♂♂, May 31; 2♂♂, June 18.

Chipesani: ♂♀ (juv.), Aug. 7; 1♂ (juv.), Aug. 16; 1♀, Sept. 28; 2♂♂ Sept. 29.

The size of these specimens is very variable as may be seen from the following table:

Locality	Date	Sex	Culmen	Wing	Tail	Tarsus
Susuya,	May 24.	♂	55	351	215	66
Tretiya Padj,	May 31.	,,	61	335	196	67
„ „	„	,,	61	332	200	67
„ „	„	,,	56	342	212	66
„ „	June 18.	,,	57	330	210	66
„ „	„	,,	60	367	221	67
Chipesani,	Sept. 28.	♀	52	336	207	63
„	Sept. 29.	♂	58	337	207	67
„	„	,,	58	335	207	68

1) Notes on Mr. ALAN OWSTON'S Collection of Birds from the Island lying between Kiushu and Formosa. Tokyo 1905.

The bird from Susuya is in full glossy plumage. The other specimens collected in May and the one taken on June 18 have many bleached quills. The birds shot in the Autumn are all fine and glossy.

The young specimens collected in August are in moult, showing in part new black feathers with blue gloss and in part the grayish black feathers of the first plumage.

The bill of the first noted specimen has a somewhat peculiar shape, the upper mandible being a little more curved than in the others.

NIKOLSKI found this crow to be one of the commonest birds in Saghalin (TACZANOWSKI). IJIMA saw them in numbers in some of the larger fishing stations along the coast of Aniwa Bay.

3. *Perisoreus infaustus sibericus* (BODDAERT).

Mouth of Susuya River: ♂, ♀, May 14; ♂, ♀, May 18;
2♂♂ (juv., not fully fledged), May 19.

Tretiya Padj: 1 spec. (unsexed), May 29; 3♂♂ (juv.), 2♂♂
and 1 unsexed ad., June 24; 1♂, June 28; 1♂, July 9.

Korsakoff: 1♂, June 26.

Chipesani: ♂ ♀, Sept. 4; 1 ♀ Oct. 14.

On the labels of the first mentioned pair Prof. IJIMA had written: "Apparently breeding in the conifer woods," which fact was fully proved by the collecting of not yet fledged young a few days later.

The plumage of the breeding birds collected in May is much worn and bleached, but that of the adult birds collected in June is quite fresh. Thus the moulting seems to take place

soon after the young are fledged and can take care of themselves. A specimen shot on May 29 had dropped its central tail feathers. The young are paler and more ochre-coloured below than, though otherwise similar to, the adult.

Compared with specimens of the typical form from Sweden, the hood of the birds from Saghalin is darker and more sharply defined from the colour of the back, which is paler than in the typical form.

NIKOLSKI has recorded this bird as common, with which Professor IJIMA's experience is in agreement.

4. *Garrulus glandarius taczanowskii*, n. subsp.

Mouth of Susuya River: 1♂, May 13; 1♂, May 23.

Khomatofka: 1♂, June 14.

Tunnaicha: 1♀, Sept. 14.

Chipesani: 1♂, Sept. 23; 1♀, Oct. 2; 1♀, Oct. 3; 1♀, Oct. 4; 1♀, Oct. 6; 1♀, Oct. 8; 1♀, Oct. 9; 1♂ and 2♀♀, Oct. 11; 2♀♀, Oct. 13; 2♂♂ and 1♀, Oct. 14.

Arakuri: 1♂, Oct. 12.

The foxy red colour of the head is very rich in these birds, and the forehead is not at all, or is scarcely, paler than other parts. The colour of the head and neck appears to be more intense than in typical specimens of *Garrulus glandarius brandti* EVERS MANN, with which this jay is, in other respects, most nearly related. The bill is also more strongly compressed than in *G. g. brandti*, so that the width of the upper bill at the anterior end of nasal bristles is about 8 mm. or even less, while

in specimens from western Siberia I have measured the same width to be about 10 mm. Further, the bill of the latter seems to be shorter than that of the eastern birds. I do not know, however, if this variation is constant. The difference in colour and especially that with regard to the width of bill, are so easily perceivable that I think it justifiable to distinguish the Saghalin jay as a distinct geographic subspecies, which I name in honour of the late ornithologist TACZANOWSKI. It appears that this investigator had been aware of the difference between the jays of Baikal and Dauria on one hand and those of Vladivostok and Sidemi on the other. Of the latter, which are probably identical with the Saghalin form, TACZANOWSKI wrote that they have "le bec distinctement plus fortement comprimé!"

NIKOLSKI, who regards the Jay of Saghalin to be "*Garrulus Brandti*", says that it is one of the most common birds on the island. Prof. IJIMA and party likewise found the jay common.

5. *Sturnia violacea* (BODDAERT).

Tretiya Padj: 1♂ juv., July 7.

This species had been observed on some of the Kuriles by SNOW, so that its distribution in Summer time is not confined to the islands of Japan alone. It does not appear to have been recorded before from Saghalin. Nevertheless, the presence of a young bird at this time of the year seems to speak for the breeding of the species on the island, although one can not be quite sure of the fact for the present.

6. *Chloris sinica minor* TEMMINCK & SCHLEGEL.

Tretiya Padj: 1 specimen (unsexed), June 16; 1♀, June 19; 1♂, June 20.

Chipesani: 1♂, July 25; 2♂♂ (1 ad., 1 juv.), Aug. 1.

The length of wing in these specimens is resp. 80, 80, 84, 81, 85, 86 mm. The wing in the two last specimens may be said to be rather remarkably large, especially when it is considered that one of them is a young bird; but as there exists no other difference worth speaking of, they should belong, together with the others, to the same form.

The young bird differs considerably from the adult of both sexes. The upper parts of head and neck are earthy brown with an olive tint; the sides of head tinged with more olive yellow; throat and foreneck olive yellow. The back is brown with darker centre to the feathers; upper tail-coverts uniform brown; medium and greater wing-coverts broadly edged with pale cinnamon buff; secondaries in their outer parts broadly edged with buffish, then with white and in the basal half with yellow. Breast and the rest of the lower parts pale dirty yellow with brown shaft-streaks; under tail-coverts pale yellow with narrow brown shaft-streaks. The tail feathers are as in the adult.

A nest with 3 eggs and a sitting bird was collected by Professor IJIMA's expedition at Soloviyofka on the 29th of June.

7. *Uragus sibiricus sanguinolentus* TEMMINCK & SCHLEGEL.

Mouth of Susuya River: 1♂, May 5; 1♂, 1"♂?", 1♀, May 15; 1♀, May 19.

Soloviyofka: 2♂♂, May 16.

Tretiya Padj: 1“0♂?”, May 30; 1♂, June 5; 1♂, June 6; 1“♂?” June 9; 1♂, June 13; 1♂, June 18; 1♂, June 19; 1♂, June 20; 1♂, June 21; 1♂, June 23; 1♂, 1♀, June 30; 2♂♂, July 9.

Chipesani: 1♂, 1♀, July 28; 1♀, Aug. 1; 1♀, Aug. 6; 2♀♀, Aug. 9; 1♀, Aug. 11; 1♂, Oct. 6; 1♂, Oct. 7.

The specimens labeled “♂?” are evidently young birds of the previous year, which have assumed as yet only a slight rosy tinge. The degree of the brightness of plumage is very different in different specimens, even in the same season. This indicates that the bird requires some years to attain its full beauty.

The usual length of wing appears to be about 67–68 mm.

NIKOLSKI found this bird to be common in Saghalin.

Professor IJIMA's party collected eggs of this beautiful little bird near the mouth of Susuya River on the 29th of June; at Tretiya Padj on the 19th of June and on the 1st and 7th of July; and at Soloviyofka on the 30th of June. The number of eggs in a clutch was 3, and in a single case 4.

8. *Pyrrhula griseiventris* LAFRESNAYE.

Mouth of Susuya River: 1♂, 1♀, May 14; 1♂, May 15; 1♂ (ad.), 1♀ (juv.), May 20.

Tretiya Padj: 1♂, June 8; 1♂, June 9; 1♀, June 13; 1♂, June 16; 2♂♂, June 20; 1♀, June 21; 1♂, June 23; 1♀ (juv.), June 25.

Chipesani: 1♀, Aug. 8; 1♂, Aug. 14; 1♂, Aug. 18; 1♂, Aug. 19; 1♂, Aug. 21.

All the males are rosy on the under parts as is ascribed to the Bullfinch named *Pyrrhula rosacea* by SEEBOHM, but the rosy tinge is developed in very variable degrees; in most specimens it is quite intense, in others rather pale. If this suffusion of rosy colour formed a constant character in all the specimens from a certain country, it might well be regarded as a subspecific character; but as this is not the case, the name *rosacea* has been discarded by later authors. It should be stated that the rosy tint is observable in specimens collected in May as in those obtained in August. Many specimens show a slight rosy tinge on their back as well. The presence of a fully fledged young in the immature brown plumage as early as May 20th, appears to be a remarkable fact.

NIKOLSKI regards the Bullfinch as not rare in Saghalin (TACZANOWSKI). IJIMA has found it very common in some parts of the island, as for instance in the forest border along the shores of Lososei Bay.

9. *Passer montanus* (LINNÉ).

Arakuri: 1 "♂?" (juv.), Aug. 23; 1 ♀ (juv.), Aug. 24.

Chipesani: 2 ♀ ♀ (juv.), Aug. 26; 1 ♀ (juv.), Sept. 1; 4 ♂ ♂ (1 juv.), Sept. 2; 1 ♀, Sept. 28; 1 ♀ and 1 unsexed specimen, Oct. 8.

The length of wing of the young birds is 64–66 mm.; that of the adult females 67–69 mm.; and that of the adult males 65–68 mm. These measurements are rather small and may possibly be an indication of a small race; but a greater number of adult birds is desirable before any definite judgement can be passed.

The length of culmen in the adult birds is 11–12 mm.

The average length of wing in Swedish adult specimens is 67–72 mm., and the length of culmen about 10 mm.

HARTERT¹⁾ quotes the measurement of the wing of males to be 73–76 mm., that of females to be 69–72 mm. and the length of bill to be 9–10 mm.

Should this Tree-sparrow deserve a third name, it might belong to STEJNEGER's *saturatus*.

NIKOLSKI collected only two young specimens of this species in the southern part of Saghalin (TACZANOWSKI).

10. *Emberiza aureola* PALLAS.

Mouth of Susuya River : 1♂, May 23.

Vladimirofka : 1♂, June 10 ; 1♂, June 14.

Tretiya Padj : 1♂, June 5 ; 1♂, June 13 ; 1♀, June 17 ;

2♂♂, June 18 ; 3♂♂, June 20 ; 1♂, June 21 ; 1♂,

June 29 ; 1♂, June 30 ; 1♂, July 1 ; 3♂♂, July 7

(one of these probably a female although labeled "♂".)

Chipesani : 1♂? (juv. in moult), Aug. 24 ; 1♂, Aug. 25.

The present series proves that the males of this species require more than a year before they quite attain full plumage. In this the back is deep maroon with hardly any black streaks and the white wing-patch is much larger, the yellow of the lower parts more intense and the band on the foreneck more broadly developed than in younger, though adult, males. The latter show several developmental stages of the plumage growing less and less intense in its colours (less red above and less yellow below).

1) Vögel pal. Fauna, p. 160.

and showing more broadly streaked back where the feathers still retain their pale brown edge in the middle of June. In addition, the less intensely coloured males have smaller wings. In three specimens the wing measures only 73 mm., in four 75 mm. and in three 76 mm. On the other hand, one of the strongly coloured birds measures about 77 mm., and two of them even 78 mm. and 79 mm. respectively, in the length of wing.

HARTERT indicates the length of wing of this species to be 77-79 mm., and according to TACZANOWSKI that of the male should be 79-81 mm. To judge from this, the Saghalin birds appear to be somewhat smaller, but there evidently exists no sharp limit that might justify their erection into a distinct geographic subspecies.

The collection also contains a series of young birds in first plumage; they appear to belong to this species, although they look very different:

Chipesani: 1 specimen unsexed, July 26; 1 ditto, July 28; 1♀, July 31; 1♂, 2♀♀, Aug. 9; 1♂, 3♀♀, Aug. 11; 1♂, 1♀, Aug. 16.

In their general appearance these birds resemble the young of some other *Emberiza*, as for instance, *E. citrinella* or *E. rustica*, although the colours differ, being less yellow than in the former, but more yellow than in the latter. The general colour of the upper parts is brown, sometimes of a more grayish olive brown and sometimes of a clearer buffish or yellowish brown, differing in different specimens. This ground colour is broadly striped with black in the middle of each feather. Wings blackish, coverts broadly edged with yellowish gray, median and greater coverts with broad buffish white tips which form two light bands across the wing; primaries with narrow pale edgings, secondaries with

broader cinnamon brown borders. Underparts rather pale yellow, unspotted on chin and belly, with dark brown shaft-streaks on foreneck, breast and sides, where the ground colour is at the same time richer and more ochraceous yellow. A buffish eye-stripe extends to the nape; earcoverts brownish, sometimes more dusky, sometimes more yellowish gray, but always dark in contrast against the eye-stripe and the yellowish of the throat.

The great difference between young and adult birds of this species is quite remarkable, especially the absence in the former of the characteristic chestnut colour even on the rump.

According to Prof. IJIMA, the species occurs commonly in all the parts of Saghalin visited by him.

11. *Emberiza spodocephala personata* TEMMINCK.

Soloviyofka: 1♂, May 16.

Mouth of Susuya River: 1♂, May 15; 1♂, May 17; 1♂, May 18.

Tretiya Padj: 1♂, May 28; 1♂, June 7; 1♂, June 8; 1♂, June 9; 1♂, June 14; 1♀, June 16; 1♂, June 19.

Chipesani: 2♂♂ (juv.), Aug. 1; 1♂ (juv.), Aug. 9; 1♂ (juv.), 1♀ (juv.), Aug. 11; 1♀ (juv.), Aug. 12; 1♂, Aug. 16; 1♀, Aug. 7; 2♂♂ (juv. in moult), Sept. 2.

HARTERT has suspected that the *Emberiza personata* quoted by NIKOLSKI as a common bird in Saghalin may not be the same as the *E. personata* of Japan, assuming it to represent "eine anscheinend der *E. s. melanops* sehr nahestehende form mit gelberer Unterseite und grünlicherer Färbung auf dem Kopfe." I have compared the Saghalin specimens with good specimens

from Japan, but there is scarcely any difference at all to be seen in most cases, although the Saghalin birds are sometimes a little greener on the head than some Japanese specimens, while the latter may have the mask a little blacker.

5 eggs in a set were collected by Professor IJIMA'S expedition at Tretiya Padj on the 19th of June. The species was one of the commonest birds observed along the shores of Lososei and Aniwa Bays during the party's stay.

12. *Alauda arvensis pekinensis* (SWINHOE).

Mouth of Susuya River: 1♂, May 15; 2♂♂, May 17;
1♂, May 23.

Soloviyofka: 1♂, May 15; 2♂♂, May 16.

Tretiya Padj: 1♂, June 28.

Chipesani: 1♂, July 23; 1♂, Aug. 1; 1♂, Aug. 4; 1
specimen (unsexed), Sept. 28; 1♂, Oct. 1; 1♂, Oct. 3.

All these specimens are so large and have such long wings that I must refer them to *Alauda arvensis pekinensis* rather than to *A. a. japonica*. The specimen collected on July 25th has the length of wing not longer than 108 mm. in the actual state, but the plumage is so much worn that it may be regarded for certain that the wing in the fresh state of the quills must have measured at least 110 mm. The measurements taken from other specimens are: in three 111 mm., in one 112, in four 113, in two 114, in one 115, and in still another 116 mm. The length of bill varies from 14 to 12 mm. The length of hind claw is extremely variable, ranging from 16 to 23 mm.

This Lark is evidently the same as that which STEINEGER had described¹⁾ from Kantschatka under the name of *Alauda blakistoni*, which was afterwards identified by HARTERT²⁾ with SWINHOE'S *A. pekinensis*.

13. *Alauda arvensis japonica* TEMMINCK & SCHLEGEL.

Mouth of Susuya River: 1 specimen (unsexed), May 15;
1♂, May 17.

Both these specimens must be referred to the smaller race, as their wings measure only 98 and 102 mm. respectively.

14. *Anthus maculatus* HODGSON.

Mouth of Susuya River: 1♂, May 16; 1 specimen (unsexed)
May 17; 3♂♂, May 18.

Tretiya Padj: 1♂, June 5; 1♀, June 9; 1♂, June 20;
1♂, June 23; 1♂, June 24.

Chipesani: 1♂, July 28; 1♀, July 29; 1♂, 1♀, Aug. 1;
1♂, Aug. 2; 1♂, Aug. 3; 1♀, Aug. 5; 1♀, Aug. 9;
1♀, Aug. 16; 1♀, Sept. 8.

NIKOLSKI regarded this pipit to be the most common of all the birds breeding in Saghalin (TACZANOWSKI). Prof. IJIMA writes me that it was met with everywhere in abundance, especially in forests that had been devastated by wild fire.

1) Bull. U. S. Nat. Mus. No. 49, p. 235. Washington, 1885.

2) Vögel pal. Fauna, p. 248.

15. *Budytes flavus taiwanus* (SWINHOE).

Mouth of Susuya River: 1♂, May 13; 1♂, May 15; 6♂♂,
May 16; 1♂, May 17; 4♂♂, May 19; 3♂♂, May 23.

Soloviyofka: 1♂, May 16.

Vladimirofka: 1♂, June 10.

Tretiya Padj: 1 specimen (unsexed), June 16; 1♂, June
20; 2♂♂, 2♀♀, June 30; 3♂♂, July 7.

Chipesani: 1♂, 1♀, July 25; 1♂, 1♀, July 28; 1♂, Aug.
1; 1♀, Aug. 2; 1♂, Aug. 4; 1♀, Aug. 6. Birds in
winter plumage and young birds: 1 specimen (un-
sexed) July 27; 1♀, Aug. 6; 1♂, 1♀, Aug. 8; 3♀♀,
Aug. 11; 1♀, Aug. 12; 1♀, Aug. 14; 1♂, Sept. 1;
1♂, Sept. 3.

The birds collected in the Spring and in the early Summer are greener than those collected later, in which the plumage is more worn, duller and somewhat brownish coloured.

The young birds are olive-brown above, tinged with olive-yellow on back, becoming olive-green towards the lower back and upper-tail-coverts. The eyebrow stripe is broad and buffy white. Lores and ear-coverts dusky brown. Throat, foreneck and chest buffy white, the latter with dusky spots; belly and under-tail-coverts white with a clear yellow tinge. Tail-feathers with narrow yellow edgings, the central ones for the rest black; the ultimate and penultimate ones white with a longitudinal black mark on the inner web, which mark is larger on the latter.

Two males in winter plumage (Sept. 1 and Sept. 3) are somewhat different even *inter se*. One of them is brownish gray

above, becoming ashy gray on the lower back and upper-tail-coverts, the entire upper parts being slightly washed with olive-green; the broad eyebrow stripe is buffy white; under-parts white, shaded with buff on throat, foreneck and breast; belly creamy white; under-tail-coverts white with a slight wash of yellow. The other specimen is more vividly coloured, the olive green wash of the upper parts being much stronger, especially on the rump; the eyebrow stripe is pale ochre-yellow; throat whitish; foreneck and breast buffy white to pale buff; belly and under-tail-coverts pale yellow.

This Wagtail is said by NIKOLSKI to be a common breeding bird in Saghalin. In Summer its habitat is the tundras. Prof. IJIMA's party found it to be one of the commonest birds on flat meadow-like or marshy grounds along the lower course of the Susuya as well as along the coast of Aniwa Bay.

16. *Motacilla lugens* KITTLITZ.

Mouth of Susuya River: 1 ♀, 1 ♂, May 14; 1 ♂, May 18.

Korsakoff: 1 ♀ ? juv., June 13.

Tretiya Padj: 2 ♂♂, June 9; 1 young specimen (unsexed), June 15; 1 ♂, June 17; 1 young specimen (unsexed), June 21; 1 ad. specimen (unsexed), June 25; 1 young specimen (unsexed), June 28; 2 ♂♂, July 7; 1 ♂, 1 ♀, July 8; 1 ♂ (juv.), July 8.

Chipesani: 1 "♀?", July 28; 1 ♀, Aug. 8; 1 specimen (unsexed, probably ♂), Aug. 10; 1 ♀, Sept. 24.

According to NIKOLSKI this Wagtail is common along the rivers and on the prairies of Saghalin.

Professor IJIMA's expedition collected two sets of 3 eggs each at Tretiya Padj on the 5th of July. According to him, the bird is "common along the sea-shore; often found together with, but less numerous than, *Budytes flavus taiwanus*."

17. *Sitta europæa uralensis* (GLOGER).

Mouth of Susuya River: 1♂, 1♀, May 14; 2♂, 1♀, May 15; 1♂, May 18; 1♂, May 19.

Tretiya Padj: 1♂, June 9.

Chipesani: 1♂, Sept. 1; 1♀ and 1 unsexed specimen, Oct. 8; 1♂, Oct. 13.

The Saghalin Nuthatch is most closely related to *Sitta europæa uralensis* and may be regarded as a slight modification of the same. The difference is that the Saghalin bird as a rule has no white edges to wing-coverts. In the series before me only two specimens (one obtained in May and another in Sept.) show slight traces of whitish edges to the greater wing-coverts. The length of wing varies between 73 mm. and 77.5 mm., 75 mm. being the usual length. This measurement is decidedly less than that recorded by HARTERT,¹⁾ viz., 80-84 mm. But, on the other hand, HELLMAYR²⁾ indicates the same measurement to be "73-83 mm." A white or whitish margin to forehead is present in all the specimens.

According to Prof. IJIMA's notes, the bird should be common in the conifer woods.

1) Vögel pal. Fauna. Hft. III, p. 330. Berlin, 1905.

2) Das Tierreich, Lief. 18. Aves: Paridae, Sittidae u. Certhiidae. Berlin, 1903.

18. *Parus ater pekinensis* DAVID.

Mouth of Susuya River: 2♂♂, 2♀♀, May 15; 1♂, 1♀,
May 16.

Tretiya Padj: 1♂, June 9; 2♂♂, 1♀, June 17; - 1♂,
June 21; 1♂, June 25.

All these specimens differ from typical Swedish specimens in full plumage in having the white spot on the hind neck smaller and less developed. The yellowish wash of the lower parts is a little stronger. The length of wing is 57–60 mm., thus, on the average shorter than in Swedish specimens. The most striking difference in size manifests itself, however, with regard to the bill which is much more slender in the Saghalin birds than in typical Swedish specimens. The development of the feathers on head is somewhat different, but, as they sometimes reach a length of 15 mm., I suppose the Saghalin bird must be regarded to be identical with *P. a. pekinensis*, although I had some doubt about this in the beginning. NIKOLSKI has also used the same name.

19. *Parus atricapillus sachalinensis*, n. subsp.

South of Susuya River: 1♀, May 14.

Tretiya Padj: 1♂, June 17.

I have compared these specimens with *P. a. baicalensis* as well as with *P. a. kamtschatkensis*, and have arrived at the result that the tit-mouse of Saghalin represents a distinct subspecies, which is lighter coloured than the former but darker than the latter.

The black cap of the head extends all over the hind neck down to the upper back and is bordered on the sides by a broad white band extending from the sides of head, which are of the same colour. In the middle of back, the black of the hind neck reaches directly the colour of the mantle which may be termed pale ashy gray with a shade of isabelline. The fluffy feathers of rump isabelline white. The upper tail-coverts very pale ashy gray. Wing-coverts darker gray than the mantle. The quills dark slate coloured with white margins. The tail feathers are similar but their outer web is more or less ashy white or ashy gray, lightest in the outermost feather. The throat is black, partly with white tips to the feathers. The under parts for the rest dirty white. The under-wing-coverts are pure white.

Bill black. Culmen 11 mm. Wing 66-64 mm.

TACZANOWSKI regards the tit-mouse of Saghalin to be *P. a. baicalensis*, but, as mentioned above, it is much lighter in colour and easily distinguishable. NIKOLSKI found it "dans l'île de Sakhalin.....commun et sédentaire, particulier aux grandes forêts" (Translation by TACZANOWSKI).

20. *Aegithalos caudatus caudatus* (LINNÉ).

Tunnaichia: 1 ♀, Sept. 14.

Wing 64, tail 96, culmen 7 mm. As this race has been recorded from Iturup (SNOW) as well as from Yezo (BLAKISTON and PRYER) and the opposite continent, Saghalien lies within the area of its very wide distribution. NIKOLSKI did not observe the species and regards it therefore to be rare in Saghalin.

21. *Regulus cristatus japonensis* (BLAKISTON).

Mouth of Susuya River : 1♂, May 18.

Chipesani : 1 specimen (unsexed), Sept. 20.

Length of wing 55 mm.

This subspecies is very easily recognized by the characteristics pointed out by RIDGWAY¹⁾ (1883). The crest is very beautifully orange red.

NIKOLSKI has not recorded any *Regulus* from Saghalin ; but as IJIMA'S expedition obtained two specimens, one in the Spring and another in the fall, and as it has never yet been recorded from any locality farther north, it is probably a breeder in the island.

22. *Lanius excubitor bianchii* HARTERT.

Chipesani : 1♀, Oct. 28.

Melea : 1♀, Oct. 28.

Both these specimens are evidently rather young birds, as is indicated by the faint, grayish undulating streaks of the sides and lower parts. Compared with Swedish specimens of similar age, it is seen that their tail-coverts are much lighter coloured than in the western form. Indeed old specimens of the latter may be sometimes nearly as light coloured, but then these are provided with more white on the wing as well as in the speculum, which

1) Proc. U. S. Nat. Mus. 1883, p. 369.

as a rule is double and lies at the end of secondaries. Whereas, in the present specimens from Saghalin, the speculum is small and the dirty whitish tips of secondaries are not very broad.

NIKOLSKI regarded this great Shrike to be rare in Saghalin.

23. *Ampelis japonicus* (SIEBOLD).

NIKOLSKI mentions *Ampelis garrulus* (collected by *Poljakow*) but not this species from Saghalin. This makes it probable that neither species really inhabits Saghalin nor breeds there, but that both are accidental visitors.

24. *Hemichelidon sibirica* GMELIN.

Tretiya Padj: 3♂♂, June 9; 1♂, June 14.

Not recorded by NIKOLSKI from Saghalin; but as the species is known from Amur as well as from Kamtschatka, it might be expected to occur in Saghalin also. It probably breeds there, as the dates of the specimens suggest.

25. *Muscicapa (Alseonax) latirostris* RAFFLES.

Vladimirofka: 1♂, 1♀, June 6.

Tretiya Padj: 1♂, June 16; 1♂, June 20.

NIKOLSKI found this bird common during its breeding season in Saghalin.

26. *Poliomyias mugimaki* (TEMMINCK).

Mouth of Susuya River: 1♂, May 16; 1♂, May 18.

Tretiya Padj: 3♂♂, May 30; 2♂♂, June 1; 1♂, June 3; 1 specimen (unsexed but no doubt a♀), 1♂, June 8.

Of these specimens only 4 are males in full plumage with black upper parts, a white mark behind eye and a white wing-patch. In some of the others, however, the mark behind the eye is only more or less indicated by a dirty whitish spot and all these specimens have white base to tail-feathers, indicating their sex. As they were all shot in Spring and in early Summer, it may be taken for proved that the bird does not assume its full plumage before it is more than one year old.

This little flycatcher was not mentioned by NIKOLSKI among the birds found by him in Saghalin, but as its distribution ranges from Baikal to the mouth of Amur, it is no wonder that it crosses over to Saghalin. It evidently breeds there.

Prof. IJIMA writes me about the bird thus: "On May 30th, after rain and northerly gale had lasted for the previous two days, the coast near Korsakoff was quite alive on account of the sudden appearance of this bird in very large numbers. The birds seemed not to heed the approach of man to within a few feet. On the following day they were found to have greatly decreased in number; still not a few seemed to have remained, apparently to breed, on the verge of the woods."

27. *Xanthopygia narcissina narcissina* (TEMMINCK).

Tretiya Padj: 1♂, June 1.

In Prof. IJIMA's field notes it stands: "Mixed in the migrating flocks of *Poliomyias mugimaki* (observed on the sea-shore north of Korsakoff on May 30th), I have also observed a number of *Xanthopygia narcissina*, easily distinguishable by its striking eye-brow stripe. It was nearly all gone by the following day."

HARTERT says about this bird in his work "Die Vögel der paläarktischen Fauna:" "Häufiger Brutvogel auf der Insel Sachalin".....(*l. c.*, Hft. IV, p. 491). NIKOLSKI says that the species is rather common and that it breeds at least as far north as Alexandrofka in the green forests of river valleys, but the Russian author adds that he did not find it in the eastern parts nor in the interior of the island.

The specimen is in moult. The quills of the wings, except the innermost secondary which is new and black, are worn and bleached. On the nape and hind neck there are also some gray brown old feathers.

28. *Locustella fasciolata* (GRAY).

Tretiya Padj: 1♂, June 16; 1♀, June 18; 1♂, June 19;
1♂, June 23; 1♀, July 1.

The length of wing varies, irrespective of sex, from 75 to 80 mm.

NIKOLSKI obtained only a single specimen of this species in Saghalin. Prof. IJIMA's notes run thus: "In June this bird is common in the country around Korsakoff. It undoubtedly breeds there. Its loud notes, uttered all through night, resemble somewhat those of Japanese Hototogisu (*Cuculus poliocephalus*) and can be heard from great distances. I have heard them also on the eastern coast of southern Saghalin."

29. *Locustella pleskei* TACZANOWSKI.

Chipesani: 1 ♀, Sept. 2.

Hitherto known from Japan and Korea.

30. *Locustella ochotensis* (MIDDENDORFF).

Chipesani: 1 ♂, July 25; 1 ♀, juv., Aug. 1; 1 ♀, Sept. 2.

The last specimen is a bird of the year suffused with yellow; the second is not fledged; the first is an old bird with the plumage much worn.

The species has not been mentioned by NIKOLSKI, but it certainly breeds in Saghalin as proved by the young birds in this collection.

31. *Acrocephalus bistrigiceps* SWINHOE.

Tretiya Padj: 1 ♂; 1 unsexed specimen, June 30.

Chipesani: 1 ♀, Aug. 18.

NIKOLSKI found this bird common in Saghalin in suitable

localities. It belongs without doubt to the regular breeders on the island. Prof. IJIMA's experience stands in agreement with these statements.

32. *Herbivocula schwarzi* (RADDE).

Tretiya Padj: 1♂, June 7; 2♂♂, June 17; 1♂, June 21;
1♂, June 23; 1♂, June 24; 1♂, July 7.

In all the specimens the toes are decidedly darker than the very pale tarsus. The yellowish or buffy wash of the lower parts is of rather variable shades in different specimens.

NIKOLSKI found this bird only in the western parts of Saghalin (TACZANOWSKI). It is certainly a breeding resident.

33. *Reguloides proregulus* (PALLAS).

Mouth of Susuya River: 1♂, May 15.

The length of wing in this specimen is 55 mm., which is longer than TACZANOWSKI has quoted (52-53 mm.); but in the "Catalogue of Birds" still larger measurements are given, viz., "2.4 to 2.25 inches."

The species has not been mentioned by NIKOLSKI, but it certainly breeds in the island, since Professor IJIMA's expedition obtained a nest containing 6 eggs at Tretiya Padj on the 4th of July.

34. *Acanthopneuste xanthodryas* (SWINHOE).

Tretiya Padj: 3♂♂, June 1 "♀?"; June 19.

Length of wing 70–73 mm. in males ; 69 mm. in the specimen presumed to be of the female sex.

Not mentioned by NIKOLSKI, but no doubt a breeder in the island.

35. *Cichloselys (Oreocincla) sibirica davisoni* (HUME).

Tretiya Padj: 1 ♀, June 18.

Chipesani: 2 ♂♂ (one of them wrongly labeled as “ ♀ ”),
Aug. 25.

I have convinced myself after making comparisons that these three specimens belong to the form which was named *davisoni* by HUME, though later on he withdrew this name himself. It was re-established by SEEBOHM in 1895. In my opinion the most appropriate way would be to regard it as a subspecies of *sibirica*. The two male specimens recorded above are both young, though one of them has nearly finished its moult so that there remain only some juvenile feathers on the throat and a few more scattered on the upper part of chest. The latter feathers have buffy white subterminal spots bordered with black. The throat and cheeks are dirty buffish white with small blackish terminal spot to feathers. The under-parts are dark slaty gray with longish central white spots to some of the feathers in the middle of belly. The under-tail-coverts are tipped with white, but less broadly than in *C. sibirica*. The upper parts are bluish slaty black. The wings are suffused with brown on the edges of the quills, and that more broadly on the greater coverts ; but there are no “ochraceous tips” to the wing-coverts as in the “males of the year” of *C. sibirica* according to the Brit. Mus. Cat. of Birds, vol. V.; p. 181.; nor is the breast “barred.”

The other male specimen still retains more of the juvenile plumage, so that a great deal of the feathers of the breast are ochraceous with blackish tips. The juvenile feathers which still exist on the head and upper neck are dark blackish brown with quite narrow and light coloured shaft-stripes.

Neither *O. sibirica* nor *davisoni* is mentioned in NIKOLSKI'S work so that it seems probable that this thrush is not common in Saghalin, although it breeds there as attested by the present collection.

36. *Turdus chrysolaus* TEMMINCK.

Tretiya Padj: 1♂, June 1; 2♂♂, June 2; 1♂, 1♀, June 10; 1♂, June 20; 1♂, 1♀, June 29; 1♂, July 7; 1♀, July 14.

Vladimirofka: 1♀, June 10; 1♀, June 11.

Chipesani: 1♀ juv., July 29; 1♂, Aug. 3.

In the year 1887 STEJNEGER¹⁾ established a new species of thrush related to *Turdus chrysolaus*, and that he named *T. jouyi*. The former should be characterized by having "axillaries and greater under-wing-coverts pure gray;" the latter by having the same parts "gray, strongly suffused with rusty." In addition to this difference, the bill of the former should be "larger" and that of the latter "smaller." That author further expressed the belief that the two "species" also differed "in the colouration of the throat. In adult male birds of *T. chrysolaus* the feathers of this part are uniformly sooty black clear to the grayish base, and more or less margined with rusty according

1) Proc. U. S. Nat. Mus. 1887, p. 4.

to season. In *T. jouyi* the sexes seem not to differ in this respect, for both birds of the breeding pair which Mr. JOUY collected have the throat pure white, streaked with dusky, and there can be no doubt that both birds are adult."

The material before me (seven adult males and five adult females suggest that *T. jouyi* is only a modification of *T. chrysolarus*, or rather that the former represents a younger stage of the *adult* bird than the latter. This may be concluded from the following facts :

2♂♂ (June 1, Aug. 3.): Throat uniformly sooty blackish ; axillaries and under-wing-coverts gray.

1♂ (June 7): Throat sooty black but some of the feathers in the middle with white base ; axillaries and wing-coverts gray ; some of the latter, especially the smaller, with a rusty tint or rusty edge.

1♂ (June 10): Throat sooty blackish but the base of the feathers to a great extent white or whitish gray, which colour shines through here and there ; axillaries and under-wing-coverts pale gray, partly whitish, the rusty tint being very little conspicuous and confined to the smaller coverts and to the outer web of some axillaries.

1♂ (June 2): Throat whitish, streaked with brown ; axillaries and under-wing-coverts gray (not so pale as in the foregoing specimen) ; the latter slightly suffused and edged with rusty.

1♂ (June 20): Throat as in the foregoing ; axillaries and under-wing-coverts gray, suffused with rusty.

1♂ (June 2): Throat pure white in the middle ; axillaries and under-wing-coverts more strongly suffused with rusty.

Quite similar is the case with the females. One of them

(June 11), which I take to be the oldest, has the throat uniformly sooty brown, not quite so dark as in the males, partly with whitish but inconspicuous base to the feathers; axillaries and under-wing-coverts gray scarcely with a rusty tint. The two next specimens (June 29, July 14) have the white of the throat more conspicuous and so also the rusty colour under the wing. The two remaining specimens have white throats streaked with brown and the under-wing-coverts more suffused with rusty.

I think that these series present a sufficient number of intergrading links between *T. jouyi* as characterized by STEJNEGER (1887) and *T. chrysolais*; and since they were collected in the same locality and in the same season of the year, it may be concluded that they belong all to the same race.

A young bird has been described by NIKOLSKI (in TACZANOWSKI'S translation¹⁾) in the following words: "Les jeunes oiseaux de cette grive, jugeant d'après notre exemplaire, présentent la coloration suivante: Dos gris oblivate, à nuance générale semblable à celle des oiseaux adultes, mais avec des taches ocreuses centrales dans les plumes, et l'extrémité de ces plumes noire; sur le croupion ces taches et ces bordures disparaissent presque; la poitrine, les flancs et le front sont d'un orange un peu plus vif et plus pure que dans les adultes, ces plumes orangées ont des taches noires denses, subarrondies sur la poitrine, transversalement prolongées sur les côtés; sur la gorge l'orange passe en stramine pâle." This description suits very well for a young male collected on July 29 and with the quills not yet fully developed. I may only add that the axillaries and under-wing-coverts, as far as are developed, are strongly rusty yellow. From this it may be con-

1) Faune Ornithol. de la Sibérie Orientale. Mém. de l'Acad. Imp. des Sciences de St. Pétersbourg, VII. Ser., T. XXXIX, p. 314.

cluded that a pale or spotted throat and rusty under-wing-coverts represent a more juvenile stage, than that in which the parts mentioned are sooty black and gray respectively. Also as remains from younger stages must be regarded the traces of light eye-brow stripes, present in a couple of females and in a male, all with pale throat. After all I have said, I think *Turdus jouyi* STEJNEGER must be regarded to be adult and breeding, nevertheless young and not yet fully developed, specimens of *Turdus chrysolaus* TEMMINCK. It may therefore be said that *Turdus chrysolaus* represents a group not fully differentiated, which in its ontogeny retains to an unusual extent traces of certain phylogenetic stages, in fact such characteristic features as lead the form some way back in the direction of such generalised spotted thrushes as the Redwing and the Songthrush.

NIKOLSKI found this thrush rather commonly breeding in the middle parts of the island, but "exclusivement dans les forêts à feuilles de la vallée." In the northernmost parts it was not found, but it became more numerous towards the south (TACZANOWSKI).

Professor IJIMA's expedition found a nest of this Thrush containing 3 eggs at the mouth of Susuya River on the 21st of June.

37. *Turdus dubius* BECHSTEIN.

(= *T. fuscatus* PALLAS).

Chipesani: 1♀, Oct. 3; 1♂, Oct. 4; 1♀, Oct. 5; 2♀♀,
Oct. 6; 1♂, Oct. 9; 1♀, Oct. 11; 1♀, Oct. 14.

These were probably birds on migration, as they were all

shot so late in the autumn as October. NIKOLSKI says that should this species happen to breed in Saghalin, that would take place most probably only in the northernmost parts of the island. The specimens he obtained may be regarded to have been migrating birds.

38. *Calliope calliope* (PALLAS).

Tretiya. Padj: 1♂, 1♀, May 30; 1♂, June 1; 1♂, June 7; 1♀, June 12; 1♂, June 13; 1♂, June 18; 1♂, June 21; 1♂, July 7; 1♂, July 9.

Korsakoff: 1♂, June 26.

Chipesani: 1♂ (juv.), Aug. 8; 1♀ (juv.), Aug. 9; 1♂ (juv.), Aug. 16.

In five of the male specimens there is not the slightest trace of a black band behind the scarlet patch of the throat; and among these five there are specimens with the scarlet colour very deep and strong as also those in which that colour is of a much paler shade. Thus both old and young males are represented. In the remaining four males the blackish "moustachial line" can be traced, with more or less interruption, to frame in the scarlet patch on the sides and behind. This framing line is everywhere quite narrow and not at all well defined. It is formed by blackish dots on the tips of the otherwise white feathers just behind the scarlet (or white scarlet-tipped) feathers of the throat.

The bird labeled "♀ May 30." has the throat white and somewhat washed with scarlet; but the cheeks are creamy and the streak from the forehead to the eye pale buffish. The female shot on June 12th shows no scarlet tinge whatever on the white throat.

The young bird shot on Aug. 16th has nearly finished the moult, but still retains some of the juvenile feathers with buff shaft streaks on the head, upper back and neck)¹⁾ The throat is almost bare, but the scarlet colour shines through the sheaths of the undeveloped feathers, proving that the throat assumes the bright colour already in the first adult plumage.

The young birds obtained on Aug. 8th and 9th are still in the first plumage with the feathers of the head dark brown with broad buff shaft-streaks, which, on the feathers of the mantle, expand into large subterminal spots. Quills of the wing edged with rufous brown; greater coverts similar, but with buffish spot at the tip. A similar spot is also found at the tip of innermost secondaries.

NIKOLSKI found this fine bird very common in Saghalin. So did Professor IJIMA also, according to his notes. He writes me: "A pair of this lovely bird inhabited the wood close to the hut near Tretiya Padj during our stay there in May and June. The male, perched on the top of a spruce only a few feet from where my taxidermist sat at work, used to entertain us every morning with his merry song."

39. *Erithacus sibilans* (SWINHOE).

Vladimirofka: 1♂, June 10.

Tretiya Padj: 1♂, June 13.

The specimens agree with the descriptions of *E. sibilans*, but I have not had material for comparison. NIKOLSKI reports *E. sibilans* among the birds found by him in Saghalin and he

1) Conf. STEJNEGER: Proc. U. S. Nat. Mus., Vol. XXI, 1899.

collected several specimens of it in the middle parts of the island. It is no doubt a breeder on Saghalin.

Professor IJIMA's notes on the species read: The song of this bird, or rather its shrill cry, sounds somewhat like the prolonged neighing of a horse and is similar to that of the Japanese Robin, *E. akahige*. It can be heard from a great distance. I have often heard the birds near Tretiya Padj as well as in the hills near Vladimirofka. They may be said to be common in forests of large trees; however, owing to their shyness, the chances to get a shot at them were very rare."

40. *Larvivora cyane* (PALLAS).

Troitskoe: 1♂, June 11.

This bird is probably not common in Saghalin as the collection contains only a single specimen.

The specimen before me is washed with a creamy yellow tint across the upper breast.

Not mentioned by NIKOLSKI.

41. *Ianthia cyanura* (PALLAS).

Mouth of Susuya River: 1♂, May 18; 1♂, May 19.

Tretiya Padj: 1♂, June 12.

Chipesani: 1♀, Aug. 15; 1♀, Sept. 20.

The two first mentioned males are in female plumage; they thus corroborate the opinion expressed by earlier authors that the male of the species takes more than a year to acquire full plumage.

NIKOLSKI found this bird but once in the western part of the island, but a couple of specimens were collected by POLJAKOW at Siska. It must certainly be a breeder in Saghalin as Professor IJIMA's expedition has found it during the whole summer. A number of the species were observed on migration, together with *Poliomyias mugimaki* and *Xanthopygia narcissina narcissina*, all which had arrived at the shores near Korsakoff on May 30th.

42. *Pratincola maura* PALLAS.

Mouth of Susuya River: 1♂, 1♀, May 17.

Tretiya Padj: 1♂, June 2; 1♂, June 5; 1♂, June 10;
1♂, June 14; 1♂, June 17; 1♂, 1♀, June 19; 1♂,
June 20; 1♂, June 21; 2♂♂, June 23; 1♂, June 25.

Chipesani: 2♂♂ (1 ad., 1 juv.), July 26; 2♀♀, Aug.
1; 1♂, 1♀, Aug. 2; 1♂ (juv.), Aug. 3; 1♀, Aug. 4;
1♀, Aug. 6.

The male specimen shot in May has the upper parts not yet entirely changed into black by abrasion, but there still remain brownish margins to the feathers. Slight remains of the same kind are also to be seen in some few of the birds collected in June, but most of these have the upper parts quite jet-black, making the birds then appear very beautiful.

A young male shot on Aug. 3rd has the upper parts of the head brownish black with pale buffish shaft-streaks. The long feathers of the upper back have a broad bar or spot of a buffish, sometimes pale rufous, colour and are then again more or less broadly edged with black. By this arrangement of the colours a mottled appearance is produced. The lower back is more uniformly buff, the rump and upper tail-coverts inclining to

cinnamon rufous. The wing-coverts and secondaries are black, broadly edged and tipped with cinnamon rufous; the primaries are only narrowly edged. The great white wing-patch of the adult is only indicated by the last greater wing-covert and the bases of one or two of the innermost secondaries. (This patch appears, however, to be somewhat different in different individuals). The lower parts are pale buff with dark brown edgings to the feathers of the breast, the belly, flanks and under-tail-coverts being uniform. As STEJNEGER¹) has stated, there is "no black at the base" of the throat. Another moult is thus necessary before these birds assume a plumage which approaches that of the adult.

Young females are similar to young males but paler, the buff markings of the latter being substituted by sandy or dirty whitish.

According to NIKOLSKI this bird breeds in great numbers in the valleys of the central parts of the island. Professor IJIMA'S expedition collected eggs of this bird at Tretiya Padj on June 13th, 28th and 30th. A complete set contained 5 eggs.

43. *Nannus fumigatus dauricus* TACZANOWSKI.

Mouth of Susuya River: 1♂. May 18.

Tretiya Padj: 1♂, June 12.

Chipesani: 1♀, Oct. 3.

The length of wing in these specimens agrees with the measurements recorded by STEJNEGER²) for typical *N. fumigatus* from Japan, being 52 mm. in the males and 50 mm. in the

1) Proc. U. S. Nat. Mus. 1882, p. 327.

2) Proc. U. S. Nat. Mus. 1888, p. 548.

female. They are also short-billed, the exposed culmen measuring between 10 and 11 mm. in length. The tail feathers are rather long, measuring 37 mm. in the males and 35 mm. in the female; but some of the specimens of *fumigatus* measured by STEJNEGER exhibited an equal length even if the majority had their tail somewhat shorter. The measurements are thus somewhat smaller than those recorded by TACZANOWSKI for the subspecies *dauricus*, but as the throat and breast are spotted in the Saghalin birds, I think they must be counted as belonging to that subspecies.

NIKOLSKI mentions the wren from Saghalin under the specific name *fumigatus*. He seems to have obtained only one specimen.

To judge from the dates of the specimens collected by Professor IJIMA's expedition, the Wren seems to breed in Saghalin.

44. *Hirundo dasypus* (BONAPARTE).

Chipesani: 1♂, July 29.

In 1885 when the tenth volume of the "Catalogue of Birds" was issued, this swallow had been known only from Japan and Borneo. In 1899 STEJNEGER¹⁾ mentioned it with query for the Kuril Islands. In the "Handlist of Birds," 1901, no new locality has been added. But NIKOLSKI has recorded it from Saghalin as breeding on the rocks at Alexandrofka.

45. *Clivicola riparia ijimæ*, n. subsp.

Tretiya Padj: 1♂, June 20.

1) Proc. U. S. Nat. Mus. Vol. 21, p. 292.

The wing of this specimen is very short, measuring only 101 mm., while Swedish specimens have the wing from 105 mm. to 111 mm. long. This fact seemed to indicate a smaller race in Saghalin; but another specimen from the same island, taken together with its eggs (but unsexed), has the wing-length of 105 mm. The difference in size is thus not constant. But the Saghalin sand-martin is darker and has more developed whitish margins to the feathers of rump, upper-tail-coverts, etc. The scapulars and innermost secondaries are also edged with whitish; especially the tail feathers (except the central pair) has narrow but very distinct white margin to the outer as well as the inner web.

These characteristics, if proved constant, as I think they are, appear to be sufficient to institute a distinct subspecies upon them. I venture therefore to propose a third name for it and take the pleasure of naming this little sand-martin in honour of Professor IJIMA, the leader of the expedition of which the ornithological results are reported upon in this paper.

It scarcely needs to be emphasized that the type specimen is not a young bird; I suppose that the time of the year when it was collected sufficiently proves this. In Saghalin sand-martins probably do not hatch out earlier than June 20th, since eggs were collected on June 26th and 29th. Moreover, there is no trace of juvenileness in the structure of the bill and the feet, nor in the plumage. The light margins of the feathers are not sandy but pure white.

NIKOLSKI has recorded sand-martins from Saghalin. Professor IJIMA has communicated to me that he had found large numbers of them nesting on the cliff along the shore between Tretiya Padj and Soloviyofka.

46. *Jynx torquilla* LINNÉ.

Tretiya Padj: 1♀, June 1; 1♂, June 10; 1♀, June 23.

All the three specimens are rather deeply coloured, but not more so than some Swedish specimens. The ground colour of throat and fore-neck is buff, strongest in the ♀ specimen shot on June 1st.

The length of wing is respectively 78 mm. and 81 mm. in the females and 82 mm. in the male. These measurements agree with those of Japanese specimens published by STEJNEGER,¹⁾ although slightly more variable. The Wryneck of the extreme East appears, according to these facts, to be slightly smaller than that of Europe.

NIKOLSKI has reported this species from Saghalin.

Three eggs were found in a nest by Professor IJIMA's party on the 20th of June.

47. *Yungipicus kizuki sechomii* HARGITT.

Mouth of Susuya River: 1♀, May 15; 1♂, May 19.

Vladimirofka: 2♀ ♀, June 11.

Chipesani: 1♂ (juv.), Aug. 18; 1♂, Oct. 15; 1"♂?",
Oct. 18.

The upper parts of the head of the specimens may be said to be ashy gray, except in the specimens from Chipesani (shot in the Autumn!) in which the same parts are mouse-gray.

1) Proc. U. S. Nat. Mus. 1886, p. 103 and *ibid.* 1892, p. 296.

The October specimens show, as was already remarked by STEJNEGER,¹⁾ a rather strong yellow wash on the lower part.

In the two males at least, the white superciliary stripe joins the white patch on the side of neck.

In young specimens the ground colour of the lower parts is more dirty and more heavily spotted with brown than in older ones.

This little woodpecker was not found by NIKOLSKI in Saghalin. Professor IJIMA however observed it in plenty. It is no doubt a regular breeder on the island, as this collection contains many specimens obtained at different times during the Summer and among them young birds too.

48. *Picoides tridactylus* (LINNÉ).

Soloviyofka: 1♂, May 18.

Chipesani: 2♂♂, Sept. 11; 1♂, Oct. 3.

Unfortunately only the last of these specimens is satisfactorily preserved and that does not differ from Swedish specimens except in a few points, viz., in the less amount of white on back and in the striation of the under-parts extending almost all over the breast and belly. In these respects it differs more from *crissoleucus* than from typical *tridactylus*. On the other hand, there exists a characteristic which reminds one of *crissoleucus*, and that is the fact that the Saghalin bird has all the upper-tail-coverts rather broadly tipped with white. It is thus possible that more material may prove the presence of a distinct race, *sachalinensis*, of the three-toed woodpecker with the characteristics mentioned above.

1) Proc. U. S. Nat. Mus. 1886, p. 141. Conf. also: Proc. U. S. Nat. Mus. 1892, p. 297.

49. *Dendrocopus major japonicus* (SEEBOHM).

Vladimirofka : 1♀, June 3 ; 1♂, June 10 ; 1♂, June 11.

Tretiya Padj : 1♂, July 2 ; 1♀, July 7.

Chipesani : 1♂, Oct. 11.

This woodpecker appeared at first somewhat different from true *japonicus* and I almost believed that the bird from Saghalin was to be regarded as a separate subspecies. From the typical *japonicus*, some male specimens in full plumage differ in having the forehead pure white, only with a slight creamy tint to the feathers situated next to the nasal bristles. In other specimens, especially the females, the creamy tint is somewhat deeper, or might in some cases be termed even pale buffish. The lower side varies in different specimens from pure white to pale buff. Unlike *D. m. kamtschaticus* ДУБОВСКИ,¹⁾ this bird has the whole outer web of the second primary black, only with one or sometimes two rather small white spot on the basal half. The light coloured parts of the outer tail-feathers are white (not buff as in true *japonicus*, but occasionally creamy at the tip of the second and third). The extension of the white on these feathers is somewhat variable. Usually it extends over the terminal half of the outermost tail-feather (thus less than in *kamtschaticus*), and is then crossed by two black bars ; in some specimens the white extends somewhat farther down and is then crossed by three black bars. The second tail-feather has two black bars across the white portion. On the third, the white is sometimes present only as one or two (opposite) white spots ; sometimes it extends over the whole tip and is crossed by a black bar.

1) Bull. Soc. Zool. France, 1883, p. 368.

The length of wing is in the males 128-131 mm. and in the females 129 mm. The tail, when not at all worn, measures about 95 mm. The length of culmen is from 27 mm. to 31 mm.

This woodpecker from Saghalin is apparently intermediate between *japonicus* and *kamtschaticus* in some respects. NIKOLSKI has recorded *Picus japonicus* from this island.

50. *Dendrocopus leuconotus*. (BECHST).

Mouth of Susuya River: 1♂, May 23.

Tretiya Padj: 1♂, 1♀, June 5.

Troitskoe: 1♂ ad., 1♂ juv., June 11.

Khomatofka: 1♂, June 14.

Chipesani: 1♂, Oct. 4.

Length of wing in three males 146 mm., in one 147 mm. and in still another 145 mm.; and in the female 144 mm.

Comparing these specimens with Swedish specimens, some at least of the latter appear to have the white of the back extending higher up than in the former. On the other hand, the Saghalin birds seem to have the red of the lower side extending farther forward and the red of the crown to be more extensive. However, all these characters are rather vague.

The length of culmen measured of four male specimens is 36, 38, 39 and 43 mm.; in the female it is 35 mm.

The young, not yet fledged bird has the upper parts of head black with narrow yellowish-red tips to the feathers.

This woodpecker was not found in Saghalin by NIKOLSKI.

51. *Dryocopus martius* (LINNÉ).

Tretiya Padj: 2♂♂, May 28; 1♂, June; 1♀, June 13;
1♀, July 7.

Chipesani: 1♂, Aug. 2; 1♂, Sept. 7; 1♂, Sept. 23; 1♀,
Sept. 26; 1♂, Oct. 9.

The dimensions of the specimens, in the same order as enumerated above, are as follows:

Sex.	Date.	Wing.	Tail.	Culmen.
♂	May 28.	244 mm.	183 mm.	59 mm.
"	" "	240 "	174 "	54 "
♂	June 2.	236 "	179 "	56 "
♀	" 13.	240 "	192 "	53 "
"	July 7.	234 "	171 "	54 "
♂	Oct. 2.	236 "	170 "	59 "
"	Sept. 7.	237 "	165 "	60 "
"	" 23.	232 "	161 "	59 "
♀	" 26.	240 "	172 "	57 "
♂	Oct. 9.	246 "	186 "	62 "

From this it may be concluded that the average size of the Saghalin birds of this species is a little larger than that of European specimens. The former are certainly finer birds, being more intensely black and glossy with the crimson of the head more brilliant.

NIKOLSKI found the Black Woodpecker rather common; so did Professor IJIMA too. According to the latter observer the presence of the bird in the woods should be easily recognizable by the shrill loud cry it utters.

52. *Apus pacificus* (LATHAM).

Tretiya Padj: 1♀, June, 20; 1♂, June 23; 1 specimen (unsexed), July 14.

Chipesani: 2♂♂, July 29; 1♂, 2♀♀, July 31; 1♀, Aug. 3; 2♂♂, Aug. 5; 1♂, Aug. 18; 1♀, Aug. 20; 1♀, Aug. 22; 4♂♂ and 1 unsexed specimen, Aug. 25; 1♂, Aug. 26; 1♂, Aug. 29; 1♀, Aug. 31; 2♀♀, Sept. 8.

53. *Chaetura caudacuta* (LATHAM).

Tretiya Padj: 2♂♂; 1♀, June 13; 1♂, June 17.

Chipesani: 1♀, Aug. 1; 2♂♂, Aug. 4; 1♀, Sept. 5; 2♂♂, Oct. 3; 2♂♂, 3♀♀ and 1 unsexed specimen, Oct. 4.

This species as well as the Pacific Swift have been already recorded by NIKOLSKI from Saghalin, the former from the neighbourhood of Alexandrofka and the latter from the River Tyma.

54. *Syrnium uralense* (PALLAS).

Vladimirofka: 1♀, June 14.

The specimens of this owl which NIKOLSKI collected in Saghalin were found by him to have "une coloration un peu plus foncée" than normal specimens (according to TACZANOWSKI'S quotation). Had this statement not been made by the Russian naturalist, a contrary view might be based on the present specimen, which is very pale. In fact the dominating colour of the upper parts is dull white.

55. *Cuculus canorus* LINNÉ.

Tretiya Padj: 1♀, May 30; 2♂♂, June 10; 1♂, June 14.

Vladimirofka: 1♀, June 3.

Khomatofka: 2♂♂, June 14.

1 specimen without label.

The length of wing in these specimens is, in the order of above enumeration, as follows: 223, 215, 229, 210, 217, 222, 219 and 216 mm. The variability in size is thus as great as in European specimens, from which the Saghalin birds do not differ to any considerable degree nor by any constant character. The dark transverse bars of the lower parts are sometimes broader and sometimes narrower; their number is often restricted to about 16 or less.

56. *Cuculus saturatus* HODGSON.

Tretiya Padj: 1♂, May 30.

Yankenai (Terpenia coast): 1 specimen (unsexed) in rufous phase, June 29.

Troitskø: 1♀, June 11.

Length of wing about 195 mm.

NIKOLSKI has recorded only the Common Cuckoo from Saghalin, but it is highly probable that this cuckoo also breeds there. Professor IJIMA writes me that, during his sojourn in the neighbourhood of Tretiya Padj in the latter part of May and in June, he used to hear daily the unmistakeable notes of this bird, which sounds like "pon-pon, pon-pon."

57. *Turtur orientalis* (LATHAM).

Chipesani: 1♀ juv., July 29; 1♀ juv., Aug. 4; 1♀, juv., Aug. 6; 1♂ ad., Aug. 10; 1♂ ad., Aug. 13; 1♂ ad., 1♀ juv., Aug. 14; 1♂ ad., 1♂, 1♀ juv., Oct. 1; 1♂?, 1♀ juv., Oct. 6; 1♂ ad., Oct. 7; 1♀? juv., 1 unsexed specimen, Oct. 11; 1♀ juv., Oct. 15.

The turtle dove of Saghalin is rather richly coloured with regard to the vinous reddish as well as the ashy blue of tail-coverts, etc. The under-wing-coverts are still darker.

NIKOLSKI found this turtle dove "en nombre considérable dans les forets vertes des vallées" (TACZANOWSKI).

58. *Uria troile californica* (BRYANT).

Robben Island: 1♂, 5♀, June 20.

Chipesani: 1♂, Aug. 16.

1♀ specimen without mention of locality, "June 29th, 1906."

Recorded by NIKOLSKI. The series of eggs collected by Professor IJIMA prove that their colouring is just as variable as in those of the European congener.

The bird should inhabit the rocks of Robben Island in hordes.

59. *Brachyrhamphus perdix* (PALLAS).

Chipesani: 1♀, Aug. 22.

Recorded by NIKOLSKI as probably breeding according to POLJANOW.

60. *Synthliborhamphus antiquus* (GMELIN).

Chipesani : 1♂, Aug. 16.

A specimen in moult. The quills are not developed. The new feathers on the upper parts are slate coloured ; the old ones brown and much bleached.

Recorded by NIKOLSKI as probably breeding in Saghalia.

61. *Cerorhyncha monocerata* (PALLAS).

Chipesani : 1♀, Sept. 22 ; 1♀, Sept. 24.

Both specimens are immature.

Recorded by NIKOLSKI from a single specimen collected by SOUPROUNENKO.

62. *Larus crassirostris* VIEILLOT.

Mouth of Susuya River : 1♂, May 19 ; 1♀, May 20.

Chipesani : 1♂, July 28 ; 1♀, Sept. 28.

On the label of the first specimen is written : " Bill yellow, vermilion at tip, crossed by a black subapical band. Legs and feet pale straw yellow. Iris ditto. Edge of eye-lids and mouth-angle vermilion. Tarsus 53 mm. Found in flock at the mouth of Susuya River."

This specimen is undoubtedly an adult bird, but it has no white tips to the 5 first primaries. In the two birds from

Chipesani there are, however, slight white tips to these primaries, but these are mostly worn off. In the female there is, in addition to this, a white spot on the inner web near the tip of the first primary of both sides, and on the left side such a spot is present on the outer web as well. This proves the variability of such markings.

Recorded by NIKOLSKI after a specimen collected by POLJAKOW. To judge from the present collection it is probable that this gull breeds in Saghalin.

63. *Larus canus* LINNÉ.

Mouth of Susuya River: 1♂ juv., 2♀♀ juv., May 19;
1♂ juv., May 20; 1♂ ad., May 26.

The adult bird shot on May 26th is still in winter plumage.
Recorded by NIKOLSKI.

64. *Larus ridibundus* LINNÉ.

Mouth of Susuya River: 1♀, May 20.

A young bird still retaining the black band on the tail, and without-hood.

This species was not observed by NIKOLSKI in SAGHALIN.

65. *Sterna longipennis* NORDMANN.

Mouth of Susuya River: 1♂, 2♀♀, 4 unsexed specimens,
May 19; 3♂♂, 1♀, May 20; 5♂♂, 4♀♀, 5 unsexed
specimens, May 22; 1♂, June 20.

On the label of a female specimen is put down: "Bill blackish; iris dark brown; legs and toes blackish red!"

Recorded by NIKOLSKI as breeding in Saghalin.

66. *Sterna aleutica* BAIRD.

Mouth of Susuya River: 1♂, May 19; 1♀, May 20.

Recorded by NIKOLSKI, who collected a specimen in August. It is quite possible that his specimen as well as these were migrating birds and that the species does not breed in Saghalin.

67. *Squatarola squatarola* (LINNÉ).

Chipesani: 1♂, Oct. 8.

NIKOLSKI did not observe this nor the following species. Both probably only migrate over Saghalin.

68. *Charadrius dominicus fulvus* (GMELIN).

Chipesani: 1♀, Sept. 7; 2♀♀, Sept. 25; 1♀, Oct. 8
2♂♂, Oct. 11.

69. *Ochthodromus mongolus* (PALLAS).

Tretiya Padj: 1♀ juv., Sept. 14. 1 specimen in summer plumage unlabeled.

Recorded by NIKOLSKI from a single specimen obtained in May by POLJAKOW. The species is probably found in Saghalin only during the migration.

70. *Numenius phaeopus variegatus* (SCOP.).

Chipesani: 1♀, Aug. 26.

A young bird with the very short bill measuring only 56 mm. in length.

Recorded by NIKOLSKI, who believed that the species breeds in Saghalin; but his specimens were collected in August when he found large flocks feeding on blueberries.

17. *Numenius cyanopus* VIEILLOT.

Korsakoff: 1 specimen unsexed, Sept. 10.

An adult specimen with the large bill measuring 191 mm. long in a straight line.

Perhaps this was a bird on migration from Kamtschatka. NIKOLSKI has not recorded this species from Saghalin.

72. *Limosa limosa melanuroides* (GOULD).

Chipesani: 1♂, Oct. 2.

A quite small bird with the wing not measuring more than 186 mm. in length. Tarsus 61 mm. Culmen 69 mm.

Recorded by NIKOLSKI as breeding in Saghalin.

73. *Tringoides hypoleucus* (LINNÉ).

Chipesani: 2♀♀, Aug. 20; 1♀, Aug. 29.

These specimens are perhaps slightly paler than average Swedish specimens.

Recorded by NIKOLSKI as breeding in Saghalin.

74. *Glottis nebularius* (GUNN.).

Chipesani: 1♀, Sept. 14.

Found by NIKOLSKI only during the migration.

75. *Heteractitis incanus brevipes* (VIEILLOT).

Tretiya Padj: 1♂, May 30.

Chipesani: 1♂, July 25; 1♂, 1♀, 1 unsexed, Aug. 6;
3♂♂, Aug. 26; 1♂, Aug. 29.

All these specimens are in the barred and spotted breeding plumage, but the following specimens shot in Sept. and Oct. have finished the moult and are in full winter plumage.

Chipesani: 1♂, Sept. 4; 1♀, Sept. 9; 1♂, Sept. 19; 1♂,
Sept. 23; 1♀, Oct. 4.

The species has been recorded by NIKOLSKI from Saghalin.

76. *Terekia cinerea* (GÜLDENSTEDT).

Chipesani: 1♀, July 25; 2♀♀, Sept. 2.

Recorded by NIKOLSKI, but only as a migrating species.

77. *Pseudoglottis guttifer* (NORDMANN).

Mouth of Susuya River: 1♀, May 19.

“Bill blackish lead. Iris deep brown. Legs and toes ochraceous yellow.”

Very few specimens of this rare bird appear to have ever been obtained for ornithological collections and museums. It was not recorded by NIKOLSKI from Saghalin, and TACZANOWSKI has only quoted NORDMANN and STEJNEGER. The specimen of this collection, belonging to the Science College of Tokyo, agrees well with the description in the “Catalogue of Birds”. The length of wing is 176 mm.

78. *Eurynorhynchus pygmaeus* (LINNÉ).

Ludka: 1♀, Sept. 19.

This is of course a migrating specimen on the way south. The species had been found before in Saghalin during its migration by SOUPROUNENKO, according to TACZANOWSKI.

79. *Limónites ruficollis* (PALLAS).

Mouth of Susuya River: 5♂♂, 1♀, May 23.

Chipesani: 1♀, July 25; 1 unsexed specimen, July 28;
2♂♂, 1♀, Sept. 1; 1♀, Sept. 2; 3♀♀, Sept. 4; 1♂,
Oct. 8.

On the label attached to a specimen from the first mentioned locality, it reads :

“Bill blackish; iris dark brown; legs and toes blackish. Found in large flocks along the shore.”

Recorded also by NIKOLSKI as occurring in great swarms.

80. *Limonites damacensis* HORSE.

Mouth of Susuya River: 1♂, May 23.

Chipesani: 1♀, Aug. 16.

The first of these specimens was “found solitarily on the marsh”. Its legs and toes are stated to have been “dull ochraceous”. “Bill blackish. Iris dark brown.”

NIKOLSKI regarded this bird to be a regular resident and breeder in Saghalin.

81. *Pelidna alpina pacifica* (COUES).

Mouth of Susuya River: 7♂♂, 3♀♀, May 23.

Chipesani: 1♀, Sept. 2.

The length of bill in these specimens is very variable, the shortest measuring (in a ♂) 31 mm. and the longest nearly 40 mm. (also in a ♂), all intermediate sizes being represented. The differences in the size of bill stand in no connection with differences in other proportions. The specimen with the shortest bill has the wing measuring 117 mm., and that of the one with the longest bill measures 118,5 mm., thus differing in this respect in no considerable degree.

The specimens obtained were without doubt birds on migration farther northward. NIKOLSKI mentioned the species as only migrating over Saghalin. He found great flocks of the bird in August.

82. *Gallinago stenura* (KUHLE).

Chipesani: 1 ♀, Sept. 2.

NIKOLSKI believes this bird breeds in Saghalin.

83. *Gallinago solitaria* HODGSON.

Chipesani: 1 unsexed specimen, Oct. 4.

Recorded by NIKOLSKI also as obtained in the month of October, when the ground was covered with snow.

84. *Gallinago gallinago* (LINNÉ).

Chipesani: 1 ♀, Aug. 26; 1 ♂, 1 ♀, Sept. 24.

Recorded by NIKOLSKI as a common bird in Saghalin.

85. *Phalaropus lobatus* (LINNÉ).

Chipesani: 1 ♂, Aug. 22; 1 ♀, Sept. 2; 2 ♂♂, 2 ♀♀, Sept. 11.

NIKOLSKI believes this bird to breed in Saghalin.

86. *Rallus aquaticus indicus* BLYTH.

Mouth of Susuya River: 1♀, May 13.

Tretiya Padj: 1♀, June 29.

Chipesani: 1♀, Sept. 24; 2♂♂, Oct. 14.

This rail has not been recorded by NIKOLSKI among the birds of Saghalin, but to judge from this collection it probably breeds there.

87. *Porzana pusilla* (PALLAS).

Chipesani: 1♂, Sept. 5.

The specimen is young. This bird has not been recorded by NIKOLSKI among the birds found by him in Saghalin; but as this specimen is young, it may be one that was born in the island.

88. *Tetrastes bonasia* (LINNÉ).

Tretiya Padj: 1♀, May 28; 1♂, May 29; 1♂, 1♀, June 24; 3 pulli, June 25.

Vladimirofka: 1♂, June 3.

Chipesani: 1♀, Sept. 1; 1♀, Sept. 9; 2♂♂, 2♀♀ (in moult), Sept. 10; 1♀, Sept. 14; 1♂, Sept. 18; 1♀ (?), Sept. 19; 2♀♀, Sept. 20; 1♂, Sept. 23; 1♀, Sept. 26; 1♀, Oct. 11.

Tunnaicha: 3♂♂, Sept. 14.

I have not been able to find any constant difference between these specimens and the Swedish birds. This is a very remark-

able fact in view of the facts that the hazel-grouse is a very stationary bird and thus must have been isolated in Saghalin for considerable ages, and that in other parts of the Palæarctic region the species has developed into two different races.

According to NIKOLSKI the hazel-grouse is a very common bird in Saghalin, with which Professor IJIMA's observation is in accord.

89. *Falco menillus* GERINI.

Chipesani: 1♀, Oct. 1.

This species is not recorded in NIKOLSKI's work.

90. *Accipiter nisus* (LINNÉ).

Mouth of Susuya River: 1♂, May 18.

Chipesani: 1♀, Oct. 18.

NIKOLSKI did not observe any sparrow-hawk in Saghalin.

The male specimen in this collection has no white neck spot, but otherwise agrees with dark Swedish specimens of a similar age. It seems most probable that the sparrow-hawk breeds in Saghalin, and perhaps it may be proved in the future that it represents a separate race, should the white neck spot be always absent in the males at least.

91. *Pandion haliaëtus* (LINNÉ).

Chipesani: 1♀, Sept. 5.

NIKOLSKI has also recorded the fish-hawk from Saghalin, but has said that it is not numerous there.

92. *Anas platyrhynchos*¹⁾ LINNÉ.

Khomatofka: 1♂, June 14.

Recorded also by NIKOLSKI, who believes it to breed in the island.

93. *Anas zonorhynchos* SWINHOE.

This species is only represented by a set of eggs collected at the mouth of Susuya River on the 17th of May.

It has not been recorded by NIKOLSKI.

94. *Nettion crecca* (LINNÉ).

Mouth of Susuya River: 1♂, May 17.

Chipesani: 2♀, Oct. 6; 1♀, Oct. 21.

Recorded by NIKOLSKI as breeding in Saghalin.

95. *Eunetta falcata* (GEORGÉ).

Chipesani: 1♀, Aug. 4; 1♀, Sept. 10.

The latter specimen is much darker than the former. The plumage of the specimen shot in August has the plumage much worn and bleached; at the same time it shows some difference from the other in pattern, each feather of the back having a pale sandy crescentic band within the broad dark brown margin,

1) According to the generally accepted law of priority this name must be used instead of the better known *A. boschas*. A Swedish duck with "*macula alari purpurea utrinque nigra albaque, pectore rufescente*" (LINNÉ: Syst. Nat., ed. X, 1758, p. 125) cannot be anything else than what later authors have called "*A. boschas*"!

while in the September specimen the entire feather is blackish brown with a slight fringe of sandy. The latter is probably a young bird.

NIKOLSKI regards this duck as a breeder in Saghalin.

96. *Fuligula marila mariloides* (VIGORS).

Mouth of Susuya River: 1♂, May 19.

Length of wing only 213 mm.

Not recorded by NIKOLSKI.

97. *Histrionicus histrionicus* (LINNÉ).

Chipesani: 1♀, Sept. 2; 1♀, Sept. 12; 1♀, Sept. 18;
1♀, Sept. 19; 1♀, Sept. 27.

Recorded by NIKOLSKI.

98. *Harelda hyemalis* (LINNÉ).

Chipesani: 1♀, Aug. 12.

The plumage of this specimen is very much worn and bleached.

Recorded by NIKOLSKI.

99. *Puffinus tenuirostris* (TEMMINCK).

Chipesani: 1♀, July 26.

Not recorded by NIKOLSKI, but known from the coasts of Japan and Korea.

A List of Birds known from Saghalin.

In the following I give a list of names of all the birds hitherto recorded from Saghalin. In the cases of such birds as the author has not been able to verify himself by examination of actual specimens, he has preferred to quote the names within inverted commas in the form as they are found in the works referred to, because a correction of the names so as to accord with the modern usage might possibly lead to errors. The names of such birds which are known either with full certainty or greatest probability to breed in the island, are italicised. It is possible that the number of the breeding birds may be justly increased by adding to them such birds as, for instance, *Corvus corax*,¹⁾ *C. macrorhynchus japonensis*,¹⁾ *Nucifraga*, *Sturnia violacea*,¹⁾ *Lanius bucephalus*, *Larvivora cyane*, etc.

The mark + heading the names indicates that the species is represented in this collection but is not recorded in NIKOLSKI'S paper; the mark — means the contrary. The species which are not marked either way, are those which have been recorded by NIKOLSKI as well as are represented in the present collection.

Species.	Yesso.	Kurile Isl.	E. Sib. or Amur Prov., etc.
<i>Corvus macrorhynchus japonensis</i>	+	+	+
<i>C. corone orientalis</i>	+	+	+
—“ <i>C. corax</i> .”		+	+
—“ <i>Nucifraga caryocatactes</i> .”	?		?
<i>Perisoreus infaustus sibericus</i>			+

1) Known from the Kurile Islands.

Species.	Yesso.	Kurile Isl.	E. Sib. or Amur Prov., etc.
<i>Garrulus glandarius taczanowskii</i>	+		+
+ <i>Sturnia violacea</i>	+	+	
<i>Chloris sinica minor</i>	+	?	
<i>Pyrrhula griseiventris</i>	+	(+)	
- " <i>Pinicola enucleator</i> ."		+	+
<i>Uragus sibiricus sanguinolentus</i>	+	+	+
- " <i>Carpodacus roseus</i> ."	+		+
- " <i>C. erythrinus</i> ."			+
- " <i>Acanthis linaria</i> ."	+		+
- " <i>A. linaria holboelli</i> ."	+		+
- " <i>A. hornemanni exilipes</i> ."	+		+
- " <i>Chrysomitris spinus</i> ."	+	+	+
- " <i>Fringilla montifringilla</i> ."	+		+
<i>Passer montanus</i>	+	+	+
<i>Emberiza aureola</i>	+		+
<i>E. spodocephala personata</i>	+	+	
- " <i>Plectrophanes lapponicus</i> ."		+	+
" <i>P. nivalis</i> ."		+	+
+ <i>Alauda arvensis pekinensis</i>	+	+	+
<i>A. arvensis japonica</i>	+		
<i>Anthus maculatus</i>	+	+	+
- <i>A. japonicus</i> ."	+	+	+
- " <i>A. cervinus</i> ."		+	+
<i>Budytes flavus taivanus</i>	?	+	+
<i>Motacilla lugens</i>	+	+	+
<i>Sitta europæa uralensis</i>	+	+	+
<i>Parus ater pekinensis</i>			+
<i>P. atricapillus sachalinensis</i>			
<i>Aegithalus caudatus</i>	+	+	+

Species.	Yesso.	Kurile Isl.	E. Sib. or Amur Prov., etc.
+ <i>Regulus cristatus japonicus</i>	+		+
<i>Lanius excubitor bianchii</i>			
—“ <i>L. bucephalus</i> .”... ..	+		+
— <i>L. superciliosus</i>	+		
+ <i>Ampelis japonicus</i>	+		+
—“ <i>A. garrulus</i> .”	+		+
+ <i>Hemichelidon sibirica</i>	+		+
<i>Muscicapa latirostris</i>	+	+	+
+ <i>Poliomyias mugimaki</i>	+		+
<i>Xanthopygia narcissina narcissina</i>	+		
<i>Locustella fasciolata</i>	+		+
+ <i>L. pleskei</i>	+		
+ <i>L. ochotensis</i>	+	+	+
—“ <i>L. lanceolata</i> .”... ..	+		+
<i>Acrocephalus bistrigiceps</i>	+		+
<i>Herbivocula schwarzi</i>			+
+ <i>Reguloides proregulus</i>			+
+ <i>Acanthopneuste xanthodryas</i>	+	+	+
—“ <i>Phylloscopus tenellipes</i> .”	+		+
+ <i>Cichloselys sibirica davisoni</i>	+		
<i>Turdus chrysolaus</i>	+		+
<i>T. dubius</i>	+	+	+
<i>Calliope calliope</i>	+	+	+
<i>Erithacus sibilans</i>	?		+
+ <i>Larvivora cyane</i>	+		+
<i>Ianthia cyanura</i>	+		+
<i>Pratincola maura</i>	+	+	+
—“ <i>Cinclus pallasi</i> .”	+		+
<i>Nannus fumigatus dauricus</i>			+

Species.	Yesso.	Kurile Isl.	E. Sib. or Amur Prov., etc.
<i>Hirundo dasypus</i>	+		
<i>Clivicola riparia ijimae</i>	?		?
<i>Lynx torquilla</i>	+		+
+ <i>Yungipicus kizuki seebohmi</i>	+	?	+
<i>Picooides tridactylus</i>			+
<i>Dendrocopus major japonicus</i>	+	+	
+ <i>D. leuconotus</i>	+		+
<i>Dryocopus martius</i>	+		+
- " <i>Picus pipra</i> ."			+
<i>Apus pacificus</i> ."	+	+	+
<i>Chatura caudacuta</i>	+	+	+
<i>Syrnium uralense</i>	+	+	+
- " <i>S. lapponicum</i> ."			+
- " <i>Bubo ignavus</i> ." ?			+
<i>Cuculus canorus</i>	+	+	+
+ <i>C. saturatus</i>	+		+
- " <i>Alcedo bengalensis</i> ."	+	+	+
<i>Turtur orientalis</i>	+	+	+
<i>Uria troile californica</i>	+	+	+
- " <i>U. lomvia arra</i> ."	+	+	+
- " <i>Cepphus columba</i> ."	+	+	
- " <i>C. carbo</i> ."	+	+	+
- " <i>Simorhynchus cristatellus</i> ."	+	+	
<i>Synthliborhampus antiquus</i>	+	+	+
- " <i>S. wumisuzume</i> ."	?		
- " <i>Phaleris pygmaeus</i> ."	+	+	
- " <i>Cyclorhynchus psittaculus</i> ."		+	
- " <i>Ceronia pusilla</i> ."	+	+	
<i>Brachyrhampus perdix</i>	+	+	+

Species.	Yesso.	Kurile Isl.	E. Sib. or Amur Prov., etc.
<i>Cerorhyncha monocerata</i>	+	+	+
— " <i>Fratercula corniculata</i> ." ?		+	+
— " <i>Lunda cirrhata</i> ." ?	+	+	+
<i>Larus crassirostris</i>	+		+
<i>L. canus</i>	+	+	+
— " <i>L. schistisagus</i> ."	+	+	+
+ <i>L. ridibundus</i>	+		+
<i>Sterna longipennis</i>	+	+	+
<i>S. aleutica</i>			?
" <i>Stercorarius longicaudatus</i> ." ?		+	+
" <i>S. parasiticus</i> ." ?		+	+
+ <i>Squatarola squatarola</i>	+	+	+
+ <i>Charadrius dominicus fulvus</i>	+	+	+
<i>Ochthodromus mongolus</i>	+	+	+
— " <i>Aegialites minor</i> ."	+		+
— " <i>Streptilas interpres</i> ."	+	+	
— " <i>Hæmatopus osculans</i> ."	+	+	+
<i>Numenius phæopus variegatus</i>	+	+	+
+ <i>N. cyanopus</i>	+	+	+
<i>Limosa limosa melanuroides</i>	+		+
<i>Tringoides hypoleucus</i>	+	+	+
— " <i>Totanus ochropus</i> ."	+	+	+
— " <i>T. glareola</i> ."	+	+	+
— " <i>T. calidris</i> ."	?		+
<i>Glottis nebularius</i>	+	+	+
<i>Heteractitis brevipes incanus</i>		+	+
<i>Terekia cinerea</i>			+
<i>Pseudoglottis guttifer</i>			+
<i>Eurynorhynchus pygmæus</i>	+	+	+

Species.	Yesso.	Kurile- Isl.	E. Sib. or Amür Prov., etc.
<i>Limonites ruficollis</i>		+	+
<i>L. damacensis</i>	+	+	+
<i>Pelidna alpina pacifica</i>	+	+	+
- " <i>Tringa crassirostris</i> ."	+	+	+
<i>Gallinago stenura</i>	+		+
<i>G. solitaria</i>	+		+
- <i>G. megala</i> ."	?		+
<i>G. gallinago</i>	+	+	+
- " <i>G. rusticola</i> ." ?	+		+
<i>Phalaropus lobatus</i>	+	+	+
+ <i>Rallus aquaticus indicus</i>	+		+
+ <i>Porzana pusilla</i>	+		+
- " <i>Grus leucogeranus</i> ."			+
- " <i>Lagopus albus</i> ."			+
<i>Tetrastes bonasia</i>	+		+
- " <i>Canace falcipennis</i> ."			+
- " <i>Tetrao urogalloides</i> ."			+
- " <i>Aquila clanga</i> ."			+?
- " <i>Haliaëtus albicillus</i> ."	+	+	+
- " <i>H. pelagicus</i> ."	+	+	
+ <i>Falco merillus</i>	+	+	+
+ <i>Accipiter nisus</i>	+	+	+
<i>Pandion haliaëtus</i>	+	+	+
- " <i>Anser segetum middendorffi</i>		?	+
- " <i>Bernicla nigricans</i> ."	+	?	+
- " <i>Cygnus musicus</i> ."	+		+
- " <i>Aix galericulata</i> "	+		+
<i>Anas platyrhyncha</i>	+	+	+
+ <i>A. zonorhyncha</i>	+	+	+

Species.	Yesso.	Kurile Isl.	E. Sib. or Amur Prov., etc.
—“ <i>Spatula clypeata</i> .”	+		+
<i>Nettion crecca</i>	+	+	+
—“ <i>Querquedula querquedula</i> .”	+		+
—“ <i>Q. formosa</i> .”	?		+
<i>Eunetta falcata</i>	+	+	+
“ <i>Dafila acuta</i> .”	+	+	+
“ <i>Mareca penelope</i> .”	+	+	+
—“ <i>Fulix fuligula</i> .”	+	+	+
+ <i>Fuligula marila mariloides</i>	+	+	+
—“ <i>Clangula clangula</i> .”	+	+	+
<i>Histrionicus histrionicus</i>	+	+	+
<i>Harelda hyemalis</i>	+	+	+
—“ <i>Oidemia deglandii</i> ”			+
—“ <i>O. fusca</i> .”	+	+	+
—“ <i>O. americana</i> .”	+	+	+
—“ <i>Mergus merganser</i> .”	+	+	+
—“ <i>M. serrator</i> .”	+	+	+
—“ <i>M. albellus</i> .”	+		+
—“ <i>Ardea cinerea</i> .”	+		+
—“ <i>Fulmarus glacialis glupischa</i> ” ?	?	+	
—“ <i>Thalassidroma leachi</i> ” ?	+	+	+
—“ <i>Diomedea albatrus</i> ” ?	+	+	+
—“ <i>D. derogata</i> ” ?	?		
+ <i>Puffinus tenuirostris</i>	?	+	+
—“ <i>Urinator arcticus</i> .”	+	+	+
—“ <i>U. lumme</i> .”	+	+	+
—“ <i>Podiceps nigricollis</i> ” ?	+		+

[HARTERT (Vögel palæarkt. Reg., p. 318) has recorded *Certhia familiaris* as occurring in Saghalin, but it is not found in NIKOLSKY'S list, nor in the present collection].

As may be seen from the foregoing list, about 177 different birds have been recorded from the island of Saghalin. Our knowledge of its ornis is no doubt still incomplete, but at least 99 of the species may be regarded as regular breeders. This number will probably be augmented by a good many more. To state any definite numbers is still too early, but this much may be said that by far the greater number, about 70% roughly speaking, of the breeding birds of Saghalin are found not only in the adjacent parts of the continent but also in Yesso. About 15% of the same are found on the continent and not in Yesso; and about 10% are found in the latter island but not on the continent, while some few subspecies are endemic. About one half of the breeders have been recorded from the Kurile Islands as well. About one third of the birds breeding in Saghalin has a very wide distribution over the whole Palæartic region, some being even circumpolar.

With Kamtschatka Saghalin has about a hundred species of birds in common,¹⁾ but not one half of these are as yet known to breed in Saghalin. Of the breeders common to both countries, about half the number belongs to the group which STEJNEGER has termed "East Asiatic", that is such as "do not occur west of the Jenisei River"; about one fourth or a little more is distributed over the entire palæarctic region; not quite as many are circumpolar and about one-eighth may be termed "Pacific". To the last group belong chiefly the members of the *Alcidae*.

As already alluded to above, our knowledge about the Ornis of Saghalin, although greatly widened by Prof. IJIMA's Expedition,

1) Comp. L. STEJNEGER: Results of Ornithological Explorations in the Commander Islands and in Kamtschatka. Bull. U. S. Nat. Museum, No. 29, 1885.

is not complete enough to allow of the working out of full statistics concerning the origin and affinities of the different elements represented. I therefore wish to confine myself in this respect to what has already been said. There are, however, some points of interest which can be stated now, and that is the absence in Saghalin of certain types of southern origin which have pushed so far north as Yesso, and of those which are found on the continent on the other side of the Tatar Sound. Among the southern or Japanese forms which have not crossed the La Perouse Strait although present in Yesso, the following genera may be mentioned: *Hypsipetes*, *Zosterops*, *Pericrocotus*,¹⁾ *Treron*, *Hierococcyx*, *Ceryle*, *Halcyon*, *Nycticorax*, *Botaurus*, *Ibis*, etc., not to mention a number of species belonging to other genera. The absence of these southern forms however loses much of remarkableness when we consider the fact that already in Yesso a considerable reduction takes place in the number of southern birds at the same time as this island contains several northern forms that find their southern limit of distribution there. A very typical example of this is offered by *Tetrastes banasia* which reaches down to, and is a resident in, Yesso; while on the other hand, the pheasants (*Phasianus versicolor* and *scintillans*) are missing in Yesso. That the same pheasants are missing in Saghalin also, is natural enough; but it could almost be expected that *Phasianus torquatus*, which is "common et sédentaire dans le pays Oussourien depuis la côte jusqu'à Amour (TACZANOWSKI), might have been able to find its way into Yesso or Saghalin, although that is not actually the case. Still more remarkable is the absence in

1) Also represented in the Amur Province.

Saghalin of such hardy birds as are found not only in Yesso but also on the opposite continent. Examples of such are *Loxia curvirostra*,²⁾ *Coccothraustes japonicus*, *Montifringilla brunneinucha*,¹⁾ several species of *Emberiza* (as *E. elegans*, *E. rustica*, *E. fucata*, etc.), *Cyanoptila cyanomelæna*, *Phœnicurus auroreus*,²⁾ *Turdus pallidus*, *T. obscurus*, *Caprimulgus jotaka*, etc. It seems probable that at least some of these shall be found in the future in Saghalin. Very likely the list of the birds of prey shall also have to receive an augmentation. Nevertheless, the isolation of Saghalin seems to have been effective enough to make its fauna noticeably different from that of adjacent countries and islands, even though the number of endemic races is small.



1) Recorded even from Kamtschatka and the Kurile Islands.

2) Recorded from the Kurile Islands also.

Errata.

For "Art. 13" in the head line, pp. 2-41, read *Art. 14*.