NEW AND KNOWN FORMS OF THE URAL OWL (STRIX URALENSIS) FROM SOUTHEASTERN SIBERIA, MANCHURIA, KOREA, SAKHALIN AND JAPAN.

BY TOKU T. MOMIYAMA.

Strix uralensis in the eastern parts of the Palæ-INTRODUCTION. arctic region has been already divided into several local races, but as it never migrates it will be possible to distinguish many more races. From the north border to southernmost Kiusiu, or to Seven Islands of Idzu, all over Japan there are various races of these birds. Of course Japan is not a large country, as all know, but, by the variety of its mountain ranges and by the peculiar extention from north to south, the climate at the same latitude is not always identical. Moreover, by the warm ocean current, some regions near the sea-shore have a comparatively warm climate, or others have the same humidity through the whole year. Therefore it seems to be very difficult to make all the subspecies in Japan belong to the known local races. I therefore indicate some new forms and list the known species from eastern Siberia, Manchuria and Japanese territories and districts.

I am indebted to Dr. Kuroda, Prof. T. Kawamura of Kyoto, Mr. T. Mori of Seoul, Mr. S. Kumagai of Miyagi prefecture, Mr. E. Takahashi of Seoul and Mr. Y. Akasaka of Prov. Tesio of Hokkaido for much kindness and many conveniences in my investigations, for which I am heartily grateful.

LITERATURE CITED.

I have traced the gradual growth of our knowledge of *Strix uralensis* in the regions mentioned, referring to many books and papers which treat of it. I give below the brief notes of the investigators and the summaries of their reports.

- 1. PALLAS (Reis. Russ. Reichs, i, 1771, p. 445) proposed for the first time, the name of *Strix uralensis*, for the Ural Owl, but he did not divide further, including all the forms of Europe and Asia under this single name.
- 2. TACZANOWSKI (Fauna Orn. Sib. Orient., 1891, p. 138) reported on Strix uralensis from eastern Siberia.

- 3. TEMMINCK AND SCHLEGEL (Siebold's Fauna Japonica, Aves, 1847, p. 30) indicated the Japanese Owl as *Strix fuscescens* (*Strix rufescens* in the Text, is preoccupied by *Strix rufescens* of Horsfield, 1822). Afterwards, by some ornithologists of the later generations, the range was confined to Kiusiu.
- 4. WHITELY (Ibis, 1867, p. 194) examined the Hokkaido form and said, "The typical form of the Ural Owl probably breeds in Yesso."
- 5. BLAKISTON and PRYER (Ibis, 1878, p. 246) reported on Syrnium rufescens from Hokkaido and Hondo.
- 6. SEEBOHM (Ibis, 1879, p. 41) named a specimen sent from Hokkaido Strix uralense, subspecies fuscescens, characterized by being paler and duller as compared with the typical Strix uralensis.
- 7. BLAKISTON AND PRYER (Ibis, 1880, p. 172) reported again on Syrnium rufescens telling about the eggs and nest, and added that the color of the feathers was paler than that of the southern races.
- 8. NIKOLSKI (Sapiski Imperatorskoi Akademii Nauk. Sankt-Peterburg, 1889) described *Syrnium uralense* from Sakhalin under the subject of 'Island Saghalin and its fauna,' saying as follows, "une colorasion un peu plus foncee."
- 9. M. NAMIYE (Dobutsu Zasshi, i, 1889, p. 370) named the Hatidio-sima form "Fukuro," in Japanese, but not in Latin, in "Notes on some birds from the islands of Idzu." He seems to have observed it only.
- 10. SEEBOHM (Birds of the Japanese Empire, 1890, p. 185) divided the Japanese Owls into two forms,—one was *Strix uralensis* and the other, *Strix uralensis fuscescens*, restricting the range of the typical form to Hokkaido and Yokohama, and that of the latter to Nagasaki.
- 11. N. OKADA (Catalogue of Vertebrated Animals of Japan, 1891, p. 111) reported on 'Syrnium uralensis rufescens, Fukuro,' limiting the range to Tokyo, Hatidio-sima, Satuma and Tikuzen.
- Dr. I. IJIMA (Dobutsu. Zasshi, iii, 1891, suppl., p. 15) indicated Strix uralensis and Strix uralensis fuscescens. He named the latter 'Kiusiu Ural Owl' in English.
- DRESSER (A Manual of Palæarctic Birds, pt. I, 1902, pp. 477-478) confined the distribution of *Strix uralensis* to Europe, Siberia, Manchuria, Korea and Japan.
- 14. Dr. I. IJIMA ('Hogo-tyo Zufu,' Revised, 1905, p. 56) decided that the Hondo and Hokkaido forms belonged to Strix uralensis, stating however, that the Kiusiu form was paler and somewhat smaller. In this I think there may have been some mistake.
- 15. S. HATTA & S. MURATA (Journ. Sapporo Nat. Hist. Soc., i, No. 1, 1905, p. 62) indicated the Hokkaido form as *Strix uralensis* in 'A preliminary list of the birds of Hokkaido.'

¹ Trans. Short Notes & Figures of Protected Birds in Japan.'

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- 16. M. OGAWA (Annot. Zool. Japan., vi, 1908, pp. 378, 379) recorded Strix uralensis and Strix uralensis fuscescens in 'A Hand-list of the Birds of Japan,' saying that the former lived in 'Hokkaido, Yokohama, Nagasaki, Musasi, Suruga,' and the latter, in Kiusiu.
- 17. BUTURLIN (Journ. f. Orn., 1907, pp. 333, 334) separated a new subspecies, *Strix uralensis nikolskii* of southeastern Siberia from the western form.
- CLARK (Proc. U. S. Nat. Mus., XXXII, 1907, pp. 4171-4172) indicated two new subspecies from Japan, namely, Syrnium uralense japonicum from Jesso, and Syrnium uralense hondoense from Hondo, the type-locality being Iwaki.
- DR. LÖNNBERG (Journ. Coll. Sci., Imp. Univ. Tokyo XXXIII, Art. 14, 1908, p. 45) examined the form of Toyohara ("Vladimirofka") in Sakhalin and looked upon it as Syrnium uralense. He noticed that the color was extremely pale.
- 20. DR. HARTERT, (Vög. Paläarkt Fauna, II, pp. 1020-1021, 1913) indicated the following forms; Strix uralensis nikolskii from Sakhalin, Strix uralensis japonica from Hokkaido, Strix uralensis hondoensis from Hondo, Strix uralensis fuscescens from Kiusiu.
- S. MURATA (Karafuto Dobutsu-tyosa Hokoku,¹ 1914, p. 45) recognized the Sakhalin form as *Strix uralensis*. He would be probably careless as to the subspecies.
- 22. S. UCHIDA (Birds of Japan, II, 1914, pp. 348-349) considered the forms in all the regions extending from south of Sakhalin to Hondo, as Syrnium uralensis, which, including the Kiusiu and Awaji forms, wholly resembled the form of Europe.
- 23. N. KURODA (Seu-man tyo-rui Japan,² 1917, suppl., p. 130) stated that, according to Dresser, Strix uralensis lived in Korea and Manchuria, and that if so, it must be probably the form known as Syrnium uralense nikolskii.
- 24. PRINCE N. TAKA-TSUKASA (Dobutsu. Zasshi XXX, 1918, p. 443 Prince Taka-Tsukasa) observing a specimen from Kagosima prefect. in south Kiusiu, considered it a melanistic Syrnium melansis (misprint for uralensis) fuscescens.
- 25. N. NOMURA & TOKU T. MOMIYAMA (Saitama-ken Iruma-gun san Tyorui,³ Tori, i, No. 8, 1919, pp. 183–184) reported that Strix uralensis japonica was found in Hokkaido and northern parts of Hondo; Strix uralensis hondoensis, in southern parts of Middle Hondo; and both subspecies, in Saitama prefect. near Tokyo.

This is conclusively wrong. Strix uralensis japonica from northern districts of Hondo must be corrected to hondoensis, and Strix uralensis hondoensis from southern districts of Hondo, to Strix uralensis media which is here separated as new.

¹ Trans. 'Reports on Fauna of Saghalin Island.'

² Trans. 'Notes on the Birds of Korea and Manchuria.'

³ Trans. 'Notes on Some Birds from Iruma-gun, Prefect. Saitama.'

- 26. TOKU T. MOMIYAMA (Fukuro-rui Zakki,¹ op. cit., i, No. 10, 1920, p. 310, Text fig. 48) observing three specimens from northern regions in Korea, recognized that they were smaller than Strix uralensis nikolskii and distinguishable from Strix uralensis japonicus by being paler and duller.
- 27. TOKU T. MOMIYAMA (Fukuro-rui Zakki, op. cit., i, No. 10, 1920, p. 311) examining a specimen from the vicinity of Tiba,—which he had recognized as *Strix uralensis japonicus*,—reported that this was wrong, and that the form resembling *hondoensis* was found so far as Tiba prefecture.
- 29. S. UCHIDA (Bds. of Jap., Revised Ed. II, 2, 1923, pp. 406-407) distinguished four subspecies as before, but corrected the ranges of *japonica* and *hondoensis* saying that the former lived in Hokkaido and northern Hondo, and the latter in Middle Hondo.
- 30. T. MORRI (Catalogue of Specimens at the exhibition of specimens of the Natural History of Chosen, 1923, p. 38) recognized the Korean form as *Strix uralensis nikolskii*, but probably he had not seen a specimen.
- 31. N. KURODA (A New Owl from Hondo, 1924, pp. 1-2) named the form of the Pacific side of Japan Strix uralensis pacifica, indicating Idzu in Suruga, etc. as the type locality. He continued, 'The range of distribution of the form may probably coincide with that of Graphophasianus soemmerringii subrufus. Specimens from Provinces Totomi, Mikawa etc. belong to hondoensis rather than to this form.'

Although being somewhat difficult to exactly understand, yet, the above-mentioned explanation would seem to be wrong. Was it not *Strix uralensis media* Momiyama? Would it not be unsuitable to confine the type locality to such a peculiar district, the northernmost limit of *S. u. pacifica* as Idzu Peninsula?

32. HON. MASA U. HACHISUKA (Comp. Hand-list Bds. Jap. & Brit. Is., 1925, p. 39) reported four subspecies as did Mr. Uchida but had not seen the short note of Mr. Kuroda.

¹ Trans. 'Notes on Some Strigidae.'

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- 33. DR. S. UCHIDA (Bds. Jap., Revised Ed. IV., 2, 1926, pp. 362-364) joined Strix uralensis pacifica to the four subspecies which he reported in (29), remaining the distributions as before, but indicating that of pacifica only as Idzu and Suruga on the Pacific side of Middle Hondo.
- 34. TOKU T. MOMIYAMA (Four new subspecies of Korean birds, Journ. Chosen Nat. Hist. Sci. No. 4, 1927, p. 1) reexamined the specimen cited in (26), and named the form from the vicinity of the north border of Korea Strix uralensis coreensis.
- 35. DR. S. UCHIDA (Bds. Jap., Revised Ed. IV, 3, 1927, p. 217) reported on the Korean form saying that the wing was shorter compared with that of birds from south-eastern Siberia and Sakhalin Island. He added that though it might be a new subspecies, so few examples could not exactly illustrate it. Probably he did not pay any attention to the note written in (34).
- 36. DR. N. KURODA (Uchida's Bds. Jap., Revised Ed. IV., 3, 1927, suppl. p. 8) named the Korean form "Strix uralensis [? nikolskii]." He also seemed not to have seen the above cited note.

37. ΤΟΚU Τ. ΜΟΜΙΥΑΜΑ (Bull. B. O. C., XLVIII, pp. 21, 1927) has recently separated three new subspecies from Japan as follows: Strix uralensis latibanai from Sakhalin. Strix uralensis morii from Korea.

Strix uralensis nigra from S. Kiusiu.

LIST OF SUBSPECIES.

(1). Strix uralensis nikolskii (Buturlin)

(Japanese name: AMUR-FUKURO)

Syrnium uralense nikolski Paturlin, Journ. f. Orn., 1907, pp. 333, 334: South-eastern Siberia.

The head, hind-neck, back and wings are striped with a little ashy brown and pale white. In general, the color of the feathers on all the parts is somewhat indistinct and duller. The wing is considerably larger on the average. Wing 330-350 mm.

Distribution: Southeastern Siberia, Amur Land, Sikhota Mts., Prov. Ussuri.

Note.—This follows the description of Hartert. I think the Sakhalin form, though it was considered as *nikolskii* by him, must be intermediate between *nikolskii* and *japonica*.

(2). Strix uralensis coreensis Momiyama

(Japanese name: KORAI-FUKURO)

Strix uralensis coreensis Momiyama, Journ. Chosen Nat. Hist. Soc., No. 4, 1927, p. 1: Tai-an-san, N. Kankyo district, Korea. The whole plumage is buffy brown not mixed with sepia. The head, facial disk, wings and under surface have a slightly buff tint. All the wingcoverts are paler sepia with ashy, or buff-brown. The tail is duller, the primaries are not striped with a brownish band. The wing averages large, though much shorter than S. u. nikolskii.

Measurements wing. 3⁷ 293 mm., 9 317-318 mm. Tail. 3⁷ 209 mm., 9 215-250.5 mm.

Distribution.—Probably confined from northernmost Korea to Changpai Mts. in South Manchuria.

(3). Strix uralensis jingkou Momiyama, sub. sp. nov.

(Japanese name: NAN-MAN-FUKURO)

Similar to S. u. coreensis, but differs in being mottled with a deeper, brownish color. The white parts of webs almost indistinct except on the head and under surface. The forehead, back and wing-coverts rich dark brown. The wings and tail are also darker, more clearly striped with narrower, grey, and brownish white.

Measurements.---Wing 312-322 mm., tail 209-235 mm.

Type in Athenæi Ornithologici Momiyamici unsex. Yingkou, Shing King Shong, Manchuria 9th March, 1927. Provisional No. 27. Sent by I. Iwai.

Material examined.-Two specimens from the same locality.

Distribution.--South-eastern Manchuria.

Note.—The bird which the following sentence indicates will probably belong to this race. "Die Abbildung von, *Ptynx fuscescens*," nacheinem Stüke von Peking in Pariser Musem [David & Austalet, Ois. Chime, Atlas Taf. 2, s. Text p. 45] erinnert am meisten an *S. u. hondoensis*. Wenn Buturlin (Journ. f. Orn. 1907, p. 332).

(4). Strix uralensis morii Momiyama

(Japanese name: SIRAGI-FUKURO)

Strix uralensis morii Momiyama, Bull. B. O. C., XIVIII, p. 21, 1927. Vicinity of Seoul, Keiki Distri., Korea.

Distinguished from S. u. jingkou by being darker and less yellowish brown. Compared with the dark phase of S. u tatibanai richer brown, but less greyish brown. The feathers of both forms are mottled in the same manner. The wing-coverts, under surface and feathers of feet and toes are evidently more buffish brown. Wing 326-330 mm., tail 230-254 mm.

Distribution.—Probably confined within Korea except the northernmost districts. Vol. XLV 1928

(5). Strix uralensis tatibanai Momiyama

(Japanese name: KITA-FUKURO)

Strix uralensis tatibanai Momiyama, Bull. B. O. C. XLVIII, p. ---, 1927; Keson, Siska Prefect-Distri., S. Sakhalin.

Readily distinguished by the smaller size from S. u. nikolskii. The dark phase is near to S. u. japonica of Hokkaido, but differs in having the upper surface paler and less tinged with ochre. The size is larger. Wing, 316-321 mm., 9328-338. Tail, 3241-249 mm., 9248.5-260 mm. Distribution.—Sakhalin Island.

(6). Strix uralensis japonica (Clark)

(Japanese name: Ezo-FUKURO)

Syrnium uralense japonicum Clark, Proc. U. S. Nat. Mus., XXXII, 1907, p. 471: Hokkaido.

Very similar to S. u. tatibanai, but distinguished by having on the whole surface less white or buffy white, almost covered with paler buffy brown with less grey, particularly, from the forehead to over the head, under surface and lower surface. In size, the wing and tail decidedly shorter. Wing, σ 267 mm., φ 295-313 mm., tail φ 201-235 mm.

Distribution .--- Confined within Hokkaido.

(7). Strix uralensis hondoensis (Clark)

(Japanese name: Iwaki-fukuro)

Syrnium uralense hondoense Clark, Proc. U. S. Nat. Mus., XXXII, 1907, p. 472: Prov. Iwaki, northern Hondo.

More buffish brown, compared with S. u. japonica, including very little ash-color. The upper surface, wings and wing-coverts are all covered with somewhat rich brown except white spots. The face is also a little dark brownish. The tip of feathers on the head, back and rump are tinged with paler buff. Wing, σ^2 302-317 mm., \circ 319-340 mm., tail σ^2 223.5-242 mm., \circ 224-244 mm.

Distribution.—Provs. Mutu (Prefect Awomori), Rikutu (Prefect. Iwate), Rikuzen (Prefect. Miyagi), Uzen (Prefect. Akita), Ugo (Prefect. Yamagata), Iwaki & Iwasiro (Prefect. Fukusima), Simotuke (Prefect. Totigi), Etigo (Prefect. Niigota).

(8). Strix uralensis media Momiyama, subsp. nov.

(Japanese name: FUKURO)

Clearly distinguished from S. u. hondoensis by having the feathers of a rich deeper brown or rather blackish brown tinged with ochre. Especially, the head, back, wings and wing-coverts. The white parts of feathers on the upper surface seem to be paler, brownish spots. The face is comparatively dark brown. The under surface and flanks are pale brownish buff mottled with white and blackish brown.

Measurements. Wing, ♂ 306-322 mm., ♀ 325-347 mm., tail ♂ 220-229 mm., ♀ 227.5-242.5 mm.

Type in Athenæi Ornithologici Momiyamici. σ^2 . Kamatari-mura, Kimitu-gun, Prov. Kazusa. January, 1923. Provisional No. x. 40. Sent by Mr. C. Saito.

Material examined. Nine males and eight females.

Distribution.—Middle Hondo and Coast of Japan Sea in western Hondo except westernmost districts; Provs. Musasi (Prefect. Tokyo & Saitama), Sinano (Prefect. Nagano), Ettu (Prefect. Toyama), Sagami (Prefect. Kanagawa), Yamasiro (Prefect. Kyoto), Wakasa (Prefect. Fukui), etc.

The birds of Prefects. Kyoto & Osaka are the intermediate form between S. u. media and S. u. pacifica.

Note.—Dr. Kuroda separates S. u. pacifica from S. u. fuscescens in his paper entitled "On An Apparently New Form of Ural Owl from the Pacific Side of Hondo, Japan," and says as follows. 'A single male (somewhat abraded) from Prov. Suruga has rather paler back than S. u. pacifica, female, but the underparts nearly as buffy as in the type, unlike those of *hondoensis*.'

It is doubtful, from my own observation, that the Suruga form belongs to S. u. pacifica, for it is very different in its colour, being nearest to S. u. media. The form must be intermediate between pacifica and hondoensis, and can be said to belong to media.

(9). Strix uralensis pacifica Kuroda

(Japanese name: IDZU-FUKURO)

Strix uralensis pacifica Kuroda, 'A New Owl from Hondo.' 1924, p. 1: Prov. Idzu, Mid. Hond.

Nearest to S. u. media, but has a remarkable character in its color. Strictly speaking, it seems to be very slightly duller blackish brown with less white, like S. u. fuscescens. The whole feathers are tinged with dark rusty or pale yellowish brown. The facial disk and abdomen are mottled with buff, dark brown and duller yellowish white.

Measurements. Wing 3 301 mm., 9 320 mm., tail 3 223-232 mm. Distribution.—Idzu Peninsula, Western Hondo exclusive of the districts that face the Japan Sea (Prov. Ise, Kii, Yamasiro, Kawati), Awaji, Sikoku Island.

(10). Strix uralensis fuscescens Temminck & Schlegel.

(Japanese name: KIUSIU-FUKURO)

Strix rufescens Temmick & Schlegel, Fauna Japan Aves, p. 30, 1847: Japan. Restricted typical locality Kiusiu (non Strix rufescens Horsfield, Trans. Linn. Soc. London, XIII, p. 140, 1822).

Strix fuscescens Temminck & Schlegel, op. cit., pl. 10, 1847: Japan. Restricted typical locality Kiusiu. Separated from S. u. pacifica by being deeper brown with less buffy parts and least white, rather more like dull sepia. The feathers of the head and wing-coverts are tinged with dark buff. The face and lower parts are darkest brown. The under surface is mottled with darker buff and blackish brown. Wing, σ^{γ} 311 mm., φ 315–330 mm., tail $\sigma^{\gamma} \varphi$ 232 mm.

Distribution .-- Probably confined within northern Kiusiu.

(11). Strix uralensis subsp. nov.

(Japanese name: HATIDIO-FUKURO)

'Fukuro' Namiye, Dobutsu Zasshi, i, 1889, p. 370, Hatidio-sima, Seven Islands.

I have not any specimen, but once observed an Owl in Hatidio-sima. Clearly distinct from S. u. pacifica Kuroda, and resembling S. u. fuscescens or, rather it may be considered to be nearest to S. u. nigra.

Distribution.-Hatidio-sima, Seven Island and thereabout.

(12). Strix uralensis nigra Momiyama

(Japanese name: OHSUMI-FUKURO)

Strix uralensis nigra Momiyama, Bull. B. O. C., xlviii, p. 21, 1927: Prov. Ohsumi, S. Kiusiu.

Peculiarly deeper, darker sepia than S. u. fuscescens of northern Kiusiu. The whiter, paler, sepia of feathers barely indicated. The face, hindneck, head, back and wing-coverts remarkably blackish sepia. Wing, \circ 326 mm., Tail 229 mm.

Distribution .- Southern districts of Kiusiu.

The measurements of all the forms of *Strix uralensis* are shown below for easy comparison:—

	Wing	Tail
	mm.	m m .
S. u. nikolskii.	326-350	
S. u. coreensis	293–218	209 - 250.5
S. u. jingkou	312–322	209 - 235
S. u. morii	326–330	230 - 254
S. u. tatibanai.	316–338	241 - 260
S. u. japonica	259–313	201-235
S. u. hondoensis	302340	223.5 - 244
S. u. media	306–347	220 - 242.5
S. u. pacifica	299–320	207 - 232
S. u. fuscescens	311–330	232
S. u. nigra	325–326	229

Athenæi Ornithologici Momiyamici,

1146 Sasazka, Yoyohata-mati, Suburb Tokyo, Japan. 9th August, 1927.