

The Red-flanked Bluetail, *Tarsiger cyanurus* (Pall.), spreading into Finland.

MATTI SOVINEN

A strange song-bird known to my brother Pekka Sovinen and me for two summers already, was only recently identified as the Siberian *Tarsiger cyanurus*. Our observations, together with the reports of some other persons, make up the following record.

1. In late summer, 1949, our uncle, Toivo Sovinen, M. Sc., told us about a song-bird which he had met on the islands of Saunasaari in the lake Kallavesi, ca. 6 km. north of the town of Kuopio (ca. 62° 55' N, 27° 40' E). He had not been able to identify it with the handbooks available. His description, however, identifies it as *Tarsiger cyanurus*. The bird sang in the spruce forests of the island Tervonsaari during about one week in early July. It was first observed on July 4. The forest was luxuriant spruce mixed with pine and birch with an undergrowth of juniper and tall ferns.

2. On June 15, 1950, Dr. Jukka Koskimies and Mr. Olavi Hildén encountered a strange songster, which was later identified as *Tarsiger cyanurus*, at the base of the Pyhänturi fell in the commune of Pelkosenniemi. The bird sang in a tall spruce forest. Hildén saw it at the same place the following morning also.

3. Mr. Toivo Sovinen again heard *Tarsiger* singing on the island Tomperi of Kuopio commune, on June 18, 1950. This island is characterized by similar spruce forests as Tervonsaari, where the bird was observed the previous summer, and is situated ca. 2 km. north of it.

4. On July 1, 1950, my brother and I met *Tarsiger* in the northern parts of the commune of Nurmes in SE. Finland. The bird sang in a place named Loukkusuo in the Mujejärvi area not far from the hill of Heinävaara, ca. 10 km. east of the Nurmes—Kuhmo road. The place was a forested hill, ca. 5 m. higher than the surrounding open bog strips. The forest was old, untouched, and rather wet. In type it was nearest the *Myrtillus* type: very dense spruce with live and dead pines and a few tall spruces towering above. A small brook runs around the northern end of the hill.

5. Ca. 2 km. west of the above place another singing male was observed on the same day. It sang at Heinävaara, on top of a high spruce-clad hill. Here, too, the forest was old, untouched spruce forest of *Myrtillus* type, becoming less dense toward the ridge of the hill, where there were tall aspens and pines. At the base of the hill there was a small bog pond.

6. In the summer of 1951 the bird had again arrived at the Puijonsarvi area of Kuopio. On June 8, Mr. Toivo Sovinen heard it on the north shore of Puijonsarvi, in a dense spruce forest with northward slope. On the island of Tervonsaari, where it was observed in 1949, the bird had sung for about one week immediately after Midsummer (June 24) according to

Mr. Eemeli Sovinen, an inhabitant of a close-by island. The song period was the warmest during the early part of the summer.

In 1951 we encountered *Tarsiger* on three different occasions:

7. One individual sang on the west slope of the hill of Jauhovaara, Katerma, in Kuhmo commune on June 9, 10 and 11. The forest was much like the habitat recorded at Nurmes: a dense spruce forest of *Myrtillus* type, mixed with a few tall birches, the tops of live and standing dead pines towering above the other trees.

8. Ca. 1 km. southwest of Jauhovaara, at Vålivaara one individual sang on June 11. The place was a pine hill of *Myrtillus*—*Vaccinium* type. The trees were tall, maybe ca. 200 years of age. There were only a few spruces at the place. It was, however, not far from the edge of a dense spruce forest with over-aged live and standing dead pines.

9. On June 14 one individual sang on the southeast slope of the hill of Valtavaara in Kuusamo (ca. 5 km. northeast of the fell Rukatunturi). The place was a gently sloping forest of *Myrtillus* type, old, poorly growing and not very tall owing to the rather high altitude, with fairly thick alders and partly decayed birches here and there. The bird sang not far from the telephone line leading to the top of the hill.

It might be mentioned that Dr. Lauri Siivonen also heard a strange bird song near the road at the base of Rukatunturi (between Rukatunturi and Pyhäntunturi, Kuusamo) on July 10, 1951, but a rain shower interrupted the song almost instantly, and the bird was not observed afterwards.

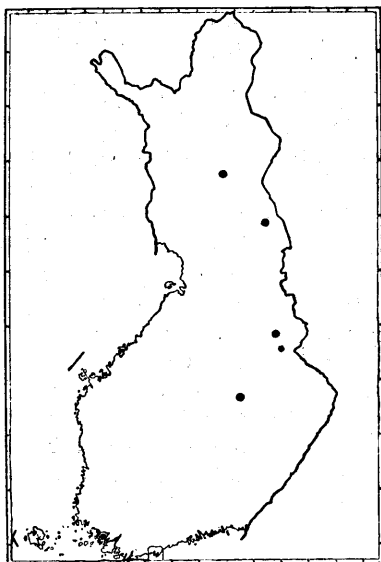
(10. The artist Matti Karppanen has told me that during two nights some time before World War II (regrettably there is no written record) he observed an unidentified bird at Haminalahti, Kuopio. The description seems to fit this bird. One night it had sung in a spruce forest at the outlet of a brook, the other at the top of tall birches in a woodlot. The song was characterized by a clear strophe „*Hiilup-Hiilup*“, audible at a distance of close on a kilometer. Mr. Karppanen had reported his find to the late Prof. Kivirikko. The identification cannot, of course, be confirmed any more).

From these observations it can without doubt be concluded that a sudden expansion of *Tarsiger cyanurus* has taken place. The literature contains one earlier record of *Tarsiger* from the immediate vicinity of Finland. In the collections of the Zoological Museum of the University of Moscow there is one specimen collected from the Kola peninsula (ca. 80 km. from the previous Finnish boundary) in August, 1937 (BUTURLIN & DEMENTJEW 1941). Up to that time, the westernmost known breeding localities of *Tarsiger* were situated ca. 1500 km. east of Finland: in the State of Perm, northern parts of the Urals, and Petshora (STEGMANN 1938). *Tarsiger* is a typical representative of STEGMANN'S Siberian taiga fauna. Its range is fairly wide, comprising almost the entire taiga zone to the Urals in the

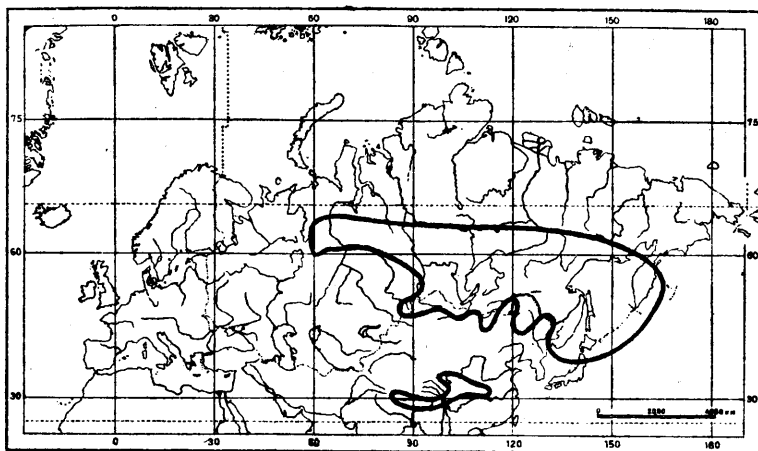
west, and to Jenisei, Udscoi—Ostrog, in the north. In the east the species is known from as far as Kamtshatka, northern Japan and Sahalin. In the south the range of *Tarsiger* extends to the mountain forests of Mongolia (STEGMANN op. c., DRESSER 1902).

There is a recent record of *Tarsiger cyanurus* from Shetland, where one specimen was obtained on October 7, 1947 (BRUCE 1948, with excellent colour photographs). Before that only one specimen was known from western Europe, namely, from Pisa, Italy, in November 1879 (Arrigoni degli Oddi, Ornithologia Italiana, 1929, p. 292; cf. The Scottish Naturalist 60, p. 7).

In the classification of HARTERT (1912—21) *Tarsiger cyanurus* is placed between the robins (*Erithacus*) and hedge sparrows (*Prunella*). The genus has 2 palearctic



Map 1. The finds of *Tarsiger cyanurus* in Finland. From north to south: Pelkosenniemi (Pyhätunturi), Kuusamo, Kuhmo, Nurmes, Kuopio.



Map 2. The breeding range of *Tarsiger cyanurus* according to STEGMANN 1938.

species. The other is *T. rufilata*, a more southern species (DRESSER, op. c.). In the collections of the Zoological Museum of Helsinki University there are ten skins of *T. cyanurus*, which aided in the final identification of the species. From these I have made the following colour descriptions:

In size and shape *Tarsiger* is fairly similar to the common redstart (*Phoenicurus phoenicurus*). The colouration of the adult male is unique: above bluish grey, the colour very dark on the sides of the neck and on the cheeks. Tail, rump and a patch on the shoulders bright cobalt blue. Flight feathers greyish brown, the outer web of a few innermost secondaries blue, edges of the other flight feathers reddish brown. Primary coverts black. A wide stripe on the forehead between eyes and bill white. Underparts creamy white, sides beautiful orange-coloured.

Female: Above greenish brown. Rump and tail blue. Wings as in the male, but duller. Under-parts greyish white, breast greenish grey. Throat creamy white, bordered by a darker streak on both sides. Frontal stripes less pronounced than in the male. Sides equally bright orange.

Young birds are spotted, as in the robin, *Erithacus rubecula*. Even mature males are often coloured like the female (DRESSER 1902). In the collections of the Zoological Museum of Helsinki University there were several specimens somewhat intermediate in colouration between the male and female. Some males, for instance,

had greyish brown spots on the breast and their back was greyish brown.

The flashy red of the sides is an excellent field character for identification. The sharp colour contrast between the cheek and the throat is also well marked. The blue colour has not been observed, and it may be seen in the forest only with difficulty. It is also probable that most of the individuals observed in Finland so far have been

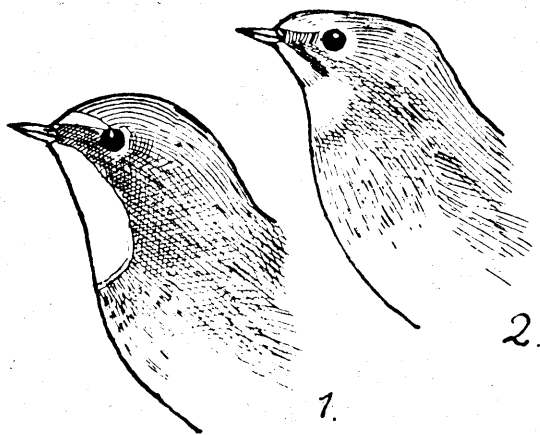


Fig. 1. Young male *Tarsiger*, with greyish brown back (1), and female (2) Collections of the Zoological Museum of the University of Helsinki.

young males, which, as is generally known, are the most likely to occur outside the regular range of a species.

The song is striking and strange. It is unusually loud and can be heard at a distance of several hundred meters. We have recorded it as follows:

„titi TIILTYYL-TIILTYYL tititi“

Hildén interprets the strophe „titi TRILIYY-TILIYY lilli“ and Koskimies „tritri TRYTYYY-TRIITYY tritritri“. The shrill notes in the middle are reminiscent of a thrush, but the tone is peculiar in our fauna. The first sounds can be heard only in the near vicinity, the final ones from a little farther away. At a distance, only the silvery „TIILTYYL-TIILTYYL“ can be heard. The song has a characteristic, slightly melancholic melody:

• • — — — — — • • •

The strophe lasts only ca. 1.5 secs. (Hildén, M. & P. Sovinen). In most intensive song the strophe is repeated at even, short intervals (4—10 secs.).

STEGMANN (1928, according to GROTE 1934) compares the song of *Tarsiger* with that of the common redstart. The call-note is described as „KEKE, KEKE“ (DRESSER 1902) or „TECKTECK, TECKTECK“, with an occasional „ERRR“ (KOLTHOFF 1932, according to GROTE 1934).

Tarsiger is evidently a typical night singer (cf. GROTE 1934) although it seems to sing in the daytime too. On the island of Tervonsaari (Kuopio) the song has been heard only at night in both years, usually between 11 p. m. and 1 a. m. In some cases the song was commenced at as early as 8 p. m. On June 18, 1950, Mr. Toivo Sovinen heard *Tarsiger* singing at 6 p. m. On June 8, 1951, the bird sang at Puijonsarvi at 5—6 p. m. When approached, it always retreated farther.

The individual observed at Pyhätunturi at midday on June 15, 1950, sang intensively in the top of a tall spruce. In the morning of the 16th, at about 3 a. m. the song was first heard from a big pine, then again from the top of a tall spruce. The bird soon came down on to a fallen tree trunk, where it repeatedly flipped with its tail.



Fig. 2. The typical position during singing (Nurmes, Loukkusuo, July 1, 1950). Throat feathers erect.

On July 1, 1950, the bird at Loukkusuo sang very intensively at 9 a. m. in the very top of a standing dead pine. It was very shy and could hardly be approached to a distance of 50 m. The intensive song was discontinued only upon taking wing, and started when the bird had reached the top of another dead pine, often at a distance of even 100 m. When taking off the bird always descended into the forest canopy and rose only near its destination, a habit which caused its sudden disappearance. The bird at Heinävaara sang at 2.30 p. m. in the top of a tall tree. On being approached it flew to a distance, from where its song could hardly be heard.

At Jauhovaara (Kuhmo) the bird observed on June 9, 1951, sang from 11 p. m.—1 a. m. Toward the end of the period the song became less intensive. On June 10, it started at 11.15 p. m. We listened to the song till midnight. We were able to approach the bird to a distance of 50 m. when it sang in the top of a standing dead pine. There it quivered its tail like the common redstart. It

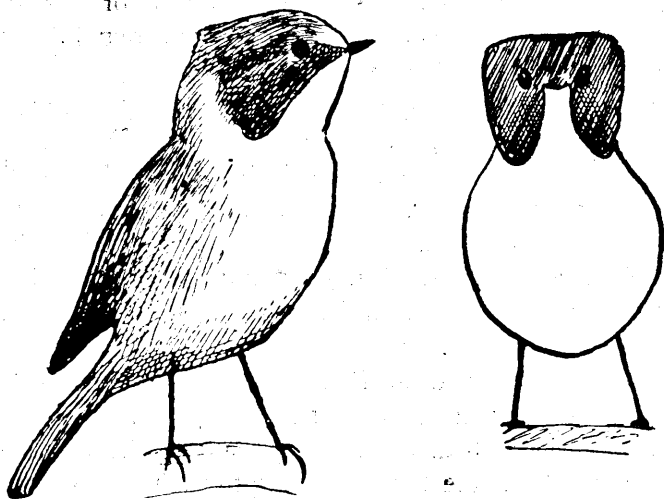


Fig. 3. Male *Tarsiger*, as seen at Jauhovaara (Kuhmo) on the night of June 10, 1951.

flew round a big birch in the fashion of a flycatcher. On June 11, the song began in the same place at 10.50 p. m. On June 11, 1951, the *Tarsiger* at Vällivaara (Kuhmo) sang between 5.45 and 6.00 a. m. and was still singing when we left the place. At this time it sang in the lowermost branches of the top of a pine, also visiting the lower dead branches. During the song it quivered its tail.

On June 14, *Tarsiger* was heard (at Valtavaara, Kuusamo) between 6 and 7 a. m. The song was clearly audible at a distance of at least 300 m. The bird was not seen.

In Finland *Tarsiger* seems to prefer pure or mixed spruce forests of fairly luxuriant nature. Their wilderness character is probably very important. Dense, dark forest with abundant decaying logs is most preferred. The literature does not contain much information regarding the habits of this bird.

According to GROTE (1934) *Tarsiger* is a characteristic bird of dense, tall mountain forests, particularly those dominated by pine and spruce. It is found especially in the „darkest, densest parts of wilderness forests“ (TUGARINOW & BUTURLIN 1911). Its habitat and habits are well described by RESZOW (1904, free translation from GROTE 1934:

„Although the song of the Bluetail can be continually heard in dense pine and spruce forests, the bird itself is almost impossible to find from the forest thickets, where dense brushwood, fallen logs, whole clouds of mosquitoes, etc., often present almost insurmountable obstacles to the observer. It is a lively and extremely shy bird, which mostly keeps to the uppermost branches of tall trees.“

GROTE (1934), on the other hand, states that although the singing male sits as a rule in a treetop, the female usually keeps closer to the ground, where the nest also lies (cf. also DRESSER). The eggs are poorly known. One egg found in 1877 was said to resemble the eggs of a spotted flycatcher, *Muscicapa striata* (SABANEJEW, according to GROTE 1934) while in another case (from 1899) they have been compared with those of the robin, *Erithacus rubecula*, (NEHRKORN, cf. HARTERT, p. 713).

In Udskoi-Ostrog the young are fledged around June 15 (DRESSER). Spring migrants are observed at the Krassnojarski area around May 3. The most intensive autumn migration takes place in early October. In northernmost Siberia *Tarsiger* arrives, of course, much later and departs in the middle of September. It migrates in small

flocks (15—20 individuals), which in their liveliness resemble a flock of titmice (TUGARINOW & BUTURLIN, op. c.). They are said to pass the winter in southern China (DRESSER).

Of the individuals observed in Finland so far, the majority at least have probably been young males. The bird seen at Loukkusuo (Nurmes) was clearly a young individual with greenish grey back, and on its throat we saw spots of a darker shade. In the bird observed at Pyhätunturi the back was brownish grey, the underparts pale and unspotted, the sides markedly red. The individual at Jauhovaara (Kuhmo) was somewhat similar; the distinct dark of the cheeks, however, indicates that it might have been older. My brother observed the singing male at Väливаара (Kuhmo) fairly closely. Its back was greyish brown, the underparts unspotted. In the other cases the shyness of the birds has rendered a closer examination impossible.

It is uncertain whether *Tarsiger* has bred in Finland; however this is quite probable considering, for instance, the regular occurrence of the species in the same locality during even three years in succession. There is every reason to assume that a firm population has settled in easternmost Finland. It is perhaps more abundant than these few observations indicate.

Already BUTURLIN & DEMENTJEW (1941) state that *Tarsiger* belongs to the species of eastern birds continually expanding their range towards the west. They also assume that, in spite of the lack of available information, *Tarsiger* occurs sparsely throughout the northern parts of the taiga zone of the European side of the USSR. It seems, however, that for some reason the expansion has become more intensive during the last few years. For instance we did not observe the species at Jauhovaara (Kuhmo) in 1949—1950, nor in Kuusamo in 1950, although our excursions covered largely the same areas. Records from the most recent years have regrettably not been available to me from the USSR territory.

VALIKANGAS (1951) has recently clearly demonstrated that the latest expansions of the greenish warbler, *Phylloscopus trochiloides viridanus*, coincide with periods of exceptionally warm springs, i. e. the 1930's and the last few years.

The most dispersed finds of *Tarsiger* also coincide remarkably well with the same periods. This gives reason to assume that climatic factors have been a stimulating agent in the expansion of

this bird, too. The habit of migrating in flocks may also have contributed to the sudden spread.

The recent expansion of *Tarsiger* may be explained as a part of the general phenomenon of the postglacial re-establishing of the balance in bird faunas. This, as is known, has been assumed to be the reason for the spread of several other European and eastern species into Finland. If the expansion is a part of this phenomenon there is, of course, every reason to expect other new species from the East, also. Time will show whether in *Tarsiger* we will have a welcome permanent addition to the fauna of our most silent wilderness areas.

Finally, the earlier synonyms of *Tarsiger*, *Janthia cyanura* (Pall.) and *Nemura cyanura* (Pall.) might be mentioned. As the Finnish name, „sinipyrstö“ (bluetail) has been proposed.

Literature cited: BRUCE, S., 1948, The Red-flanked Bluetail in Shetland: the first British record. *Scottish Naturalist* 60: 6—7. — BUTURLIN, S. A. & DEMENTJEW, G. P., 1941, (Vollständiges Bestimmungsbuch der Vögel Russlands). Vol. 5 (Russ.); reviewed by H. Grote: *Beitr. Fortpfl. Biol. Vögel* 18: 148—149. — DRESSER, H. E., 1902, A manual of Palearctic birds, I. — GROTE, H., 1934, Zur Biologie einiger ostpaläarktischer Erdsänger. *Beitr. Fortpfl. Biol. Vögel* 10: 99—105. — HARTERT, E., 1912—21, Die Vögel der paläarktischen Fauna, I. Berlin. — STEGMANN, B., 1938, Grundzüge der ornitho-geographischen Gliederung des paläarktischen Gebietes. *Faune de l'URSS, Oiseaux* 1, N:o 2: 77—157. — TUGARINOW, A. & BUTURLIN, S., 1911, (Materialien über die Vögel des Jenisseischen Gouvernements). *Mitt. Krassnojarsker Abt. Russ. Geogr. Gesellsch., Sekt. Phys. Geogr.* I (Russ.); German translation by H. Grote: *Falco* 1925, Sonderheft. — VALIKANGAS, I., 1951, Die Expansion von *Phylloscopus trochiloides viridanus* Blyth im nordwesteuropäischen Raum, insbesondere nach Finnland, und ihre Ursachen. *Ornis Fenn.* 28: 25—37.
