# Distribution of the Japanese yellow bunting *Emberiza sulphurata* on Shimokita and Tsugaru Peninsulas, Aomori Prefecture

### Yoshio Kaneko\*

#### Abstract

The Japanese yellow bunting *Emberiza sulphurata* breeds only in Japan and is distributed mainly in northern Japan. I made observations on the species on Shimokita and Tsugaru Peninsulas which are the northernmost parts of mainland Honshu. The species was frequently found in both peninsulas and occurred in areas lower than 60 m in altitude. According to the IUCN Redlist, the species breeds from 600 m to 1,500 m. Since it can be found in the areas lower than 600 m on Shimokita, Tsugaru and elsewhere, IUCN's description needs to be rectified. Considering the occurrence in a wide range of altitudes, the population of the Japanese yellow bunting may be larger than once believed.

Key words northern Japan, altitudinal distribution, habitat, IUCN Redlist

#### Introduction

The Japanese yellow bunting *Emberiza* sulphurata is a small passerine bird species belonging to the family Emberizidae (Fig. 1). The species is known to breed only in Japan. It is distributed and breeds mainly in northern Japan. There is no breeding record from Hokkaido. It used to be thought to breed in limited areas such as Mt. Fuji. However, it has recently become known that the species is fairly common in northern Japan, especially in the region facing Sea of Japan. For example, the Check-List of Japanese Birds published in 1974 describes that the species is a locally common breeding summer visitor in the highlands and higher foothills of central Honshu (especially in



Fig. 1. A male Japanese yellow bunting in Tsugaru Peninsula on 31 May 2015.

Mt. Fuji and Japan Alps area), occurring from about 700 to 1,200 m in altitude and breeding status in other parts of Japan is uncertain (The Ornithological Society of Japan, 1974). Later,

<sup>\*</sup> Koshiji Nature Foundation, Asahi 595-5, Nagaoka 949-5494, Japan

the sixth and seventh revised editions of the Check-List of Japanese Birds (The Ornithological Society of Japan, 2000, 2012) made no reference to the altitudinal range.

I conducted bird surveys in Tsugaru Peninsula, Shimokita Peninsula, Kameda Peninsula and Matsumae Peninsula during the breeding season. The former two peninsulas and the latter two are divided by Tsugaru Strait. The objectives of that survey were to compare the avifauna of the four peninsulas and to confirm whether the Japanese yellow bunting occured in these peninsulas. I made no observation from Matsumae Peninsula and Kameda Peninsula. both being parts of Hokkaido. On the other hand, the species was observed frequently in Tsugaru Peninsula and Shimokita Peninsula, which constitute the northernmost peninsulas of mainland Honshu. The present paper aims to show the result of the surveys especially on the distribution of the Japanese yellow bunting on both Tsugaru and Shimokita Peninsulas.

This study was funded by the Basic Research Grant of Iwate Prefectural University.

#### Survey

The avifauna of Matsumae and Kameda Peninsulas were surveyed for five days from 29 May to 2 June 2014 and four days from 28 to 31 May 2016 respectively. The avifauna of Tsugaru and Shimokita Peninsulas were surveyed for four days from 29 May to 1 June 2015 and for eight days from 19 to 20 July 2016, 27 to 29 May 2017 and 11 to 13 June 2017 respectively. I used a vehicle and stopped at selected sites where I recorded species names and their numbers. The latitude and longitude of the selected sites were also recorded using a GPS device. The maximum altitude of the study sites was 400 m for Matsumae Peninsula, 413 m for Kameda Peninsula, 188 m for Tsugaru Peninsula and 474 m for Shimokita Peninsula.

#### Results and discussion

The species was observed at 33 study sites. The details are shown in Table 1. Out of the 33 study sites, 15 sites were in Shimokita Peninsula and 18 sites were in Tsugaru Peninsula (Fig. 2).

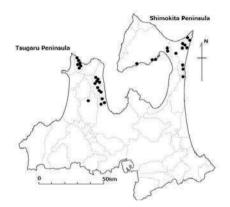


Fig. 2. A map showing the sites where Japanese yellow buntings were observed.

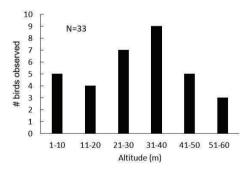


Fig. 3. Altitudinal distribution of the sites where Japanese yellow buntings were observed.

Latitude				Longitude			0.1	City
degree	minute	second	degree	minute	second	Alt. m	City	(old name)
40	54	30.9	140	37	45.2	19	Sotogahama	Minmaya
40	54	31.1	140	37	41.5	20	Yomogita	Yomogita
40	54	56.9	140	30	07.6	39	Yomogita	Yomogita
40	55	43.5	140	37	57.5	13	Yomogita	Yomogita
41	13	31.5	140	23	50.0	25	Sotogahama	Kanita
41	01	09.2	140	34	38.4	50	Sotogahama	Kanita
41	01	12.8	140	35	11.8	45	Sotogahama	Kanita
41	01	14.2	140	35	32.9	39	Sotogahama	Kanita
41	02	48.1	140	34	43.3	9	Sotogahama	Kanita
41	02	40.4	140	34	30.4	10	Sotogahama	Minmaya
41	02	05.1	140	33	42.0	40	Sotogahama	Minmaya
41	02	36.2	140	34	18.7	14	Sotogahama	Minmaya
41	03	53.3	140	32	43.4	24	Sotogahama	Minmaya
41	13	25.1	140	23	53.2	30	Sotogahama	Minmaya
41	12	42.3	140	24	50.1	50	Goshogawara	Kanagi
41	10	49.2	140	26	04.5	22	Aomori	Aomori
41	10	25.4	140	25	34.4	36	Aomori	Aomori
41	03	49.8	140	31	21.6	45	Aomori	Aomori
41	18	11.2	141	14	30.1	26	Mutsu	Mutsu
41	18	14.1	141	14	31.1	26	Mutsu	Mutsu
41	11	21.9	141	22	45.9	40	Higashidori	Higashidori
41	10	08.1	141	22	35.2	30	Higashidori	Higashidori
41	07	03.2	141	23	28.6	57	Rokkasho	Rokkasho
41	10	35.6	140	55	51.0	4	Mutsu	Kawauchi
41	12	09.5	141	04	37.8	3	Mutsu	Kawauchi
41	12	13.2	141	04	44.1	3	Mutsu	Kawauchi
41	15	24.1	141	18	39.4	57	Higashidori	Higashidori
41	24	15.9	141	26	49.7	33	Higashidori	Higashidori
41	23	57.6	141	26	53.9	32	Higashidori	Higashidori
41	18	16.2	141	23	44.4	39	Higashidori	Higashidori
41	18	14.5	141	22	52.5	60	Higashidori	Higashidori
41	18	35.9	141	22	01.5	37	Higashidori	Higashidori
41	18	11.6	141	20	49.8	46	Higashidori	Higashidori

Table 1. Details of the sites where Japanese yellow buntings were observed.

Fig. 3 shows the altitudinal distribution of the sites where the species was observed. The species occurred mostly from 20 m to 50 m in altitude. One of the observed sites was a small wetland with trees immediately adjacent to Mutsu Bay.

According to IUCN Red List published in 2016, the Japanese yellow bunting has been classified as Vulnerable (VU) since 1994 (BirdLife International, 2016). In the Red List, it is mentioned that the species breeds from c.600-1,500 m. This altitudes seem to be based on Brazil (2009) that followed mainly the Check-List of Japanese Birds (The Ornithological Society of Japan, 1974).

The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wildlife (CMS) was held in Manila, the Philippines in October 2017. The Government of the Philippines submitted a proposal to list the Japanese yellow bunting in its Appendix II, which was adopted unanimously (CMS, 2017). According to the text of the Convention, Appendix II shall list migratory species which have an unfavorable conservation status and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement. The Japanese yellow bunting breeds only in Japan and is thought to winter mainly in the Philippines (BirdLife International, 2001). If listed in Appendix II, Parties that are Range States of the species in question are encouraged to co-operate with other Parties, though the Philippines is the only Party from East Asia. However, the Convention does not preclude a possibility of co-operating between Parties and non-Parties.

The information contained in the proposal was almost the same as that of IUCN Redlist (BirdLife International, 2016). Brazil's description is out of date and as such, it needs to be rectified. In Niigata Prefecture where the species occurs with high density (Kaneko, 1979), most of the distribution sites are lower than 600 m in altitude (Kaneko, pers. obs.). Nishi (2013) studied the Japanese yellow bunting on the northern slope of Mt. Fuji and found the species at 10 sites with the altitude varying from 1,090 to 1,470 m. The vegetation of these 10 sites was Japanese larch (*Larix kaempferi*) forests or mixed forests consisting of larch and other tree species.

Based on the information above, the altitudinal distribution of the Japanese yellow

bunting in Japan can be considered at any altitude lower than 1,500 m, ranging from 0 m to 1,500 m. Considering that the species occurs in a wide range of altitudes, the population of the species may be larger than once believed.

In the case of Niigata Prefecture, the main habitat of the species is the forest edge adjacent to paddyfields or reed beds (Kaneko, pers. obs.). Such a habitat can be located in shallow valleys. Paddyfields penetrate shallow valleys along streams. After paddyfields are abandoned, they become reed beds, which also provide the Japanese vellow bunting with favorable habitats. In some areas such as Mt. Fuji (Nishi, 2013) and Mt. Himekami, Iwate Prefecture (Kaneko, pers. obs.), the larch forest is a favorable habitat. Some of the habitats on Tsugaru and Shimokita Peninsulas were similar to those of Niigata Prefecture but the species was found in more xeric areas as well.

#### Literature cited

- BirdLife International (2001) Threatened Birds of Asia: The BirdLife International Red Data Book. Cambridge, UK: BirdLife International.
- BirdLife International (2016) *Emberiza sulphurata*. The IUCN Redlist of Threatened Species 2016: e.T22720996A94694052.
- Brazil, Mark (2009) Birds of East Asia China, Taiwan, Korea, Japan and Russia. Helm Field Guides, A & C Black Publishers Limited, London.
- CMS (2017) Proposal for inclusion of the yellow bunting (*Emberiza sulphurata*) on Appendix II of the Convention. <https://www.cms.int/ en/document/proposal-inclusion-yellowbunting-emberiza-sulphurata-appendix-iiconvention>

- Kaneko, Yoshio (1979) The life history of the Japanese yellow bunting *Emberiza* sulphurata. Bulletin of the Niigata Prefectural Biological Society for Education. Vol. 14: 33-38. (in Japanese).
- Nishi, Norio (2013) The breeding environment of the yellow bunting at northern slope of Mt. Fuji. Mount Fuji Research. Vol. 7: 25-27. (in Japanese).
- The Ornithological Society of Japan (1974) Check-List of Japanese Birds (5th ed.).

Gakken, Tokyo.

- The Ornithological Society of Japan (2000) Check-List of Japanese Birds (6th ed.). The Ornithological Society of Japan.
- The Ornithological Society of Japan (2012) Check-List of Japanese Birds (7th ed.). The Ornithological Society of Japan.

## 青森県下北半島・津軽半島におけるノジコの分布

## 金子 与止男

要旨日本だけで繁殖することが知られているノジコ Emberiza sulphurata は主に北日本に分布している。本州最北端のふたつの半島である下北半島と津軽半島において、本種の分布調査を実施した。両半島とも、標高 60 m 以下の地点でノジコを頻繁に観察することができた。IUCNレッドリストによれば、本種は標高 600m から 1,500mの範囲で繁殖するとされている。下北半島と津軽半島、さらにはその他の地域でも 600m 以下でも生息していることから、IUCNの記述は修正される必要がある。広範囲の標高に生息していることから、ノジコの個体数はこれまで考えられていたより多いかもしれない。

キーワード 北日本、標高分布、生息環境、IUCN レッドリスト