

Threatened Birds of Asia:

The BirdLife International Red Data Book

Editors

N. J. COLLAR (Editor-in-chief),
A. V. ANDREEV, S. CHAN, M. J. CROSBY, S. SUBRAMANYA and J. A. TOBIAS

Maps by

RUDYANTO and M. J. CROSBY

Principal compilers and data contributors

■ **BANGLADESH** P. Thompson ■ **BHUTAN** R. Pradhan; C. Inskipp, T. Inskipp ■ **CAMBODIA** Sun Huan; C. M. Poole ■ **CHINA** ■ **MAINLAND CHINA** Zheng Guangmei; Ding Changqing, Gao Wei, Gao Yuren, Li Fulai, Liu Naifa, Ma Zhijun, the late Tan Yaokuang, Wang Qishan, Xu Weishu, Yang Lan, Yu Zhiwei, Zhang Zhengwang. ■ **HONG KONG** Hong Kong Bird Watching Society (BirdLife Affiliate); H. F. Cheung; F. N. Y. Lock, C. K. W. Ma, Y. T. Yu. ■ **TAIWAN** Wild Bird Federation of Taiwan (BirdLife Partner); L. Liu Severinghaus; Chang Chin-lung, Chiang Ming-liang, Fang Woei-horng, Ho Yi-hsian, Hwang Kwang-yin, Lin Wei-yuan, Lin Wen-horn, Lo Hung-ren, Sha Chian-chung, Yau Cheng-teh. ■ **INDIA** Bombay Natural History Society (BirdLife Partner Designate) and Sálím Ali Centre for Ornithology and Natural History; L. Vijayan and V. S. Vijayan; S. Balachandran, R. Bhargava, P. C. Bhattacharjee, S. Bhupathy, A. Chaudhury, P. Gole, S. A. Hussain, R. Kaul, U. Lachungpa, R. Naroji, S. Pandey, A. Pittie, V. Prakash, A. Rahmani, P. Saikia, R. Sankaran, P. Singh, R. Sugathan, Zafar-ul Islam ■ **INDONESIA** BirdLife International Indonesia Country Programme; Ria Saryanthi; D. Agista, S. van Balen, Y. Cahyadin, R. F. A. Grimmett, F. R. Lambert, M. Poulsen, Rudyanto, I. Setiawan, C. Trainor ■ **JAPAN** Wild Bird Society of Japan (BirdLife Partner); Y. Fujimaki; Y. Kanai, H. Morioka, K. Ono, H. Uchida, M. Ueta, N. Yanagisawa ■ **KOREA** ■ **NORTH KOREA** Pak U-il; Chong Jong-ryol, Rim Chuyon. ■ **SOUTH KOREA** Lee Woo-shin; Han Sang-hoon, Kim Jin-han, Lee Ki-sup, Park Jin-young ■ **LAOS** K. Khounbolin; W. J. Duckworth ■ **MALAYSIA** Malaysian Nature Society (BirdLife Partner); K. Kumar; G. Noramly, M. J. Kohler ■ **MONGOLIA** D. Batdelger; A. Bräunlich, N. Tseveenmyadag ■ **MYANMAR** Khin Ma Ma Thwin ■ **NEPAL** Bird Conservation Nepal (BirdLife Affiliate); H. S. Baral; C. Inskipp, T. P. Inskipp ■ **PAKISTAN** Ornithological Society of Pakistan (BirdLife Affiliate) ■ **PHILIPPINES** Haribon Foundation for Conservation of Natural Resources (BirdLife Partner); N. A. D. Mallari, B. R. Tabaranza, Jr. ■ **RUSSIA** Russian Bird Conservation Union (BirdLife Partner Designate); A. V. Andreev; A. G. Degtyarev, V. G. Degtyarev, V. A. Dugintsov, N. N. Gerasimov, Yu. N. Gerasimov, N. I. Germogenov, O. A. Goroshko, A. V. Kondrat'ev, Yu. V. Labutin, N. M. Litvinenko, Yu. N. Nazarov, V. A. Nechaev, V. I. Perfil'ev, R. V. Ryabtsev, Yu. V. Shibaev, S. G. Surmach, E. E. Tkachenko, O. P. Val'chuk, B. A. Voronov. ■ **SINGAPORE** The Nature Society (Singapore) (BirdLife Partner); Lim Kim Seng ■ **SRI LANKA** Field Ornithology Group of Sri Lanka (BirdLife Affiliate); S. Kotagama; S. Aryaprema, S. Corea, J. P. G. Jones, U. Fernando, R. Perera, M. Siriwardhane, K. Weerakoon ■ **THAILAND** Bird Conservation Society of Thailand (BirdLife Partner); U. Treesucon; R. Jugmongkol, V. Kongthong, P. Poonswad, P. D. Round, S. Supparatvirkorn ■ **VIETNAM** BirdLife International Vietnam Country Programme; Nguyen Cu; J. C. Eames, A. W. Tordoff, Le Trong Trai, Nguyen Duc Tu.

With contributions from: S. H. M. Butchart, D. S. Butler (maps), P. Davidson, J. C. Lowen, G. C. L. Dutson, N. B. Peet, T. Vetta (maps), J. M. Villasper (maps), M. G. Wilson

Recommended citation

BirdLife International (2001) *Threatened birds of Asia: the BirdLife International Red Data Book*. Cambridge, UK: BirdLife International.

© 2001 BirdLife International

Wellbrook Court, Girton Road, Cambridge, CB3 0NA, United Kingdom

Tel: +44 1223 277318 Fax: +44 1223 277200 Email: birdlife@birdlife.org.uk

Internet: www.birdlife.net

BirdLife International is a UK-registered charity

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrical, chemical, mechanical, optical, photocopying, recording or otherwise, without prior permission of the publisher.

ISBN 0 946888 42 6 (Part A)

ISBN 0 946888 43 4 (Part B)

ISBN 0 946888 44 2 (Set)

British Library-in-Publication Data

A catalogue record for this book is available from the British Library

First published 2001 by BirdLife International

Designed and produced by the **Nature**Bureau, 36 Kingfisher Court, Hambridge Road, Newbury, Berkshire RG14 5SJ, United Kingdom

Available from the Natural History Book Service Ltd, 2–3 Wills Road, Totnes, Devon TQ9 5XN, UK. Tel: +44 1803 865913 Fax: +44 1803 865280 Email nhbs@nhbs.co.uk
Internet: www.nhbs.com/services/birdlife.html

The presentation of material in this book and the geographical designations employed do not imply the expression of any opinion whatsoever on the part of BirdLife International concerning the legal status of any country, territory or area, or concerning the delimitation of its frontiers or boundaries.

RUFOUS-BACKED BUNTING

Emberiza jankowskii



Critical —
Endangered —
Vulnerable C1; C2a

This bunting has a small, declining, and severely fragmented population as a result of conversion of grassland to arable cultivation and pasture. It therefore qualifies as Vulnerable.

DISTRIBUTION The Rufous-backed Bunting (see Remarks 1) breeds in north-east China, extreme south-east Russia and northern North Korea, with non-breeding records from elsewhere in eastern China. A report from Mongolia (Piechocki and Bolod 1972) was in error (Mauersberger 1978).

■ **RUSSIA** The species is recorded from the extreme south of the Russian Far East, on the coastal plain between the north coast of Pos'yeta bay and the Tumen river, which forms the Russian border with North Korea and China. Records (by province) are as follows:

■ **Primorye Ussuriisk**, Suptinka (Komarovka) river, one collected, late March 1922 (Vorob'ev 1954, Dement'ev and Gladkov 1951–1954); **Erdmana peninsula** (De Friz peninsula), Amurskiy bay, one, March 1959 (Omel'ko 1963); **Murav'yev-Amurskiy peninsula** (Polustrov Murav'yev-Amurskiy, Poluostrov Murav'eva-Amurskogo), Amurskiy bay, several recorded during a snowstorm, early April 1947 (Vorob'ev 1954, Dement'ev and Gladkov 1951–1954); near **Sedimi** (Sidemi, Bukhta), one collected (the type), March 1886 (Taczanowski 1888, Meise 1934), June 1896 (clutch of two eggs in BMNH); **Kraskino** (Nowokiewsk), Cukanowka ("Jantschiche-Niederung"), collected at Kraskino and on the Manchurian (now Chinese) frontier to the west, 1926 and 1927 (Dement'ev and Gladkov 1951–1954, Shulpin 1928 in Stresemann and Portenko 1981); between **Nagornaya** (Nagoruaga) and Kraskino (Nowokiewsk), Tumen (Tumenula) river, c.50 collected ("chiefly in this region where it breeds very commonly"), spring, summer and autumn 1927 (Yamashina 1957, Dement'ev and Gladkov 1951–1954); **Pos'yeta bay** (Poset bay, Possiet bay, Possieff-Bucht), collected, June 1927 (Shul'pin 1928 in Dement'ev and Gladkov 1951–1954, two males and one female in MCZ and ZMB); **Krabbe peninsula**, six and 19 recorded on two visits, 1966 ("Pugatschuk 1972" in Stresemann and Portenko 1981); **Sakpau lake**, spring 1947 ("Worobjew 1948" and "Litwinenko and Schibajew 1966" in Stresemann and Portenko 1981), 7–8 singing males along a 3 km transect, 1965 (Panov 1973 in Stresemann and Portenko 1981), "common" breeding bird between about 1900 and 1970 (N. M. Litvinenko *in litt.* 1997); **Tal'mi lake** (Taly lake), 1926–1927, 1947, four breeding pairs, 1958, 15 pairs (in an area of 0.8 km²), 1964, collected on the north-west shore of Tal'mi lake, May 1968 (male in NHMW), "common" breeding bird between about 1900 and 1970 (N. M. Litvinenko *in litt.* 1997); lower **Tumen river** (Tumen-Ula, Tumenula, Tumangan), near Lake Chassan, on the North Korean frontier, ten collected, May–June 1913 (Dement'ev and Gladkov 1951–1954, two males in AMNH).

■ **KOREA** ■ **NORTH KOREA** The species is restricted to the extreme north-east, with records (by province) as follows: ■ **North Hamgyong Manpo** (Bampo), six specimens collected, September–October 1929 (Yamashina 1930b, 1957, Austin 1948, Gore and Won 1971, specimens in YIO), nests, undated (Dement'ev and Gladkov 1951–1954); ■ **Ryanggang** near **Samjiyon**, recently (Rim Chu-yon *in litt.* 1997).

■ **CHINA** The species breeds in Heilongjiang and Jilin, and has also been found in Inner Mongolia, Hebei and Beijing, with records (by province) as follows:

■ **Heilongjiang** Zhalong National Nature Reserve, Qiqihar city, listed as a “summer visitor” in a bird list published by the reserve in 1985 (Kennerley 1985); **Duiqingshan** (Dujcynschan station), Zhaodong county, 29 km west of Harbin (Charbin), adult male collected, April 1920, in a sand-steppe area with villages (Musilek 1928); **Acheng county**, at the “Aschiche river”, at the River Sungari, 12.5–15.5 km north-east of Harbin (Charbin), adult male collected, November 1927 (Meise 1934); **Mao’ershan** (Maoerschan), 90 km south-east of Harbin (Charbin), one collected, February in the period 1927–1929 (Meise 1934); **Mudanjiang**, Mudan Jiang (“Mutanszian”) river, collected “near Echo (Ekho station)”, February 1923 (“Loukashkin” in Yamashina 1957, “Lukashkin 1934” in Dement’ev and Gladkov 1951–1954), one collected, April 1924 (Piechocki 1956), one collected, February in the period 1927–1929 (Meise 1934), recorded at “Mutanko”, October 1943 (Fushihara 1947 in Yamashina 1957); near Butsuayakou, **Dongning county** (Tonning, Tungning), six adults, five young and two clutches collected, between May 1939 and September 1941 (but species never found during the winter), nesting in a “single thickly populated breeding colony” in meadowland (Yamashina 1957, Stresemann and Portenko 1981, three males in YIO); **Jingpo Hu** (Chingbohu, Zsinpochu, Kingpaihu), upper Mudan Jiang (“Mutankiang”) river, collected on northern shore, October 1931 (Piechocki 1956, “Lukashkin 1934” in Dement’ev and Gladkov 1951–1954, specimen in USNM), October 1987 (Jensen 1989);



The distribution of Rufous-backed Bunting *Emberiza jankowskii*: (1) Ussuriysk; (2) Erdmana peninsula; (3) Murav’yev-Amurskiy peninsula; (4) Sedimi; (5) Kraskino; (6) Nagornaya; (7) Pos’yeta bay; (8) Krabbe peninsula; (9) Sakpau lake; (10) Tal’mi lake; (11) Tumen river; (12) Manpo; (13) Samjiyon; (14) Duiqingshan; (15) Acheng county; (16) Mao’ershan; (17) Mudanjiang; (18) Dongning county; (19) Jingpo Hu; (20) Yematu; (21) Xianghai National Nature Reserve; (22) Tongyu county; (23) Yaotuo; (24) Yushutai; (25) Hunchun; (26) Baihe; (27) Liaoyang city; (28) Jalaid Qi; (29) Dayingzi; (30) Beidaihe; (31) Summer Palace.

○ Historical (pre-1950) ● Fairly recent (1950–1979) ● Recent (1980–present) □ Undated

- **Jilin** Heidingshan, **Yematu**, where it “winters and also breeds”, undated (Fu Tong-sheng *et al.* 1984); **Xianghai National Nature Reserve**, Tongyu county, June 1985 (specimen in NEFUCN), breeding in the grasslands, c.1988 (Bouffard *et al.* undated), 150–200 pairs estimated, c.1994 (Zhao Zhengjie *et al.* 1994c), several flocks recorded, each about 10–20 birds, undated (Sun Xiangwu and Zhao Jun *in litt.* 1997), small numbers (maximum 15) regularly seen in May–June, 1993–1996 (Regulus Travel 1994, 1995, Earlybird 1995, 1996, Holt 1995, B. Johansson *in litt.* 1999); **Tongyu county**, June 1960 (specimen in ASCN); **Yaotuo** (Yaotuozi), Changchun district, Changling county, 100–150 pairs estimated, c.1994 (Zhao Zhengjie *et al.* 1994c); **Yushutai**, Siping district, Lishu county, c.80 pairs estimated, c.1994 (Zhao Zhengjie *et al.* 1994c); **Hunchun**, undated (Zhao Zhengjie *et al.* 1994c); **Baihe** town, Huichun, Erdao, eastern Changbai mountains, 800 m, summer visitor, nesting from mid-May onwards, April–September c.1980 (Fu Tong-sheng *et al.* 1984);
- **Liaoning Liaoyang city**, November 1956 (two specimens in ASCN);
- **Inner Mongolia Jalaid Qi**, January 1991 (specimen in NEFUCN); **Dayingzi** (Ta ying ze), near Linxi (Linn si hien), one collected, May 1924 (Seys and Licent 1933; see Remarks 2);
- **Hebei Beidaihe**, undated (Cheng Tso-hsin 1987);
- **Beijing** vicinity of the **Summer Palace**, near Beijing, February–March 1941 (Morrison 1948, two males in BMNH).

POPULATION This species appears to be highly localised within its rather small breeding range, and, although it is locally common, it may total only a few thousand individuals. It has clearly declined in numbers in Russia, where it may already be extinct, but population trends are not known for other parts of its range (see below).

Russia Until the early 1970s, Rufous-backed Bunting was a “locally common” breeding bird in the extreme south of the Russian Far East, for example around Tal’mi and Sakpau lakes (Shulpin 1928, Vorob’ev 1954, Litvinenko and Shibaev 1966, Panov 1973). In the mid-1960s, the population in Russia (the “Khasan” population) was estimated at several hundred pairs (Litvinenko and Shibaev 1999b). However, none was recorded breeding there from the early 1970s to 1977 (Litvinenko 1989), and there have now been no records of this species in this region for more than 20 years (Litvinenko and Shibaev 1999b).

North Korea In the past, it was reported to be “not uncommon” within its small range in North Korea (Yamashina 1939 in Austin 1948).

China The known breeding population in Jilin province was estimated in 1994 at 330–430 pairs at three sites (Zhao Zhengjie *et al.* 1994c). Yamashina (1957) described it as “locally common” in Heilongjiang province.

ECOLOGY Habitat The Rufous-backed Bunting breeds on low hills or in valleys with sparse vegetation (Cheng Tso-hsin 1987), its habitat being generalised as “dry overgrown sand-dunes with relatively scant ground cover and low bushes, particularly stunted dune elm *Ulmus* and *Prunus sibirica*” (Byers *et al.* 1995). In Jilin, it is restricted to sandy habitats within small, narrow, semi-humid transitional areas between Manchurian deciduous forest and Mongolian steppes; all three known sites in this province are in hilly dune areas with scattered bushes and trees, and valleys and lakes at altitudes from 130 to 250 m (Zhao Zhengjie *et al.* 1994c). Xianghai is savanna-like with *Ulmus macrocarpa* and *U. pumila*, and Yaotuo was afforested in the 1950s with *Pinus sylvestris mongolica* and *Populus*, before being converted to pasture and agricultural land (Zhao Zhengjie *et al.* 1994c). This bunting prefers 40% vegetation cover with *Allium bidentatum*, *A. odorum*, *Ampelopsis japonica*, *Atraphaxis manshurica*, *Carlesia sinensis*, *Cirsium maacki*, *Clematis*, *Cymbaria daurica*, *Gallium spurium*, *Lespedeza hedysaroides* and *Thalictrum petaloideum*, and it breeds in scattered colonies in sparsely forested areas with *Pinus sylvestris* and *Ulmus pumila*, and only where the trees are young, not higher than 2–3 m (Zhao Zhengjie *et al.* 1994c).

In the Dongning (Tonning) district of Heilongjiang, its nests were found in upland meadowland covered with low trees at c.300 m, where this species and Meadow Bunting *Emberiza cioides* were breeding side by side, together with a few Black-faced Buntings *E. spodocephala* and Yellow-breasted Buntings *E. aureola* (Yamashina 1957). Its general habits were very similar to those of *E. cioides*, but it was easily distinguished by its clearly different plumages and songs; the males sometimes sang when perched on low trees, but they seemed to spend more time on the ground than *E. cioides*, and both sexes (especially the females) were fairly tame, the females often being watched on the nest from a distance of c.1 m (Yamashina 1957).

The main breeding area of this species in Russia was the coastal plain between the lower Tumen river and Cape Gramov (an area of c.880 km²), much of which is occupied by meadows, which are very boggy in places, scattered relict round-topped hills covered in secondary oak forest, and low sandy hills with xerophilous grass species (N. M. Litvinenko *in litt.* 1997). In this area it preferred open habitats, usually dry, low hills and valleys with scattered low bushes, especially scrub with young oak trees; it was often found on the lower slopes of the hills, where there was dense, knee-high grass (10–40 cm tall) and shrubs less than or equal to 40 cm in height; at Talmi lake it was found in dry, flat, sandy sites on the east shore, which were very distinct from the surrounding habitats, being sparsely vegetated with mainly xerophilous species and scattered bushes (Stresemann and Portenko 1981).

Food At Xianghai it feeds on seeds, grasshoppers and cicada larvae, and has been seen foraging on harvested farmland (Sun Xiangwu *in litt.* 1997). Young have been observed being brought grasshoppers, caterpillars, and spiders and their cocoons (Byers *et al.* 1995).

Breeding Pairing starts from early May, and eggs are laid in the second half of May, but some have been found breeding much later, suggesting that it may sometimes have two clutches (Stresemann and Portenko 1981). The nest is placed amongst sparse grass on the ground, sometimes at the base of a small tree, lined with grass and sometimes horse hair, and the clutch-size is 4–5 eggs (Yamashina 1957, Stresemann and Portenko 1981, Byers *et al.* 1995, Sun Xiangwu *in litt.* 1997).

Migration This species makes some migratory movements, but their precise pattern is unclear. At several breeding sites it has been reported as a summer visitor, for example in the Dongning (Tonning) district of Heilongjiang (Yamashina 1957) and in most of its Russian range (Stresemann and Portenko 1981). Records at all other sites in Heilongjiang have been in the non-breeding season (Yamashina 1957), and it has been suggested that the northernmost breeding populations in Russian leave the area to winter along the Tumen river, and in North Korea and north-east China (Stresemann and Portenko 1981). Birds winter both within the Chinese breeding range in Heilongjiang and Jilin, and to the south and west in eastern Inner Mongolia, Liaoning and Hebei (Cheng Tso-hsin 1987).

THREATS **Habitat loss** The main threat to this species appears to be the conversion of its habitats for agricultural land and possibly also forestry. *Russia* In its small range in Russia, Rufous-backed Bunting has declined from a locally common breeding bird in the mid-1960s to apparent extinction (Litvinenko 1989). Shulin (1928 in Stresemann and Portenko 1981) reported that fires started for agricultural purposes affected its habitat negatively and thus preventing breeding. Potentially suitable habitats for Rufous-backed Bunting are now in danger in Russia (and presumably also in China and North Korea) through the implementation of the large-scale “Tumangan” Project (within the framework of a UN Development Programme), which has now begun (N. M. Litvinenko *in litt.* 1997). *North Korea* Habitat loss is a threat to this species in North Korea (Rim Chu Yon *in litt.* 1997). *China* In China, its habitat is increasingly used for pasture and crops and so its population is likely to decrease further, but forestry activities can produce areas with young trees which are suitable, although not when these develop into dense forest (Zhao Zhengjie *et al.* 1994c).

In Xianghai National Nature Reserve in Jilin, “Mongolian oak”, the species’s favoured songpost tree, is being cut (Sun Xiangwu *in litt.* 1997).

MEASURES TAKEN *Legislation* This species is included in the Russian Red Data Book (N. M. Litvinenko *in litt.* 1997) and is a protected species (category two) in North Korea (Rim Chu Yon *in litt.* 1997).

Protected areas *Russia* Part of the former breeding range in Russia is now protected within the “Khasanskiy” Nature Park, which was established in 1997 (N. M. Litvinenko *in litt.* 1997). *China* An important population is also protected in Xianghai National Nature Reserve (1,055 km²) in Jilin, where the mixture of swamps, lakes, meadows, dunes and scrubland is as yet very little affected by development (MacKinnon *et al.* 1996; also Zhao Zhengjie *et al.* 1994c). A management plan for this nature reserve includes measures designed to maintain the present numbers of Rufous-backed Buntings, and plans for studies to learn more about its breeding habitat requirements (Bouffard *et al.* undated). There is also an unconfirmed report of this species from Zhalong Nature Reserve in Heilongjiang (see Distribution).

MEASURES PROPOSED *Legislation* Rufous-backed Bunting should be listed as a nationally protected species in China (Zheng Guangmei and Wang Qishan 1998).

Protected areas *Russia* Better habitat conservation is required in the Russian part of its range (N. M. Litvinenko *in litt.* 1997), and there may now be some potential for habitat restoration within the recently established “Khasanskiy” Nature Park. *China* The Xianghai National Nature Reserve should be jointly managed with the adjoining Horqin (Keerqin) Nature Reserve in Inner Mongolia, with controls on fishing, grazing and agricultural activities, and limits on tourism (MacKinnon *et al.* 1996). The management plan for this reserve described by Bouffard *et al.* (undated) needs to be implemented, and the designation of new nature reserves should be considered to protect the other two known breeding populations in Jilin.

Habitat management Given that this species has been found nesting in young plantations, there may be potential to influence forestry practices for its benefit, perhaps by introducing a rotational system of planting which always provides areas of young plantations suitable for nesting.

Research *Russia* In Russia, surveys are needed in its former range to locate any surviving breeding populations, which should then be monitored and managed (N. M. Litvinenko *in litt.* 1997). It is important to establish how changes to the habitats in its former breeding range caused it to decline so rapidly. *North Korea* Surveys in the areas where it was known to have bred in the past in North Korea should focus on locating suitable habitat and breeding populations (Rim Chu Yon *in litt.* 1997), with the aim of establishing new protected areas and/or suitable habitat management regimes for this species. *China* Ecological studies should be conducted at the breeding localities in Jilin to clarify its habitat requirements during the breeding season, and hence help to determine the most appropriate ways to manage habitats for its conservation. Surveys targeted at selected historical localities in China would help to determine its current distribution and habitat requirements outside the breeding season, also with the aims of establishing new protected areas and/or suitable habitat management regimes.

REMARKS (1) Yamashina (1957) discussed the possible origin of this species. (2) The statement by Dement’ev and Gladkov (1951–1954) that this species was “evidently obtained east of Lake Dalai-Nor in eastern Mongolia (Lisan 1933)” is presumably based on the record of Seys and Licent (1933) from in Inner Mongolia (see Distribution).