

# Threatened Birds of Asia:

## The BirdLife International Red Data Book

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## MARSH GRASSBIRD

### *Megalurus pryeri*

Critical  —  
Endangered  —  
Vulnerable  C1



*This grassbird has a small population, which is inferred to be declining as a result of wetland destruction in its breeding and wintering grounds. It therefore qualifies as Vulnerable.*

**DISTRIBUTION** The Marsh Grassbird breeds on the island of Honshu in Japan (n nominate *pryeri*) and in north-east China (race *sinensis*; see Remarks 1), and possibly also in neighbouring parts of Russia and Mongolia. The two races winter respectively in Japan and in the Yangtze River basin in south-east China, with records on passage from the east coast of China and South Korea.

■ **RUSSIA** The species is recorded from one locality in the Russian Far East, where it possibly breeds:

■ **Primorye Khanka lake**, recorded several times during the breeding season, included singing males, undated (Knyustautas 1993).

■ **MONGOLIA** It has only been recorded in eastern Mongolia as a very rare summer visitor, with records (by province) as follows: ■ **Dornod Mongol Daguur Strictly Protected Area**, summer visitor (Tsevenmyadag 1998), this locality probably being the same as “Rivers Ulz and Chalchyn-gol”, where the species has been recorded as a vagrant (Dawaa *et al.* 1994); ■ **Numrug Strictly Protected Area**, summer visitor, breeding not confirmed (Tsevenmyadag 1998).

■ **JAPAN** The Marsh Grassbird is known to breed at six localities in northern and eastern Honshu, three in Aomori prefecture, one in Akita prefecture, one in Ibaraki prefecture and one on the border of Ibaraki and Chiba prefectures. It winters along the Pacific side of central Japan from Ibaraki in central Honshu to Kagawa on Shikoku, and has occurred on passage in several other prefectures (Nagata and Yoshida 1997), with records (by island and prefecture) as follows (see maps in Nagata 1997):

**Honshu** ■ **Aomori Iwaki-gawa river delta**, Shariki-mura, Nishitsugarugun and Nakasato-machi, Kitatsugaru-gun, c.95 birds, undated (Murata 1993 in Fujita and Nagata 1997), breeding around the delta where the Iwaki-gawa river meets Jusan-ko lake, mostly in *Phragmites australis* reedbeds with some willow trees *Salix*, the most northerly breeding site known in Japan (Kanai and Ueta 1994); ■ **Takase-gawa river mouth**, three birds along a 0.5 km transect, 1975, mostly in *Phragmites australis* reedbeds, and probably still breeding in this area but no recent information (Kanai and Ueta 1994), 35 birds, undated (Nagata 1997); ■ **Hotoke-numa wetland**, south of Rokkasho, Misawa-shi, first recorded in 1980, 172 birds counted in 1992 and 214 males in 1993, mostly in reeds in the northern part of the site, which was formed in the early 1970s by a reclamation project (Fujita *et al.* 1994, Kanai and Ueta 1994, Fujita and Nagata 1997), also occurring to the north between Ichiyana-gi-numa and the coast, undated (Brazil 1991); ■ **Miyagi Wakayanagi-cho**, Kurihara-gun, male collected, from 3–4 birds seen, June 1923 (Momiya-ma 1949); ■ **Kabukuri-numa**, several caught and banded, November and December (unspecified years) (Kanai and Ueta 1994); ■ **Ishinomaki-shi**, one male and two “unfinished” nests, June 1943 (Kiyosu 1965); ■ **Gamo** (Gamou), just north of Sendai, nest and eggs found in marshes near a river mouth, August 1936, nesting, May 1937 (Austin and Kuroda 1953, OSJ 1958), but no subsequent reports and unlikely to be a breeding site (Kanai and Ueta 1994); ■ **Akita Hachiro-gata** reclamation, 28 singing males counted in 1973, increasing to 122 in 1977, but declining in

1980 as the area gradually dried up and only 80 counted in 1982, the highest densities of this species in the 1970s and 1980s being in a 0.8 km<sup>2</sup> area of uncultivated land on the western edge of the reclaimed land coded "A40" (Nishide 1982), with only five birds in "A40", 1992 (Nishide 1993), six, 1992 (Kanai and Ueta 1994), 2–3 singing males, 1998 (Y. Kanai verbally 2000); ■ **Yamagata** unspecified locality, autumn/winter (unspecified years) (Brazil 1991; also OSJ 2000); ■ **Ibaraki Tamatsukuri**, north-east shore of Kasumigaura lake, several seen and 1–2 collected, 1952 (Momiyama 1953), February 1952 (female in USNM), February 1953 (specimen in FMNH); near Seimei river mouth, **Kasumiga-ura** lake, nine caught and banded between November 1995 and February 1996 (Nagata and Yoshida 1997); **Sugao-numa**, several caught and banded, November and December (unspecified years) (Kanai and Ueta 1994); **Ukishima wetland**, Kasumigaura lake, breeding confirmed, 1992, 4–5 seen, July 1993 (Kanai and Ueta 1994), April and December 1993 (two males in YIO), one, April 1995 (*Birder* 95/6), 25 caught and banded between November 1995 and February 1996 (Nagata and Yoshida 1997), at least five, July 1998 (*Birder* 98/9); lower Tone-gawa river, **Kamisu-machi**, Kashima-gun, first discovered at this site in 1984, with at least 111 birds in July 1993, most breeding on the northern bank of the river (Kanai *et al.* 1994; also Brazil 1987), and at least 20 seen at Takahama, Kamisu-machi, Kashima-gun, July 1998 (*Birder* 98/9), specimen evidence (nine in YIO) indicating year-round presence; ■ **Tochigi** Watarase reservoir, **Shimotsuga-gun**, up to two, November–December 1998 (*Birder* 99/1, 99/3); ■ **Saitama** unspecified localities, one collected, 1953 (OSJ 1958), winter 1986 (Kanai and Ueta 1994); ■ **Chiba Omigawa-machi**, Katori-gun, at least five at Omigawa bridge on the lower Tone-gawa river, on the border with Ibaraki prefecture (see that prefecture for details of records), July 1998 (*Birder* 98/9), two at Tondashinden, April 1998 (*Birder* 98/7); Hokubu Chosei-chi, **Inba-numa**, male, April 1996 (*Birder* 96/6), up to three, April 1996 (*Birder* 96/7); Maruhama, **Gyotoku-cho**, Ichigawa-shi, one seen, October 1948 (Kiyosu 1965); **Tsudanuma** lake, Narashino-shi, March 1947 (Momiyama 1947, Austin and Kuroda 1953, female in YIO); **Shinham**, seen in 1948 (OSJ 1958); **Obitsu-gawa river mouth**, four banded (including one which had been banded at Omigawamachi, Chiba prefecture, in August 1991), December 1991 (YIO database); ■ **Tokyo Adachi-ku**, one collected at Senju, December 1895 (Kuroda 1934a, Momiyama 1949), female collected at Makinoya, Senju, February 1911 (Kuroda 1934a), two males and a female collected, January 1937 (WBSJ 1975; also Momiyama 1949); **Oji-ku**, Kita-ku, male collected, 1896, female collected at Toyoshimacho, February 1935 (two specimens in YIO); **Shimura**, Itabashi-ku, December 1933 and March 1934 (four specimens in YIO); Tokyo Port Bird Park (Oi Yacho Koen and Shioiri-no-ike), **Tokyo**, "a rarity", undated (Brazil 1987); **Arakawa** river drainage, Arakawa-ku, just north of Tokyo, more than 30 collected, December 1931, February and November 1932, February 1934, March 1935, April 1936, January, May and October 1937, February 1940 (Momiyama 1949, Austin and Kuroda 1953, WBSJ 1975, nine specimens in YIO), October–November 1990 (two specimens in YIO); **Haneda**, Ota-ku, type specimen collected, 1884 (Momiyama 1949), one, February 1951 (WBSJ 1975), one collected, January or early February 1952, at the airfield in Haneda (not in a wetland) (Momiyama 1953); Toshima-ku (untraced), February 1935 (female in YIO); ■ **Kanagawa Yokohama**, February 1885 (Kuroda 1934a, Momiyama 1949, two males in BMNH); unspecified locality, winter 1986 (Kanai and Ueta 1994); ■ **Niigata Joetsu-shi** area, rare passage migrant (unspecified years), one banded bird found at Kashiwazaki-shi, undated (Nakamura 1994); unspecified locality, autumn/winter (unspecified years) (Brazil 1991); ■ **Shizuoka** Shimoukishimaura, **Sunto-gun**, one collected and two others seen, April 1937 (Momiyama 1949); **Fuji-gawa river mouth**, April 1996 (WBSJ Minamifuji Chapter database); **Shizuoka-shi**, April 1888 (male in YIO); unspecified locality, Shizuoka ("Suruga-koku"), female collected, December 1887 (Momiyama 1949); ■ **Aichi Yatomi-cho**, Ama-gun, two at Nabeda reclamation, April 1963 (Kiyosu 1965), male banded at Yatomi-cho, November 1989 (recovered at Kamisu-machi, Ibaraki prefecture, in June 1990) (data from YIO); **Tahara-cho** (Taharamachi), one male, December 1990, banded at Kamisu-machi,

Ibaraki prefecture, in June 1990 (data from YIO); unspecified locality, Aichi (“Owari”), probably near Nagoya, two collected, October 1905 (Kuroda 1934a, Momiyama 1949, Austin and Kuroda 1953); ■ **Hyogo Mega**, Himeji-shi, one seen in paddyfields near the coast, May 1954 (Kiyosu 1965); unspecified locality, winter 1986 (Kanai and Ueta 1994); ■ **Wakayama Kino-kawa** (Kino-gawa) river, under Ryumon bridge, one, December 1986 (WBSJ 1987); **Hidaka-cho**, Hidaka-gun, November 1991 (WBSJ Wakayama Chapter 1995); ■ **Okayama** unspecified localities, irregular visitor (OSJ 2000);

*Shikoku* ■ **Tokushima Takabo**, Kitajima-cho, Itano-gun, April 1995 (WBSJ Tokushima Chapter database); ■ **Kagawa** unspecified locality, January 1986 (Brazil 1991, Kanai and Ueta 1994).

■ **KOREA** ■ **SOUTH KOREA** This species is a rare visitor to South Korea but, given that it has been recorded at the Yalu estuary in China and Lake Khanka in Russia it is likely that it occurs in North Korea near to its borders with China and Russia. Records are as follows: ■ **Kyonggi and Seoul** three miles south of **Seoul**, female collected, November 1962, among reeds in a marsh (Fennell and King 1964); ■ **Cheju Cheju island**, seen, May 1991, “a rare summer visitor” (Park Jin-young *in litt.* 1998).

■ **CHINA** This species breeds in Heilongjiang and Liaoning in north-east China, and possibly also on the coast near Shanghai, occurring in Hebei on migration, and wintering in wetlands in the lower Yangtze River basin. Records (by province) are as follows:

■ **Heilongjiang Zhalong National Nature Reserve**, Qiqihar city, 20–25 displaying males, June 1983 (R. Koepfel *in litt.* 1999), four males banded, June 1987 (Shigeta 1991, Y. Shigeta *in litt.* 1999), June 1987 and June 1988 (Goodwin 1987, P. Alström, U. Olsson and D. Zetterström *in litt.* 2000), one collected, 8–10 birds findable in one hour at the site, May 1996 (Lu Changhu and Li Feng 1997), collected in or near this reserve in Lindian county, June 1996 and June 1997 (Chang Jiachuan *in litt.* 1998, two specimens in NEFUCN);

■ **Liaoning Chaoyang county**, four, June 1926 (P. G. Seys in Huang Mupeng *et al.* 1989; also Zhao Zhengjie 1988); **Shuangtai Hekou National Nature Reserve**, Dawa and Panshan counties, one singing, May 1988 and May 1991, with 15 singing at four other sites (all west of the Shuangtai He river), June 1993, the vegetation in them being similar to breeding sites in Japan and a maximum of 60 probably breeding birds estimated for the reserve (Kanai *et al.* 1993); **Yalu Jiang estuary**, April 1989 (Xu Chuanzhen *in litt.* 2000);

■ **Hebei Qinhuangdao** (Chinwangtao), collected at the port and in nearby marshes, April and October 1911, April 1913, several collected when it was “swarming on the grassy banks and among sedgy grass”, October 1914 (La Touche 1920–1921, 1925–1934, 12 specimens in AMNH, BMNH and MCZ); **Beidaihe**, four seen at “Lighthouse Point” and Heng Ho reservoir, October 1989, one seen at “Fishhook Point”, October 1990 (Williams *et al.* 1992), one, May 1993, two, May 1994 (P. Alström, U. Olsson and D. Zetterström *in litt.* 2000), singles seen at “Eagle Rock Gully”, “Radar Station Marsh” and “Wet Boot Marsh”, May 1994 (J. Thalund *in litt.* 1999), up to two seen, May 1995 (P. van der Wielen *in litt.* 1999), occasionally seen in May, but no more than 1–2 in a season, early 1990s (M. Williams *in litt.* 2000);

■ **Hubei Hankou** (Hankow), part of Wuhan city, six collected (including the type of the subspecies *sinensis*), March 1912, believed to winter in the swamps near the town in areas thickly overgrown with reeds, leaving in late March or early April (Witherby *et al.* 1912, La Touche 1920–1921, 1925–1934, five specimens in AMNH and BMNH);

■ **Shanghai Wusi** coast, northern shore of Hangzhou bay, at least seven, including several birds in full song, April 1988 (P. Kennerley in Scott 1989);

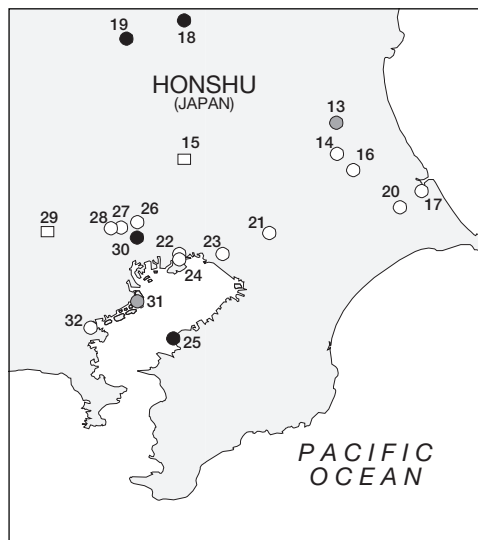
■ **Jiangxi Poyang Hu Nature Reserve**, Yongxiu county, one on Linggong Zhou, December 1985, minimum of seven in the same area, January 1986 (Kennerley 1987), seven seen, January 1987, in moderately long grass (M. Williams *in litt.* 2000), three seen in grassland at the south end of Bang Hu, December 1988 (Birdquest 1989), up to seven, winter 1986–1991

(Lewthwaite 1992), seven seen, November 1993 (I. Lewis *in litt.* 1999), maximum of seven seen, December 1997 (Yu Yat-tung *in litt.* 1998);

■ **Hunan Yueyang city**, southern bank of Yangtze River, east of Dongting lake (probably inside Dong Dongting Hu Nature Reserve), up to five seen, February–March 1987 (Jirle and Kjellen 1987).



**The distribution of Marsh Grassbird *Megalurus pryeri*:** (1) Khanka lake; (2) Mongol Daguur Strictly Protected Area; (3) Numrug Strictly Protected Area; (4) Iwaki-gawa river delta; (5) Takase-gawa river mouth; (6) Hotoke-numa; (7) Wakayanagi-cho; (8) Kabukuri-numa; (9) Ishinomaki-shi; (10) Gamo; (11) Hachiro-gata; (12) Yamagata; (13) Tamatsukuri; (14) Kasumiga-ura; (15) Sugao-numa; (16) Ukishima wetland; (17) Kamisu-machi; (18) Shimotsuga-gun; (19) Saitama; (20) Omigawa-machi; (21) Inba-numa; (22) Gyotoku-cho; (23) Tsudanuma; (24) Shinhama; (25) Obitsu-gawa river mouth; (26) Adachi-ku; (27) Oji-ku; (28) Shimura; (29) Tokyo; (30) Arakawa; (31) Haneda; (32) Yokohama; (33) Joetsu-shi; (34) Sunto-gun; (35) Fuji-gawa river mouth; (36) Shizuoka-shi; (37) Yatomi-cho; (38) Tahara-cho; (39) Mega; (40) Kino-kawa; (41) Hidaka-cho; (42) Okayama; (43) Takabo; (44) Kagawa; (45) Seoul; (46) Cheju island; (47) Zhalong National Nature Reserve; (48) Chaoyang county; (49) Shuangtai Hekou National Nature Reserve; (50) Yalu Jiang estuary; (51) Qinhuangdao; (52) Beidaihe; (53) Hankou; (54) Wusi; (55) Poyang Hu Nature Reserve; (56) Yueyang city.



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

**POPULATION** The Marsh Grassbird is highly localised in distribution because of its specialised habitat requirements, but it is often quite numerous in suitable areas (see Distribution). It has been intensively studied in Japan, where Kanai and Ueta (1994) recently estimated its population at c.1,000 individuals, on the basis that there were c.200 males at Hotake-numa, c.100 males at both Iwaki-gawa and Tone-gawa, and c.100 males at the remaining smaller sites, making c.500 males in total, and with the assumption that there is a 1:1 ratio of male and female birds. Nagata (1997) also estimated its Japanese population to be c.1,000 birds. However, this figure may be a little low, as Kiyosu (1965) suggested that (a) the sex ratio may not be equal in this species, (b) there may be some undiscovered breeding grounds in the wetlands of northern Japan (Kanai and Ueta 1994), and (c) there are likely to be some non-breeding birds in the population.

It is not possible to make a realistic estimate of its numbers in continental Asia, given the relatively low level of observer coverage there. It has only been found at a handful of sites in Russia and Mongolia (where it appears to be rare) and in north-east China (see Distribution), but it is presumably greatly under-recorded in these countries. At Shuangtai Hekou in Liaoning province its population was estimated at not more than 60 birds in 1993 (Kanai *et al.* 1993) but it appears to be locally common at Zhalong in Heilongjiang province, as R. Koepfel (*in litt.* 1999) found 20–25 displaying males in 1983 and Lu Changhu and Li Feng (1997) reported that 8–10 birds could be found in an hour at one site. In winter, it has been found to be not uncommon at three localities in the lower Yangtze River basin (see Distribution), and undiscovered populations presumably occur at other sites in that region.

In Japan, this species has been regarded as rare since its discovery in the late nineteenth century (e.g. by Yamashina 1941), and there is no evidence for a substantial change in its numbers. In continental Asia, it is likely that a decline has taken place this century because of an overall decline in the area and quality of wetland habitats (see, e.g., Scott 1989, MacKinnon *et al.* 1996). On migration in Hebei province in China, La Touche (1920–1921) once found this species “swarming on the grassy banks and among sedgy grass”, but it has never been found in comparable numbers by the many birdwatchers that have visited the Beidaihe area during the migration periods in the 1980s and 1990s (see Distribution), indicating that a real decline has probably taken place.

**ECOLOGY Habitat** The Marsh Grassbird is a skulking wetland bird which “seems weak-winged” and when flushed it only flies a short distance before dropping into cover (Uchida 1949, Austin and Kuroda 1953). At the Japanese breeding localities it is found in successional marshes, and only occurs where the reeds and sedges have reached a certain height; it does not tolerate vegetation which is too short or too tall (Kanai and Ueta 1994, Nishide 1994). The highest nesting densities at Tone-gawa were found in locations with a high density of sedges (Kanai *et al.* 1994, Nagata and Kanai 1994) and they were also found to prefer sedges at Hotoke-numa (Fujita *et al.* 1994). This preference for sedges is because they need dense, medium-height monocotyledonous plants for nesting, mixed with some taller grasses such as reeds which they use as songposts or perches; this combination of dense medium-height grasses and sparse taller grasses is essential for their breeding, and is always found in shallow water (Y. Kanai verbally 2000). Three out of the six known breeding sites in Japan are on reclaimed land or paddies, where areas of reeds and sedges had developed, but further succession at Hachiro-gata resulted in a decline in the area of suitable breeding habitat (Kanai and Ueta 1994, Nishide 1994). In China, the singing males at Shuangtai Hekou in Liaoning were all found in a dense grassland of c.1 m tall *Bolboschoenus maritimus* or *B. fluviatilis* and/or *Typha orientalis*, mixed with some sparse c.1.5 m tall *Phragmites australis* or *Typha latifolia* grasses (Kanai *et al.* 1993). In winter, it favours reedbeds in Japan and is difficult to locate and survey (Kanai and Ueta 1994). In China, specimens were collected near Wuhan in March in “dry sedge grass of [a] duck swamp” (BMNH label data). At Poyang lake, they were

found in an extensive area of grass averaging between 30 and 90 cm tall, and were very reluctant to fly, behaving in a manner typical of a *Locustella* warbler (Kennerley 1987). The bird collected by Fennell and King (1964) in South Korea was in reeds in a marsh, and “appeared barely able to fly”.

**Food** In Japan it is reported to feed mainly on insect (especially lepidoptera and diptera) larvae (Kiyosu 1965), which are also one of the most important foods of nestlings (Fujita and Nagata 1997). The stomachs of specimens collected in March in China contained “small insects, bugs, beetles, soft insects, grubs and capsular larvae from reed sheaths” (BMNH label data).

**Breeding** At Hachiro-gata in Japan, nesting was found to start from 20 June and the chicks fledged from mid-July to mid-August (Nishide 1975). During the breeding season, the males sing and perform display-flights in evident territorial or self-advertising behaviour (Austin and Kuroda 1953), but territory sizes and nesting densities appear not to have been measured or estimated. Nests are built on or up to 35 cm above the ground (Austin and Kuroda 1953, Nishide 1994), in sedges or Japanese pampas grasses *Miscanthus sinensis* (Nishide 1993, Kanai and Ueta 1994). The clutch-size is 5–6 (Uchida 1949). Incubation takes an average of 11.3 days and fledging a further 13–14 days (Brazil 1991). Austin and Kuroda (1953) speculated that two broods may be raised per year. Nagata (1997) reported that some males at Hotoke-numa were polygynous, but no examples of polygynous behaviour were found during a study at Hachiro-gata in 1973–1974 (Nishide 1975).

**Migration** In Japan it is only present in northern Honshu from early May to October, and birds move to warmer areas along the Pacific coast from central Honshu southwards in winter, although specific wintering areas other than the lower Tone-gawa river in Ibakiri/Chiba are poorly known (Kiyosu 1965, WBSJ 1980, Brazil 1991). There have been several ringing recoveries within Japan, including birds moving from the breeding locality at Hotoke-numa to winter on the lower Tone-gawa river (data from YIO). The warblers that breed in Aomori prefecture in northern Japan overwinter in the Kanto area in central Japan, and those that breed in Kanto overwinter between Kanto (with some remaining on their breeding grounds) and Tokai (Nagata and Yoshida 1997). Its migratory routes in continental Asia are unknown, but it is possible that the birds which breed in North-East Asia migrate along the Gulf of Bohai to their wintering grounds in the lower Yangtze River basin (see Distribution).

**THREATS** *Habitat loss and degradation* **Russia** The wetlands at Lake Khanka are under pressure from the development of rice paddies (Yu. V. Shibaev verbally 1992; see Threats under Red-crowned Crane *Grus japonensis*). **Japan** The Marsh Grassbird requires successional wetlands, and in the past it was able to colonise new sites as the old ones became unsuitable, but nowadays the potential for new wetlands to develop has been greatly reduced in Japan and most of the existing breeding grounds are under pressure. Several of these are in abandoned paddyfields, and much habitat would therefore be lost if rice cultivation was resumed (Kanai *et al.* 1994). At Tone-gawa there are plans to widen the river to prevent flooding, which would destroy some suitable breeding areas and could change the underground water-level and affect the marshland vegetation (Kanai *et al.* 1994). There are plans to convert the Hotoke-numa area, the most important breeding ground in Japan, into grazing land, and leave only 70 ha as a protected area for this species (Fujita *et al.* 1994). At Hachiro-gata, its population has declined as the area has gradually dried up and the vegetation has changed through natural succession (Nishide 1993, 1994, Kanai *et al.* 1994). **China** Some potential sites for this species in north-east China are facing development pressures, for example the Song-nen wetlands (including Zhalong) and Shuangtai Hekou are potentially threatened by oilfield development, reeds are harvested in winter for pulp production, and the water-levels in the wetlands are affected by irrigation (SC). In the wintering grounds in



the Yangtze River basin wetlands are also being drained or degraded (see Threats under, e.g. Siberian Crane *Grus leucogeranus*).

**Human disturbance** Researchers studying this species at breeding sites may induce high levels of predation by leaving trails that guide mammalian predators to nests (Kanai *et al.* 1994).

**Pollution** The use of pesticides and other agrochemicals is widespread in mainland China, and could be affecting this insectivorous species directly or greatly reducing its insect prey (SC).

**Flooding** This species nests during the rainy season in Japan, and its nesting areas are in constant danger of flooding (Austin and Kuroda 1953, Kanai *et al.* 1994).

**MEASURES TAKEN Legislation Japan** The Marsh Grassbird was designated a “Special Bird” in 1972 (Environment Agency of Japan 1976), and it was protected as a National Endangered Species in 1993. It is on the Red List of Japan, which means that its conservation importance is recognised and it can be used as a reference species in environmental impact assessments for development projects (Environment Agency of Japan *in litt.* 1999).

**Protected areas Russia** Lake Khanka is a nature reserve and a Ramsar site (see relevant sections under Red-crowned Crane *Grus japonensis* for further details on threats and conservation at this site). **Japan** Several of the breeding sites of this species are protected. At Hachiro-gata, an area called Ogata-sogen has been established as a National Wildlife Protection Area (1.35 km<sup>2</sup> including 0.48 km<sup>2</sup> of Special Protection Area), mainly for the conservation of Marsh Grassbird (Nishide 1994, Environment Agency of Japan *in litt.* 1999). The designation of the all-year site at Tone-gawa as a National Wildlife Protection Area was in progress (as of 1999) (Environment Agency of Japan *in litt.* 1999). WBSJ purchased 3.5 ha of land at Hotoke-numa wetland (the most important known breeding ground of this species) in 1992, and is currently negotiating for an Environmental Education Centre there to show how conservation and agriculture can co-exist (Kominami *in litt.* 1999, WBSJ Conservation Centre 2000). **China** This species occurs in several protected areas in China, including Zhalong National Nature Reserve in Heilongjiang, Shuangtai Hekou National Nature Reserve in Liaoning, Poyang Hu Nature Reserve in Jiangxi and Dong Dongting Hu Nature Reserve in Hunan (see Distribution).

**Advocacy Japan** The WBSJ Aomori Chapter has studied this species at Hotoke-numa wetland, and has lobbied for its conservation, since 1982; and in December 1999 WBSJ lobbied the Minister of Agriculture and the Minister of the Environment for the conservation of this critical site (WBSJ Conservation Centre 2000).

**MEASURES PROPOSED Legislation** The Marsh Grassbird should be listed as a nationally protected species in China.

**Habitat protection and management** The protection and management of the few areas where is specialised bird is known to breed is critical for its conservation. There is considerable potential to improve its conservation status by increasing the area of suitable successional wetlands within its breeding range, either through management of existing wetlands or even by the creation of new wetlands. The use of agrochemicals and pesticides should be regulated, especially on farmland within the watersheds of important wetlands. **China** The wetland habitats in the nature reserves where it occurs should be carefully managed to maintain suitable areas of breeding or wintering habitat for this species. **Japan** Several of the breeding localities are not fully protected, and they face a number of potential threats, so ongoing efforts to improve their protection and management need to be continued. Management is required at some of these sites to maintain the necessary vegetation diversity, especially to maintain the areas of sedge *Carex* (Kanai and Ueta 1994). This could presumably be achieved by managing the water-level to maintain appropriate soil conditions

(Fujita and Nagata 1997) and possibly also by the cutting of vegetation to prevent further succession.

**Research** *Russia* Surveys should be conducted to clarify its status at Lake Khanka. *China* Scott (1989) and MacKinnon *et al.* (1996) listed many wetland sites in Heilongjiang, Jilin, Liaoning and other north-east Chinese provinces which could be targeted for surveys to locate breeding populations of this species (and possibly also other poorly known wetland birds, notably Streaked Reed-warbler *Acrocephalus sorghophilus*: see relevant account). For example, the wetlands along the Nen Jiang river between Zhalong National Nature Reserve and Xianghai Nature Reserve in Jilin look suitable for this species (Y. Kanai verbally 1999). The use of tape-recording of its song would greatly facilitate field surveys. *Japan* This species should be searched for in potential breeding sites in northern Japan, and it is possible that it winters in undiscovered sites in western Japan (Kanai and Ueta 1994). Studies in Japan have generated much valuable information on the ecological requirements of this species, and should be continued. It would be particularly valuable to study the effects of wetland management on its numbers, for example the effects of managing groundwater levels and the impact of grazing by cattle on its marshland habitat (Fujita and Nagata 1997), to help develop the most effective management regimes for the sites where it breeds and winters.

**REMARKS** (1) It is possible that the population on mainland Asia merits full species status (P. Leader and G. J. Carey *per* H. F. Cheung *in litt.* 1999). Morioka and Shigeta (1993) suggested that this species should be placed in the genus *Locustella*. (2) In Japan, the heavy trapping of this species in the marshes around Tokyo in winter in the 1930s may have caused a decline in its numbers there (Austin and Kuroda 1953; also Momiyama 1949), but hunting of small birds is no longer a problem in the country.