

Threatened Birds of Asia:

The BirdLife International Red Data Book

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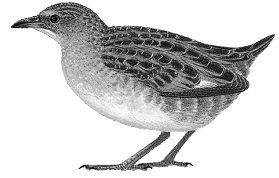
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SWINHOE'S RAIL

Coturnicops exquisitus

Critical —
Endangered —
Vulnerable C1



This poorly known rail is inferred to have a small, declining population as a result of loss and fragmentation of wetlands in its breeding and wintering ranges. It therefore qualifies as Vulnerable.

DISTRIBUTION Swinhoe's Rail is known to breed at just a handful of wetlands in south-east Russia and in north-east China, and it has occurred on passage and in winter in Mongolia, Japan (including the Nansei Shoto islands), North Korea, South Korea and southern and eastern China.

■ **RUSSIA** In Russia, it is known only from a few scattered localities in Transbaykalia (Chita), Amur and Primorye, with records (by province) as follows:

■ **Chita** middle reaches of the Karenga river, left-bank tributary of the Vitim river, near to **Tungokochen** village, immature female collected and several other birds seen, October 1962 (Gagina 1965a,b); lower **Onon river**, female collected and nest with three eggs found, 1867 (Taczanowski 1873, Swinhoe 1876, Meise 1934, Dement'ev and Gladkov 1951–1954);

■ **Amur Albazin** (Albacun), July 1906 (clutch of three eggs in BMNH, also Taylor 1998); Borzya river, **Khinganskiy Nature Reserve**, Amur valley, 20 km downstream from the mouth of the Bureya river, one flushed from a grassy swamp, May 1995 (Ryabtsev 1997, V. V. Ryabtsev *in litt.* 1997);

■ **Primorye** wetlands between the **Alchan river** and the Bikin river, flushed from a grassy swamp, May 1997 (Mikhailov 1997); **Sungacha river** source, east shore of Khanka lake (see Remarks 1), in Khanakiski (Khanka) Nature Reserve, male collected, April 1868, clutch of four eggs collected in the Khanka lake lowlands, 1868 or 1869, the eggs being “originally incorrectly identified, but proved to belong to this species” (Neufeldt 1967), breeding at Khanka lake, undated (Knystautas 1993); **Erdmana peninsula** (De Friz peninsula), Peter the Great bay, April 1961, on a wet grassy islet (Labzyuk and Nazarov 1967); lower reaches of the **Mongugay river** (Barabashevka river), Peter the Great bay, collected, September 1976 (Glushchenko and Shibnev 1977); **Bol'shoi Pelis island**, Peter the Great bay, one found dead, April 1966 (Labzyuk *et al.* 1971).

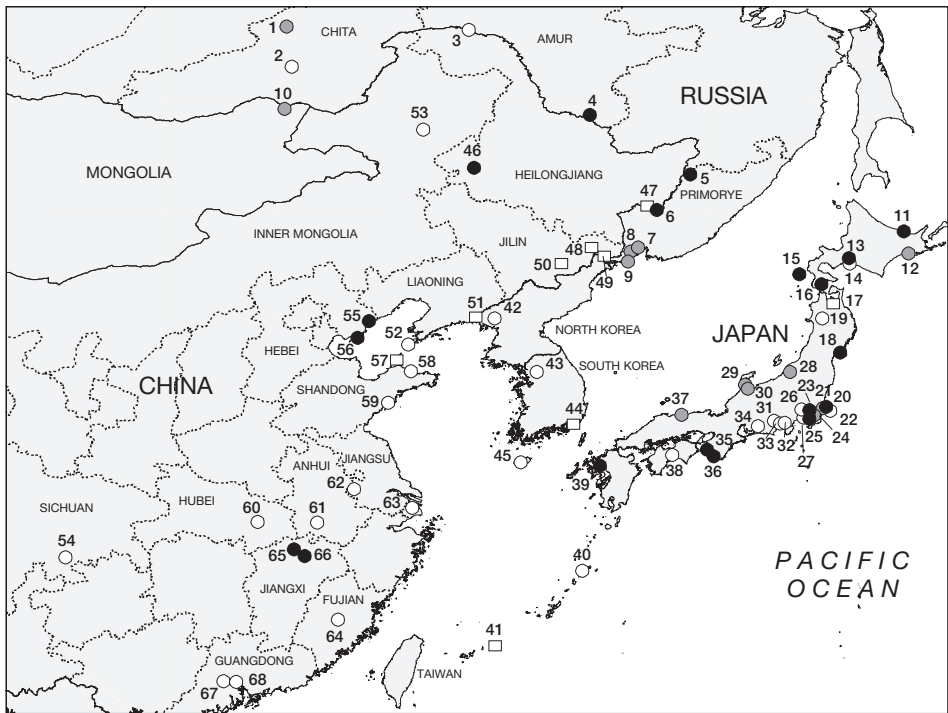
■ **MONGOLIA** The species presumably occurs on passage in Mongolia, and it may even breed, but there is only one record: ■ **Dornod** near Tari Nuur lake, in what is now **Mongol Daguur Strictly Protected Area**, one, 1976 (Dawaa *et al.* 1994).

■ **JAPAN** The species is a rare migrant and winter visitor (Austin and Kuroda 1953, Brazil 1991), with records (by island and prefecture) as follows:

Hokkaido Abashiri, October 1987 (WBSJ “Yacho Kiroku linkai” 1986 in Brazil 1991); **Kushiro**, May 1977 (Fuchimoto and Hashimoto 1987 in Brazil 1991); **Lake Utonai** Sanctuary, Yufutsu, Hakodate, October 1981 (Tazawa and Anzai 1982); **Yufutsu**, Hakodate, one collected, August 1875, one collected, undated (Austin and Kuroda 1953, Swinhoe 1875, 1876 and Stejneger 1886c in Brazil 1991); **Tomisato**, Assabu-cho, Hiyama-gun, one banded, October 1993 (Yamashina Institute Banding Center database); **Shirichi-cho**, Kamiiso-gun, one “captured”, October 1987 (WBSJ 1987);

Honshu ■ **Aomori** unspecified locality, undated (OSJ 2000); ■ **Miyagi Kitakami-gawa river mouth**, Kahoku-cho, Mono-gun, one banded, November 1990 (Yamashina Institute Banding

Center database), November 1993 (*Birder* 93/2); ■ *Akita* unspecified locality, April 1926 (Mishima 1956b in Brazil 1991, OSJ 2000); ■ *Ibaraki* Tone-gawa river, **Kamisu-machi**, Kashima-gun, single birds banded in reedbeds, November 1988 and April 1995 (Yamashina Institute Banding Center database); ■ *Chiba* Tonosho-machi, **Katori-gun**, banded in reedbeds by the Tone-gawa river, December 1974 (two birds) and March 1975 (Yamashina Institute Banding Center database), one collected at Sasakawa, November 1976 (specimen in YIO); **Inubosaki** lighthouse (Cape Inubo), Kaijo-gun, two collected, October–November 1929 (Austin and Kuroda 1953); **Gyotoku Bird Sanctuary**, Ichikawa-shi, one banded, October 1982 (Yamashina Institute Banding Center database); **Goi**, January 1957 (male in YPM); **Obitsu-gawa river mouth**, one banded, December 1990 (Yamashina Institute Banding Center database); ■ **Tokyo** **Tokyo**, March 1893 (female in YIO); ■ **Kanagawa** **Yokohama**, one collected, undated (Seebohm 1890 in Austin and Kuroda 1953), January 1894 (specimen in BMNH); ■ **Niigata** unspecified locality, 1965 (Kazama 1968b in Brazil 1991); ■ **Toyama** **Himi-shi**, January 1950 (male in YPM); **Sano**,



The distribution of Swinhoe's Rail *Coturnicops exquisitus*: (1) Tungokochen; (2) Onon river; (3) Albazin; (4) Khinganskiy Nature Reserve; (5) Alchan river; (6) Sungacha river; (7) Erdmana peninsula; (8) Mongugay river; (9) Bol'shoy Pelis island; (10) Mongol Daguur Strictly Protected Area; (11) Abashiri; (12) Kushiro; (13) Lake Utonai; (14) Yufutsu; (15) Tomisato; (16) Shiriuchi-cho; (17) Aomori; (18) Kitakami-gawa river mouth; (19) Akita; (20) Kamisu-machi; (21) Katori-gun; (22) Inubosaki; (23) Gyotoku Bird Sanctuary; (24) Goi; (25) Obitsu-gawa river mouth; (26) Tokyo; (27) Yokohama; (28) Niigata; (29) Himi-shi; (30) Sano; (31) Abe-gun; (32) Ukushima; (33) Ihara-gun; (34) Mikawa; (35) Gobo-shi; (36) Shirahama-cho; (37) Aoya-cho; (38) Kochi; (39) Ariake reclamation; (40) Amami-ooshima; (41) Miyako-jima; (42) North Pyongan; (43) Kyonggi; (44) Nakdong estuary; (45) Cheju island; (46) Zhalong National Nature Reserve; (47) Xingkai Hu National Nature Reserve; (48) Wangqing county; (49) Hunchun; (50) Songhua Jiang; (51) Dandong; (52) Lüshun; (53) Bugt; (54) Luzhou; (55) Beidaihe; (56) Shijiu-tuo; (57) Changshan islands; (58) Yantai city; (59) Qingdao; (60) Hankou; (61) Anqing; (62) Nanjing; (63) Shanghai; (64) Fujian; (65) Bang Hu; (66) PoYang Hu; (67) Shia Po; (68) Guangzhou city.

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

Takaoka-shi, January 1970 (WBSJ Toyama Chapter database); ■ **Shizuoka Abe-gun**, December 1906 (female in YIO); ■ **Ukishima**, Sunto-gun, February 1922 (two) and January 1929 (three females in YIO); ■ **Ihara-gun**, November 1893 (one specimen in YIO); Suruga (old name for Shizuoka), two collected, undated (Austin and Kuroda 1953), 1891 (specimen in YIO); ■ **Aichi Mikawa**, one collected, before 1942 (Austin and Kuroda 1953); ■ **Wakayama Nada-cho, Gobo-shi**, one, November 1994 (WBSJ Wakayama Chapter database, WBSJ 1996); Fujishima, ■ **Shirahama-cho**, Nishimuro-gun, one, November 1997 (WBSJ Wakayama Chapter database); ■ **Tottori Aoya-cho**, Ketaka-gun, September 1969 (WBSJ Tottori Chapter database);

■ **Shikoku** ■ **Kochi** unspecified localities, one collected, undated (Austin and Kuroda 1953), February 1905 (female and unsexed bird in YIO);

■ **Kyushu** unspecified locality, two collected, January–February 1887 (Austin and Kuroda 1953); ■ **Saga Ariake reclamation**, one, August 1991 (Wild Bird Society of Saga 1997);

■ **Amami-ooshima** island or Okinawa island, December 1895 (Hachisuka and Udagawa 1953 in Brazil 1991, also Ikehara 1983);

■ **Miyako-jima**, “uncommon” between October and March (unspecified years) (Kugai and Yamamoto 1981 in Brazil 1991).

■ **KOREA** ■ **NORTH KOREA** There is one record of this species (Tomek 1999): ■ **North Pyongan** unspecified locality, collected, undated (Ornithological Society of Japan 1942 in Austin 1948; see Remarks 2).

■ **SOUTH KOREA** This species is a rare non-breeding visitor, with records (by province) as follows: ■ **Kyonggi** unspecified locality, eight collected between 1913 and 1930, in April, September, October and November (Austin 1948, one specimen in YIO); ■ **South Kyongsang Nakdong estuary**, “vagrant”, undated (Woo *et al.* 1997); ■ **Cheju Cheju island**, November 1928 (male in YIO).

■ **CHINA** Swinhoe’s Rail has been reported to breed in Heilongjiang and Inner Mongolia, and possibly also in Jilin, and it is an uncommon passage and winter visitor to the southern and eastern provinces of China. Records (by province) are 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), breeding (Scott 1989); ■ **Xingkai Hu National Nature Reserve** (Lake Khanka), Mishan county, breeding, undated (Meyer de Schauensee 1984), but this report was possibly based solely on records from the Russian section of this lake (MJC);

■ **Jilin Wangqing county**, Changbai Shan, “rare” summer visitor, undated (Fu Tongsheng *et al.* 1984); ■ **Hunchun**, Changbai Shan, “rare” summer visitor, undated (Fu Tongsheng *et al.* 1984); ■ **Songhua Jiang** river, Changbai Shan, “rare” summer visitor, undated (Fu Tongsheng *et al.* 1984), with old records in Changbai Shan, but not for at least 20 years (Zhao Zhengjie 1985);

■ **Liaoning Dandong** (Tan-nung), “rare” passage migrant (Liaoning Ornithological Survey Team 1986, also Cheng Tso-hsin 1987); ■ **Baigangzi, Lüshun**, Dalian city, August 1924 (male in YIO);

■ **Inner Mongolia Bugt** (Buchedu, Pokotu), adult male collected, June in the period 1923–1926 (Meise 1934, also Ripley 1977, Cheng Tso-hsin 1987);

■ **Sichuan Luzhou** (Luchow), adult female collected, April 1908 (Thayer and Bangs 1912);

■ **Hebei Heng He** (Heng Ho) reservoir, ■ **Beidaihe**, two, May 1985 (Williams 1986), up to nine, September–October 1987 (Scott 1989, Williams *et al.* 1992, J. Hornskov *in litt.* 1989), two, April–May 1989 (Holt 1989), up to three, October 1990 (J. Christensen *in litt.* 1999), one, October 1994 (G. Kirwan *in litt.* 1999), one, May 1999 (J. Christensen *in litt.* 1999); ■ **Shijiu-tuo** (“Happy island”), two, May 1997 (Aryren 1997, Drijvers 1997, Mauro 1997);

■ **Shandong Changshan islands**, Changdao county, passage migrant in October (unspecified year) (Fan Qiangdong and Xu Jianmin 1996); ■ **Yantai city** (Chefoo), one (the type) collected,

May 1873, male collected, October 1874 (Swinhoe 1873, 1876, one specimen in BMNH); **Qingdao** (Tsingdao), five collected, September–October 1926 (LeFevre 1962, Cheng Tso-hsin 1987);

■ **Hubei Hankou** (Hankow), January 1912 (female in BMNH);

■ **Anhui Anqing** (Anking), January 1909 (specimen in BMNH);

■ **Jiangsu Nanjing** (Nanking), passage migrant, April–May 1931–1932 (Chang 1932); unspecified localities, February 1921 (specimen in ASCN), 1982–1990 (Li Guozhong *et al.* 1991);

■ **Shanghai Shanghai** district, collected in “snipe-marshes”, March–April 1886 (Styan 1891, two specimens in BMNH);

■ **Fujian central Fujian**, one collected, undated (Caldwell and Caldwell 1931);

■ **Jiangxi Poyang Hu** lake, including Poyang Hu Nature Reserve and areas outside the reserve, 1981–1984 (Jiangxi Poyang Lake Ornithological Survey Team 1988), one, December 1989 (*Oriental Bird Club Bull.* 11 [1990]: 40–48), one, December 1992 (R. Koepfel *in litt.* 1999), dead bird found at **Bang Hu** lake, Poyang Hu Nature Reserve, December 1995 (specimen presented to the WBSJ Research Center);

■ **Guangdong Shia Po**, a few kilometres west of Sanshui, one collected and another seen, November 1906 (Vaughan and Jones 1913, specimen in BMNH); near **Guangzhou city** (Kanton), one collected, December in the period 1915–1921 (Mell 1922).

POPULATION There is little information available on the population of this tiny skulking marshland rail. Its range in Russia is inadequately known, but it is probably genuinely very rare and declining (Yu. N. Nazarov *in litt.* 1997). It is apparently a rare non-breeding visitor to Mongolia, Japan, North Korea and South Korea (see Distribution). Cheng Tso-hsin (1987) considered it to be “uncommon” in mainland China. In the Changbai Shan region in Jilin, it was a “rare” summer visitor (breeding suspected, but not proven), commoner in eastern Changbai Shan (Fu Tongsheng *et al.* 1984). At Nanking in Jiangsu, where it was recorded on passage in spring in the early 1930s, it was described as “not a common bird” (Chang 1932). At Beidaihe in Hebei, it is currently considered a “rare to scarce” passage migrant in late spring and mid-autumn (Beidaihe Bird Society 1992). However, at Poyang Hu lake in Jiangxi, it was reported to be “common” during surveys in the early 1980s, meaning that 5–30 birds could be found per km² (Jiangxi Poyang Lake Ornithological Survey Team 1988).

ECOLOGY This tiny rail is “very elusive and difficult to flush” (J. Hornskov *in litt.* 1989), and it never flies when it can escape by running or hiding in the dense grass of its home (Chang 1932). A flushed bird settled 20 yards away, and it had “very feeble flight” (this is not, however, to say that the species is a feeble flyer) and [the writer] “could have caught it in a net” (BMNH label data). Its ecology is poorly known, but it is presumably similar in many respects to the much better known Yellow Rail *Coturnicops noveboracensis* of North America (see, e.g., Bookhout 1995, Taylor 1998).

Habitat In Russia, it has been recorded in wet grassy meadows and tussock swamps in the lowlands. Recent records there are from a “wet, grassy island” (on the coast in April, so presumably on migration) (Labzyuk and Nazarov 1967), a reed swamp on the lower reaches of a river in September (presumably on migration) (Glushchenko and Shibnev 1977), from grassy swamps by a river in May (possibly a breeding site) (Ryabtsev 1997, V. V. Ryabtsev *in litt.* 1997) and a grassy swamp at the confluence of two rivers in May (possibly a breeding site) (Mikhailov 1997). In Japan, it has been found, usually by flushing, around marshes and rice fields (Brazil 1991), and it has been banded in reedbeds at several localities in November–April (Yamashina Institute Banding Center database). At non-breeding localities in China, it has been recorded in “snipe-marshes” in Shanghai district (March–April) (Styan 1891,

specimens in BMNH), in marshes or streams and pools “where cover abounds” at Nanking in Jiangsu (April–May) (Chang 1932), and in soft sedge (“proper grass where I was looking for snipe”) at Hankou (Hankow) in Hubei (January) (BMNH label data).

Food There is no information.

Breeding In Russia, two nests containing clutches (probably incomplete: AVA) have been found, of three eggs (Taczanowski 1873) and four eggs (Neufeldt 1967). Another clutch of three eggs was found on 15 July (specimens in BMNH, also Taylor 1998).

Migration Swinhoe’s Rail has been recorded in its breeding range in Russia between April and September (see Distribution). In Japan, it has been recorded from as early as 4 August until as late as 16 May, but it is more typically found between October and April (Kazama 1968b and Ornithological Society of Japan 1974 in Brazil 1991; see Distribution). In China, Fu Tongsheng *et al.* (1984) reported that it was present in the Changbai Shan region of Jilin from mid-April to mid-September. In the Shanghai district, it arrived in March and April and was “one of the earliest migrants” (Styan 1891).

THREATS **Habitat loss** Swinhoe’s Rail is presumably threatened by the destruction and modification of its wetland habitats, which is taking place in both its breeding and wintering ranges (Collar *et al.* 1994; for China, see Table 1). *Russia* The species’s habitats in Ussuriland (bogs and river floodplains) are being reduced as a result of drainage and ploughing (Yu. N. Nazarov *in litt.* 1997). *China* Zhalong National Nature Reserve in Heilongjiang is threatened by agricultural encroachment, and the excessive clearance of reeds, hunting and the collection of birds’ eggs, while the increasing demand for water from agricultural activities has reduced the water supply to the reserve, and caused salinisation of the marshes and reduced reed production; industrial development in the upper basin of the river may also affect the wetland environment (MacKinnon *et al.* 1996). At Poyang Hu Nature Reserve in Jiangxi, threats include habitat loss through vegetation cutting, reclamation for agriculture and dam construction (especially that of the Three Gorges Dam), and illegal hunting (MacKinnon *et al.* 1996).

Pesticides The overuse of pesticides could affect this species in South Korea (Lee Wooshin *in litt.* 1998), and presumably elsewhere.

MEASURES TAKEN **Legislation** Swinhoe’s Rail is a Nationally Protected Species (Second Class) in China, and designated as a protected species by the Ministry of Environment in South Korea (Lee Wooshin *in litt.* 1998). 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 assessment for development projects (Environment Agency of Japan *in litt.* 1999).

Protected areas *Russia* It occurs in Khanakiski (Khanka) and Khinganski State Reserves (Nature Reserves) in Russia (Yu. N. Nazarov *in litt.* 1997). *Mongolia* The single record in

Habitat	Original	Remaining	%	Protected	%
freshwater swamp vegetation	8,033	3,213	40	130	1.6
mossy water vegetation	32,713	22,899	70	0	0
swampy tussock vegetation	3,946	1,381	35	0	0
swampy grassland	6,091	1,548	25	880	14.4

Table 1. Changes in the extent of natural habitats within the species’s range in north-east China. The data in this table are reproduced from MacKinnon *et al.* (1996), and show the estimated areas (both original and remaining in km²) of presumably suitable habitats within this species’s range in north-east China, and the area of each habitat estimated within existing protected areas. However, it is important to note that this only gives an indication of the extent of reduction of presumed habitats, as there is no information on the time-scale over which they have been lost, and this species does not necessarily occur throughout each habitat in this region of China.

Mongolia was from what is now Mongol Daguur Nature Reserve (Dawaa *et al.* 1994). *China* In China, it occurs in Xingkai Hu (Lake Khanka) (222 km²) and Zhalong National Nature Reserves (2,100 km²) (the latter being declared a Ramsar site in 1992) in Heilongjiang and Poyang Hu Nature Reserve (224 km²) in Jiangxi (protected area sizes from MacKinnon *et al.* 1996, see Distribution).

MEASURES PROPOSED *Protected areas* *Russia* Better protection of the habitats of this species is required in Russia, especially in Khanakiski (Khanka) Nature Reserve (Yu. N. Nazarov *in litt.* 1997). *China* MacKinnon *et al.* (1996) made the following recommendations for the protected areas where this species has been recorded in China: at Zhalong National Nature Reserve, control hunting, fishing, reed-farming, and agricultural, industrial and tourism development, and improve water resources management, especially dam construction projects; and at Poyang Hu Nature Reserve, implement the management plan that has been prepared for the reserve.

Research Extensive surveys are required in the breeding range of this species in Russia and north-east China (Yu. N. Nazarov *in litt.* 1997), with the aim of locating and censusing its populations, and therefore determining which existing protected areas are important for its conservation and identifying any other key areas that should be protected. Swinhoe's Rail presumably has a distinctive breeding season song, like the closely related Yellow Rail of North America (see, e.g., Bookhout 1995, Taylor 1998), which could be used to detect and census populations during surveys. Surveys and monitoring may also be valuable at some of the most important non-breeding sites, including at Poyang Hu lake in Jiangxi and perhaps at some of the other large wetlands in the Chang Jiang (Yangtze) valley. Ecological studies are required in Russia and elsewhere to establish its breeding (and possibly also passage and wintering) habitat requirements (Yu. N. Nazarov *in litt.* 1997), and in particular to determine what threats are affecting these habitats, and whether any of the techniques that have been used to manage and improve the habitats of Yellow Rail in North America (see Taylor 1998) might also be appropriate for this species.

REMARKS (1) The Sungacha river forms the border between China and Russia, so this site could be in Russia or in China (or even in both). (2) "Mori (1917) took one on the north-west coast in the spring of 1917 which may be the source of the [North Pyongan] record" (Austin 1948).