

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.

WOOD SNIPE

Gallinago nemoricola



Critical —
Endangered —
Vulnerable C1

This secretive snipe has a small, declining population, as a result of habitat loss and localised hunting in its wintering grounds. It therefore qualifies as Vulnerable.

DISTRIBUTION The Wood Snipe breeds in the Himalayas and the mountains of China (and possibly in northern Vietnam), wintering southwards to southern India, Bangladesh, Myanmar, Thailand and Indochina; it has apparently occurred as a vagrant to Sri Lanka and Singapore (Blanford 1895–1898, del Hoyo *et al.* 1996). In the following account, sight records published or reported as certain have been accepted, but it needs to be borne in mind that some of these (particularly historical records) are likely to be mistaken given the considerable identification problems with *Gallinago* snipes. Conversely, all records of birds merely suspected of being this species have been omitted or are not mapped (see Remarks 1). Inclusion of records for Pakistan and Sri Lanka should not be taken as confirmation that the species has occurred in those countries. A recent record from Singapore (Gibson-Hill 1956) was based on a rare rufescent variant of Swinhoe's Snipe *Gallinago megala* (Wells 1999).

■ **CHINA** Records, by province and region, are from:

■ **Tibet** (see Remarks 2) **Namphu La** (Nambu La), Nyingchi county, male collected at 4,250 m, September 1938 (Ludlow and Kinnear 1944; also Vaurie 1972, Cheng Tso-hsin 1987); **Lusha La**, **Bimbi La** and **Sang La**, in 1936 and 1938 (Ludlow and Kinnear 1944);

■ **Gansu Langmusi**, one, June 1992 (D. Holden *in litt.* 1999);

■ **Sichuan Zoigê** (Rouergai), one seen, June 1994 (Viney 1994), at least four seen, June 1996 (Cheung *et al.* 1994); **Wolong Biosphere Reserve**, Wenchuan county, one, May 1988 (C. G. Undeland *in litt.* 1999), several seen “roding”, and one on the “pass road”, May 1989 (Clements 1989), at least 10 males displaying just above the treeline, May 1989 (Alström *et al.* 1991), and subsequently seen in spring by many observers down to the present (e.g. F. R. Lambert, G. M. Kirwan, P. Snetsinger *in litt.* 1999, MJC);

■ **Yunnan Haozhiba**, Yongshan county, one seen, 2,220 m, May 1997, by a small stream in secondary forest (Dowell *et al.* 1997); **Tengchong county** (Tengyueh), before 1913 (specimen in BMNH).

■ **PAKISTAN** The species appears to be a vagrant, although it is possibly overlooked in mountainous areas. There are two records from the far north, as follows: ■ **North-West Frontier Province Skardu**, north side of Mt Kharpocho, above the Indus river, one, January 1986 (N. Wheatley *in litt.* 1999); **Mardan**, Peshawar district, one shot in 1887 by Barton (1902b), who was familiar with Solitary Snipe *G. solitaria*, and had “not the slightest doubt as to its being a specimen of *G. nemoricola*”, although this record was subsequently not accepted by Roberts (1991–1992).

■ **INDIA** Records of this species are broadly, but thinly scattered from Himachal Pradesh in the north-west to Assam, Arunachal Pradesh and Manipur in the north-east, southwards in hills to the southern tip of India during winter. A report that the species is a common winter visitor to Coringa Wildlife Sanctuary in Andhra Pradesh (Rao *et al.* 1996) is presumably erroneous and other records for the state are considered unconfirmed (see Grimmett *et al.* 1998). Records accepted here are as follows:

■ **Himachal Pradesh Chamba**, thought to breed at high elevations and appearing in winter below Dalhousie, undated (Marshall 1884); **Dharmasala**, October 1869 (specimen in BMNH), where large snipes flushed in forest behind Palumpur (Palimpur) in 1921–1923 were thought to be this species (Whistler 1926b); **Tcho-Ti**, Tsho-Nala, on the river Tcho, where probably breeding, May 1914 (Babault 1920, two males in MNHN); **Kulu**, recorded in winter, undated (Stoliczka 1868), a “couple”, undated (Ferrar 1917); **Kotgarh** (Kotegurh), winter, undated (Stoliczka 1868);

■ **Uttar Pradesh Mussoorie**, at the foot of the hills, undated (Stewart 1886); valleys in **Dehra Dun** district, one apparently taken nearby at Kalsi, February 1902, and stored in BMNH (Whistler ms), although the skin was not located during a recent search (NJC), “occasionally seen,” undated (Osmaston 1935, Bhatnagar and Misra 1972), but no recent records (Osmaston and Sale 1989, Singh 2000); **Kumaon**, terai, February 1925 (specimen in BMNH) and specifically at “Moonsheyaree” (untraced), Kumaon, 1,850–2,150 m, “several couples”, May 1859 (Irby 1861); **Almora**, December 1910 (Abdulali 1968–1996, specimen in BNHS); Bhimtal, near **Naini Tal**, male and female collected, undated (Reid 1886); **Pilibhit**, where more than 12 snipes were identified as this species although no details were provided, January 1872 (Baker 1921–1930); 40 km north-west of **Lakhimpur**, January 1879 (specimen in BMNH); **Bundelkhand**, undated passage records (Baker 1922–1930); Gonda (not mapped), December 1881 (Morioka and Yang 1996); Lucknow (unconfirmed), probably recorded (Reid 1887, Jesse 1902–1903; see Remarks 3);

■ **Madhya Pradesh** (see Remarks 4) **Amarkantak**, Mandla district, one, February 1927 (Baker 1922–1930, Clive 1928); Surguja (not mapped), possible record, undated (Ball 1874);

■ **Maharashtra** Turus, Kanara and **Nashik** (Nasik), birds first being thought by E. A. Butler (1881) to refer to Solitary Snipe but identification later revised to *nemoricola*, and the latter is indeed more likely; Mahalunge, near Chakan, on the Pune–Nashik road, this site given as Telegaon (**Talegaon**) by Abdulali (1968–1996), one, January 1950 (specimen in BNHS, Suter 1950); **Ambarnath**, one, December 1939 (Hackney 1940); **Thana**, one, January 1917 (Ferrar 1917, specimen in BNHS); near **Bombay** (Mumbai), January 1896 (Baker 1921–1930, female in BNHS);

■ **Karnataka Dharwad**, undated passage records (Baker 1922–1930); “jungles of Mysore” west of **Shimoga**, two, c.1883, with reports of two others in Manjerabad district (Anderson 1883); near **Bangalore**, one male, December 1911 (Betham 1912); **Somwarpet**, Mysore, one, 1930s or 1940s (Betts 1951); **Coorg**, undated (Hume and Marshall 1879–1881); **Mercara**, Coorg, one, January 1938 (Betts 1951); **Mysore** (previously Maisur) **district**, early November 1921 (Inglis 1923), and, at least seven sightings, c.1915–1945 (Frend 1947);

■ **Kerala** 19 km north of **Kannur** (Cannanore), one, November 1933 (Phythian-Adams 1934), and elsewhere in “Malabar”, one (not the Kannur bird), between 1923 and 1948 (Phythian-Adams 1948); **Periya ghats**, 400–700 m, “uncommon”, 1973–1997 (Zacharias and Gaston 1999); **Wynaad district**, at Sultan’s Battery, 700 m, tabulated as “common”, 1973–1997, although the text implies that the species was “uncommon or rare” at all sites visited (Zacharias and Gaston 1999), and this district probably including “Makki Poyil”, an untraced swamp in Wynaad, seven, December 1879 and 1882 (Ditmas 1881); **Wynaad Ghats**, 600–1,000 m, “uncommon”, 1973–1997 (Zacharias and Gaston 1993, 1999); **Edamalayar**, 60–200 m, “uncommon”, 1973–1997 (Zacharias and Gaston 1999); **Pambadumpara**, 700–900 m, “uncommon”, 1973–1997 (Zacharias and Gaston 1999); in the “tourist zone” of **Periyar Sanctuary**, undated (Robertson and Jackson 1992), and apparently (although this seems unlikely) seen on more than 30% of field days in both “Periyar East”, 900–2,000, and “Periyar West”, 800–1,400 m, 1973–1997 (Zacharias and Gaston 1999), with a record of a single at Thekkady in 1981 (V. J. Rajan *in litt.* 1988);

■ **Tamil Nadu Shevaroy hills**, undated (Hume and Marshall 1879–1881), December 1928 (specimen in BMNH, Whistler and Kinnear 1931–1937); **Nilgiri hills**, five, February–March

1922 (Inglis 1923), January 1924, January 1927 (two), January 1928, February and October 1929 (E. G. Phythian-Adams in Whistler and Kinnear 1931–1937), December 1933, February 1935 (R. F. Stoney in Whistler and Kinnear 1931–1937), February 1936, February 1937 (two), February 1938, March 1939, December 1940, December 1945 (Phythian-Adams 1948), these records presumably including those shot or observed at Udagamandalam (Ootacamund, Ooty), February 1922 (male and female in YPM), February 1938 (Stoney 1938), also subsequently at Kotagiri, 1974–1976 (Khan 1980); Guddasal hills, **Coimbatore district**, undated (Whistler and Kinnear 1931–1937); **Anaimalai hills**, undated (Whistler and Kinnear 1931–1937), including the Pannimade estate, three, December 1936 (Williams 1937); **Palni hills**, undated (Whistler and Kinnear 1931–1937); **Sholavandan tank**, Madura (Mathurai) district, March, probably 1930s (Nichols 1943–1945); one in south “Travancore” in the “High Range”, presumably in what are now called the **Ashambu hills**, undated (Ferguson and Bourdillon 1903–1904); “Madras”, November 1877 (specimen in BMNH), possibly from the city area but more likely to have been collected somewhere in the Eastern Ghats;

■ **Bihar Purnea** (Purneah), April–May 1882 (Baker 1921–1930), although this is not mapped by Grimmett *et al.* (1998) probably because of the lack of documentation provided (see Remarks 2 under Grey-crowned Prinia *Prinia cinereocapilla*);

■ **Orissa Russelkonda**, Ganjam district, undated (“Vagrant” [McMaster] 1868, Hume and Marshall 1879–1881);

■ **West Bengal Darjeeling**, pre-1879 (specimen in BMNH); **Mangpu**, 1,050–1,200 m, undated (Stevens 1923–1925); **Rungbong** (Rungboom) **valley**, undated (Stevens 1923–1925); **Jalpaiguri district**, undated (Baker 1921–1930), three along a forest stream, November 1915 (Inglis *et al.* 1920) and Jalpaiguri, undated (E. C. S. Baker in Inglis *et al.* 1920); **Maldah**, April–May 1882 (Baker 1921–1930); **Chapra**, one, around 1919 (*J. Bombay Nat. Hist. Soc.* 27 [1920]: 186); **Salt lakes**, near Calcutta, undated (Anon. 1969b; see Remarks 5); Manbhum (Puruliya district) (unconfirmed), undated (Ball 1874; see also D’Abreu 1935, Hewetson 1956); Buxa Wildlife Sanctuary (not mapped), listed without details (Anon. 1993a);

■ **Sikkim Changu**, 3,800 m, May 1933 (Ludlow and Kinnear 1937);

■ **Arunachal Pradesh** one collected and “many” seen in the “hills west of **Mago**”, 4,250 m, August 1934 (Ludlow and Kinnear 1937);

■ **Assam Dibrugarh district**, pre-1881 (Hume 1888); **Tezpur**, undated (Baker 1921–1930); **Barpeta**, undated (Baker 1921–1930); **Cachar**, undated (Baker 1921–1930); Moran and Jaipur (not mapped), probable records (Hume 1888); Kaziranga National Park (not mapped), listed without details (Bhattacharjee *et al.* 1996);

■ **Meghalaya** unspecified localities in the Khasia hills, September 1869 (specimen in BMNH), pre-1880 (specimen in BMNH); **Mairang**, c.50 km from Shillong, around 1922–1924 (McCulloch 1926); **Shillong**, Khasia hills, October 1877 (specimen in BMNH), and Dunpep, c.25 km from Shillong, around 1922–1924 (McCulloch 1926; see Remarks 6); **Mawrykneng**, November 1951 (three specimens in UMMZ), November 1954 (female in FMNH); **Garó hills**, pre-1881 (Hume 1888); **Mawphlang** (Mawplang, Maifland), Khasia hills, January, 1909 and 1910 (two specimens in BNHS), November 1951, October and December 1952, January 1953, November 1954, January 1955 (seven specimens in FMNH, UMMZ); **Cherrapunji**, December 1952, September 1953 (three specimens in UMMZ);

■ **Manipur** unspecified localities, fairly common, pre-1881 (Hume 1888), five, undated (Baker 1921–1930); **Imphal**, one, around 1919 (*J. Bombay Nat. Hist. Soc.* 27 [1920]: 186).

■ **NEPAL** This species has been observed or collected at scattered localities as it breeds in montane areas, winters at lower altitudes and has occurred on passage at a variety of sites. A record from Bikabanjan, December 1984 (Calladine 1985) has been withdrawn (C. Inskipp *in litt.* 2000). Records are from: Pani Palta Khola, **Shey-Phoksundo National Park**, 4,100 m, two, April 1992 (Priemé and Øksnebjerg 1994); **Lete**, Upper Kali Gandaki valley, one,

December 1984 (Calladine 1985); between **Ghasa** and Marpha, above Kalopani, “north of the pumping station”, two, April 1991 (J. Nordin *in litt.* 1999); **Bagarchhap**, one, November 1984 (Calladine 1985); **Pipar**, two displaying, May 1985 (Warwick 1986), and apparently seen at this site fairly regularly (B. F. King verbally 1998); **Ghorepani**, on trek from Pokhara to Tukche, unspecified numbers, February 1971 (Aarestrup *et al.* 1971); **Kyanjin Gompa** (Kyanjing), Bagmati zone, Rasuwa district, single birds in April 1996 (Taylor 1996), and across Langtang Khola, one, May 1997 (Choudhary and Karki 1997, D. Cooper and F. Cooper *in litt.* 1999), both in Langtang National Park; between **Gapte** (Ghopte) and Phedi, two, May 1990 (Buckton and Morris 1993), one, May 1994 (Drijvers 1995), one at 3,500 m, May 1997 (D. Cooper and F. Cooper *in litt.* 1999); Phedi, **Gosainkund**, Langtang National Park, two displaying at dusk, April 1996 (Davidson and Heywood 1996); **Gokyo lake**, Sagarmatha National Park, c.4,500 m, c.1998 (*Danphe* 7, 3/4 [1998], *Oriental Bird Club Bull.* 29 [1999]: 51–56); **Kathmandu valley** (Nepal valley), undated (Hodgson 1829a, 1831), 1877 (Scully 1879), 1–2 shot annually up to 1948 (Ripley 1950b); **Khangma** (Kongma La), upper Arun watershed, 3,800 m, one, May 1981 (Krabbe 1981), with a breeding record from the treeline in the upper Arun valley, 1973 (Cronin 1979, Fleming *et al.* 1984), presumably resulting in the specimen from “Arun valley”, April 1973 (female in FMNH), these sites falling within or near Makulu Barun National Park; **Maghan Kharkaat**, 2,550 m, two, April 1990 (Tymstra 1993); **Singalila range**, 3,050 m, one, January 1912 (Stevens 1912), although Ali (1962) noted clutches taken at this site and suggested that they might be those of Solitary Snipe (see Remarks 6); **Jolbari**, 2,800 m, one bird, January 1989 (Halliday 1989); Sandakpur, **Ilam district**, c.3,600 m, one, April 1999 (*Danphe* 9, 3 [2000]: 3); Sundar Gundar, **Morang district**, one, February 1938 (Bailey 1938).

■ **BHUTAN** Records are from: **Bumdeling**, three, February 1998 (Sherub *in litt.* 2000); **Dib La**, 3,800 m, flushed from long grass into fir forest, September 1934 (Ludlow ms, Ludlow and Kinnear 1937); **Shingkarap** (Singkhanap forest), Paro, on the way to Jhomolari trek, 3,800 m, one, October 1992 (R. Pradhan *in litt.* 1998); **Dochhu La**, 2,800 m, one on two occasions, March 1992 (Clements 1992); Taba, near **Thimpu**, c.2,500 m, 1–2 in swampy ground with large grass tussocks, December 1997, March 1998 (Spierenburg and Pradhan *in press*), a regular site recently, also seen in January and July 2000 (C. Inskipp *in litt.* 2000); **Cheli La**, 3,700 m, one, June 1922 (Ludlow and Kinnear 1944); **Black mountain**, several snipes that “drummed around at dusk, uttering a series of guttural croaks” in May 1937 (Ludlow and Kinnear 1944) possibly being this species (taking “drum” to mean “rode”; see Remarks 1) and more recently on one of the ridges of Black mountain at Pegula, Bumthang district, 4,100 m, one, August 1994 (R. Pradhan *in litt.* 1998).

■ **BANGLADESH** Rashid (1967) listed the species as a winter visitor to the north-east highlands and lowlands, possibly occurring elsewhere in the Chittagong region and the south-west (but see Remarks 2 under Manipur Bush-quail *Perdica manipurensis*). Early hunting reports suggest that the species might have occurred in Sylhet (Barton 1902b) but are likewise inconclusive. Khan (1982) listed it as a rare migrant to the country without providing further details, while Ali and Ripley (1968–1998) remarked that it “doubtless also occurs in Chittagong Hill Tracts”. Despite the general agreement that the species must visit Bangladesh in winter, only one confirmed record has been traced: **West Bhanugach Reserved Forest** (Lowacherra), one possible record in 1984 (D. Johnson *in litt.* 1999) and another certainly recorded in December 1992 (Thompson *et al.* 1993).

■ **SRI LANKA** This species is possibly a regular winter visitor in small numbers to the hill zone, although it is known from the country only by sight records and by individuals shot but not positively identified (Phillips 1978). It is listed for the country on the strength of a report from “the country round **Nuwara Eliya**”, undated (H. Nevill in Legge 1880), and subsequently some snipes shot around Nuwara Eliya lake, undated, were possibly this species

but were not positively identified (Villiers 1944, Phillips 1978); some were also shot on Horton Plains, but again not positively identified, undated (Phillips 1978).

■ **MYANMAR** During the period of ornithological exploration in the country, this species was “locally distributed” in winter (Harington 1909a) being recorded from the Chin hills, Bhamo (Kachin state), and in the foothills of eastern Myanmar south to Tenasserim (Taninthayi) (Baker 1921–1930, Smythies 1986). Confirmed records are from: **Panwa pass**, 2,050 m, December 1934, with several other records around this time (specimen in BMNH,



The distribution of Wood Snipe *Gallinago nemoricola*: (1) Namphu La; (2) Lusha La; (3) Bimbi La; (4) Sang La; (5) Langmusi; (6) Zoigê; (7) Wolong Biosphere Reserve; (8) Haozhriba; (9) Tengchong county; (10) Skardu; (11) Mardan; (12) Chamba; (13) Dharmsala; (14) Tcho-Ti; (15) Kulu; (16) Kotgarh; (17) Mussoorie; (18) Dehra Dun; (19) Kumaon; (20) Almora; (21) Naini Tal; (22) Pilibhit; (23) Lakhimpur; (24) Bundelkhand; (25) Amarkantak; (26) Nashik; (27) Talegaon; (28) Ambarnath; (29) Thana; (30) Bombay; (31) Dharwad; (32) Shimoga; (33) Bangalore; (34) Somwarpet; (35) Coorg; (36) Mercara; (37) Mysore district; (38) Kannur; (39) Periyar ghats; (40) Wynaad district; (41) Wynaad ghats; (42) Edamalayar; (43) Pambadumpara; (44) Periyar Sanctuary; (45) Shevaroy hills; (46) Nilgiri hills; (47) Coimbatore district; (48) Anaimalai hills; (49) Palni hills; (50) Sholavandan tank; (51) Ashambu hills; (52) Purnea; (53) Russelkonda; (54) Darjeeling; (55) Mangpu; (56) Rungbong valley; (57) Jalpaiguri district; (58) Maldah; (59) Chapra; (60) Salt lakes; (61) Changu; (62) Mago; (63) Dibrugarh district; (64) Tezpur; (65) Barpeta; (66) Cachar; (67) Mairang; (68) Shillong; (69) Mawrygneng; (70) Garo hills; (71) Mawphlang; (72) Cherrapunji; (73) Imphal; (74) Shey-Phoksundo National Park; (75) Lete; (76) Ghasa; (77) Bagarchhap; (78) Pipar; (79) Ghorepani; (80) Kyanjin Gompa; (81) Gapte; (82) Gosainkund; (83) Gokyo lake; (84) Kathmandu valley; (85) Khangma; (86) Maghan Kharka; (87) Singalila range; (88) Jolbari; (89) Ilam district; (90) Morang district; (91) Bumdeling; (92) Dib La; (93) Shingkarap; (94) Dochhu La; (95) Thimpu; (96) Cheli La; (97) Black mountain; (98) West Bhanugach Reserved Forest; (99) Nuwara Eliya; (100) Panwa pass; (101) Myitkyina; (102) Bhamo; (103) Kalewa; (104) Haka; (105) Falam; (106) Maymyo; (107) Keng Tang; (108) Taunggyi; (109) Bampon; (110) Nampan lake; (111) Palon; (112) Yangon; (113) Maliwun; (114) Doi Pha Hom Pok; (115) Doi Inthanon National Park; (116) Phou Chong Vong; (117) Plain of Jars; (118) Nakai plateau; (119) Mount Fan Si Pan.

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

Stanford and Ticehurst 1938–1939); near **Myitkyina**, undated (Baker 1926–1935), seven nearby, October 1926 (Macdonald 1927); **Bhamo**, December 1909 (Harington 1909a); Kaliawa, here presumed to be **Kalewa**, undated (Abdulali 1968–1996); **Haka**, Chin hills, two, 1909 (Venning 1912); **Falam**, Chin hills, pre-1898 (specimen in BMNH); **Maymyo**, 900 m, March 1895 (specimen in BMNH); **Keng Tang** (Keng Tung), Southern Shan States, pre-1901 (specimen in BMNH), also from an unspecified locality in the Southern Shan States, February 1926 (specimen in BMNH), and elsewhere east of the Salween river, March 1925 (specimen in BMNH); **Taunggyi**, 1889–1900 (Bingham and Thompson 1900), undated (seven specimens in BNHS, Abdulali 1968–1996), including two around 1913 (*J. Bombay Nat. Hist. Soc.* 22 [1914]: 822), 1,350 m, December 1926 (specimen in BMNH, Wickham 1929–1930); **Bampon**, Southern Shan States, 1898–1901 (Rippon 1901); **Nampan lake**, Southern Shan States, April 1929 (specimen in BMNH); Hlahamahget-su, near **Palon**, c.80 km up the Pye (Prome) railway line, one, December 1914 (Bloech 1915); **Yangon** (Rangoon), 1865 (“Vagrant” [McMaster] 1868); near **Maliwun** (Malewun), Tenasserim, by a stream near the Pakchan estuary, an undated sight record (W. Davison was “perfectly certain of the identification”) (Hume and Davison 1878), although thought possibly to refer to Swinhoe’s Snipe *G. megala* by Robinson and Kloss (1921–1924); Nawngiping (untraced), March 1912 (two females in AMNH); Pidaung Sanctuary, a probable record, March, unspecified year (Stanford and Ticehurst 1938–1939).

■ **THAILAND** The species is clearly a very rare winter visitor to the northern highlands with only two definite records (see Remarks 7): **Doi Pha Hom Pok**, Chiang Mai, 2,000 m, one, October 1965 (King 1966); **Doi Inthanon National Park**, one, 1,300 m (Rogers and Deignan 1934, Deignan 1945), with snipes flushed in September 1930 (Deignan 1945) and February 1986 (Balanca *et al.* 1986) at the summit bog probably being this species.

■ **LAOS** Early records suggest that the species was locally common, but there has been only one recent report despite fieldwork in many areas. Records are from: **Phou Chong Vong**, south-west of Xiang Khouang, two pairs together in a marshy depression, February 1940, and numerous other records without details in Xiang Khouang province (David-Beaulieu 1944); **Plain of Jars**, Xiang Khouang, at least 12 shot (presumably those mentioned by David-Beaulieu [1944]), September–December 1938 (specimens in MCZ, MNHN, YPM); **Nakai plateau**, Khammouane, four sightings of birds flushed from slow-flowing rivers (at c.500 m) with scrubby or wooded margins, February 1995 (Duckworth *et al.* 1998, 1999).

■ **VIETNAM** The species occurs locally in the north of the country during winter (Delacour 1930). Indeed, the following confirmed records are all from Mount Fan Si Pan, on which the species might possibly breed in small numbers (Eames and Tordoff in prep.), although this remains to be confirmed: **Mount Fan Si Pan**, at Sa Pa (Chapa), Lao Cai, March, November and December, 1929–1930 (specimens in AMNH, FMNH and MNHN, Delacour 1930), one male collected, December 1938 (Eames and Ericson 1996), more recently at Hoang Lien Nature Reserve, Sa Pa district, one nearby at O Quy Ho village, October 1997 (*Oriental Bird Club Bull.* 27 [1998]: 61–66), one on the west of the Dinh pass at 1,700 m, November 1997 (Tordoff *et al.* 1999), three at 2,500 m on Mount Fan Si Pan, February–March 1998 (Tordoff *et al.* 1999). The species is also listed for Muong Nhe Nature Reserve, Lai Chau, possibly from a visit in November and December 1991 (Cox *et al.* 1992), but as no details are provided this record is regarded as unconfirmed (Nguyen Cu *in litt.* 1997).

POPULATION In the nineteenth and early twentieth centuries this species was much the rarest of the snipes in the Indian subcontinent but it was still regularly recorded from a wide variety of localities and regions (see Baker 1921–1930, 1922–1930). Its distribution and population at that time was in many ways better known than it is today because of the extensive hunting record compiled by the numerous “sportsmen” of the erstwhile “British Empire” (then

including most of present-day Pakistan, India, Bangladesh and Myanmar). These records are long discontinued and it is now more difficult to determine the status of the species as it is generally highly skulking and relatively difficult to identify (see Remarks 1).

China This species was considered to be “exceedingly rare” in China by Cheng Tso-hsin (1987), but it is presumably greatly under-recorded and the recent sightings in Sichuan and Gansu suggest that it may be more numerous than was previously thought. At Wolong Biosphere Reserve, for example, it was apparently “fairly common” in the 1990s (B. F. King verbally 1998).

India Nineteenth-century and early twentieth-century records show the species to be relatively widespread but generally scarce. In Uttar Pradesh it was considered “by no means common” around Mussoorie and “rather an event to bag one” (Stewart 1886), although numbers were possibly quite high in Philibet district given that Baker (1921–1930) claimed as a very young man to see 12 in close proximity in January 1872. Further south, it was “an extremely rare cold weather visitant to parts of the Deccan” (Barnes 1885). In the region of Bombay, Maharashtra, the species was described as “rare” (Ali and Abdulali 1936–1939), and “an infrequent cold weather visitor” (footnote to Hackney 1940). At Surguja, Madhya Pradesh, it was only once “believed” to be flushed during several years of residence, and Ball (1874) concluded that “it must be rare” there. In Purnea, Bihar, and Maldah, West Bengal, it appeared “fairly numerous” (at least in the latter, where more than 20 were apparently shot in a small area) in 1882 (Baker 1921–1930). Also in West Bengal, the species used to be a regular winter visitor to the Rungbong valley, with “a few obtained” nearly every winter (Stevens 1923–1925). There were also a few records from Himachal Pradesh and Orissa (see Distribution). However, there have been no post-1950 records from any of these areas but because of the absence of recent hunting records or specimens it is impossible to say whether this indicates an actual decline.

Small populations of the species winter in hill ranges of southern India and (at least historically) in north-east India. It was scarce in Wynaad, Kerala, with only seven encountered in the 1870s and 1880s (Ditmas 1881), and a “rare visitant to the Nilgiris during the cold season” (Jerdon 1839–1840). W. Davison “shot numbers” of the species in this latter area (Hume 1888) but considered that it “was never common and seems to be getting still more rare, year by year” (Davison 1883). The fact that 13 birds were shot in the Nilgiris between 1922 and 1935, however, suggested that no decline had taken place and that a small wintering population survived (Whistler and Kinnear 1931–1937). In north-eastern India Hume (1888) thought the species “must be common” in Manipur for he saw “at least a dozen” and “hardly ever beat any piece of heavy grass in wet ground without flushing one”. Furthermore, many individuals were seen in May in one valley in Manipur where 13 were later shot in the first two days of October by A. Wilson (who “could have killed a good many more”), and at another locality in the state five were shot in one morning (Baker 1921–1930). Between 1910 and 1932, 213 were recorded shot in Manipur, with peak winter totals of 20 in 1916–1917 and 20–25 every winter between 1928 and 1932 (Higgins 1933–1934). In Meghalaya, McCulloch (1926) found wintering birds in small numbers, with nine shot in five days. These records suggest that the wintering populations in both Meghalaya and Manipur were substantial. Given the paucity of recent fieldwork in these two states it is perhaps unsurprising that no further records have been documented, although protracted and intensive collection in the Khasia hills by W. Koelz in the 1950s failed to detect the species (based on lack of specimens in UMMZ). An important population could still survive in these areas (although see Threats).

Recent winter records of the species anywhere in India are scarce. The decline in small-game hunting (or at least hunting records) partly explains this fact, but it is disappointing that the increase in local natural historians and travelling naturalists has not generated more observations. However, during a protracted survey of 24 sites in Kerala, 1973–1997, Zacharias and Gaston (1999) identified the species at seven sites, concluding that it was “uncommon or

rare” at all of these, but possibly overlooked. However, their definition of “uncommon” is that the species was observed on at least 30% of field days (Zacharias and Gaston 1999), suggesting that quite a few sightings were made.

Nepal Hodgson (1829a, 1831) found it not uncommon during winter in the Kathmandu valley, although Scully (1879) found it only twice there in two years and it has not been reported from the area since 1948 (Ripley 1950b). At least in some breeding seasons it is locally common in montane areas around Ghopte and Phedi (Buckton and Morris 1993); local people claim that the birds are fairly common in the area (Drijvers 1995), although there may perhaps be some confusion with Eurasian Woodcock *Scolopax rusticola* or Solitary Snipe. In any case, the scatter of recent sightings suggests that the species might be fairly common in the breeding season in remote uplands.

Bhutan It was apparently locally “plentiful” in the 1930s (Ludlow and Kinnear 1937, 1944), but has been recorded only in small numbers in recent years, suggesting that a decline might have taken place. Suitable breeding habitat for the species is, however, rather remote (C. Inskipp *in litt.* 1999), a fact in part explaining the dearth of recent reports.

Bangladesh It was listed by Khan (1982) as a “rare” winter visitor without further details. In fact, there is only one confirmed record for the country (see Distribution) and the general lack of suitable terrain (but see Habitat) suggests that any wintering population is small (Thompson *et al.* 1993).

Sri Lanka Previous records of the species in Sri Lanka are poorly documented and further evidence of its occurrence is desirable. Its appearance in the country is unlikely to be anything more than very sporadic.

Myanmar Although apparently rarely seen in Myanmar (Peacock 1933) the species was considered to be fairly common in the Shan States (Bingham and Thompson 1900, Rippon 1901; for some reason Stanford and Ticehurst [1938–1939] stated that it was not mentioned by these earlier workers). The fact that Livesey (1935a) shot 20 in a day in the Shan States suggests that it was locally fairly abundant. Wickham (1929–1930) agreed that it was still “quite common” in the Shan hills, with “a number round” certain sites at Taunggyi each winter, but that it was generally rare in the Chin and Kachin hills. Elsewhere, seven were shot in a single day near Myitkyina (Macdonald 1927), a few were found in the hills of Bhamo district (Harrington 1909–1910), and “numerous” specimens were collected in winter at Panwa pass in the 1930s (Stanford and Ticehurst 1938–1939). In “Lower Burma” (southern Myanmar, principally Pegu and Yangon), however, Bloech (1915) counted only three between 1904 and 1914, concluding that the species was “none too plentiful”. While it was clearly widespread and regular in occurrence in the early part of the twentieth century (particularly in eastern hills from around Myitkyina south to Taunggyi and the Shan hills), there have been no recent records. This is no doubt largely because its previous stronghold has remained virtually unexplored for many years and its current status is thus a matter of conjecture.

Thailand It was probably always a very scarce visitor, and must be so now that much suitable wintering habitat has been destroyed in the northern hills (P. D. Round *in litt.* 1998).

Laos In Xiang Khouang the species was reportedly uncommon and localised in winter, generally encountered in singles or pairs (David-Beaulieu 1944). However, the large number of specimens collected (see Distribution) implies that the overall population was fairly large, at least on the Plain of Jars. There have been very few recent records and any surviving wintering population is likely to be small (Duckworth *et al.* 1999).

Vietnam The species was apparently “numerous” (at least during winter) around Sa Pa (Chapa) in the Fan Si Pan range (Delacour 1930, Delacour and Jabouille 1931), an area from which several recent records derive (Nguyen Cu *in litt.* 1997, Tordoff *et al.* 1999). A regular wintering population is certainly present, and it has even been suggested that the species might breed in the area as high-altitude habitat appears to be suitable (A. W. Tordoff *in litt.* 1999), although this remains to be confirmed.

ECOLOGY Habitat Hume and Marshall (1879–1881) believed that the species bred around 2,150–3,050 m, and perhaps “considerably higher”, while Ripley (1982) thought breeding occurred between c.2,100 and 4,200 m, possibly lower. Baker (1921–1930), however, remarked that “the dates on which specimens of the Wood Snipe have been obtained, for me, show that in some cases it is not a bird of high elevations alone and that it almost certainly breeds well below” 600 m, at least in Manipur. No data have subsequently emerged to corroborate this opinion (see Migration and Remarks 6), and the species apparently breeds only in alpine meadows with scattered bushes and streams or in dwarf scrub or patchy woodland in boulder-strewn areas, generally between 3,500 and 4,000 m, at or above the treeline (Ludlow and Kinnear 1937, 1944, Fleming *et al.* 1984, Grimmett *et al.* 1998; see Distribution). Specifically, breeding (or at least breeding season) habitats have included high-altitude *Cotoneaster* scrub near a stream in Nepal (Priemé and Øksnebjerg 1994), a ravine above the treeline deeply filled with snow, “long grass in marshy ground” adjoining fir forests (Ludlow and Kinnear 1937), or “marshy ground covered in low rhododendron scrub, just above the tree-line” (Ludlow and Kinnear 1944). It has also been recorded in the breeding season on forest streams, and in mixed conifer forest and alpine scrub forests in Bhutan, usually at 3,000–4,200 m (Clements 1992, R. Pradhan *in litt.* 1998).

During the non-breeding season there seems to be an odd mixture of records from both tall and short marshy grasslands, forests, scrub and wooded rivers. At this season there is generally a move to lower altitudes: individuals have been recorded below 100 m in India (Ferrar 1917) and Nepal (Baral *et al.* 1996). In a synthesis of available reports, Baker (1921–1930) concluded that wintering individuals generally preferred habitat intermediate between the forests frequented by Woodcock and the low marshy habitat favoured by most snipes. The species usually frequents swampy ground in and at the edge of forests with thick cover, usually too dense for Common Snipe *Gallinago gallinago* (Peacock 1933, Grimmett *et al.* 1998). The species’s haunts in its wintering grounds in India or Nepal have variously been described as “the marshy ground at the foot of the dense woods of the [Nilgiri] hills” (Jerdon 1839–1840), little rushy patches of bog on hillsides (Irby 1861), “the skirts of forests at the foot of the hills” in Kathmandu valley (Scully 1879), “bushes at the edge of a marsh” (Davison 1883), a “rushy swamp” near forest (judging by the occurrence of gaur *Bos gaurus* at the same site) (Ditmas 1881), “brushwood in swampy ground” (Murray 1889), small marshy valleys at the base of hills in Meghalaya where it concealed itself in clumps of tall ferns, small bushes and reeds (McCulloch 1926), thick, knee-high grass in Manipur, “covert too thick for the ordinary snipe to run about in” and sometimes “very high grass”, and “valleys in the hills which are full of thick matted grass growing on the sites of old rice khets” (Baker 1921–1930), and lastly “the edge of a small tank... very close to thick jungle at the foot of a hill” (Hackney 1940). Williams (1937) noted its “habit of flopping into scrub cover”. In the Nilgiris it apparently occurs in wooded sholas but avoids nearby tea, eucalyptus and acacia plantations (Khan 1980). Around Myitkyina, Myanmar, it frequented “very thick grass [c.1 m] high with water c.10 cm deep, and small mounds dotted about with scrub jungle and grass growing on them”, this being, like most places in which Wood Snipe are found in winter, “most unsuitable land for Snipe” (Macdonald 1927). Other descriptions of wintering habitat in Myanmar are of thick jungle on the bank of a small stream (Hume and Marshall 1879–1881), “marshes” (Bingham and Thompson 1900), and the edge of a large lake situated in the middle of dense forest (Bloech 1915). On Doi Inthanon, Thailand, the species was found in “a boggy area overgrown with an alder-like shrub, near the upper end of the valley” (Deignan 1945). Around Hoang Lien Nature Reserve, Vietnam, the species was found by a small stream in montane forest (F. R. Lambert verbally 1998), by a stream in *Imperata cylindrica* grassland, and in upper montane forest (Tordoff *et al.* 1999).

While these accounts generally depict a preference for somewhat overgrown swampy areas, usually near and sometimes in forest, this link to wooded habitats is not universal.

Although it generally avoids the open fields and marshes in which most *Gallinago* snipes are often found (Smythies 1986), it has been recorded (perhaps on migration) in Nepal at 2,550 m in wet meadows grazed by yak (Tymstra 1993) and in India in “large open rice stubble far from any dense cover” (Phythian-Adams 1934). In the Indian plains it has been reported in some numbers in “huge fields of sungrass, ekra [*Erianthus ravaneae*] or elephant grass [mostly *Saccharum*] which have in their midst small pools and swamps hidden away by the rank vegetation” (Baker 1921–1930). In Bihar it was flushed from tiny pools covered with coarse weeds and grass so high and dense that they were accessible only to elephants (Baker 1921–1930). There have been no further records from this type of habitat in India. At Xiang Khouang, Laos, birds wintered regularly in marshy habitats with reeds, sedges or tall grasses, apparently well away from forest (David-Beaulieu 1944).

The species apparently sits very close when approached, usually flushing at the feet of people or large animals and seldom flying further than 100 m with a “slow and owlish” flight (see Ferrar 1917, Baker 1921–1930, McCulloch 1926, Grimmett *et al.* 1999). It is a shy and solitary bird, rarely being found in company (McCulloch 1926), although Higgins (1933–1834) stated that it “not infrequently occurs in pairs” and occasionally several rise from the same patch of grass.

Food It is said to consume worms, small aquatic insects and grubs, and perhaps also seeds (Baral *et al.* 1996). As it flies reluctantly in daylight, always landing in “the darkest hollow” and is never visible in the open (McCulloch 1926), it seems quite likely to forage crepuscularly or even nocturnally, especially in areas that are disturbed during daylight.

Breeding There is little information on breeding season and behaviour. Indeed, despite several early breeding reports, “there are no first-hand authentic records of the nest” (Grimmett *et al.* 1998; see Remarks 6). In Nepal displaying birds have been recorded in April (Davidson and Heywood 1996) and May (Warwick 1986), while in China birds are generally seen displaying in May (Clements 1989, Alström *et al.* 1991), and apparent displays have been seen in August in both Bhutan (R. Pradhan *in litt.* 1998) and Tibet (Ludlow and Kinnear 1937). In addition, the ovaries of one individual were apparently swelling by 10 March and another female shot in early April had an almost full-sized but unshelled egg in the oviduct (Baker 1921–1930). These dates suggest that breeding possibly begins in March, but more usually in April and May, although the fact that there are some records of migrating or wintering individuals in May (see Migration) suggests that the season may begin late for part of the population, as one might expect for a bird breeding at such high altitudes.

Migration It appears that all records away from high altitudes in the Himalayas and Chinese mountains involve non-breeding migrants. Initially, Baker (1922–1930) postulated that it was “probably a resident bird” throughout its range and also (Baker 1921–1930) that, “as we get to know more about this rare snipe it will probably be found that its migrations are of a very local character and it would not surprise me to find that over the greater portion of its habitat it is a permanent resident”; in support of his speculation he mentioned May records from the lowlands of Bihar, Assam and the Manipur hills and a nest from Meghalaya. However, the breeding record is not acceptable (see Remarks 6) and further data prove the species to be a winter migrant in all portions of its Indian range away from the high Himalayas. For example, although hunting in the 1920s in Meghalaya resulted in many records of Wood Snipe the birds were “seldom seen after March” (McCulloch 1926) and of 213 recorded in Manipur between 1910 and 1932, only six (3%) were shot in September (earliest on 9th) and four (2%) in May (latest on 12th), the rest all being flushed during winter (Higgins 1933). Furthermore, while local shikaris claimed that the species bred in Manipur, the offer of rewards never resulted in the production of eggs or nest (Higgins 1933–1834). In southern India, the species has only ever been recorded in winter, apparently arriving in early November in Mysore district, but somewhat later in the Nilgiris, a little further south, where numbers tended to peak in late winter (Inglis 1923, Baker and Inglis 1930). Of 15 records in the Nilgiris

between 1923 and 1945, one was on 29 October, none was in November, three were in December, three were in January, six were in February and the latest was on 2 March (Nichols 1943–1945, Phythian-Adams 1948). It previously occurred in Xiang Khouang province, Laos, between October and April (David-Beaulieu 1944), and records in Bangladesh, Laos, Vietnam, Thailand and Myanmar fall within a similar time-frame, but there are few recent records from any of these countries.

In Nepal it has been described as a “breeding resident” (Baral *et al.* 1996), or a possible resident and altitudinal migrant (Inskipp and Inskipp 1991), categories that conceal the substantial altitudinal movements undertaken. It presumably vacates most breeding localities as these are deep in snow during winter (C. Inskipp and T. P. Inskipp *in litt.* 1999) and it once wintered in some numbers in the lowlands of the Kathmandu valley, once remaining until 11 May in the early 1800s (Hodgson 1829a, 1831). Recent mid-winter sightings have been made at 2,500 m in Bhutan, however, and some birds are seemingly—as Baker (1926–1935) thought—only very short-distance migrants (C. Inskipp *in litt.* 2000).

THREATS The apparent decline and current rarity of this species is in some ways curious given the low rates of habitat loss in high-altitude breeding areas where it is generally not persecuted (C. Inskipp and T. P. Inskipp verbally 1998). If a decline has occurred, therefore, it is probably due to pressures (through habitat loss and hunting) exerted on the wintering population.

Habitat loss Breeding areas generally lie just above the treeline, a zone that is somewhat disturbed by herders in late spring and summer, possibly causing some depression of breeding success (B. F. King verbally 1998). Meanwhile, loss of marshes and undisturbed woody wetlands in the wintering range has probably contributed to an overall population decline. The fact that it was “not to be found near human habitations nor in paddy fields” (McCulloch 1926) suggests that the habitat available for wintering birds has declined dramatically as human populations and their associated agricultural activities have increased. For example, a small population of the species wintered annually in the Rungbong valley, West Bengal, until the marsh at Mirik was drained, after which time the winter records ceased (Stevens 1923–1925). Again in Jalpaiguri district the Wood Snipe was apparently “commoner before so much jungle was cleared for tea” (Inglis *et al.* 1920). While the lack of recent records in Manipur is perhaps largely due to a lack of survey work owing to peace-and-order difficulties, it is also apparent that grassland habitat has been extensively disturbed or destroyed in the region of Logtak lake, predominantly through conversion to large-scale rice cultivation (Scott 1989); this is very likely to have had an adverse effect on the species in the area. An account of habitat loss in Bangladesh appears under Pale-capped Pigeon *Columba punicea*. The boggy area where the species was found on Doi Inthanon, Thailand (Deignan 1945), is now an extensive agricultural terrace upon which rice and cabbages are grown (P. D. Round *in litt.* 1998). Suitable habitat still remained in Xiang Khouang, Laos, in 1999 but was very highly disturbed by extensive harvesting of fish, birds and water invertebrates for food, emergent macrophytes for a variety of purposes, and grazing by buffaloes (J. W. Duckworth *in litt.* 1999). In Vietnam, Hoang Lien Nature Reserve is threatened by forest loss and degradation through tree-cutting, fire and clearance for agriculture, especially at lower altitudes (Tordoff *et al.* 1999). This reserve is currently under management but lacks funding, infrastructure and trained personnel (Tordoff *et al.* 1999). There is clearly a pressing need for a major conservation project at this site, which also provides habitat for several other threatened species (e.g. Rufous-necked Hornbill *Aceros nipalensis* and Beautiful Nuthatch *Sitta formosa*).

Hunting When flushed it only travels a short distance with ponderous flight, a factor that makes it very easy to shoot (see, e.g., McCulloch 1926, Higgins 1933–1934, David-Beaulieu 1944). Moreover, Wood Snipes are apparently “very good for the table and by some are considered to be the best of the Snipe tribe” (McCulloch 1926), a fact that, along with its

rarity, made it a highly sought-after species for many “sportsmen” in British India. The wide interest and participation in small-game hunting throughout India during the early twentieth century presumably caused some damage to populations of this species: Phythian-Adams (1948) noted a “considerable diminution” in the number of snipe (five species) shot on the Nilgiris around 1940, reporting that R. F. Stoney shot 150 snipe in 1937, 134 in 1938, but with equal effort mustered only 53 in total in the seven years between 1941 and 1948. In the Khasia hills, once a major wintering area, locals were described as “universal slaughterers of all life” (Baker 1907b), their intensive hunting practices reducing populations of most birds, and in Manipur current levels of hunting are reportedly high (R. Kaul verbally 1999). The species is also potentially threatened by hunting in northern Thailand (Round 1988), northern Vietnam (Cox *et al.* 1992, Tordoff *et al.* 1999), and particularly Laos, where hunting pressure is extreme (Thewlis *et al.* 1998). Little is known about current hunting practices in Myanmar, but it is thought that levels of persecution and poaching are high (U Tun Yin 1954, B. F. King verbally 1998; see equivalent section under White-winged Duck *Cairina scutulata*).

MEASURES TAKEN The species is listed as totally protected in Myanmar (Wildlife Act 1984). In India Schedule IV of the Wildlife Act 1972 includes the general entry: “Snipes Scolopacinae”.

In China, the species apparently breeds in one protected area, Wolong Biosphere Reserve (2,000 km²) in Sichuan. In India, a few records fall within protected areas, but the only site that might support a regular (if small) wintering population is Periyar Sanctuary (472 km²). In Nepal, it has occurred in the Annapurna Conservation Area (2,660 km²), Langtang National Park (1,710 km²), Makulu Barun National Park (c.1,500 km² with 850 km² buffer zone), Sagarmatha National Park (1,148 km²) and Shey-Phoksundo National Park (3,555 km²). In Laos, it has been reported from the Nakai plateau, part of which lies in Nakai-Nam Theun NBCA (3,532 km²). In Vietnam, a regular (probably wintering) population occurs in Hoang Lien Nature Reserve (246.5 km²).

MEASURES PROPOSED Few conservation measures are relevant to the montane breeding range of the species, although control of disturbance by herders in summer would be useful at relevant breeding sites. In China, MacKinnon *et al.* (1996) recommended strengthened protection for Wolong Biosphere Reserve as an urgent priority. Conservation action in the wintering range involves maintaining sufficient suitable habitat wherever the species might occur and minimisation of the threat of hunting. To pursue these ends snipe shooting in key areas for this species should be monitored and controlled, while relevant protected areas should be managed with the species in mind (i.e. with a view to the protection or development of overgrown scrubby wetlands and adjoining forests). Specific proposals are few, but in the event of a population being rediscovered in Laos the relevant location should receive complete habitat protection and rigorous enforcement of anti-hunting measures if possible (Duckworth *et al.* 1999), and protective measures at Hoang Lien Nature Reserve, Vietnam, should be expanded; in particular the area requires adequate funding, improved infrastructure and training of personnel so that hunting and habitat deterioration can be controlled (Tordoff *et al.* 1999).

Duckworth *et al.* (1999) proposed a survey for the species in potential wintering areas in Laos (especially the Xiang Khouang plateau). This plea is relevant across much of its wintering range, with survey work perhaps most urgent in Meghalaya and Manipur, India, and the eastern hills of Myanmar. These areas historically supported (and quite possibly still support) major populations of the species, and fieldwork is needed to clarify their current importance. Given the difficulty of identifying Wood Snipes in the field (see Remarks 1) and the fact that proof of sightings is very difficult to provide without shooting the birds, it is strongly urged that experienced fieldworkers offer their services and form teams to undertake the task of searching for them, perhaps using mist-nets to catch flushed birds.

REMARKS (1) Because of confusion over the identification of this species, distributional data are often inconclusive. While specimens should not be confused and field identification is relatively straightforward with experience, inadequate or inaccurate literature has clouded identification details. For example, Ali and Abdulali (1936–1939) suspected that the Wood Snipe was “perhaps not always identified even in sportsmen’s bags”, offering the hint that it flushes with a squelching sound and escapes “swiftly in zig-zags” from marshes, stubble and mudflats. Their entry unfortunately only serves to obfuscate the issue, however, as it accurately describes the behaviour and habitat of the Common Snipe *Gallinago gallinago* but is rather misleading in view of the different call of the Wood Snipe and its relatively direct, floppy and laboured escape flight from much thicker habitat (see, e.g., Ferrar 1917, Baker 1921–1930, McCulloch 1926, Grimmett *et al.* 1998). Records of displaying snipes are also confused. For instance, displaying birds at Mani Bhuk, eastern Nepal, were published as Wood Snipe (Youngman 1995), until it was pointed out that this species, unlike Solitary Snipe *G. solitaria*, does not drum (with tail-feathers) in display, but gives a croaking or nasal series of *chur* notes, either while it flies in wide circles (c.10 m up) somewhat like a Woodcock *Scolopax rusticola* or from the ground (Ludlow and Kinnear 1937, Buckton and Morris 1993, C. Inskipp 1996).

(2) A record of Painted Snipe *Rostratula benghalensis* from c.5,200 m on Mount Everest (Sagarmatha), Tibet (Kinnear 1922), is perhaps more likely to refer to Wood Snipe as the “the flight of the two birds is very similar” (Ludlow and Kinnear 1937).

(3) In Lucknow, Uttar Pradesh, Reid (1887) never succeeded in shooting this species but on several occasions saw “a large dark solitary snipe” with a “lazy flight” that he took to be Wood Snipe rather than Solitary Snipe, but certainly one or the other. Given the generally sedentary nature of the Solitary Snipe in the Himalayas (Grimmett *et al.* 1999), it is likely that the Wood Snipe was involved.

(4) A possible record from Balaghat division, February 1934 (Chance 1934) is treated as unconfirmed because the author gives the scientific name “*Scolopax r. rusticola*”, and thus might equally have been referring to the Woodcock.

(5) An individual purchased by Blyth (1867) in the Calcutta bazaar was probably from the immediate vicinity of the city (see Remarks 4 under Bristled Grass-warbler *Chaetornis striatus*).

(6) There are three breeding records that are not accepted here: (a) although said to breed at Shillong, Meghalaya, with a published claim of a female trapped in June 1908 on her nest and eggs at 1,200 m, (Baker 1921–1930, 1922–1930), this anomalous record lacks specimen evidence (most of E. C. S. Baker’s skin collection is now untraceable) and thus it is considered doubtful, especially in the light of other dubious identifications in his egg collection (see Remarks 2 under Grey-crowned Prinia *Prinia cinereocapilla*); (b) four nests found by L. Mandelli in “native Sikkim”, “opposite Darjeeling” (and thus possibly West Bengal or Singhalila ridge in Nepal), undated (Hume and Oates 1889–1890), refer to Solitary Snipe *G. solitaria* (Baker 1922–1930, Ali 1962); (c) a clutch of four eggs (in NMS) from an unspecified locality in Kashmir, April 1911, is treated as unconfirmed.

(7) There is one unconfirmed report from Kaeng Krachan National Park, March 1994 (*Bird Conserv. Soc. Thailand Bull.* 11[5]:14) and another two reports from Khao Yai National Park, one of two birds in December 1989 (R. Koepfel *in litt.* 1999) and another of one in February 1995 (P. Schiermacker-Hansen *in litt.* 1999), but these are best treated as provisional until further details are provided.