

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

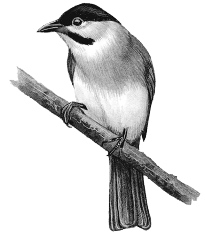
Designed and produced by the **Nature**Bureau, 36 Kingfisher Court, Hambridge Road, Newbury, Berkshire RG14 5SJ, United Kingdom

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.

TAIWAN BULBUL

Pycnonotus taivanus



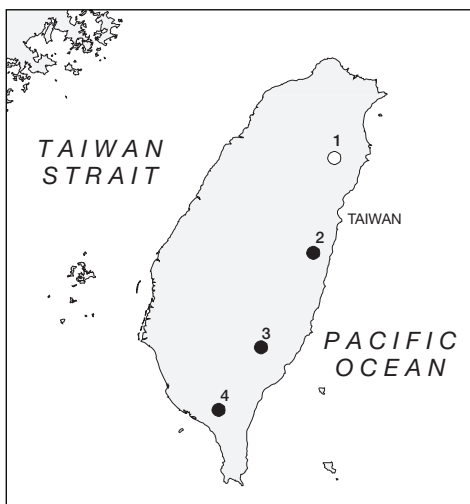
Critical —
Endangered —
Vulnerable A1c,e; A2c,e

This bulbul qualifies as Vulnerable because it has a rapidly declining population as a result of hybridisation, compounded by habitat loss.

DISTRIBUTION The Taiwan or Styan's Bulbul (see Remarks 1) is endemic to Taiwan, China, where it is confined to the lowlands in the east and south of the island.

■ **CHINA** ■ **TAIWAN** Hachisuka and Udagawa (1950–1951) reported that it was found as far north as Suao in **Ilan county**, but it is no longer found in the county (L. L. Severinghaus *in litt.* 1997). It currently occurs in the coastal plains and hills of eastern Taiwan in **Hualien county** and **Taitung county**, in the Huatung valley (in both of these counties) and as far west as Litao in Taitung county and north to Chungta and Hojen in Hualien county, and in southern Taiwan at Hengchun and Kenting in southern **Pingtung county**, and as far north as Fangshan and Fengkang on the south-west coast of Taiwan (L. L. Severinghaus *in litt.* 1997; see also La Touche 1895, Ogilvie-Grant and La Touche 1907, Hachisuka and Udagawa 1950–1951, Wang Chia-hsiong *et al.* 1991).

POPULATION In the early twentieth century, this species was only known by a few specimens from the southernmost tip of Taiwan (see, e.g., Ogilvie-Grant and La Touche 1907). It is now known to be common in much of its restricted range; for example, there were counts of 100 or more birds at Kenting in Pingtung county in September 1989 and December 1996, at Tungho in Taitung county in January 1993, and at Tajung, Fenglin, Hualien county, in October 1996 (CWWF database). It is unclear whether there has been a real change in its range and numbers during the twentieth century, or whether the apparent increase is simply because its range is more accessible now than it was in the early part of the century. In any



The distribution of Taiwan Bulbul *Pycnonotus taivanus*: (1) Ilan county; (2) Hualien county; (3) Taitung county; (4) Pingtung county.
○ Historical (pre-1950) ● Recent (1980–present)

case, it is now considered that its population and range are in decline (L. L. Severinghaus *in litt.* 1997; see Threats).

ECOLOGY *Habitat* The Taiwan Bulbul occurs in a wide variety of habitats, including secondary forest, scrub, agricultural areas and gardens (Hachisuka and Udagawa 1950–1951, Wang Chia-hsiong *et al.* 1991, L. L. Severinghaus *in litt.* 1997). It forms large flocks in autumn and winter but it is territorial in the breeding season (L. L. Severinghaus *in litt.* 1997).

Food The species feeds on fruits and flowers (Hsu and Lin 1997).

Breeding Territories are established from February onwards (L. L. Severinghaus *in litt.* 1997), and the breeding season is from March to July (Hsu and Lin 1997). Nest sites are selected amongst dense vegetation (nests are built 0.8–5.0 m above the ground), the average clutch-size is 3.3 eggs, the incubation period 11–12 days and the nestling period 9–10 days (Hsu and Lin 1997; see also Yamashina and Yamada 1938). The species was found to have, on occasion, two successful broods per breeding season (Hsu and Lin 1997, L. L. Severinghaus *in litt.* 1997).

THREATS *Habitat loss* Habitat alterations and urbanisation are a threat throughout the range of the Taiwan Bulbul (Hsu and Lin 1997), and perhaps account for its extinction in Ilan county (see Distribution).

Hybridisation Another consequence of alterations to the original habitats of Taiwan is that the ranges of this species and the closely related Chinese Bulbul *Pycnonotus sinensis* (which is represented on Taiwan by the endemic subspecies *formosae*) have changed, and they now overlap and hybridise in several areas (L. L. Severinghaus *in litt.* 1997). In the early 1970s, their ranges were found to overlap at Tienhsiung in Hualien county and 13 km north of Fengkang in Pingtung county, and by 1991 the area of overlap had expanded to include Hojen, Peipu and Hsipao in Hualien county, and Fangshan and Fangliao in Pingtung county (L. L. Severinghaus *in litt.* 1997). Chinese Bulbuls and hybrid Chinese × Taiwan Bulbuls are now also found in the eastern plains, and the only genetically pure Taiwan Bulbuls remaining are in the coastal mountains, and at Tungho and Luye in Taitung county (L. L. Severinghaus *in litt.* 1997). The increase in hybrids in the wild has been accelerated by releases of Chinese Bulbuls for religious purposes, which are organised by temples (which have greatly increased in numbers on Taiwan in the past 10 years) to commemorate special days, and have created new hybrid epicentres (Severinghaus 1998; see also Severinghaus and Li Chi 1999). Pure Taiwan Bulbuls are becoming rare in the wild, and there is a danger that they may disappear within 20 years through genetic swamping by Chinese Bulbuls (Severinghaus 1998).

MEASURES TAKEN *Legislation* Taiwan Bulbul has been a protected species (Category III) in Taiwan since December 1995 (L. L. Severinghaus *in litt.* 1997).

Protected areas It is common in Kenting National Park in southern Taiwan (Hsu and Lin 1997).

MEASURES PROPOSED *Protected areas* Severinghaus (1998) suggested that one option for the conservation of this species would be to establish a Taiwan Bulbul refuge (in one of the areas where a genetically pure population survives), with strictly enforced buffer zones from which all Chinese Bulbuls and hybrids are removed.

Captive breeding A second option suggested by Severinghaus (1998 and *in litt.* 1997) is to create a Taiwan Bulbul gene bank by enlisting zoos and aviaries to maintain breeding stocks. The management of the captive “subpopulations” must be coordinated and closely monitored.

Research More field studies are required to improve understanding of the distribution and spread of hybrids within the wild population of the Taiwan Bulbul, to help develop the most appropriate conservation measures.

Education It is important to alert the Taiwan government and the general public to the plight of one of the island's endemic species, which is in imminent danger of extinction if the measures outlined above are not implemented in the near future. Informed public support would be required to establish and manage a Taiwan Bulbul refuge from which hybrids are systematically removed. Another important aim of an awareness campaign must be to discourage further releases of Chinese Bulbuls (and any other exotic species or subspecies which may hybridise with the native Taiwanese avifauna) for religious purposes.

REMARKS (1) Y. Yamashina (*vide* specimen labels in YIO) regarded the Taiwan Bulbul and the “Hainan Bulbul” (now generally regarded as a subspecies of Chinese Bulbul *Pycnonotus sinensis hainanus*, although it occurs together with another “subspecies” of Chinese Bulbul that winters on Hainan) as two subspecies of a separate species. Genetic studies of these two taxa and the populations of Chinese Bulbuls that occur on Taiwan and Hainan would be helpful, together with field studies of the “Hainan Bulbul” to determine whether it too is in danger of genetic swamping by Chinese Bulbuls.