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 Hean; 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.


INDONESIA BirdLife International Indonesia Country Programme; Ria Saryanti; 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 Chu-yon.

SOUTH KOREA Lee Woo-shin; Han Sang-hoon, Kim Jin-han, Lee Ki-sup, Park Jin-young

LAOS K. Khounboline; W. J. Duckworth

MALAYSIA Malaysian Nature Society (BirdLife Partner); K. Kumar, G. Noramly, M. J. Kohler

MONGOLIA D. Batdelger; A. Bräunlich, N. Tseveennydag

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.


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; Weerakoon THAILAND Bird Conservation Society of Thailand (BirdLife Partner); U. Treesucon; R. Jugmongkol, V. Kongthong, P. Poonsiwad, P. D. Round, S. Supparatvikorn


PHILIPPINE DWARF KINGFISHER

*Ceyx melanurus*

Critical —
Endangered —
Vulnerable ■ A1c; A2c

This tiny forest kingfisher is undergoing a continuing rapid population decline owing to extensive lowland deforestation throughout its range, and thus qualifies as Vulnerable.

**DISTRIBUTION**

The Philippine Dwarf Kingfisher is endemic to the Philippines in three subspecies (see Remarks 1): nominate *melanurus* on Luzon, Polillo and Catanduanes, race *samarensis* on Samar and Leyte, and race *mindanensis* (called *plateneae* in Forshaw 1983, Fry and Fry 1992) on Mindanao and Basilan (Dickinson *et al.* 1991). Records are from:

**Luzon (western)** Pagudpud at Tabbug and Matay, Ilocos Norte, 75–150 m, May 1959 (four specimens in FMNH, UPLB); Banaue, Mountain province, February 1984 (Gibbs 1984); Laoao, Bataan, 100 m, December 1947 (Gilliard 1950; immature in AMNH); (eastern) Mt Cagua at San Pascual, Gonzaga, April 1960 (female in FMNH); Santa Margarita at Calimudinan Falls, Baggao, Cagayan, 100 m, April 1989 (three specimens in USNM); Mt Cetaceo at Suwa, May 1960 (three specimens in FMNH); Peñablanca at Bagio River, Cagayan, August 1981 (two specimens in UMMZ); Minuma at 300–350 m, March 1992 (Danielsen *et al.* 1994, Poulsen 1995), May 1994 (Davidson *et al.* 1997, W. Simpson in litt. 1997); Manila, 1880s (Wardlaw Ramsay 1884, 1886; specimen in MCML); Quezon National Park, May 1983 (J. W. Wall in litt. 1987), recently (N. Bostock verbally 1993, Poulsen 1995); Pangil, March 1961, and in particular Balian, June 1966 (two males in PNM, also Poulsen 1995); Diman, Balian, 300–360 m, February 1970 and July 1972 (three specimens in DMNH); UP Quezon Land Grant, Real, Quezon, May/July 1990 (A. S. Manamtam verbally 1996); Caliraya, Luminum, Laguna, 240–300 m, February 1975 (male in DMNH); Calauan, Laguna (two specimens before 1896 in BMNH); Mt Makiling, Los Baños, Laguna, October 1914 (Zimmer 1918a), undated (Miranda 1987); (southern) Mt Isarog, 610 m, April 1961 (Goodman and Gonzales 1990; specimen in FMNH); Bicol National Park, February 1996 (J. C. T. Gonzalez in litt. 1997);

Polillo Polillo Watershed Forest Reserve at Sibulan, July 1996 (Gonzalez 1997, J. C. T. Gonzalez in litt. 1997; see also McGregor 1910a);

Alabat no specific locality or date (Manuel 1939b);

Catanduanes Burgos, Viga, 300 m, May 1981 (female in DMNH; also Gonzales 1983);

Buradan, Gigmoto, August 1990 (three specimens in PNM); Matamok, Caramoran, June 1969 (specimen in PNM);

Tablas Looc, 2–30 m, February 1976 (female in DMNH);

Samar Mt Capoto-an at 400–600 m, May 1957 (Rand and Rabor 1960); Cadapnan, Bantayan, Oras, May 1948 (two specimens in PNM); Matuquiniao, specifically San Isidro, at 300–400 m, April 1957 (Rand and Rabor 1960); Bonga, July 1896 (two specimens in AMNH; hence Ogilvie-Grant 1897); Catalogan, April 1888 (Dickinson *et al.* 1991) and August 1892 (six specimens in CM, USNM); Tagaslian, Barangan, June 1948 (female in PNM);

Leyte Mt Lobi at Tambis, Burauen, May 1964 (female in USNM); Mt Kabalanti-an at Balinsasayao and Paniniklan, 240–300 m, June 1964 (female in DMNH, Parkes 1973), also
Threatened birds of Asia

1. SOUTHWEST CHINA SEA
2. LUZON
3. SOUTH CHINA SEA
4. SULU SEA
5. PALAWAN
6. SAMAR
7. NEGROS
8. PANAY
9. MINDANAO
10. PALAWAN (MALAYSIA)
11. SULAWESI SEA

12. PACIFIC OCEAN
13. LUZON
14. SOUTH CHINA SEA
15. SULU SEA
16. PALAWAN
17. SAMAR
18. NEGROS
19. PANAY
20. MINDANAO
21. PALAWAN (MALAYSIA)
22. SULAWESI SEA

1802
at Bulog Peak, Mahaplag, June 1964 (male in USNM); **Mt Pangasugan** at Visca, Bay-bay, March 1987 (two specimens in PNM); **Balinsasayao** at Abuyog, July 1961 (male in AMNH); **Santa Cruz**, Mahaplag, June 1964 (male in FMNH); **Helosig**, midway between Baybay and Abuyog, May 1937 (Rabor 1938);

**Mindanao (eastern)** **Malibho**, San Vincente (Puyat Logging Company concession), Carmen, Cubason River, May 1993 (female in CMNH); **Sibahay**, Lanuza, sea-level to 300 m, May 1963 (male in USNM); **Mt Hilong-hilong** at Balang-balang, Cabadbaran, 150–300 m, April 1963 (two specimens in FMNH, USNM); **San Miguel**, Madrid, Suriaga del Sur, May 1993 (A. C. Diesmos verbally 1995); **Bislig** at the PICOP concession, 1983 (Krupa et al. 1984) and on several other occasions (T. H. Fisher verbally 1997); **Mt Mayo** at Limot, Mati, April 1949 (female in PNM), and at 150–330 m, June 1965 (two specimens in USNM); **Maputi**, May 1905 (female in BMNH; Ogilvie-Grant 1906); **Agustin Peninsula**, 1927–1928 (Hachisuka 1941); (central) **Bucobuco-onay**, Kauswagon, Lanao del Norte, July 1965 (male in USNM); **Mt Kapiagan**, May 1963 (female in PNM); **Tagbalogo**, Naawan, Misamis Oriental, October 1974 (specimen in MSU); **Mt Tuduk** at Datat-Bukay, Glan, May 1966 (five specimens in AMNH, DMNH, FMNH); (western) **Mt Dapiak** at Diway, Zamboanga del Sur, May 1952 (male in UPLB); **Dumalon**, late 1874 (Sharpe 1877; male in UMMZ); **Sigayan** and **Saluyong**, Katipunan, Zamboanga, 600–750 m, May 1950 (three specimens in FMNH); **Pasonanca** (at Zamboanga City Watershed and adjacent **Ipil** (at Zamboanga Wood Products, Inc.), 1983 (Krupa et al. 1984); **Ayala**, October 1887 (Dickinson et al. 1991), July and August 1891 (three specimens in CM, USNM); **Baluno**, Zamboanga City, June 1993 (female in PNM);

**Basilan Isabela**, November 1887, August 1890, August and September 1891, April 1898 and April 1978 (25 specimens in BMNH, CM, DMNH, FMNH, MCZ, MNHN, UMMZ, USNM; also McGregor 1907a); **Lamitan**, March 1898 (male in AMNH); 15 km north-east of **Maluso**, April 1937 (Peters 1939); **Tairan**, June 1979 (female in DMNH).

**POPULATION** Numbers of the species are unknown although the available information suggests that it is an uncommon and indeed apparently extremely rare species (Collar et al. 1994), with fewer than 20 sites at which it has been recorded since 1980 throughout its extensive range. In the past century it was judged to be “very common at Manilla” (Wardlaw Ramsay 1884), but Whitehead (1899c) regarded it as “somewhat rare” based on the fact that he only obtained six (in fact nine, counting three *samarensis*) specimens in three years. Zimmer (1918a) also considered it “rather rare”, obtaining only a single specimen, a judgement shared by Rabor (1938) on Leyte, Gilliard (1950) on Luzon’s Bataan Peninsula, and Rand and Rabor (1960) on Samar. During fieldwork in the Sierra Madre, Luzon, in the early 1990s single birds were seen twice, suggesting that the species is indeed scarce there; on the other hand it is secretive and difficult to observe (Danielsen et al. 1994).

**ECOLOGY: Habitat** This is a lowland forest kingfisher (sea-level to 750 m from evidence under Distribution; also Dickinson et al. 1991), found in the understorey of dry forest (Rand...
1970b). Any association with water appears not to be obligate, which is not of course to say that the species is not sometimes present on watercourses. Thus on Catanduanes it has been reported as usually found singly, less often in pairs, in forest understorey far from water (Gonzales 1983), and elsewhere frequenting “hills in deep forest” or low second growth “invariably away from water”, usually near the ground but occasionally alighting 5–10 m up (Bourns and Worcester 1894, Steere 1894, McGregor 1909–1910, Delacour and Mayr 1946); hence the assertion “not along streams” (Dickinson et al. 1991). However, the remarks by Whitehead (1899c) (“rivers and streams being apparently non-essential to their well-being”) and Rand and Rabor (1960) (“only inside original forest, even away from streams”) suggest an occasional or incidental use of watercourses, and this is confirmed by the observations of at least six independent observers (Davidson ms, C. R. Robson verbally 1994, A. S. Manamtam verbally 1996, J. C. T. Gonzalez in litt. 1997, W. Simpson in litt. 1997, BRT).

**Food** It feeds on insects and their larvae (F. S. Bourns and D. C. Worcester in McGregor 1909–1910, Delacour and Mayr 1946, Gonzales 1983); the label of a J. B. Steere specimen from Calauan, July (in BMNH), also asserts this, although Steere collected another bird, at Dumalon, whose “food consisted of small crabs” (Sharpe 1877).

**Breeding** Specimens with enlarged gonads have been taken in April and May (Goodman and Gonzales 1990, Dickinson et al. 1991; additional material in FMNH). Immatures (short bills) have been collected in May, July and December (three specimens in AMNH, one in USNM).

**Migration** Nothing is known of any seasonal movements this species might make (also Forshaw 1983).

**THREATS** As a strictly lowland forest specialist (as established by the records under Distribution), the Philippine Dwarf Kingfisher clearly faces major danger from the almost total loss of habitat throughout its range (Collar et al. 1994). At Bislig on Mindanao good primary forest is being clear-felled (under the PICOP logging concession) and the land planted with exotic trees for paper production (B. Gee in litt. 1997; also Caufield 1983). The deliberate conflagration of forests on Mindanao—associated with insurgency—is a problem, particularly on the Zamboanga Peninsula (D. Allen verbally 1997). It is not clear what proportion of forest has been lost on Samar and Leyte, where mining applications are a severe potential threat (NADM), but PEWG (1996), using 1989 DENR statistics, credited them with possessing as little as 433 km² of old-growth dipterocarp, although other sources judged their forest cover considerably higher (see Threats Habitat loss for Samar and Leyte under Philippine Eagle *Pithecophaga jefferyi*). Typhoons that hit Catanduanes in 1987 and 1996 not only destroyed large areas of forest but also augmented the flooding and silting of watercourses used by the kingfisher for foraging (BRT). Tablas, which still held “a considerable area of undisturbed forest remaining on the slopes of the high hills and low mountains in its interior” in 1905 (McGregor 1906c), appeared to possess only a few small tracts of degraded cover in 1992 (R. J. Timmins in litt. 1997).

**MEASURES TAKEN** The Philippine Dwarf Kingfisher has been recorded from Northern Sierra Madre Natural Park (a CPPAP site; see Appendix), Bicol, Mt Makiling and Quezon National Parks. It is also known from Mt Isarog National Park (a NIPAP site) and from Polillo Watershed Forest Reserve, and some protection may be conferred by the watershed reserve at Mt Hilong-hilong on Mindanao.

**MEASURES PROPOSED** Apart from the areas targeted for conservation above, the species is known from nine “key sites” (Mt Cagua, Mt Cetaceo and Angat Watershed on Luzon; Central Catanduanes; Mt Cabalantian/Capoto-an on Samar; Mt Lobi range on Leyte; Mt Dapiak and Mayo on Mindanao; Central Basilan; see Appendix) which deserve further survey
and, at least in part, formal designation under the NIPAS process. For instance, the relatively recent survey on Catanduanes (Gonzales 1983) suggests there may be valuable habitat there which deserves re-investigation (in spite of and indeed in light of the hurricanes in the more recent past: see Threats). In addition, there is possibly scope for a specialist study of Philippine kingfishers, with particular emphasis on the most problematic species (see equivalent section under Silvery Kingfisher *Alcedo argentata*). Identification of all significant tracts of primary forest below 750 m remaining in the Philippines will help determine the modern distribution of the species. It may be necessary to conduct surveys of these areas to determine its presence and assess its conservation status; also to gather more ecological data.

**REMARKS** (1) McGregor (1909) considered this species as three separate ones, namely Kaup’s Kingfisher *Ceyx melanurus*, Mindanao Kingfisher *C. mindanensis* and Samar Kingfisher *C. samarensis*. Delacour and Mayr (1946) united these forms as a single endemic, *Ceyx melanurus*, an arrangement followed by Forshaw (1983), Dickinson *et al.* (1991) and Fry and Fry (1992). The forms are moderately distinct.