

vocalizations *peee-ow*, given by both birds. On 9 March, the female was seen brooding a newly hatched nestling. Since egg-laying occurred between 2 and 5 February, incubation took 32–35 days. Among the food items the male was observed feeding to the chick were cicadas *Cicadidae* sp. and a green lizard. On 15 March, only the male was present near the nest tree; the female was not observed; despite heavy rain, the male made no visits to the nest. The chick was not observed at the nest, and may have been depredated or fallen out of the nest due to strong winds.

DISCUSSION

This breeding record of Jerdon's Baza constitutes the first for Sumatra. Since breeding in the extreme north-west of Peninsular Malaysia has not been confirmed to date (Ferguson-Lees *et al.* 2001), it represents an extension of the known breeding range by approximately 500 km to the south-west of the southern boundary of the breeding range in southern Thailand.

The nest was located at the edge of primary tropical lowland rainforest, which is reported to be typical throughout the species's range (del Hoyo *et al.* 1994, Ferguson-Lees *et al.* 2001). The pair was seen exclusively in or above primary lowland forest or near its edges (bordering rivers or a small road); the birds were never observed near or above nearby rice paddies or other cultivated areas, despite the close proximity of such habitat. Unfortunately, illegal forest clearance has become a serious problem at the Ketambe Study Area, and at other lowland sites in the Leuser ecosystem (S. Wich verbally, 2000). Stimulated by recent economic and political crises, illegal logging occurs at catastrophic rates throughout Sumatra's lowland forest, even inside official park boundaries (Jepson *et al.* 2001). If the

current state of forest mismanagement continues, lowland forests on Sumatra will have disappeared by 2005 (Holmes 2000, Jepson *et al.* 2001), which will severely impact Jerdon's Baza as a breeding species on Sumatra.

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High-altitude records of the House Crow *Corvus splendens* in Himachal Pradesh and Jammu and Kashmir, India

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In June and July 2001 we observed House Crows *Corvus splendens* at high altitudes on several occasions in Himachal Pradesh, and the Ladakh region of Jammu and Kashmir, India. Singles were seen at the human settlements of Koksar, Himachal Pradesh (32°50'N 77°05'E) at 3,200 m and Dracha, Himachal Pradesh (32°55'N 77°01'E) at 3,370 m on 22 June 2001. One individual was seen at Karu, Ladakh (34°04'N 77°59'E) at c.3,500 m on 27 June 2001. Finally, two birds were observed near the *gompa* (monastery) of Hanle, Ladakh, (32°55'N 78°55'E) on 29 June 2001 at 4,240 m, which

probably represent the highest altitude record for this species.

According to Kazmierczak and van Perlo (2000) the species is chiefly found below 1,600 m but sometimes up to 2,400 m. Grimmett *et al.* (1998) noted it occurs up to 2,100 m in India and up to 2,500 m in summer in Bhutan. In Nepal it is found below 1,525 m, with only one report from a higher altitude: 2,100 m at Nagarkot on 9 February 1993 (Inskipp and Inskipp 1991). In Sikkim, an individual was recorded by F. N. Betts at 2,600 m (8,900 feet) in May 1943 (Ali 1962).

We know of only three other records at high altitude, all in Ladakh, Jammu and Kashmir (O. Pfister *in litt.* 2001). An individual was recorded on 15 August 1980 at Choglamsar (3,450 m) near Leh by a University of Southampton expedition. Another was recorded by a bird tour group on 10 August 1993 in the Markha valley at c.4,000 m. Finally, one was seen at 4,150 m at Rangdum/Zanskar on 26 June 2000 (O. Pfister *in litt.* 2001).

Like the House Sparrow *Passer domesticus*, the House Crow is a commensal species. Increased tourism and development of permanent army camps in Ladakh seems to have facilitated its spread to higher areas. The species has probably moved up the Leh–Manali road where human settlements have increased recently.

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Foraging and nesting behaviour of Asian Paradise-flycatcher *Terpsiphone paradisi* in Mudumalai wildlife sanctuary, Tamil Nadu, India

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The Asian Paradise-flycatcher *Terpsiphone paradisi* occurs from Turkestan and Afghanistan, through the Indian subcontinent to China and the western Lesser Sundas (Robson 2000). In the Indian subcontinent it is found in the Himalayan foothills from north Pakistan east to Arunachal Pradesh and north-east India, south through much of the subcontinent apart from north and north-west India. North and central Indian birds winter further south in the peninsula (Grimmett *et al.* 1998). Males occur in two colour morphs (rufous and white), which Mizuta (1998) considered to be subadults and adults respectively. However, Mulder *et al.* (2002) have shown in Madagascar Paradise-flycatcher *T. mutata* that some males retain the rufous plumage as adults. We studied the foraging and breeding behaviour of paradise-flycatchers in Mudumalai wildlife sanctuary, Tamil Nadu, during 1995–1996. Here, both morphs are found, although only the rufous morph was found breeding. It is presumed that residents are supplemented by migrants during December–May, but in the absence of morphometric data, discrimination of race was not possible.

Mudumalai wildlife sanctuary (MWS) is located between 11°30–31'N and 76°27–43'E in the Nilgiri hills, at an average elevation of 1,000 m. Temperatures average 14–17°C during December–January and 29–33°C during March–May. Annual rainfall varies from 600 mm to 2000 mm, and mainly falls during the south-west monsoon (June–August), and less heavily during the north-east monsoon (September–November). The vegetation varies from thorn forest in the east to semi-evergreen forest in the west. This study was carried out in thorn forest, which is dominated by *Acacia chundra*,

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A. leucophloea, *A. ferruginea*, *Anogeissus latifolia*, *Ziziphus* spp., *Sapindus emarginatus*, *Phyllanthus emblica*, *Erythroxylum monogynum*, *Cassia fistula*, and *Capparis* spp. Further details of the study area are given in Desai (1991).

METHODS

Foraging records were collected during the dry season in January to April 1995 and 1996. Observations were made during the four hours after sunrise. The first foraging observation was recorded for any individual encountered, following MacNally (1994). For each observation, the height (to the nearest metre), substrate and method were noted. Substrates were classified as ground, trunk/main branches, twigs, foliage, and air. Foraging method was categorized as glean (food item picked from its substrate by a standing or hopping bird), probe (when the beak penetrated or lifted the substrate to locate concealed food), pounce (when the bird flew from a perch and grabbed the food item as it landed on the substrate), or sally (=flycatching, when a bird caught prey on the wing). Data collected for the entire study period were pooled for analysis (no significant differences in weather were observed between years).

A 10 ha plot was searched intensively for nests. A nest was considered active if adults were seen nest building or renovating, incubating, or feeding young in or adjacent to the nest. Nest height (using a clinometer) and internal and external width were noted. 'Nest visibility' was estimated by viewing the nest at nest-level from a distance of 2, 5, 7 and 10 m in each of four cardinal directions (Martin and Roper 1988) and