Status of Indian Peafowl *Pavo cristatus* in Nepal

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Indian Peafowl *Pavo cristatus*, known as *mayura* in Sanskrit, and *mujur* or *muyur* in Nepali, is one of the most strikingly beautiful birds found in lowland Nepal. Its colourful plumage, and long tail feathers containing hundreds of ocelli are an unforgettable sight. It is the largest of galliforms occurring in Nepal (Ali & Ripley 1987). Peafowl are widely revered amongst the Hindu community as the carrier of Karthikeya, the god of war, and the son of Shiva, a member of the Hindu holy trinity. They are also effective in controlling populations of snakes and other ‘vermin’ causing damage to agriculture.

Indian Peafowl is found only in the Indian Subcontinent: Pakistan, India, Nepal, Bhutan, Sri Lanka, and Bangladesh (del Hoyo et al. 1994; Madge & McGowan 2002). Its IUCN global red list status is ‘Least Concern’ (BirdLife International 2013). The species is the national bird of India and has a high profile throughout that country.

The species is found in forest edges, grasslands, and in lightly wooded forests. It is said to also inhabit undergrowth in deciduous forests near water (Grimmett et al. 1998), and *Zizyphus* species thorn bushes (Fleming et al. 1976). The species is gregarious and roosts in tall trees (Grimmett et al. 1998). Indian Peafowl is shy, immediately escaping into bushes or flying away upon the slightest hint of danger (Pandey 1984). It feeds on seeds, grain, lentils, groundnuts, tender shoots of crops, flower-buds, berries, drupes, wild figs, centipedes, scorpions, lizards, small snakes, insects, worms, and grubs (Ali & Ripley 1987).

Inexplicably, Indian Peafowl was not reported from Nepal by B. H. Hodgson in the nineteenth century (Inskipp & Inskipp 1991). It was first recorded for the country, from the central lowlands in 1877 by Scully (1879). Fleming et al. (1976) described the species as ‘fairly common’. Its distribution was mapped for the first time in Nepal by Inskipp & Inskipp (1991) (Fig. 1) who reported it as a ‘locally common resident’, mainly found below 500 m. It also occurred at 1280 m in the Kathmandu Valley where it was introduced, although it has since died out in the Valley (Inskipp & Inskipp 1991). The only other recent higher altitude records are of single birds recorded at Dobhan, Taplejung District at 650 m in April 1994 (Halberg 1994), and at Naya Pul, Dolakha district at c. 1200 m, in 1999 (Yadav Ghimirey pers. comm., October 2012).

The peafowl’s status, post 1990s, in protected areas is as follows: a common breeding resident in the Sukla Phanta Wildlife Reserve (Baral & Inskipp 2009) and in the Chitwan National Park (Baral & Upadhyay 2006), a rare breeding resident in the Koshi Tappu Wildlife Reserve (Baral 2005), a common resident in the Bardia National Park (Inskipp 2001), recorded in the Banke National Park (Baral et al. 2012), and resident in the Parsa Wildlife Reserve (Todd 2001).

Indian Peafowl has also been recorded from the Chitwan National Park’s buffer zone in the Barandabhar Important Bird Area (Adhikan et al. 2000; Baral 1996), and from the Janakauli Community Forest, Chitwan district (Giri 2008).

Although an attractive and visible bird, often talked about and revered in culture and religion, there has been only one autecological study of the species in Nepal (Pandey 1984). Other than its distribution, there is little information on its national status. Since 1990, it has been recorded in six protected areas in lowland Nepal, varying in status in each of these. For example, its population may be increasing in Banke National Park, established in 2010, because of increased protection. On the other hand, Indian Peafowl has declined drastically in Koshi Tappu Wildlife Reserve, which was established in 1976. The reserve is one of the few localities in Nepal where the species was recorded breeding (Inskipp & Inskipp 1991); however there are no such recent breeding records from there; in fact it was absent during a recent comprehensive survey of birds in the reserve and surrounding areas (Baral et al. 2013).

There have not been any noticeable changes in its population in Chitwan-, and Bardia- National Parks; nor in Sukla Phanta-, and Parsa- Wildlife Reserves. Pandey (1984) reported that two or three decades previously the species was abundant, occurring up to the low-lying foothills of the outer Himalayan range, but by 1984 it was chiefly restricted to parks and reserves below 330 m and rare outside the protected area system.

Recent research for the forthcoming Red Data book of birds of Nepal, has revealed that compared to pre-1990 records, there have been relatively few records of the species from outside the protected areas’ system since 1990 despite increased ornithological activity and recording over the last two decades. Known records comprise the following: the Dang Deukhuri foothills forests Important Bird Area, Dang district (Thakuri 2009a, b); three in January 2003 from Lumpini Development Area, Rupandehi district (Giri 2003); up to eight in Nawalparasi district in 2005 (Poorneshwor Subedi & Kapil Pokharel pers. comm., October 2012); one at Naya Pul, Dolakha district in 1999 (Yadav Ghimirey pers. comm., October 2012); one heard along the Sunkoshi River system on the border between Okhaldunga, Udayapur- and Sindhuli- districts at approximately 500 m in

![Fig. 1. Distribution of Indian Peafowl in Nepal after Inskipp & Inskipp (1991).](image-url)
March 2008 (Haris Chandra Rai pers. comm., October 2012); recorded from Kathaure Community Forest (CF), Ladabhir Village Development Committee (VDC), and Durga CF of Kukurthakur VDC, Sindhuli district (Phyual & Dhoubhadel 2007); Dharian forests Important Bird Area, Sunsari district (Basnet & Sapkota 2008); one at Dobhan, Taplejung district in April 1994 (Halberg 1994); recorded in Raja Rani Community Forest, Morang district (Basnet 2002; Basnet et al. 2005); the lower Mai valley in Mai valley Important Bird Area, Jhapa district (Basnet & Sapkota 2006); Sukhni, Jhapa district in November 1992 (Cox 1992); and Guruvha, Jhapa district in March 2008 (Robson et al. 2008).

The current major threats to the peafowl, especially outside protected areas are, hunting, trapping, habitat loss through encroachment, illicit tree-felling, and heavy grazing (Pandey 1984). Hunting and trapping for meat and feathers is reported to be widely practiced in the Morang Siwalik hills in far eastern Nepal (Basnet 2003). Meat is believed to generate heat and is often eaten as a delicacy in winter to cope with the cold; however, this has no proven scientific basis. Feathers are made into hand-fans, used in religious ceremonies, in traditional attire, such as worn by the Tharu people, in daily- and various traditional- ceremonies. People also keep individual birds in a cage, as ‘guard’ birds, because of their loud call. Indian Peafowl also suffers from the collection of its eggs, and probably from the effects of pesticides. Invasive alien plant species, notably Mikania micrantha is having an impact on its habitats, especially in Chitwan National Park, where the plant is rampant. The effects of fire may be quite significant in the breeding of the peafowl species, as with all other galliforms, but this has not yet been assessed. Grass- and firewood- collection in Nepal’s lowland protected areas may impact its ecology. Similarly the collection of edible ferns, bamboo shoots, and wild fruits and vegetables from all protected areas are also additional threats to this species. Such activities disturb breeding birds, which may result in higher mortality due to exposure to predators.

Research for the Nepal Red Data Book revealed that although Indian Peafowl populations may seem stable in some protected areas, its numbers have depleted, and it has a reduced range outside the protected areas’ system. It is threatened by habitat loss and deterioration. It is seriously threatened by hunting and trapping, at least in a few areas including Koshi Tappu and the Morang Siwalik hills, from where the species may have been extirpated. Based on above, assessment we concluded that the species qualifies for a ‘Near Threatened’ status. This means that it may be considered threatened with extinction in the near future, although it does not currently qualify for said status. If the present threats continue in the foreseeable future the Indian Peafowl may qualify for the ‘Vulnerable’ category.

To conserve the Indian Peafowl over the long term in Nepal, law should ban hunting, snaring, and trapping of the species. Population monitoring should be conducted throughout the country, both inside and outside protected areas. Systematic studies on impacts of M. micrantha and grass burning on the species are recommended.

Conservation awareness programmes should be carried out to alert local people to the species’ current situation and to engage their support and involvement. Popular media should be used to reach out to the wider public.

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References


Notes on the breeding of the Brown Fish Owl *Ketupa zeylonensis*

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**Abstract**

During March–April 2012, a nesting pair, and two chicks, of the Brown Fish Owl *Ketupa zeylonensis* were monitored, with the help of ‘night vision cameras,’ to study their food habits, and feeding behaviour. 192 feeding-flights of the parents were recorded within 23 nights. In this study, we identified 18 types of animals in their diet, including invertebrates, and vertebrates. Threat and status of the species were evaluated by a rapid habitat assessment along with a vigilant watch on each of the selected waterbodies; the presence of birds was then checked at night by repeated playback of pre-recorded calls of the species. Four active pairs were noted within the study area.

**Introduction**

Owls are one of the least researched groups of birds, not only due to their nocturnal and secretive lifestyle, but also because of their misconceived association with taboo and stigma in myth, folklore, and superstition. 36 species of owls [*Tytonidae*, and *Strigidae*] inhabit India (Grimmett et al. 1998; Rasmussen & Anderton 2005), 17 of which are recorded from Gujarat (Parasharya et al. 2004; Joshua et al., 2005), including the Brown Fish Owl *Ketupa zeylonensis*. [165]

All *Ketupa* species are large, powerful, and exclusively piscivorous nocturnal birds. Fish owls occur in a wide range of environments, from hot, humid, equatorial forests, to the cold boreal forest near the Arctic; they live by lakes, rivers, and streams with well-wooded banks, and feed mainly on relatively large fish, and other small aquatic, and terrestrial animals. The Brown Fish Owl is widely distributed, from the Mediterranean coast to the Indo-China region (van den Berg et al. 2010).

Slaught & Survich (2008) stated that, in totality, very scanty and limited published literature is available on the *Ketupa* species. Published information is particularly insufficient on the ecology, and breeding biology, of *K. zeylonensis* (Dharmakumarsinhji 1955; Butler 1897). Published literature from its geographical range includes; Turkey (Megnin 1991; Yontem 2007), Middle-eastern countries (Benson 1970; Andrews 1995; Shinhai 1996), Pakistan (Eates 1939), India (Shashidhara 1989; Singh 2002), and Sri Lanka (Legge 1875).

The Brown Fish Owl *K. z. leschenaultii* is distributed widely in the forests of Gujarat, except Kachchh (Ali 1954; Dharmakumarsinhji 1955). Dharmakumarsinhji (1955) provided breeding information and stated it to be common in Gir forest, Gujarat.

We monitored a breeding pair of Brown Fish Owls and their nest for a month, from 28 March to 30 April 2012, and were able to record some new, and interesting information, especially the behavior of the breeding pair, and the food spectrum of the fledglings; we also assessed the status of the species in and around Jambughoda Wildlife Sanctuary and its reserved forest areas.