



Early response on the decline of two species of *Gyps* vulture in Nepal with reference to Chitwan

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Nepal's position on the earth map is a key factor to the great avifaunal diversity that country possesses. A high total of 861 bird species have so far been recorded in Nepal (Bird Conservation Nepal 2004). All the eight species of vultures found in the Indian subcontinent are found in Nepal (Fleming *et al.* 1984).

Cinereous Vulture *Aegypius monachus* is a winter visitor to Nepal. Eurasian Griffon *Gyps fulvus* is a rare winter visitor and Red-headed Vulture *Sarcogyps calvus* probably breeds in the mid-hills and in the western lowlands. Himalayan Griffon *Gyps himalayensis*, Lammergeier *Gypaetus barbatus* and Egyptian Vulture *Neophron percnopterus* breed at higher elevations (Inskipp and Inskipp 1991).

White-rumped Vulture *Gyps bengalensis* and Slender-billed Vulture *Gyps tenuirostris* are two resident species that breed in the lowlands. In the past, both species have widely bred in the lowlands of Nepal (Inskipp and Inskipp 1991).

The publication of Birds to Watch 2 by BirdLife International and recent discoveries in India triggered our monitoring on the status of lowland breeding vultures in Nepal. Dr Vibhu Prakash of the BNHS proved the decline of these two species of vultures by giving sound population statistics for Keoladeo National Park.

We suspect that the whole of lowland Nepal vultures are affected from this population crash. Different areas were visited in irregular interval of time and data were collected from skilled and recognised birders. The sites include mainly Koshi Tappu, Koshi Tappu to Biratnagar, Koshi Tappu and Koshi Barrage, Dharan forests, Koshi Tappu and Chitwan highway stretch, Chitwan, Lumbini, Pokhara, Chitwan and Bardia highway, Bardia, Nepalgunj and few other places. These areas were visited between 1991 to 2000.

There has not been any systematic study done on vultures of Nepal. These lowland areas were frequently visited by different birdwatchers and over 40 trip lists were collected from Chitwan and Koshi Tappu. These trip reports number were tallied to find out if there was any significant decline of vultures in Nepal. A reconnaissance survey was carried by The Peregrine Fund and Bird Conservation Nepal in Koshi Tappu and Chitwan in May 2000. Further, more survey works were carried out at Chitwan in June/July 2000.

While accumulating data, it neglects the bias arising from individual capacity of data recorder to observe birds, on recording population estimate, weather conditions etc. Many of the trip reports prior to 1996 did not even mention the number of vultures because obviously they were ubiquitous in the lowland areas. Therefore, an exact population figure was not available for both species of vulture.

These data do not give a clear trend of population decline for vultures for any of the places mentioned above on the study sites except Chitwan. In Chitwan, while we can not depend 100% on these data, there is an indication that vultures have declined specially after 1996/1997. Slender-billed Vulture has not been recorded in Chitwan since March 1999 and White-rumped Vulture has been almost wiped out from the eastern part of Chitwan. This year, up to 12 White-rumped were recorded close to the Narayani River where the last population of vultures in Chitwan are believed to be surviving.

The decline in vulture population is further supported by decline of nesting sites in Chitwan. Diary notes dating back to 1989 indicate at least 5 nests that belonged to White-rumped were noted within a radius of 1.5 kilometres near Sauraha. All nests were built on tall *Bombax ceiba* trees. There has not been a single nest of vulture in close vicinity of this village since we searched nest in 1999. At least 3 additional surveys failed to trace presence of vulture and nests. Tika Giri, a highly knowledgeable birder and widely travelled naturalist in the

country, claims not to have seen vulture nest in Chitwan, east of Narayani River in recent years.

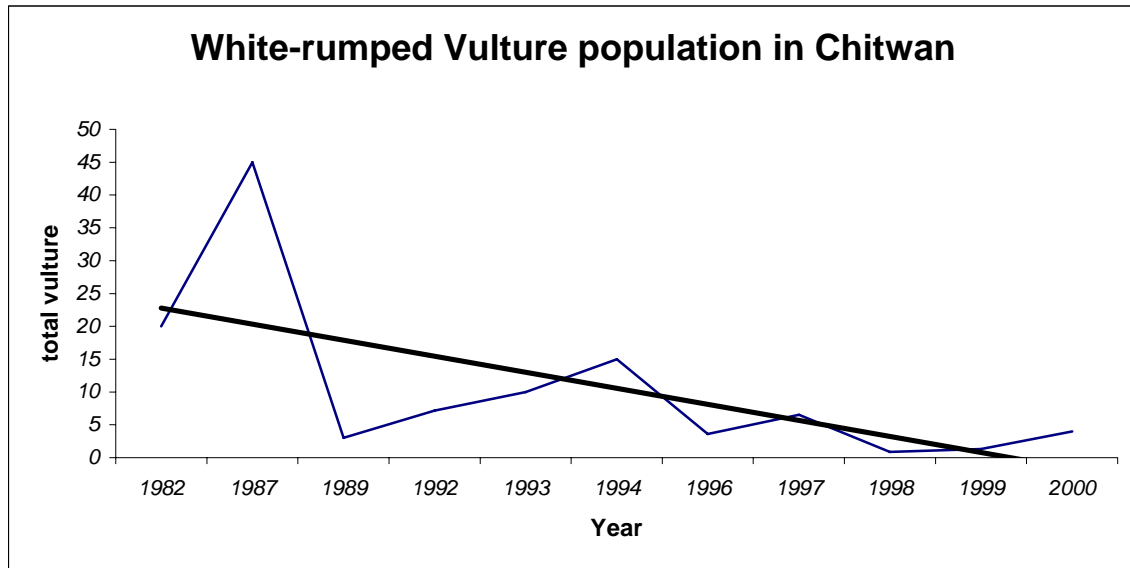


Figure. The decline in White-rumped Vulture population from Royal Chitwan National Park (straight line indicating trend, data source: various birding logs, Himalayan Nature archives).

Our data clearly indicate that there has been decline of vulture population in Chitwan. Because of lack of good data keeping system in Nepal, these data do not show the alarming situation of vulture decline as shown in case of Keoladeo National Park. As already stated that the data were collected by at least 7 observers and in different weather conditions. The threat to vultures in Chitwan and entire lowland Nepal may not be less than the threat shown in India.

Shortage of food and fear of attack or predation have been also pointed out as a possible reason for vulture decline in India (Satheesan 1999). These may be factors affecting population in certain areas. At this stage it seems like there is something else stronger and more dangerous which is eating our vultures.

It is also suggested to monitor population of other highland species of vultures to find out if such decline is also occurring there (Carol Inskipp *in litt* to Hem Sagar Baral). At this stage nothing is known about this in the entire Indian subcontinent.

- 1) Bird Conservation Nepal to take the lead in understanding the causes affecting white-backed vulture populations in the Terai region of Nepal.
- 2) Study and document White-rumped Vulture's breeding behaviour (never been documented) and monitor breeding success over one (possibly two seasons). In addition, the study should also document vulture nest-site selection. Koshi Tappu is the most obvious place to study the birds, but supplementary sites e.g. at Shuklaphanta and Bardia in the western Terai should also be considered (if they harbour larger populations).
- 3) Bird Conservation Nepal apply for permission to ring vultures and collect tissue samples for analysis in collaboration with expert international organisations such as The Peregrine Fund.

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