PAKISTAN'S GYPS VULTURE RESTORATION PROJECT

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Introduction

Since the early 1990s, vulture populations in south Asia have crashed by more than 95%. The three species most affected are the Oriental White-backed Vulture *Gyps bengalensis*, Long-billed Vulture *G. indicus* and Slender-billed Vulture *G. tenuirostris*. The continuing declines are due primarily to veterinary diclofenac, a non-steroidal anti-inflammatory drug (Oaks et al. 2004).

Remedial conservation efforts include the development of conservation breeding centres, which aim to hold core populations of vultures until the environment is safe. They will then act as a source to reintroduce or supplement wild populations.

These centres must run successfully over many years, perhaps decades. The long term husbandry of the captive vultures, plus breeding and preparing vultures for release requires involvement from a wide range of organisations.

Two centres currently operate in India, whilst a third regional centre opened in Pakistan in 2007. Herein we provide information on vulture populations in Pakistan and outline the Gyps Vulture Restoration Project, launched by WWF-Pakistan in 2004. The centrepiece of this project is a vulture conservation centre at Changa Manga in the Punjab Province of Pakistan, approximately 80km southwest of Lahore.

Trends of Gyps vulture populations in Pakistan

Between 2001 and 2007 rates of decline across the three largest *Gyps bengalensis* colonies in Pakistan ranged from 11% to 61% per year (Gilbert et al. 2006). Two of these colonies, Changa Manga (southwest of Lahore) and Dholewala (northwest of Multan), were extinct by the 2003/2004 breeding season. They declined from 758 active nests and 412 active nests respectively in 2000/2001 (Gilbert et al. 2006). The third colony, Toawala (northeast of Multan) numbered 445 breeding pairs in 2000/2001 and declined to 84 pairs in 2005/2006 (Gilbert et al. 2006). By April 2007 only two active nests remained at Toawala.

In November and December 2006 surveys by WWF-Pakistan covered 23 known major and minor breeding colonies in 16 districts across the Punjab Province. In only five forestry plantations were vultures observed, and a total of only 37 breeding pairs were observed.

The Gyps Vulture Restoration Project (GVRP)

The key objective of the GVRP is to conserve and breed a viable population of *Gyps bengalensis*. Additional project objectives include continued monitoring of wild populations, lobbying for the complete removal of diclofenac from the environment and to build capacity for the eventual release of captive-bred vultures.

The project, run by WWF-Pakistan, is a partnership between WWF-Pakistan, the Punjab Wildlife and Parks Department, the Environment Agency, Abu Dhabi and the Hawk Conservancy Trust (UK). WWF-Pakistan is the project manager and staff provider, whilst the Hawk Conservancy Trust provides technical, training and funding support. The Environment Agency provided keystone funding for the facility and WWF-US provided funds for survey work.

There is currently one large aviary with a capacity of approximately 30 vultures, and an attached service building. Second phase building (late 2007) will include at least four breeding aviaries and additional infrastructure such as livestock paddocks, perimeter fencing and freezer rooms.

Facilities to keep livestock are essential. Purchased animals cannot be treated with diclofenac, and must also be kept for at least seven days prior to slaughter to ensure that there are no diclofenac residues in the carcasses.

Current population and future plans

In August 2007, there were eleven vultures in the facility. Future breeding potential with this small population is limited, and clearly there is a need to increase the number of vultures at the facility. To this end, trapping of wild vultures will take place in early 2008. Small populations and available food will undoubtedly make trapping attempts difficult; however the project aims to trap between 15 and 20 birds.

In the longer term, the construction of additional breeding aviaries is a primary goal. Only in this respect, is the time scale favourable. It is likely to be many years before the environment is safe for the release of vultures back to the wild. The project has a production capacity goal of at least 10-15 chicks per year.

Conclusions

There are no prospects for a rapid conclusion to the conservation of *Gyps* vultures in south Asia. Continuing the lines of communication and sharing information between Pakistan and India will be of benefit to all parties that are working together on this international conservation effort.

References and Acknowledgments

References and acknowledgments are available on the pdf version available on the wmenews website.

Figure 1. White-backed vulture *(Gyps bengalensis)* (©Ghulam Rasool)

Figure 2. The Gyps Vulture Restoration Project (©Campbell Murn)