

## SHORT COMMUNICATIONS, NOTES AND REPORTS

### Recent developments in *Gyps* vulture conservation in Pakistan

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In 2004 WWF-Pakistan launched the *Gyps* Vulture Restoration Project (GVRP), which aims to conserve and manage a population of Oriental White-backed Vultures *Gyps bengalensis* in captivity until release to the wild becomes possible (Murn *et al.* 2008). As part of regional conservation efforts in south Asia (Pain *et al.* 2008), the GVRP was started in response to the catastrophic decline of three species of *Gyps* vulture, due primarily to the effects of veterinary diclofenac (Green *et al.* 2004, Oaks *et al.* 2004). The GVRP is based in Changa Manga forest, approximately 80km southwest of Lahore in the Punjab Province of Pakistan. In this note we provide an update of project activities and some recent developments from the wild.

A main communal aviary built in 2006 (see Murn *et al.* 2008 for details) was supplemented with four new breeding aviaries in early 2009. Nest building and regular copulation by two pairs of birds occurred during the 2008/2009 breeding

season, and these birds were transferred to the new breeding aviaries in June 2009. The remaining vultures will stay in the communal aviary until additional pairs form. Artificial nest baskets installed in the communal aviary are a favourable behavioural stimulus for the vultures, and are the focus of nest building and copulation activity.

Positive links between the project and the Changa Manga community are an important goal for the GVRP. Since 2008, the local school in Changa Manga has become involved with the project and the students now have information sheets and activity packs about vultures (in Urdu). There are approximately 60 children at the school, all from families living within Changa Manga forest, and the students make regular visits to the facility to see the vultures. Staff from WWF-Pakistan have given several talks about why vultures are important, why they have been dying and why the facility has been built.

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Since inception, support for the GVRP has benefitted significantly from a growing support base. Funding for the running costs of the project are provided by the

Hawk Conservancy Trust and these costs are contributed to by a range of zoos, organisations and individuals that has grown favourably since 2007 (Box 1).

**Box 1. Supporters of the Gyps Vulture Restoration Project in Pakistan**

The Environment Agency (Abu Dhabi)

The Punjab Wildlife and Parks Department (Pakistan)

WWF-US

United States Fish and Wildlife Service

ABQ Biopark (Rio Grande Zoo) (USA)

Beale Park (UK)

Colchester Zoo: Action for the Wild (UK)

Cumberland Bird of Prey Centre (UK)

Gauntlet Bird of Prey Centre (UK)

International Association of Avian Trainers and Educators (USA)

Isle of Wight Owl & Falconry Centre (UK)

Lowry Park Zoo (USA)

Paradise Park (UK)

The National Aviary (USA)

Virginia Aquarium & Marine Science Center (USA)

Banham Zoo (UK)

Cheyenne Mountain Zoo (USA)

Cotswold Falconry Centre (UK)

Friends of Paradise Wildlife Park (UK)

Grand Parc Puy du Fou (France)

Longleat Safari Park (UK)

National Birds of Prey Trust (UK)

Seneca Park Zoo (USA)

Trotters World of Animals (UK)

L. & H. Arends (Ned); T. & J. Cobbold (UK); H. Gonzales (Mex); J. Murrell (UK); I. Sinclair (UK)

Surveys of wild vulture activity coordinated by WWF-Pakistan during 2008, 2009 and 2010 have revealed only six locations in the Punjab Province where vultures are seen with any regularity; however there are only estimated to be approximately 70 birds scattered in small groups. During 2009 and 2010, one particular group of approximately 15 adult Oriental White-backed Vultures was

located in and around the Salt Range, a hill system approximately 200km north-west of Lahore. The survey leader, who is experienced with vultures and other raptors has highlighted the wary behaviour being shown by these vultures, now that there is abundant food. Two teams are employed in and around the Salt Range, following the birds and attempting to attract them by putting out carcasses.

The search for nests has continued in conjunction with the vulture activity surveys. In early 2009 seven active nests were located in the south-east of Pakistan in Nagar Parkar, Sindh Province, near the border with India. Encouragingly, six additional nests were reported in late March 2009 in the same area, which is one of the more remote parts of the Pakistan. Further surveys in 2010 revealed more White-backed Vulture nests and also a breeding colony of Long-billed vultures. It is likely that this region holds the largest remaining population of White-backed and Long-billed Vultures in Pakistan.

Conservation efforts in the Nagar Parkar area will be intensified during 2012 and this will be facilitated by a grant provided by the US Fish and Wildlife Service. The three key aims of the project are, briefly, 1) to establish a Vulture Safe Zone of at least 100km<sup>2</sup> that is free from diclofenac; 2) enhance the availability and use of meloxicam, a known safe alternative to diclofenac and 3) increase awareness of vulture conservation through local advocacy work with veterinarians, farmers

and local communities. A longer-term aim of the project is securing transnational cooperation and the establishment of a transnational Vulture Safe Zone in the region.

Apart from the GVRP, concurrent efforts on the conservation breeding of *Gyps* vultures are progressing rapidly in other countries in the region, particularly in India where three breeding centres are now operating (Vibhu Prakash, personal communications. See also [www.vulturerescue.org](http://www.vulturerescue.org)). The vulture conservation programme in Nepal has also established a breeding centre, vulture restaurants and various community projects (Nick Lindsay, personal communications. See also [www.birdlifeneal.org/projects/vulture.htm](http://www.birdlifeneal.org/projects/vulture.htm)).

Most recently, organisations in all three countries (and others) have joined a new and growing partnership called SAVE (Save Asia's Vultures from Extinction). The GVRP looks forward to maintaining its commitment to *Gyps* vulture conservation in south Asia, and to collaborating with other organisations within SAVE that have similar objectives.

**Keywords:** *Gyps bengalensis*, Pakistan, Punjab, Sindh, Changa Manga, Captive breeding

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