

Gyps Vulture Telemetry Research Proposal

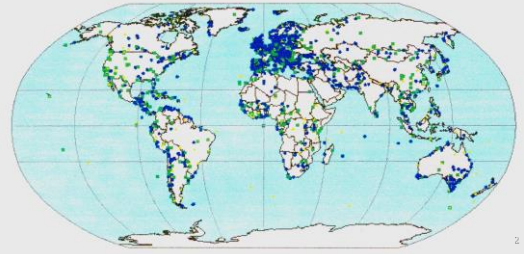


Anil Kumar Chhangani, D.Sc.
Department of Environmental Science,
Maharaja Ganga Singh University,
Bikaner (Rajasthan).

1

IUCN: (International Union for the Conservation of Nature)

- Recognized protected areas from 1990-2010: 3,000 to 6,931.
Total coverage of Protected Areas and Biosphere Reserves:
803 million hectares to 1,215 million hectares.



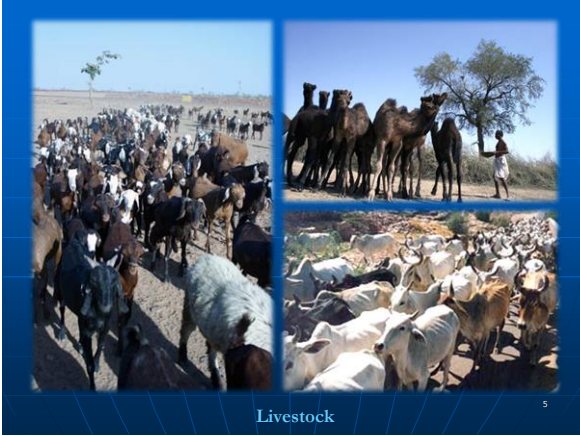
2

Type of protected area's in India to conserve the Biodiversity

Type of Protected Areas	India
Biosphere Reserves	14
National Parks	100
Wildlife Sanctuaries	514
Community Reserves or Conservation Reserves	17

3





Livestock

5

Vulture conservation and management

Questions ?

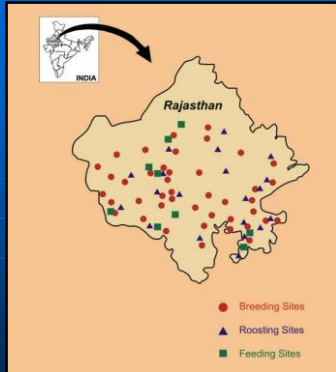
- What are the ecological conditions around feeding, roosting and breeding sites.
- What relationship do these processes between common property resource, livestock, water and habitat?
- What is the home range of any given species of vultures or Great Indian Bustard?

6

Seven species of vultures in this part of the country. This includes white-backed vulture (*Gyps bengalensis*), Long-billed vulture (*Gyps indicus*), Slender-billed vulture (*Gyps tenuirostris*), Red headed vulture (*Sarcogyps calvus*) and Egyptian vulture (*Neophron percnopterus*) as resident species and Himalayan Griffon (*Gyps himalayensis*), Eurasian Griffon (*Gyps fulvus*) and Cinereous vulture (*Aegypius monachus*) as migrants.

Red headed vulture (*Sarcogyps calvus*)

8



Vulture Populations Observed in different parts of Rajasthan

Seven Vulture Species Recorded

4 Resident: * Long-Billed Vulture (*Gyps indicus*),
 * White-Backed Vulture (*Gyps bengalensis*),
 Red Headed Vulture (*Sarcogyps calvus*),
 Egyptian Vulture (*Neophron percnopterus*)
 * Schedule-I Indian wildlife act 1972.

3 Migratory: Himalian Griffon (*Gyps himalayensis*),
 Eurasian Griffon (*Gyps fulvus*),
 Cinereous Vulture (*Acgypius monachus*)
 * Migratory Egyptian vulture (in some parts)

10

Vulture Populations Observed in 24 Districts of Rajasthan

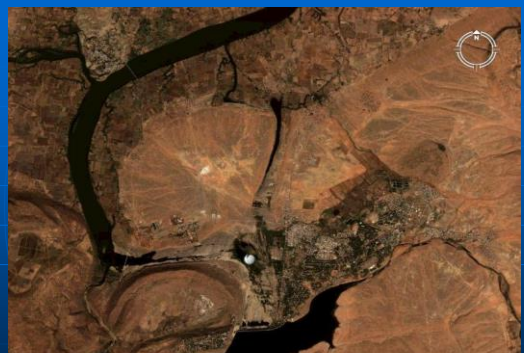
Total Vulture Population : 7489

- o Resident Vultures: 6047
- o Migratory Vultures: 1451

Breeding Vultures Populations in Rajasthan

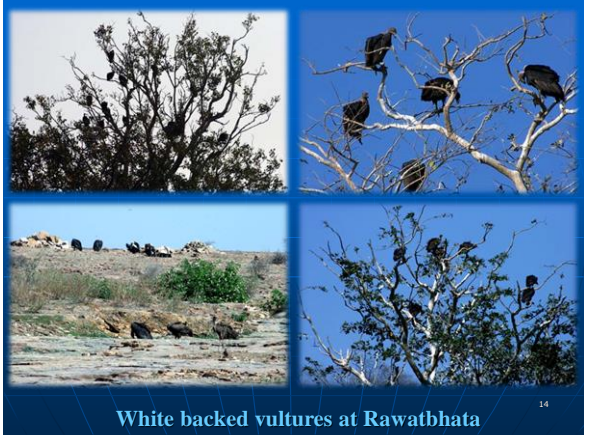
- o Breeding Colonies of LBV : 44
- o Breeding Colonies of WBV : 17
- o Breeding Colonies of RHV : 09
- o Breeding Colonies of EGV : 13

11



White backed vultures nesting site at Rawatbhata

12





Egyptian vulture (*Neophron percnopterus*) nests in old buildings called 'Haveli'¹⁷



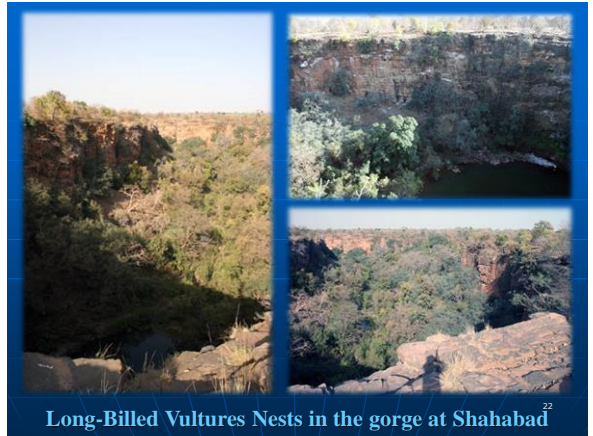
Long-billed vulture population in gorges of Chambal



Long-Billed Vultures Nests at Chambal, Kota¹⁹



Long-Billed Vultures Breeding Colony at Shahabad and many such colonies in the Hadoti region²⁰



Indo US Collaborative Researches

Title	Grant Period	Funding Agency
Indo-US Bilateral Workshop Proposal "Geospatial Technology, Wildlife Conservation and Community"	2008-09	Indo-US S&T Forum, New Delhi
Visit U.S. Fish & Wildlife Service Office at Washington, Ventura; Patuxent Wildlife Research Centre, Virginia; National Zoological Park, Smithsonian Institution, Washington; Condor Breeding Centre, Los Angeles and Ventura, California, USA.	2007-08	U.S. Fish & Wildlife Service
Monitoring of Selective Breeding Sites and Rescue of Long-Billed and White-Backed Vultures in Rajasthan and Gujarat, India	2006-07	U.S. Fish & Wildlife Service, USA
Monitoring of the Status and Breeding Success of Long-Billed and White-Backed Vulture in the Thar Desert of Rajasthan, India	2004-05	U.S. Fish & Wildlife Service, USA
Land-Use Politics, Disturbance and Biodiversity in the Indian Aravalli	2004-06	National Science Foundation, USA
Indo-US Primate Project	1994-2001	U.S. Fish & Wildlife Service, USA

23





Candor Breeding in captivity at L.A. Zoo

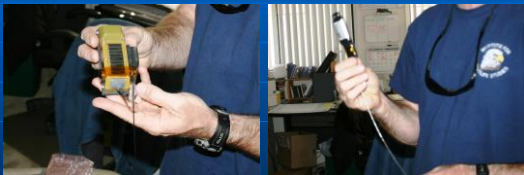
25



Candor Breeding Program Headquarter at Ventura, California is ready to collaborate for any further *research* program.

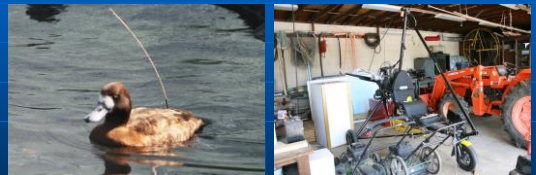
26

Satellite Trance Meters



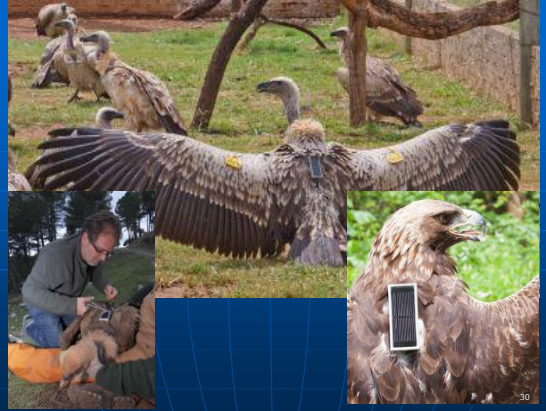
27

Satellite Trance Meters and Monitoring



28

Satellite Transmitter (Solar)





33



34

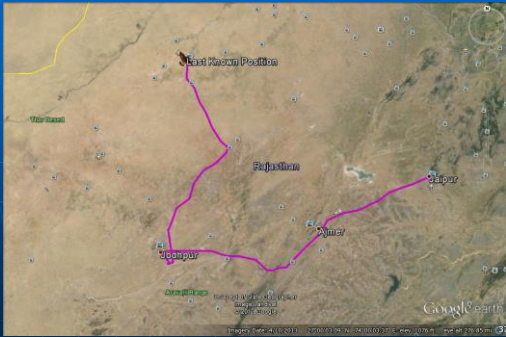


35

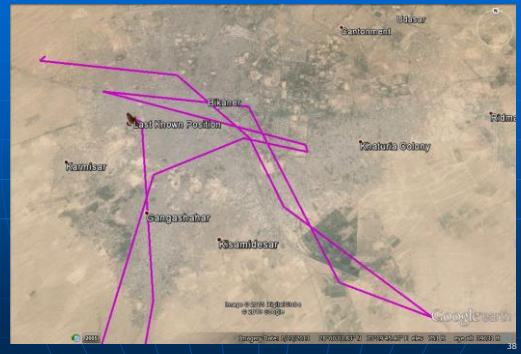


36

Tracking of Movement



Tracking of Movement



These studies provides some hope
for biodiversity conservation and
management through recent
sciences and technologies

39

Thanks

State Forest Department,
M.G.S. University, Bikaner,
State Remote Sensing Department
Indo-US Science and Technology Forum
U.S. Fish & Wildlife Service.
&
Paryavaran Prabandhan Sansthan

40