# VULTURES NAMIBIA



P O Box 3699 Walvis Bay Tel: 064-22 0443 Cell: 081-260 7375

E-mail: pmbridge@iway.na

12/11/2006

# AERIAL SURVEY OF BREEDING LAPPET-FACED VULTURES AND MARKING OF CHICKS IN THE NAMIB-NAUKLUFT PARK

September/October 2006

#### INTRODUCTION

The monitoring and ringing of Lappet-faced Vultures (LFV) in the Namib-Naukluft Park (NNP) started in 1991. Annually more areas were investigated until most of the known breeding areas were checked and the chicks ringed. The only exception is the Koigab area north of Aus, which due to the distance involved, was only surveyed once in 1998 and then from the air in 2005. Areas south of Sossusvlei in the NNP and adjacent NamibRand Nature Reserve were flown in 2005 and 2006.

This is the longest running project of its kind in Namibia. It is providing an increasing amount of data, which can be used for wildlife management planning, by ornithologists and biodiversity researchers.

In 2000, an aircraft was used to survey part of the breeding area at Ganab. In 2001, an aerial survey of 15 hours was done, which covered most of the known breeding areas. No ringing was done in 2001 In October 2002, an aerial survey of 18.5 hrs was completed and then 46 chicks were ringed, although breeding attempts by 55 LFV were recorded. In 2003, after an aerial survey, 52 breeding attempts were recorded and 44 chicks ringed. The following year (2004), 52 chicks were ringed and another four breeding attempts recorded, again after an aerial survey.

In 2005, due to increased sponsorship, we were able to survey the area from south of Sossusvlei to the Orange River for the first time, but because of the great distances involved, no ringing was done. In the NNP, 36 chicks were ringed, with an additional seven breeding records.

# **AERIAL SURVEY 2006**

The survey (23 hours), was a joint Vultures Namibia / Ministry of Environment and Tourism (MET) operation organized and funded through Vultures Namibia. It took place from Monday 25/09/2006 to Friday 29/09/2006. This was the area surveyed in past years, between the Swakop River and Sossusvlei, but with the addition of NamibRand Nature Reserve and adjoining parts of the NNP, as far south as Kumbis. Rob Field of Zebra River Lodge piloted the aircraft at no charge to Vultures Namibia. Observers included ranger David Masen and warden Riaan Solomons, Ann and Mike Scott, Andreas Keding and Peter Bridgeford. After completing the Ganab area, the crew moved to Weltevrede Guest Farm. The rest of the survey was flown from there, except on Friday when the Keerweder airstrip was used. Nedbank, through the Go Green Fund, sponsored the cost of the aircraft hire. The aircraft fuel was sponsored by Swart Grant Angula (formerly KPMG). Weltevrede Guest Farm provided food and accommodation. Nedbank funded the cost of transporting the fuel.

During the aerial survey, occupied nests were plotted on a GPS and additional information recorded on a tape recorder. Adult birds, chicks and even eggs are visible from the air in the nests. However, it is impossible to differentiate between birds roosting on nests and breeding birds.

#### FITTING OF PATAGIAL TAGS

Since the project started, birds have been ringed with a numbered metal ring and five coloured plastic rings. This was intended to help observe marked birds in the field. However, as the sighting of marked birds was very low throughout southern Africa, it was decided to use other means of marking vultures. After much deliberation by vulture researchers and biologists, it was decided to use patagial tags. These are numbered, coloured, plastic tags fitted to the wing of the bird. In the past, researchers in Namibia and South Africa have successfully used this marking system on other raptors. Trials with patagial tags in SA produced so many sightings and reports of the marked vultures, that it was decided to use this system in place of the coloured rings.

The Endangered Wildlife Trust sent Andre Botha, the manager of the Birds of Prey Working Group, to Namibia to train ringers to fit the patagial tags. They also sponsored the tools and patagial tags.

#### **RINGING**

Ringing took place as follows:

01/10 to 10/10/2006 Ganab, Saagberg/Kamberg, Tsondab/Escourt and Sukses.

Andre Botha spent Sunday and Monday training several ringers. These were "old" vulture ringers Marc Dürr, Peter Bridgeford, Ann and Mike Scott. New ringers were Holger Kolberg, Sandra Dantu, Mark Boorman, Ben Slabbert and Hartmut Kolb. Ringing continued at Ganab until Thursday. Some ringers moved south to NamibRand and then to Sukses and finally Escourt and Tsondabylei.

Academia Friendly Supermarket provided food, while fuel for the ringing vehicle came from Nedbank.

#### RESULTS OF THE RINGING

Certainly not a good year for the vultures, with only 22 chicks ringed. A further 12 breeding records were noted: namely five nests with abandoned eggs, and eight birds still incubating and three chicks too small to ring.

# DISCUSSION OF RESULTS

The aerial survey has the advantage that marginal breeding areas can easily be checked, whereas in the past they were often left because a vehicle survey was a slow, tiring exercise and time was limited. Almost all the GPS marked points were investigated, although on occasions no active nests were found. It is assumed that birds perched on nests were mistaken for breeding birds.

The Tsauchab River, ending in Sossusvlei, has shown the biggest decline over the past years, with no breeding birds found for three years. In 1996, ten chicks were ringed here. The large number of tourist vehicles and aircraft on pleasure flights in and over the Tsauchab River valley have probably lead to the demise of this breeding colony.

The numbers found in the Sukses/Tsamsvlei area are down and in the Saagberg/Kamberg vicinity breeding has decreased from eight in 2002, to two this year. The Ganab area is down to 14 breeding birds, while in 2004, we found 40.

On the Tsondab Plains, a vast area of about 10  $\times$  20 kilometres, with a few scattered trees in shallow pans, three chicks were ringed, while the Tsondab River and Vlei, with hundreds of nesting trees, no breeding birds were found. This fact suggests that disturbance by aircraft could be responsible. Planes on sight seeing flips do not fly over the flat, uninteresting plains, but over the vlei and along the river.

During the aerial survey and ringing, it was noted that in the Gemsbokwater area there were large numbers of mountain zebra, gemsbok, springbok and ostriches, while other areas had little game in comparison.

### LOGISTICS

The Lappet-faced Vulture breeds over a vast area in the Namib-Naukluft Park and this increases the time and costs during the aerial survey and ringing.

Aerial survey	23 hours
Transport of fuel, equipment and personnel by vehicle during the aerial survey	12 hours
Distance travelled: 4x4 vehicle with the avgas (Whoek / Walvis / Weltevrede)	1 583 km
Avgas (No avgas available in Walvis Bay)	5 drums
Ringing	9 days
Distance travelled by Vultures Namibia 4x4 vehicle (other vehicles were involved)	1 957 km

#### **ACKNOWLEDGEMENTS**

This project could not continue without the support of several people and organisations. Vultures Namibia thanks the following:

- $\varnothing$  MET for allowing the survey, tagging and ringing to continue.
- Ø Pilot Rob Field.
- Ø Weltevrede Guest Farm for accommodation and meals during the aerial survey.
- Ø Solitaire Guest Farm for accommodation and meals.
- Ø Nedbank for their continued support of the project over four years, without them we could not have started. They paid for aircraft hire and vehicle fuel.
- Ø Swart Grant Angula who donated the fuel for the aerial survey.
- Ø Academia Friendly Supermarket for new tyres for the Vultures Namibia vehicle, food for the ringers and other incidental, but significant expenses.
- Ø The Swart Grant Angula partners and the Slabbert family who assisted with the ringing.
- Ø Namib-Rand Nature Reserve for avgas and assistance.
- Ø Holger Kolberg for his assistance and support of the project.
- Ø Wardens and rangers of the Namib-Naukluft Park.
- Ø Endangered Wildlife Trust for support and tagging equipment.
- Ø Andre Botha for his assistance.
- $\emptyset$  Helen and Hartmut Kolb for a spare petrol tank for the Vultures Namibia vehicle.
- Ø All the other people who made the ringing fun and enjoyable.

Peter Bridgeford

VSG Co-ordinator.

YEAR	TSAUCHAB	SUKSES	TSONDAB	SAAGBERG	GANAB	TOTAL
1991	3	No ringing	12	No ringing	No ringing	15
1992	5	8	21	No ringing	No ringing	34
1993	4	5	15	3	2	29
1994	8	9	16	2	6	41
1995	6	8	6	1	8	29
1996	10	6	13	3	12	44
1997	2	2	3	0	No ringing	7
1998	7	6	7	2	14	36
1999	2	5	9	5	16	37
2000	No ringing	No ringing	0	No ringing	2	2
2001	No ringing					
2002	0	6	5	8	27	46
2003	1	10	5	3	25	44
2004	0	5	6	1	40	52
2005	1	6	4	2	23	36
2006	0	3	3	2	14	22
TOTAL	49	79	125	32	189	474

**Table 1**: Number of Lappet-faced Vulture chicks ringed in the Namib-Naukluft Park. (In 2000 only a partial survey of Ganab and Tsondab was done. In 2001 no ringing was done).

