



CAPE VULTURE TASK FORCE REPORT 2012

"To stabilize the global Cape Vulture population"



Photo taken by Walter Neser

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Executive summary

Review of breeding pairs

A major achievement is reported in that it has now been possible to develop an almost complete breeding data set for all known breeding sites in South Africa. The 2012 breeding records for the sites are tabulated and, within limits placed by less complete data in past years, it is becoming possible to see trends with time, particularly since 2008. The 2012 estimated total of over 2900 breeding pairs in SA alone is seen as encouraging, though the influence of more efficient monitoring on the estimates of increased population numbers is unclear at this point.

A Biodiversity Management Plan for the Cape vulture

It is reported that, in line with The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) and the Threatened or Protected Species Regulations, the first draft of the Cape Vulture BMP has been developed and is being circulated for comments.

Food provisioning

The vulture restaurant database has recently been updated with both many sites discontinued and many new sites confirmed. In all we report 124 confirmed active feeding sites throughout southern Africa, although records for Namibia, Botswana and Zimbabwe are incomplete. The updated *Sasol Guide to the establishment and operation of supplementary feeding sites for Vultures* booklet is now available online with hard copies planned. The booklet covers the benefits to both bird and site owner and how to establish a well-managed feeding site, including also a list of veterinary drugs and chemicals hazardous to vultures.

Wind Energy Mitigation

Contacts with Cennergi, a leading cleaner energy Independent Power Producer in southern Africa, regarding appropriate siting's for wind farms in relation to vulture movements have resulted in positive feedback. The CVTF felt the necessary data (nest localities, sites active or not, number of birds, breeding activity, etc.) to compile a scientifically defensible wind farm map for Cape Vultures for the whole of South Africa were not yet available but would require considerable resources and funding to obtain.

Power line Electrocutions and Collisions

It is reported that, in 2012, Eskom partnership responded to CVTF concerns by installing 47.9 km of line marked with flappers/diverters, making 1995 poles safer for birds, insulating 11 transformers and spending R70 167 000.00 on making lines safe. Contact was made with Nampower in Namibia to establish a similar collaborative partnership and contacts also made with contractors building lines in Mozambique.

Poisonings

It was noted that poisoning statistics are few and far between and that resources are needed to gather information and establish protocols and mitigation measures to eliminate vulture poisoning incidents.

Traditional uses

It was again noted that very little information is available on the uses of vultures for traditional purposes (Muthi). A reward system designed to save vultures at the Blouberg Nature Reserve has proved to be successful but is this attracting the capture of vultures which could be left alone?

Research

Research in 2012 principally consisted of population and breeding colony monitoring, tracking of tagged vultures and of 5 birds fitted with tracking devices to elucidate their foraging and distribution ranges. Studies also included monitoring survival rates among rehabilitated birds and work aimed at a better understanding of

power line dangers, wind farm threats and the extent of lead poisoning in vultures. Recent publications are listed.

Introduction

The Cape Vulture Task Force operates under the auspices of the Birds of Prey Programme of the Endangered Wildlife Trust and is made up of dedicated individuals and organisations focused on conserving the Cape Vulture; to prevent further declines of this species, to protect its natural habitat together with its foraging and distribution ranges and to mitigate threats, putting sound conservation actions into practice which will reduce further loses of this species and finally lead to the increase in the population throughout its range.

During March 2012, this dedicated Group spent 2 days reviewing the 2010 Conservation Plan proceedings and reviewed identified threats and identified conservation actions together with allocating responsibilities to individuals to address these objectives with measureable time-frames. Thus, the species conservation goals became more refined and targets were set to make these more achievable and measurable.

This report will highlight the Cape Vulture breeding season with a 10 year comparison whereby we can start to evaluate our efforts from previous years, together with an update and progress report on how we are moving forward along the lines of those conservation goals reviewed in March 2012.

Monitoring and Evaluation

It is with much thanks to all involved that we have managed, for the first time in years, to get an almost complete breeding data set for all known breeding sites in South Africa. Unfortunately we do still have gaps from our neighbouring countries which we hope to address in due course. I am also thrilled to report that some of these figures are looking promising, giving us a total of over 2900 breeding pairs for 2012 in SA alone. However, I would like to urge caution when analyzing this data. We are quite sure that these numbers have gone up due to a more dedicated monitoring season rather than an increase in the population itself.

Table 1: 2012 Breeding records (excluding KZN and Lesotho)

	Breeding Pairs	Nestlings	Fledglings		
Potberg	69	38	8 Fledged and another 24 still on their nests		
Manutsa	434	374 active nestlings, 19 incubating birds, 27 tenanted nests, 2 hidden nests and 2 pairs copulating. Making up a total of 424 active nests	nestlings, 5 brooding pairs, 2 tenanted adults, 1 hidden nest and 1 pair		
Blouberg	851	113 active nestlings, 816 pairs incubating and another 12 hidden nests. Making up a total of 941 active nests.	-		
Kransberg	661	384 active nestlings, 148 incubating birds, 1 egg, 18 tenanted nests and 2 pairs seen copulating. Making up a total of 553 active nests	nestlings, 4 hidden nests, 1 tenanted pair, 2 incubating pairs and 1		
Magaliesberg					

* Skeerpoort	200	156 active nestlings, 28	113 Fledglings , 4		
Skeerpoort	200	pairs incubating and	0 0		
		another 13 tenanted nests.	pairs		
		Making a total of 197			
		active nests			
* Nooitgedacht	73	33 active nestlings, 8	66 Fledglings, 4 nestlings		
		tenanted and another 13	and 12 tenanted pairs.		
		incubating adults, making	1		
		a total of 54 active nests			
* Robert's Farm	0	No breeding, colony now e	now extinct as a breeding site		
Soutpansberg	182	170 chicks with 1 pair	123 Fledglings, 3 chicks		
Soutpansperg	182	tenanting a nest, another	and 2 brooding parents		
		7 fledglings and 4 pairs	and 2 brooding parents		
		incubating. Making a			
N. 1	20	total of 182 active nests.	7 7 1 1 1 2 1 1 1		
Moletjie	20	9 active chicks and 4	7 Fledglings, 2 chicks		
		pairs incubating, making	and 1 brooding pair		
		up a total of 13 active			
		nests			
Mzimkulu/Oribi	49	30 Adults brooding and	41		
		another 11 visible			
		nestlings.			
Port St Johns / Mlengana	182	-	118		
Colleywobbles	200	-	129		
-					
Tembukazi	120	114	99		
Ntsizwa	30	_	_		
T (USIZ W U					
Ndakeni	29-33	_	_		
Mzwakazi	6-8	_	-		
Dungu	48-51	_	40 (only 1 visit in late		
Dungu	10 31		October)		
Ngozi	59-60	_	-		
1,8021					
Msikaba / Mkambati	175	133	121		
Nyokweni	Possible breeding site which	ch needs to be visited in 2013	1		
Ttyokwem	1 ossible orceaning site wind	on needs to be visited in 2015	,		
Thomas River	Potential breeding site with some adults appearing to be nest building. A total of				
THOMAS RIVE	53 immature Cape Vultures were recorded with 31 adult birds. This site to be				
	monitored each year.	The residence with 31 to	in the same of the		
Namibia	Two years ago there was 1 recorded breeding pair, however this nest is hidden and				
1 milliola	thus very difficult to monitor. Presently it is unknown if this pair is still on the				
	Waterberg and active.				
Botswana - Moremi	79	Unknown	19 seen but completed		
Gorge		Chriown	1) seen out completed		
	106	TT 1	TT 1		
Kwa-Zulu Natal /	186	Unknown	Unknown		
Drakensberg					

Total	3653	

Table 2: KZN and Lesotho 2012 breeding records

			Nest/Roost/	TOTAL birds			
DATE	AREA	SITE NAME	Sighting	seen	Adults	Juveniles	Unknown
2012-	Cathedral		<u> </u>				
06-15	Peak	Cathedral peak	Nest	3			
2012-	Cathedral						
06-15	Peak	Elephant Rock	Nest	1			
2012-	Cathedral						
10-17	Peak	Ganabu	Nest	8			8
2012-	Cathedral						
06-13	Peak	Ganabu	Nest	100			
2012-							
10-19	Drifters	Rockliff	Roost	45+		5	
2012-							
08-30	Endimane	Isiwa Samanqe	Nest	45			45
2012-							
11-04	Highmoor	Mt Lebanon	Nest	4	4		
2012-							
10-02	Hillside	Ntabamhlope	Nest	38			
2012-		Ha Mosele					
09-10	Lesotho?	Phororone	Nest	9			
2012-							
11-21	Lesotho?	Motsitseng	Nest	36	27	9	
2012-							
11-19	Lesotho?	Thaba Phatsoa	Nest	5	5		
2012-		Thlanyaku					
11-15	Lesotho?	Selomo se Putsoa	Nest	22?			
2012-							
10-07	Lesotho?	Topia Waterfall	Nest	45			45
2012-							
06-07	Monks Cowl	Vultures Retreat	Nest	50			50
2012-		Selomo - se -	.			_	
03-20	Tlhanyaku	Putsoa	Nest	31	27	4	
2012-							
07-03	Witteberg	Long Wall	Nest	21			21
2012-	LP.L.	Mu Olassa d	D t		4.5		
11-05	Highmoor	Mt Cleopatra	Roost	15	15		
2012-	Kambarra	Cladatan ala sa a	Doort	40	40	_	
10-17	Kamberg	Gladstone's nose	Roost	13	12	1	

Figure 1: Comparison between 2008-2012 breeding seasons

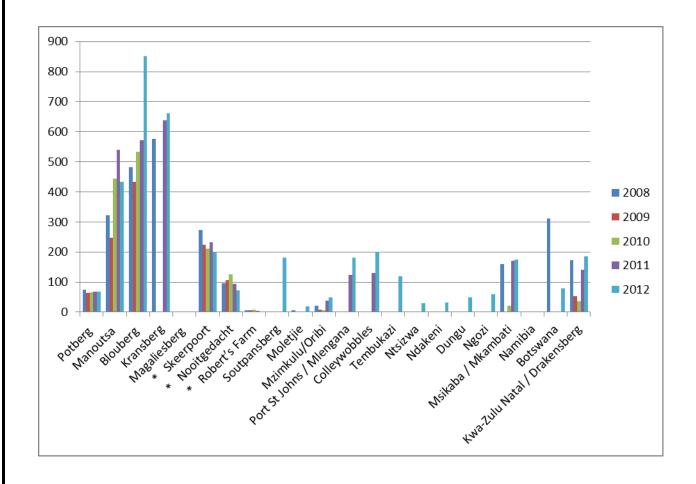
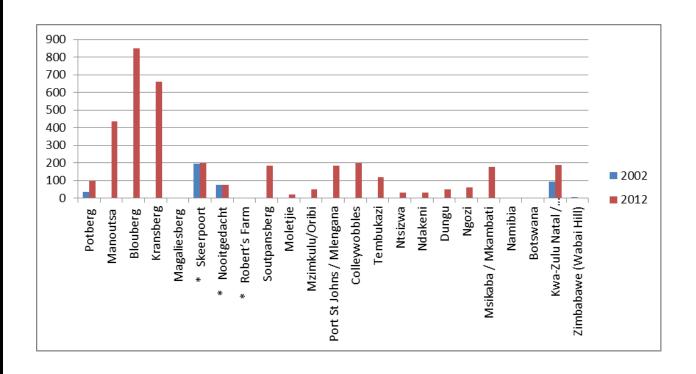


Figure 2: Comparison between limited available data in 2002 to available data in 2012 breeding season



Conservation actions/goals as set out in March 2012

1. Biodiversity Management Plan for the Cape vulture

In recognition of the need for conservation action, South Africa has developed the requisite legal framework that caters for the protection of important species. The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) and the Threatened or Protected Species Regulations provide for the compilation of Biodiversity Management Plans for Species (BMP-S).

It was therefore felt that the first step to getting the Cape Vulture recognised as an important species needing conservation action, a BMP should be developed to drive all other operational/conservation goals forward to possibly help direct our efforts in a more structured and productive manner.

The first draft of the Cape Vulture BMP has been developed and is now receiving feedback from Andre Botha of the EWT. Once his comments have been included into the document and re-checked, the second draft will be distributed to all delegates for comments.

2. Food Provisioning

Shortage of safe and available food, together with an insufficient amount of bone fragments for chick development, is believed to be one of the major factors in the species decline. Thus, establishing well managed vulture feeding sites as a conservation tool is an important goal in addressing this particular threat, as well as possibly assisting in changing their foraging paths and keeping them away from other detrimental threats such as wind farms and power lines, if suitably placed.

The vulture restaurant database has recently been updated. All sites in this database have been contacted and information updated accordingly. Many sites have been discontinued but many new sites that were established since the last review have been recorded and confirmed based on the tracking data from VulPro. The next phase is to get this database as a working online document with 2 or 3 'users' which can access it and update accordingly. To-date, there are 124 confirmed active feeding sites throughout southern Africa. However, we do not have complete records for Namibia, Botswana and Zimbabwe.

The EWT's vulture feeding site booklet has been updated and is now available as an online document and in future, in hard copy. This booklet defines what a feeding site is, the advantages to both bird and owner of the site. How to establish a well-managed feeding site as well as an updated list of which veterinary drugs or chemicals are NOT safe for vulture consumption i.e. if an animal has been donated to the feeding site and treated with any of the listed drugs/chemicals, the donated carcass either needs to be burned or buried.

Other actions identified at the meeting and which have not been addressed as yet are:

- Annual newsletter to each vulture restaurant manager / owner
- Review of existing predator control methods and how effective they are
- Landbou Weekblad article once a month on farmers running restaurants well recognition for farmer
- Assess the availability of naturally obtained food at a countrywide scale

3. Wind Energy Mitigation

Due to the topography and wind strength in areas of KZN, Lesotho, Free State and the Eastern Cape, wind farms for "greener" energy generation has become a growing threat for our vulture species foraging and breeding within these areas. It has already been shown in Spain to have a devastating effect on migratory birds of prey and vultures.

Currently in Kwa-Zulu Natal and Lesotho, the Cape Vulture population is declining at -2.2% per annum (Vortex modelling system). However, when including wind farm impacts into this model (80 structures (turbines) in two wind farms), the rate of decline increases to -3.4% per annum. The need for further tracking devices is evident to further this study as well as to fine scale spatial analysis of ranging data to inform turbine placement.

VulPro has made contact with Cennergi, one of the leading cleaner energy Independent Power Producer's in Southern Africa with regards to the location of their proposed wind farms in the Eastern Cape, near Queenstown. A proposal with regards to the fitting of 6 tracking GSM/GPS devices to follow the vulture's movements in that area before the placement of their wind farms has been submitted for consideration. Although we have not have final comment, their feedback has been very positive and this could potentially be a good avenue for support and correct placements of these wind farms, taking into account vulture movements. Cennergi has given us their support in wanting to safeguard vultures from any negative impacts caused by their wind farms.

Over and above the need for more tracking devices to find out more about vulture movements and the impact of wind farms to the species and their foraging ranges, it was also decided to develop a sensitivity map. Ernst Retief reports back "After careful consideration and evaluation of the available data sources by BirdLife SA nominated for this task, the conclusion was reached that we do not have the necessary data (nest localities, sites active or not, number of birds, breeding activity, etc) to compile a scientific defensible wind farm map for Cape Vultures for the whole of South Africa. To obtain and collate this data will require considerable resources, also finances that are not currently available. Furthermore it is clear that due to the number of nesting sites a very large part of South Africa, after buffers have been added to each nest site, will become "no go zones". This is especially true for the Eastern Cape. A map like this serves no purpose and it is mostly ignored by conservation role players. It would be of much more value to ask EIA specialists to follow the Best Practice Monitoring Guidelines for wind farms as proposed by the Birds and Wind Energy Specialist Group (BAWESG). These protocols require detailed and long term studies of nesting sites and flight patterns of birds through the proposed wind farm site. It is proposed that ways are considered to make data on Cape Vulture nesting sites easily available to EIA specialists. It should also be considered to advise EIA specialist about the risk proposed by these wind farms to Cape Vultures and vultures in general.

The BAWESG monitoring guidelines can be downloaded here: http://www.birdlife.org.za/images/stories/conservation/birds and wind energy/BLSA EWT %20Best%2 0Practice%20Monitoring%20Guidelines_2012.pdf . For more information please contact Sam Ralston at energy@birdlife.org.za."

4. Power line Electrocutions and Collisions

Power line associated mortalities and injuries can potentially increase in future as the human population and the demand for electricity continues to increase. Vultures and power lines have always had a negative relationship and thus, the EWT and Eskom formed a partnership working towards improving the situation to safe guard our vulture species as well as to reduce power outages often caused from vulture mortalities.

In the past, various mitigation measures have been tried and tested but unfortunately not all of them have been successful. With the construction of the 'Eskom' vulture enclosure at VulPro, captive research with regards to monitoring and observing vultures on some of the Eskom structures has proven to be highly beneficial in designing, re-designing, researching and implementing mitigation measures to protect vultures out in the wild which are making use of power line structures as high vantage and roosting platforms.

During 2012 the Eskom partnership worked proactively towards addressing some of our concerns highlighted at the March 2012 workshop, summarised below:

- 47.9 km of line marked with flappers / diverters
- 1995 number of poles made safe for birds
- 11 Transformers insulated
- Total spent by Eskom on making lines safe R 70 167 000.00

Additional feedback:

- Contact was made with Nampower in Namibia to establish a partnership, similar to the Eskom partnership in SA.
- Some good contacts were made with the contractors building lines in Mozambique and the Eskom Technical bulletins on bird safe structures were sent to them as guidelines.
- A meeting was held with DEAT with regards to power line mortalities. and they are now looking into makingEIAs compulsory for all lines to ensure that bird friendly structures are used.
- An online database has been developed and is now accessible to the public, once a data request form has been sent through and requested on the on the EWT's KMS system.
- WEP trained 1027 Eskom employees on wildlife interaction training across South Africa in 2012.

Future plans:

Tracking devices will be fitted onto adult wild caught Cape Vultures from the Blouberg, Kransberg and Manutsa Cape Vulture breeding colonies where information is lacking with regards to the relationship of vultures and power lines within their foraging and distribution ranges.

In addition to this, a meeting was held with DEAT with regards to power line mortalities. and they are now looking into making EIAs compulsory for all lines to ensure that bird friendly structures are used. We will keep a close eye on this.

5. Data collection and evaluation

There is a lot of information and data out there being collected by individuals and organisations, however this data is not always available or analysed whereby the information can be used to structure and facilitate adaptive conservation management plans and strategies.

To-date, a few databases have been developed as a starting point to gather all available information for analysis purposes. However, no information or data can be analysed without the consent of each and every person who has participated in these various projects:

- Vulture restaurant database
- Complete database for all tagged and re-sighted Cape Vultures. To-date, we have a total of 1902 tagged re-sightings.
- In prep, vulture breeding colony database with known roosting sites
- Cape Vulture breeding population through the CVTF report each year
- Number of vulture electrocutions (also to be grouped according to age, year and location)

Still to be developed as outlined at the meeting:

- Number of vulture poisonings (also to be grouped according to age, year and location) (Develop a standardised guideline on determining age on carcasses)
- What are the figures of vulture fatalities related to traditional use?
- Educational material

6. Poisonings

With the closing down of the Wildlife Conflict Prevention Programme of the EWT and due to a lack of available historical and present data, poisoning statistics are few and far between. Therefore many resources need to be re-developed and information gathered to start putting protocols and mitigation measures in place as well as to keep a database of all known vulture poisoning incidents. Unfortunately this has not been looked at as yet but attention does need to be given to this major vulture threat which should not and cannot be forgotten. Areas of major concern are:

- Limpopo Province
- Mpumalanga
- KZN

- Namibia
- Botswana
- Zimbabwe

7. Traditional uses

Very little information is known on the uses of vultures for traditional purposes (Muthi), however there is an Action Plan already in existence developed following a 'traditional uses workshop' held in KZN and this should form the baseline on which to move forward. As with the poisoning threat, little attention has been placed on this issue mainly due to the difficulty in acquiring reliable and accurate information.

Priority areas concerned are:

- KZN
- Limpopo

To-date, there is one site evident in trying to educate and work together with the community, preventing vultures from being harvested for the 'muti' trade. However there are some concerns to this 'reward' system in place. Basically, a reward is offered to anyone who brings in a live vulture to the Blouberg Nature Reserve rather than taking the bird to the 'muti' practitioners for use. This system though seems to be creating a demand in capturing vultures for either the 'reward' or the ever present danger of the 'muthi' trade. In the 2011 - 2012 seasons alone, a total of 39 vultures were brought into the Blouberg Nature Reserve with a total cost of R7850.00 spent on this Programme. Unfortunately though, many of the birds brought in have capture-related injuries and thus, cannot be rehabilitated for release.

8. Communications and awareness

It is important to keep the flow of communication open and on-going, not only between the CVTF but also with the media, general public and any interested individuals and/or organisations. What has been done to-date?

- A Google group for the CVTF has been set up and is in use.
- VulPro has developed a few video clips on some of the rehab cases and vulture breeding in captivity
- Mazda have promoted their sponsorship but also promoting vulture conservation in an advert broadcasted on DSTV channels featuring vulture conservation.
- Facebook pages have been established for individual organisations such as EWT and VulPro.
- Publications both in popular and peer reviewed journals
- Talks by EWT and VulPro on a regular basis

9. Research

There are a few research projects being undertaken at the moment and herewith just some highlighted points:

- 1. Monitoring the Cape Vulture population by colony champions and analysis of this data by VulPro and collaborators
- 2. Wild capture and fitting of 5 GSM/GPS tracking devices onto 5 adult Cape Vultures at the Mzimkaba vulture colony as well as tagging a total of 10 adults by Morgan Pfeiffer to identify their foraging and distribution ranges.
- 3. On-going monitoring of the tracked immature Cape Vultures by VulPro to identify their movements and foraging patterns
- 4. On-going wild captures at VulPro and tagging of all caught vultures by VulPro.
- 5. On-going monitoring at vulture restaurants for tagged re-sightings by all and camera traps to identify movement and foraging patterns.
- 6. On-going research into power line collisions and electrocutions.

- 7. Research into wind farms, their estimated threat to Cape Vultures and how best to address some of these threats predominately by KZN staff.
- 8. Tagged and processed 10 chicks on their nests at the Potberg vulture colony by Kevin Shaw and staff.
- 9. Fitted 5 tracking devices onto first year Cape Vultures and processed and tagged a total of 36 Cape Vultures at the Oribi breeding colony. This study will give good comparisons between the adult CVs from Mkambati compared to immatures from Oribi and further analyses studies will be made on their individual home ranges and movements.
- 10. A tracking device was fitted onto a rehabilitated Cape Vulture which was released in the Berg by Ben Hoffman and Sonja Krueger.
- 11. Further research into the lead levels of vultures needs to take place as one dead Cape Vulture was found to have high lead levels in its bones.
- 12. Research into the survival rates of rehabilitated vs wild caught Cape Vultures by VulPro and Ara Monadjem

10. Publications

- Naidoo V, Wolter K, Espie I and Kotze A. Vulture rescue and rehabilitation in South Africa: an urban perspective. S.Afr.Vet.Ver. (2011) 82(1): 24–31.
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- Annual Review of the conservation plan for the Cape Griffon (*Gyps coprotheres*): workshop proceedings 1-2 March 2012
- Cape Vulture (Gyps coprotheres) Species Conservation Plan review 2010



By Bettina Boemans

