

VULTURE CHICK RINGING IN PHONGOLO, MKHUZE, HLUHLUWE IMFOLOZI PARK AND ITHALA, OCTOBER 2005.

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Engraved uniquely numbered colour rings that were supplied by Haggie Engraving in the USA were used as part of the annual vulture ringing operation in KZN. These colour rings were designed and produced 15mm shorter than those used last year due to concerns being raised that the rings possibly covered too much of the birds tarsus. The cost of these rings was fully covered with funds obtained from Mr. Dale Hancock of Untamed Images CC.

The data gathered for the ground census was a continuous operation undertaken by EKZNW field staff during 2005 and this information was combined with data obtained from the aerial survey of the vulture colonies in Zululand at the end of July 2005. This information was used during the 2005 vulture chick ringing operation in October 2005.

THE RINGING OPERATION

The ringing operation took place in Phongolo Nature Reserve, Mkhuze Game Reserve, Hluhluwe Imfolozi Park (HIP) and Ithala Game Reserve. The Eskom Cherry-picker was once again kindly made available for the Phongolo and Mkhuze game reserve portions of the vulture chick ringing. The summarised findings of this ringing operation are as follows:

Phongolo Nature Reserve

- Of the 28 vulture nests located in the ground survey (May 2005), seven were not accessible at the time of ringing (Oct 2005), and four of these seven inaccessible nests had chicks present. Eighteen nests were reachable, of which one chick was too small to be ringed either with the Safring or the Colour Ring. The remaining 17 chicks were ringed with the Safring of which 16 were also colour ringed - one bird was just too small to hold a colour ring.

SPECIES	ACTIVE NEST	SAFRING	COLOUR RING	NEST FAILURE
White-backed	26	15	14	7
Lappet-faced	1	1	1	0
White-headed	1	1	1	0

- The pre-fledging success rate for Phongolo Nature Reserve is therefore currently 75%, compared to 32% in 2004. According to the literature, expected averages are 50%. This figure is not a good measure of how a population is doing as the important figure is how many successful nests fledge chicks in a colony (see last bullet point).

- 3 vulture nests were in use by Egyptian geese, all incubating eggs – it is not known if the geese usurped the nests or simply followed vulture breeding failures.
- 2 vulture nests had a decaying chick carcass, cause of death is uncertain.
- All but one vulture chick regurgitated during the ringing procedure. In 2004 only one chick regurgitated and it was felt that this could have been due to insufficient food availability during 2004. As a result of our findings in 2004, predator simulation was initiated in May 2005. This appears to have had a significant positive impact on the vulture colonies in this reserve as nest success has improved from only 9 in 2004 to 21 in 2005. This success included the commencement of breeding by a pair of White-headed vultures for the first time in Phongolo Nature Reserve. Well done to the OIC Malcolm Thomson and the Phongolo Nature Reserve Management team.

Mkhuze Game Reserve

- Of the 34 vulture nests located in the ground survey, which were verified active in the aerial survey, 14 were not accessible. 20 nests were reachable of which 14 had chicks and all were ringed with the Safring and were colour ringed.

SPECIES	ACTIVE NEST	SAFRING	COLOUR RING	NEST FAILURE
White-backed	31	13	13	6
Lappet-faced	2	1	1	1
White-headed	1	0	0	1

- The pre-fledging success rate (based upon accessible nests only) in Mkhuze Game Reserve is therefore currently 76%, compared to 88% in 2004. According to the literature, expected averages are 50%.
- One vulture nest had a decaying chick carcass, cause of death is uncertain. A single dead adult White-backed vulture was also found.
- In line with the findings from 2004, the majority of the vulture chicks regurgitated.
- Of concern was that a pair of Lappet-faced vultures that were active failed along with the breeding pair of White-headed vultures. Cause of failure is unknown.
- Of interest (concern?), it was noted that of the nests containing chicks, and that had the breeding birds present (n=4), all breeding birds were immatures. This could indicate a lack of adult birds or an unusually high turnover of breeding birds in the population.
- One adult White-backed vulture was found dead below a tree containing a nest with a chick. The chick was found in a healthy condition and subsequently ringed. The carcass of the dead bird was decomposed and could not be sent away for poison testing.

Hluhluwe Imfolozi Park

- This was the first year HIP participated in the annual ringing program.
- As the cherry-picker was not available, none of the 268 White-backed vulture nests were visited and the tree climbing effort was focused on the Lappet-faced and White-headed vultures. One Lappetfaced and two white-headed Vulture nests were accessible and had a chick in each. All these chicks were Safringed and colour ringed.

SPECIES	ACTIVE NEST	SAFRING	COLOUR RING	NEST FAILURE
White-backed	268	0	0	?
Lappet-faced	6	1	1	?
White-headed	3	2	2	?

- The majority of the Lappet-faced vulture nests were not accessible.

Ithala Game Reserve

- This was the first year that a nesting vulture has been recorded in Ithala since its inception. Of great importance is the fact that it is the nest of a Lappet-faced Vulture.
- The nest was discovered during the annual aerial game count by Cathy Greaver and Greg Nanni.
- The nest tree was easily accessed using an 8m ladder.

SPECIES	ACTIVE NEST	SAFRING	COLOUR RING	NEST FAILURE
Lappet-faced	1	1	1	0

MANAGEMENT RECOMMENDATIONS

Phongolo Game Reserve

- Continue to provide adequate year round safe supply of carcasses for predator simulation. Ensure that bones are adequately broken using a vehicle.
- Continue the ground and aerial vulture monitoring as a priority species project.

Mkhuze game reserve

- As a matter of urgency investigate the poisoning of vultures both inside and outside the protected area and ways to reduce the impact thereof.
- Supply carcasses year round inside Mkhuze to reduce foraging of the vultures into the high risk areas.

- Continue the ground and aerial based vulture monitoring as a priority species project.

Hluhluwe Imfolozi Park

- Continue the ground and aerial based vulture monitoring as a priority species project.
- Managers need to attempt to identify all those sites that can be accessed with the Cherry-picker.

Ithala Game Reserve

- Continue the ground and aerial based vulture monitoring as a priority species project.
- Continue with the current predator simulation programme.

General Recommendations

- All staff to make a dedicated effort to observe vultures feeding at carcasses, both inside and outside PA's in an effort to re-sight colour rings. All re-sightings are to be recorded and reported to the regional ecologist and to vulture@kznwildlife.com It is essential that ring colour is recorded and if possible the ring number.
- The use of the cherry-picker is essential wherever possible. It has been shown that disturbance is at an absolute minimum and the entire operation is safer for the bird, the nest and staff.

ACKNOWLEDGEMENTS

This vulture chick ringing exercise was considered a tremendous success and without the support of the reserve managers and their staff (Malcolm Thomson, Dennis Kelly, Craig Reid, Emile Schmidt, San-Marie Ras, Paul Havemann, Thanda Zulu, Cathy Greaver, Gary Bawden), the EKZN pilot Greg Nanni, Bill Howells and Doug van Zyl, and Eskom, this initiative would not have been possible. Mr Fanie van Jaarsveld from Eskom deserves special mention as he made it possible for the provision of the "Cherry Picker". Mr Andries Schouhz and Mr Chris Coetzee from Eskom are thanked for their interest and assistance in this programme as is Mr Andy Bamford from the University of Swaziland (is also thanked for his assistance and input). Mr Dale Hancock of Untamed Images CC is gratefully acknowledged for sponsoring the colour rings, which made this important project possible.

Suggested citation:

Wakelin, J. and Marchant, A.M. (2006). **Vulture chick ringing in Phongolo, Mkhuze, Hluhluwe Imfolozi Park and Ithala, October 2005.** Unpublished internal Report, Ezemvelo KZN Wildlife, Queen Elizabeth Park.