

Southern African Biodiversity Status Assessment Report - 2017

Biodiversity Asset: Bearded Vulture (*Gypaetus barbatus*)



Group	Birds
Common Name	Bearded Vulture
Scientific Name	<i>Gypaetus barbatus</i>
Assessment period	2017
Monitoring period	Annually
Author	Sonja Krüger, Ezemvelo KZN Wildlife
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Strategic Objective

Maintain the Bearded Vulture population at or above minimum target levels.

Biodiversity Target

The southern African biodiversity target for Bearded Vultures is 100 breeding pairs in the short term and 150 breeding pairs in the long term (Krüger 2013).

Abundance Parameter

Number of breeding pairs (= number of breeding territories occupied even if the pair does not breed).

Indicator Relevance

Bearded Vultures are classed as **Critically Endangered** in South Africa (Krüger 2015). The status of Bearded Vulture is an indicator of the suitability of its preferred habitat (alpine and mixed grasslands on rugged mountains and escarpments) and the availability of food in terms of quantity and quality, within its preferred range.

Assessment

Data adequacy

Quality – staff trained although monitoring protocol not always followed, partial aerial survey undertaken – **Moderate**

Quantity – 52 of 162 territories surveyed in 2017, including three new territories found – **Low**

Overall confidence in estimates – **Low to Moderate**

Status

- Protected areas – There are 40 potential territories in protected areas in Southern Africa; where potential territories are those known to be used either historically or currently (within the past 10 years, Krüger *et al.* 2014). Of the 29 territories that were checked, 13 were occupied and breeding was confirmed at 6 of these (Table 1). Protected areas containing occupied territories included 11 in the Maloti-Drakensberg Park and 1 in Ntsikeni Nature Reserve in South Africa, and 1 in Bokong Nature Reserve in Lesotho.
- Private and communal land – There are 122 potential territories on private and communal land in Southern Africa, which includes three territories discovered in 2017. Of the 23 nests that were checked outside protected areas, 14 were occupied (Table 1) and breeding was confirmed at 12 of these sites.
- Based on the survey of occupied territories, the minimum size of the adult population of Bearded Vulture is 27. Assuming the same ratio of adult (60%) to non-adult (40%) birds as Brown (1997) and Krüger (2014b), the minimum estimate of the Southern African Bearded Vulture population is 87 individuals.

Table 1. Numerical status of Bearded Vulture in Southern Africa in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	40	122	162
Number of occupied territories	13	14	27
Number of territories not occupied	16	9	25
Number of territories not surveyed	11	99	110
Population Estimate – number of pairs			27
Population Estimate – number of individuals			87

Table 2. Numerical status of Bearded Vulture in South Africa in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	38	40	78
Number of occupied territories	12	5	17
Number of territories not occupied	16	8	24
Number of territories not surveyed	10	27	37
Population Estimate – number of pairs			17
Population Estimate – number of individuals			40

Table 3. Numerical status of Bearded Vulture in Lesotho in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	2	82	84
Number of occupied territories	1	9	10
Number of territories not occupied	0	1	1
Number of territories not surveyed	1	72	73
Population Estimate – number of pairs			10
Population Estimate – number of individuals			33

Trend

The trend in the breeding population has not been assessed. However, the number of pairs and total number of individuals is slightly lower than recorded in 2016. 52% of the sites that were surveyed in southern Africa (91% in Lesotho and 41% in South Africa) were occupied compared with 58% in 2015 (88% in Lesotho and 44% in South Africa). However, 53% of the sites in South Africa were surveyed whereas only 13% of the sites in Lesotho were surveyed.

Current pressures and future threats

The primary threats to the population are poisoning and collisions with powerlines, based on the deaths of tagged birds. Accidental poisoning from ingesting lead and poison baits meant for mammalian scavengers is by far the most serious threat to the population (Krüger 2014). Development of wind farms in Lesotho and the Eastern Cape are likely to cause significant mortality (Rushworth & Krüger 2014, Reid *et al.* 2015). The small population size is resulting in low genetic diversity (Krüger *et al.* 2015) and this may pose a long term threat to the population viability.

Evaluation

Summary

1. **Status** – the number of breeding pairs and the total population estimate are well below the target levels – therefore target **Not Achieved**.

2. **Trend**– **Not Assessed**

Species	Biodiversity Indicator	Target	2017 measure	Target Assessment	Trend Assessment
<i>Bearded Vulture</i>	Number of occupied breeding territories in Southern Africa	≥100	>27	Not Achieved	Not Assessed

Key management actions

Key management actions for 2018:

1. Complete and implement the Monitoring Plan for Bearded Vulture.
2. Implement the Biodiversity Management Plan (BMP-S) for Bearded Vulture.
3. Undertake an aerial survey of the entire Maloti Mountains and Drakensberg escarpment.
4. Survey sites not surveyed in 2017.
5. Increase survey effort in the Eastern Cape and Lesotho

References

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Appendix 1:

Table 2a. Numerical status of Bearded Vulture in KwaZulu-Natal in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	36	12	48
Number of occupied territories	12	1	11
Number of territories not occupied	16	8	24
Number of territories not surveyed	8	3	11
Population Estimate – number of pairs			13
Population Estimate – number of individuals			43

Table 2b. Numerical status of Bearded Vulture in Free State in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	1	7	8
Number of occupied territories	0	1	1
Number of territories not occupied	0	0	0
Number of territories not surveyed	1	6	7
Population Estimate – number of pairs			2
Population Estimate – number of individuals			7

Table 2c. Numerical status of Bearded Vulture in Eastern Cape in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	1	21	22
Number of occupied territories	0	3	3
Number of territories not occupied	0	0	0
Number of territories not surveyed	1	18	19
Population Estimate – number of pairs			3
Population Estimate – number of individuals			10

Table 3a. Numerical status of Bearded Vulture in Butha Buthe in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories		5	5
Number of occupied territories		0	0
Number of territories not occupied		0	0
Number of territories not surveyed		5	5
Population Estimate – number of pairs			0
Population Estimate – number of individuals			0

Table 3a. Numerical status of Bearded Vulture in Berea in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	0	7	7
Number of occupied territories	0	0	0
Number of territories not occupied	0	0	0
Number of territories not surveyed	0	7	7
Population Estimate – number of pairs			0
Population Estimate – number of individuals			0

Table 3a. Numerical status of Bearded Vulture in Leribe in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	0	6	6
Number of occupied territories	0	0	0
Number of territories not occupied	0	0	0
Number of territories not surveyed	0	6	6
Population Estimate – number of pairs			0
Population Estimate – number of individuals			0

Table 3a. Numerical status of Bearded Vulture in Maseru in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	1	5	6
Number of occupied territories	1	1	2
Number of territories not occupied	0	1	1
Number of territories not surveyed	0	3	3
Population Estimate – number of pairs			2
Population Estimate – number of individuals			7

Table 3a. Numerical status of Bearded Vulture in Mhales Hoek in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	0	5	5
Number of occupied territories	0	0	0
Number of territories not occupied	0	0	0
Number of territories not surveyed	0	0	0
Population Estimate – number of pairs			0
Population Estimate – number of individuals			0

Table 3a. Numerical status of Bearded Vulture in Mokhotlong in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	0	17	17
Number of occupied territories	0	3	3
Number of territories not occupied	0	0	0
Number of territories not surveyed	0	14	14
Population Estimate – number of pairs			3
Population Estimate – number of individuals			10

Table 3a. Numerical status of Bearded Vulture in Qachas Nek in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	1	9	10
Number of occupied territories	0	1	1
Number of territories not occupied	0	0	0
Number of territories not surveyed	1	8	9
Population Estimate – number of pairs			1
Population Estimate – number of individuals			3

Table 3a. Numerical status of Bearded Vulture in Quthing in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	0	16	16
Number of occupied territories	0	2	2
Number of territories not occupied	0	0	0
Number of territories not surveyed	0	14	14
Population Estimate – number of pairs			2
Population Estimate – number of individuals			7

Table 3a. Numerical status of Bearded Vulture in Thaba Tseka in 2017

Abundance Parameter	Protected Areas	Private & Communal	Total
Total number of breeding territories	0	12	12
Number of occupied territories	0	2	2
Number of territories not occupied	0	0	0
Number of territories not surveyed	0	10	10
Population Estimate – number of pairs			2
Population Estimate – number of individuals			7