

**A FIRST SYNTHESIS OF  
THE ENVIRONMENTAL,  
BIOLOGICAL & CULTURAL  
ASSETS OF THE  
SOUTPANSBERG**



# **A FIRST SYNTHESIS OF THE ENVIRONMENTAL, BIOLOGICAL & CULTURAL ASSETS OF THE SOUTPANSBERG**

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## INDIGENOUS BIRDS

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### Sources of information

The main data sources used are:

ANON. Undated. *Birds of the Greater Kuduland Conservancy*. Unpublished.

HARRISON, J. A., ALLAN, D. G., UNDERHILL, L. G., HERREMANS, M., TREE, A. J., PARKER, V. & BROWN, C. J. (ESD). *The Atlas of southern African birds*. Vols I & II. Birdlife South Africa, Johannesburg.

MARAIS, E. Undated. *A guide to the birds of Ben Lavin Nature Reserve*. Unpublished.

STEWART, C. T., STEWART, T., GAIGHER, I. G., GAIGHER, M. J. 2001. *Checklists for the fauna of the Western Soutpansberg*. Soutpansberg Conservancy, Louis Trichardt.

TARBOTON, W. R., KEMP, M. I. & KEMP, A. C. 1987. *Birds of the Transvaal*. Transvaal Museum, Pretoria.

This list of species occurring in the Soutpansberg is most probably 100% complete for species of any significance - any new species coming in from now on will probably be rare vagrants, of little ecological or conservation significance. However, finer scale data on where exactly the various species occur within the Soutpansberg, how they move seasonally, how large their populations are and how the species is faring in the area is only available for a few of the larger birds of prey and vultures.

### Summary statistics

The whole greater Soutpansberg area [*sensu latu* = van Wyk and Smith's (2001) Soutpansberg Centre], has a total indigenous avifauna of  $\pm 510$  species (CTS). This is 56% of the southern African avifauna (CTS - ex Sthn Afrn Bird Atlas = 910 species) and 76% of the South African terrestrial and freshwater avifauna when vagrants and oceanic species are excluded (CTS - ex Sthn Afrn Bird Atlas = 666 species). If only the Soutpansberg mountain range itself is included then the avifauna totals about 380 to 400 species (WT).

If we look at smaller areas within this area the diversity is equally outstanding, e.g. the Western Soutpansberg (900 km<sup>2</sup>) has an avifauna of 298 species (Stuart, Stuart, Gaigher & Gaigher, 2001), the quarter degree Grid Square 2230AA (an area of  $\pm 700$  km<sup>2</sup>) has 338 native species - but this includes core areas on the mountain such as the Luonde Forest as well as areas on the plains south of the mountain range including the Albasini Dam (IAWM - Sthn Afr Bird Atlas + IAWM in press), the quarter degree grid square which includes the Greater

Kuduland Conservancy 2130DA (an area of 700 km<sup>2</sup>) has 412 species and the Greater Kuduland Conservancy itself (150 km<sup>2</sup>) has 304 species. Lajuma, a 4,3 km<sup>2</sup> area mainly forested and totally within the Soutpansberg mountains has 100 species (this is likely to be a considerable underestimate as the area's avifauna has not yet been intensively studied).

Birds of prey are especially well represented, with 38 species, as are forest-living species, and species restricted to moist savanna (on SE side of mountain range) and to arid savanna (on NW side of the mountains). Some of the "special" species of the Soutpansberg are Cape Vulture *Gyps coprotheres*, Crowned Eagle *Stephanoaetus coronatus*, Forest Buzzard *Buteo trizonatus*, Bat Hawk *Macheiramphus alcinus*, Crested Guineafowl *Guttera pucherani*, Blue-spotted Wood Dove *Turtur afer*, Knysna Turaco *Tauraco corythaix*, Pel's Fishing Owl *Scotopelia peli*, Mottled Spinetail *Telecanthura ussheri*, Narina Trogon *Apaloderma narina*, African Broadbill *Smithornis capensis*, Grey Cuckoo-shrike *Coracina caesia*, African Golden Oriole *Oriolus auratus*, Eastern Bearded Robin *Erythropygia quadringata*, Gorgeous Bush Shrike *Telephorus quadricolor*, Black-fronted Bush Shrike *T. nigrifrons*, Golden-backed Pytilia *Pytilia afra*, Green Twinspot *Mandingoa nitidula* and Pink-throated Twinspot *Hypargos margaritatus*. Birdwatchers from all over the world come to the Soutpansberg to see these "specials" and, of course, the many other species that are present here.

At least 6 Red Data-listed 'vulnerable' species occur here (White-backed Night Heron *Gorsachius leuconotus*, Cape Vulture, Martial Eagle *Polemaetus bellicosus*, African Finfoot *Podica senegalensis*, Grass Owl *Tyto capensis*, Pel's Fishing Owl), and 11 'near-threatened' species (Black Stork *Ciconia nigra*, Bat Hawk, Ayres' Eagle *Hieraetus ayresii*, Crowned Eagle, Peregrine *Falco peregrinus minor* and Lanner Falcons *Falco biarmicus*, Half-collared Kingfisher *Alcedo semitorquata*, African Broadbill, Orange Thrush *Zoothera gurneyi*, Wattle-eyed Flycatcher *Platysteira peltata*, Pink-throated Twinspot). Although not Red Data-listed, three other rare South African species also occur here - Blue-spotted Dove, Mottled Spinetail, Golden-backed Pytilia *Phytalia afra* - and the Soutpansberg is the stronghold in South Africa for these species. Another very unusual species - Ruppell's Vulture *Gyps rupellii* - was discovered (a single bird) living in the Cape Vulture breeding colony at Blouberg. This is the first South African record for this East African species.

### Major studies and publications

See the list of data sources above

### Recommendations for priority studies required to fill any gaps identified

The most important studies that should be done are:

- a fine scale survey of the distribution of bird species in the Soutpansberg (this to be done in such a way that it will provide a "baseline" against which future changes in the status of the area's bird species can be measured by repeating these surveys in all or parts of the range),
- retrospective analyses of any regularly recorded areas to see if any trends in reporting frequency can be determined as an indicator of population changes in the native bird species in the Soutpansberg,
- continuation of the monitoring of the breeding populations and nesting success of the larger birds of prey and Cape Vulture colonies in the Soutpansberg (including the Blouberg).

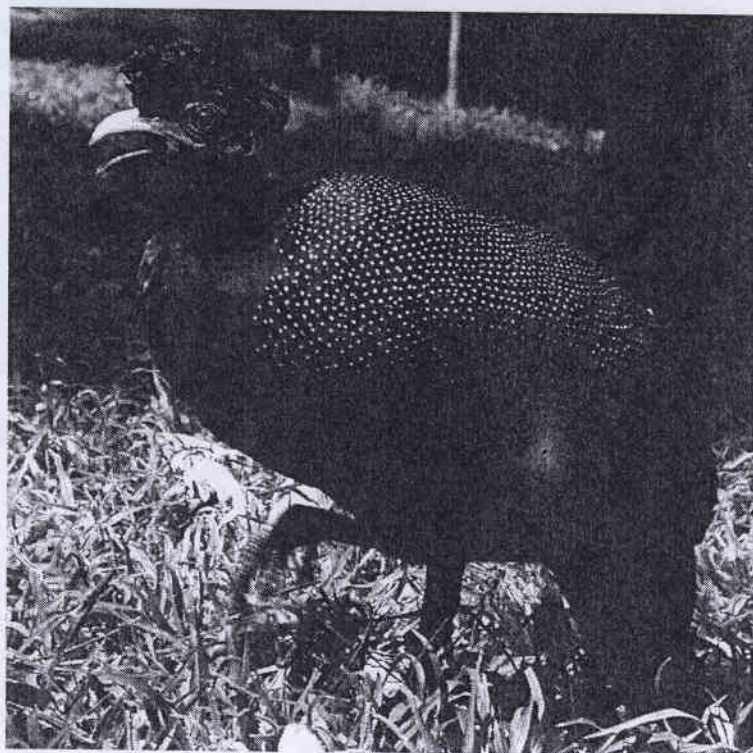
### "Hot spots" of particular importance

In terms of bird 'hotspots' in the Soutpansberg, WT would list the following:

- the Cape Vulture breeding colonies on the Blouberg (700–800 pairs, the second largest colony of this species in existence) and on Buffelspoort and

Uniondale, just west of the Sand River (50–100 pairs)

- the extensive network of large cliffs found west of Louis Trichardt, and especially west of the Sand River: some 6–7 pairs of Peregrine Falcons nest here and at least 22 breeding pairs of Black Eagles nest west of the Sand River.
- the Mottled Spinetail breeding colony (100+ nesting pairs) in the 'Big Baobab' near Klein Tshipise
- the patch of *Brachystegia* woodland at Shakadza (in Nwanedzi catchment): this has the potential of harbouring a population of one or more miombo-restricted species
- the baobab stands along the northern slopes of the Soutpansberg west of the Sand River: these provide breeding sites for a number of large eagles, including at least 1 pair of Martial Eagle and 6 pairs of African Hawk Eagle *Hieraaetus spilogaster*.
- all forest patches, but especially those on Entabeni, where a pair of Bat Hawks breed, where there are several nesting pairs of Crowned Eagle and where such Red Data species as Orange Thrush and African Broadbill occur.
- the gallery of riparian forest along the Sand River where it cuts through the Soutpansberg, providing habitat for White-backed Night Heron, Pel's Fishing Owl and others.



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## MAMMALS

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### Sources of information

Collections and records are maintained in a number of Museums, the most important of which are the "Transvaal" Museum, the Kaffrarian Museum and the Albany Museum. Various other museums, universities, government departments, etc. also have collections and statistics. The biodiversity data set of the Department of Nature Conservation of the Limpopo Province in Polokwane is an important source of recent information. Due to a lack of funding, some collections may not be curated properly any more and it is necessary to obtain and catalogue all the information on the Soutpansberg as soon as possible.

A total of 145 species has been recorded in the Soutpansberg (Table 1).

TABLE 1. Number of species per order as recorded for the Soutpansberg in relation to South Africa.

Order	Number Species		%
	Sout.	S. A.	
INSECTIVORA	11	35	31
CHIROPTERA	36	55	65
PRIMATES	5	5	100
PHOLIDOTA	1	1	100
LAGOMORPHA	3	6	50
RODENTIA	31	64	48
CARNIVORA	26	34	76
TUBULIDENTATA	1	1	100
PROBOSCIDEA	1	1	100
HYRACOIDEA	2	3	66
PERISSODACTYLA	3	4	75
ARTIODACTYLA	25	33	76
TOTAL	145	242	60

### Summary statistics

The Soutpansberg has a remarkable diversity of mammals making up 60% of the total number of species that occur in South Africa. There are more mammal species in the Soutpansberg than in the Cape Floristic Kingdom (127). The whole of the Kruger National Park only contains two more species of mammals than the Soutpansberg. It is particularly rich in bats, carnivores and larger hoofed animals. Six species are listed in the SA Red Data

Book on Mammals. One critically endangered (black rhino), two endangered (elephant and wild dog), and three vulnerable (cheetah, lion and springhare). The black rhino has been exterminated from the Soutpansberg. What about Lichtenstein hartebeest and Roan. Elephant, wild dog and lion only remain in the far eastern part within the Kruger National Park. Elephant do occasionally move to the northern foothills from the Limpopo region. What about the few remaining Hippopotami in the Levhuvhu? Cheetah is not found on the mountain plateau any more but it is still amazingly common on the plains north of the mountain. Springhare is still relatively common in areas with suitable habitat.

Compared internationally, the mammal diversity of the Soutpansberg is impressive. It has more mammal species than 11 of the 27 recognized biodiversity hotspots of the world. For example, there are more mammal species in the Soutpansberg than in places like Central Chile (56) or Madagascar and the Indian Ocean Islands combined (112). The Soutpansberg has more mammal species per unit area than seven of the eight hottest biodiversity hotspots of the world.

### Major studies and publications

No detailed work has been done on mammal diversity in the Soutpansberg. General publications on South African mammals are:

DE GRAAFF, G. 1981. *The rodents of southern Africa*. Butterworth, Pretoria

DORST, J. & DANDELLOT, P. 1983. *A field guide to the larger mammals of Africa*. Macmillan. Johannesburg.

RAUTENBACH, I. L. 1978. *The mammals of the Transvaal*. Ph.D. Thesis, University of Natal.

SKINNER, J. D. & SMITHERS, R. H. N. 1990. *The mammals of the Southern African subregion*. Yale University Press, New Haven.

STUART, C. & STUART T. 2001. *Field guide to the mammals of Southern Africa*. Struik Publishers, Cape Town.

### Recommendations for priority studies required to fill any gaps identified

It is necessary to summarise all the existing information on historical and present distribution of mammals in the Soutpansberg. A proper data base should be set up and be updated from time to time to determine trends.

**"Hotspots" of particular importance**

The approximately twenty species of mammals that are dependent on or associated with forests probably require the most attention because this biotope has been under a lot of pressure. This includes some musk shrews, several

bat species, the thick tailed bush baby, the samango monkey, the giant rat and red duiker. Biotopes that provide surface water and wet or marshy areas also require attention. Some shrews, bats, rodents, Cape clawless otter, and reedbuck are examples. The status of the grey rhebok needs to be determined.



J. Stam