SWAZILAND

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Four-coloured Bush-shrike *Telophorus quadricolor.* (ILLUSTRATION: MARK ANDREWS)

GENERAL INTRODUCTION

The Kingdom of Swaziland, with an area of 17,363 km², is one of the smallest countries in Africa. It is landlocked, surrounded by South Africa to the north, west and south and separated from the Indian Ocean on the east by the Mozambique coastal plain. About 46% of Swaziland lies above 1,000 m (the highveld), but none above 2,000 m. Almost the entire land area of the country is cultivable, and most of it is highly cultivated. Swaziland has a population of about 900,000 people.

In the west, the highveld of Swaziland straddles the broken and dissected edge of the Drakensberg escarpment of southern Africa, which runs linearly from north to south. This mountainous region varies from steep rugged terrain to undulating slopes. The natural vegetation consists of Afromontane forests in steep mesic gullies, scrub and woodland on intermediate slopes and grassland on rolling hills with deeper soils. The middleveld is a transitional zone between the highveld and the lowveld, and consists largely of undulating topography interspersed with isolated inselbergs and rocky outcrops. The vegetation is primarily broadleaved savanna, woodland and forest. The lowveld, in the east, consists of flat to gently rolling country at 150–500 m elevation; the vegetation comprises patches of indigenous *Acacia* savanna interspersed with *Combretum* and *Terminalia* woodland. The eastern border of Swaziland is formed by the Lubombo Mountains, a low range which rises from the lowveld to an altitude of 777 m.

The highveld grasslands have been dramatically reduced in extent by commercial afforestation, with large areas having been replaced by *Pinus* and *Eucalyptus* plantations. Invasion of native habitat by Australian wattle *Acacia* trees is another severe problem. These alien plants clog river courses and threaten native plant and animal communities by occupying habitat and altering water flows and nutrient cycles. Overgrazing by livestock has led to reduced grass cover and subsequent erosion and degradation of wetlands. Encroachment of maize cultivation around the edges of wetlands has also contributed to the demise of vleis. The middleveld has largely been replaced by subsistence agriculture, cultivation and livestock. Wood is removed for subsistence purposes, leading to substantial deforestation in certain areas. The lowveld has also been extensively modified for the cultivation of sugar, cotton and citrus. Overgrazing has led to severe bush

Map 1. Location and size of Important Bird Areas in Swaziland.

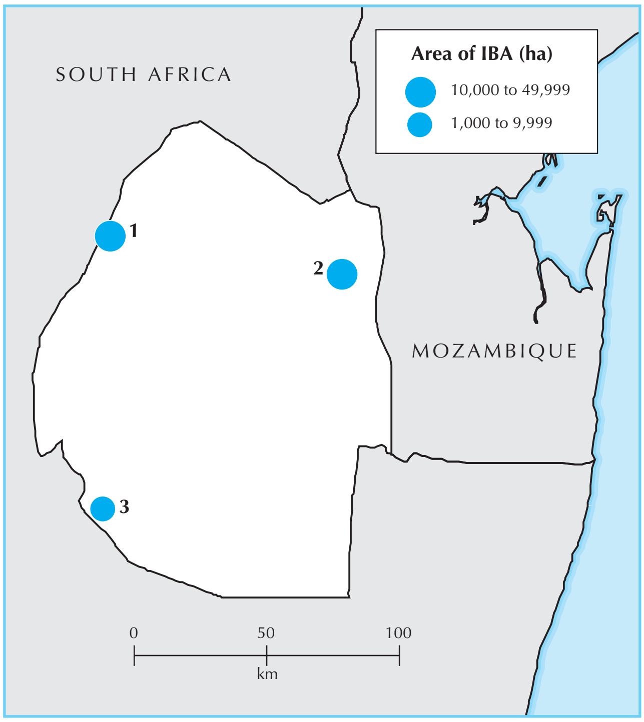

Table 1. Summary of Important Bird Areas in Swaziland. 3 IBAs covering 580 km^2

IBA code	National code [1]	Site name	Administrative region	Criteria (see p. 11; for A2/A3 codes, see Tables 2/3) A1	A2 089	 092	A3 A07	 A09
SZ001	SW001	Malolotja Nature Reserve	Hhohho	✔	✔		✔	
SZ002	SW002	Hlane and Mlawula Game Reserves	Lubombo			✔		✔
SZ003	—	Mahamba Mountain	Shiselweni	✔			✔	
		Total number of IBAs qualifying:		2	1	1	2	1

[1] Barnes (1998).

Table 2. The occurrence of restricted-range species at Important Bird Areas in Swaziland. Sites that meet the A2 criterion are highlighted in **bold**. Species of global conservation concern are highlighted in **bold blue**.

089 – South African forests Endemic Bird Area
(five species in Swaziland; one site meets the A2 criterion)

IBA code:	**001**
Tauraco corythaix	✔
Lioptilus nigricapillus	✔
Cossypha dichroa	✔
Cercotrichas signata	✔
Serinus scotops	✔
Number of species recorded:	**5**

092 – South-east African coast Endemic Bird Area
(two species in Swaziland; one site meets the A2 criterion)

IBA code:	**002**
Apalis ruddi	
Hypargos margaritatus	✔
Number of species recorded:	**1**

encroachment transforming much of the indigenous savanna into shrubby woodland.

ORNITHOLOGICAL IMPORTANCE

During the period of the national ornithological atlas project (1985–1991), 489 bird species were recorded in Swaziland (Parker 1994). Since then, another 11 species have been added, bringing the number of species recorded in Swaziland to 500. This diversity is a result of the altitudinal range and consequent habitat variability within this small country.

Swaziland currently supports six species of global conservation concern. Most of them are concentrated in the highveld. The area around Malolotja Nature Reserve (IBA SZ001) is one of only a few sizeable areas of pristine high-altitude grassland remaining in the country; it supports regular populations of *Hirundo atrocaerulea* (VU) and *Geocolaptes olivaceus* (NT). *Grus paradisea* (VU) is now extinct in Swaziland, having been last observed at Malolotja in 1994. It also supports important populations of other species, including *Geronticus calvus* (VU), *Lioptilus nigricapillus* (NT) and *Saxicola bifasciata* (NT). The western highveld zone holds pockets of forest that support five restricted-range species of the South African forests Endemic Bird Area (EBA 089) (Table 2). Mahamba Mountain (IBA SZ003) also covers a relatively large area of pristine high-altitude grassland and supports populations of *Geocolaptes olivaceus* and *Saxicola bifasciata*. The Mahamba Gorge is the site of the largest breeding colony of *Geronticus calvus* in Swaziland.

The lowveld in and around Hlane and Mlawula is one of the few sanctuaries in Swaziland supporting large-game populations and their associated diverse raptor assemblages (including *Gyps coprotheres* (VU), which breeds in neighbouring Mozambique) and large terrestrial birds such as *Bucorvus cafer* (although only one or two groups survive here, and the population may therefore not be viable). The eastern lowveld also supports two restricted-range species of the South-east African coast EBA (EBA 092), *Apalis ruddi* and *Hypargos margaritatus* (Table 2). Owing to the extensive altitudinal variation in the country, species typical of the Afrotropical Highlands, East African Coast and Zambezian biomes are all present (Table 3).

CONSERVATION INFRASTRUCTURE AND PROTECTED-AREA SYSTEM

The National Trust Commission Act of 1972 provided legislation for the creation of National Parks and Monuments and matters related to them, and brought into being the Swaziland National Trust Commission, which oversees nature conservation and the preservation of Swazi heritage. The Forest Legislation (1979) prohibits the cutting down, removal, sale or purchase of indigenous timber without permission from the Minister of Agriculture. Earlier legislation included the Game Act of 1 September 1953 (last amended in 1993) which covered game reserves and sanctuaries, and the Flora Protection Act of 31 October 1952 (amended in 2001) which deals with the protection of endangered species and the establishment of flora reserves. The Game Act also offers legislative protection to all species of bird except for *Numida meleagris*.

Currently, the protected-area network in Swaziland is poorly developed, and very few publicly owned protected areas exist, covering just 3.7% of the country. They are under constant threat from mining interests or de-proclamation for other purposes (e.g. sugar-cane cultivation in Hlane Game Reserve). The number of privately owned reserves is increasing annually (currently these ‘informally’ protected areas cover c. 1% of the land surface area of Swaziland).

Table 3. The occurrence of biome-restricted species at Important Bird Areas in Swaziland. Sites that meet the A3 criterion are highlighted in **bold**. Species of global conservation concern are highlighted in **bold blue**. Any other species with a restricted range are highlighted in blue.

A07 – Afrotropical Highlands biome
(12 species in Swaziland; two sites meet the A3 criterion)

IBA code:	**001**	002	**003**
Sarothrura affinis	✔		
Tauraco corythaix	✔		
Coracina caesia	✔	✔	
Lioptilus nigricapillus	✔		
Zoothera gurneyi	✔		
Saxicola bifasciata	✔		✔
Cossypha dichroa	✔		
Pogonocichla stellata	✔		
Phylloscopus ruficapilla	✔		✔
Telophorus olivaceus	✔		
Promerops gurneyi	✔		
Estrilda melanotis	✔		✔
Number of species recorded:	**12**	1	**3**

A09 – East African Coast biome
(five species in Swaziland; one site meets the A3 criterion)

IBA code:	001	**002**
Poicephalus cryptoxanthus		✔
Telophorus quadricolor	✔	✔
Lamprotornis corruscus	✔	✔
Nectarinia veroxii		✔
Hypargos margaritatus		✔
Number of species recorded:	2	**5**

A10 – Zambezian biome
(three species in Swaziland; no sites meet the A3 criterion)

IBA code:	001	002
Turdus libonyana	✔	✔
Cossypha humeralis	✔	✔
Nectarinia talatala	✔	✔
Number of species recorded:	3	3

A11 – Kalahari–Highveld biome
(one species in Swaziland; no sites meet the A3 criterion)

IBA code:	002
Lamprotornis australis	✔

INTERNATIONAL MEASURES RELEVANT TO THE CONSERVATION OF SITES

Swaziland ratified the Convention on Biodiversity (CBD) in 1994, the Convention on Climate Change in 1996 and the Convention to Combat Desertification and the Convention on International Trade in Endangered Species in 1997. Swaziland is not a party to the Ramsar Convention, as no wetlands within the country satisfy the convention's criteria for recognition as a wetland of international importance.

OVERVIEW OF THE INVENTORY

Three globally Important Bird Areas (IBAs) have been identified in Swaziland (Map 1, Table 1), covering some 580 km² or 3.3% of the country's land surface area. Two of the three receive full legal protection, but the government seems to be prepared to permit mining and other destructive activities in these protected areas when there is economic incentive to do so. These two protected sites represent some of the least altered areas of Swaziland—Malolotja in the grassland and forest belt of the north-western highveld, which is otherwise highly modified, and the Hlane–Mlawula complex in the north-eastern lowveld nestled up against the Lubombos. Although the Hlane–Mlawula complex has suffered extensively from overgrazing and bush encroachment (this is patchy in nature and does not cover the entire area), it is still the only place in the country supporting a diverse assemblage of ungulates and their associated avian scavengers.

The third site, Mahamba Mountain, is privately owned. Mahamba Mountain is situated in the south-western region of Swaziland and is covered by highveld grassland and small patches of forest. The Mkhondvo river cuts through Mahamba Gorge and provides nesting habitat for cliff-nesting species. Currently, this area is utilized for cattle-grazing, although the land-owner is attempting to develop the area for ecotourism.

ACKNOWLEDGEMENTS

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GLOSSARY

vlei a wetland, particularly of a marshy nature.

SITE ACCOUNTS

Malolotja Nature Reserve SZ001

Admin region Hhohho
Coordinates 26º06′S 31º05′E A1, A2 (089), A3 (A07)
Area 18,000 ha **Altitude** 670–1,837 m Nature Reserve

Site description

This reserve is located in north-western Swaziland, between the border towns of Bulembu and Ngwenya, along the eastern Drakensberg escarpment of southern Africa. The western boundary of the reserve forms the border with South Africa, abutting on Songimvelo Nature Reserve (IBA ZA017). Havelock Mine and Swaziland Plantations own the land north of the reserve and the eastern boundary runs close to the main Mbabane/Pigg's Peak road. Within the reserve lie some of the oldest sedimentary rocks known, c.3,600 million years in age. The site is dominated by the rugged mountains of the Silotfwane, Mgwayiza and Ngwenya ranges, including two of Swaziland's highest peaks, Ngwenya (1,837 m) and Silotfwane (1,680 m), as well as its highest waterfall, Malolotja Falls. Steep valleys and gorges cut into this mountain escarpment, while deep river valleys and gentle rolling grassland plains dominate the adjacent landscape.

Sour highland grassveld covers the gently undulating hills and slopes interspersed with narrow drainage lines. Scrubby vegetation occurs patchily along clear, fast-flowing mountain streams. Mountain slopes contain thornveld, and there are a few *Protea* bushes on Ngwenya Mountain. The valley slopes contain savanna trees and shrubs. Forests are restricted to the more mesic valleys. Also present are rocky outcrops, as well as open rock cliffs that form part of the Drakensberg escarpment.

Birds

See Box and Tables 2 and 3 for key species. To date c.290 species have been recorded in the reserve. Malolotja holds suitable habitat for many important grassland-dependent species. This is the only reserve in Swaziland where *Hirundo atrocaerulea* occurs regularly. Pairs breed along the eastern boundary of the reserve near the entrance gate. The rolling primary grassland is restricted to the eastern sector of the reserve; further west the geology changes and the topography becomes steeper, more dissected and unsuitable for this species. *Geronticus calvus* breeds regularly at Malolotja Falls, and irregularly at a small number of satellite sites. They are often observed foraging in burnt grassland. *Grus paradisea* was formerly an altitudinal migrant in Swaziland; three pairs bred in Malolotja Vlei, She Mine area and Mhlangamphepha Valley. However, this species is now extinct in Swaziland, since there has been no sign of it since 1994 despite several searches (Monadjem *et al.* in prep.).

Francolinus levaillantoides, *Neotis denhami* and *Sarothrura affinis* are breeding residents that are virtually restricted, in Swaziland, to Malolotja Nature Reserve. Other grassland species of concern include *Vanellus melanopterus*, *Turnix hottentotta* and *Schoenicola brevirostris*. *Francolinus shelleyi* is a fairly common resident in the foothills of the Malolotja Valley.

The moist vleis hold *Circus ranivorus* and *Tyto capensis*, as well as *Balearica regulorum* formerly, but this species has now been extinct in Swaziland for over a decade (Monadjem *et al.* in prep.). The riverine and Afromontane forests in the reserve hold *Tauraco corythaix*, *Lioptilus nigricapillus*, *Cossypha dichroa*, *Telophorus olivaceus* and *Serinus scotops*. Two previously unknown species, *Zoothera gurneyi* (a first for Swaziland) and *Cercotrichas signata*, were found in the isolated Mgwayiza mist-belt forest north of the Nkomati river in 1998 (this forest is the site of a proposed chert mine). *Geocolaptes olivaceus* and *Saxicola bifasciata* are found on exposed rocky grassland slopes where *Monticola explorator* occurs as a winter visitor. The small patches of *Protea* bushes on Ngwenya Mountain hold a few *Promerops gurneyi*. *Buteo oreophilus* has been recorded nearby and may frequent the reserve as a non-breeding migrant.

Key species

A1	*Geronticus calvus*	*Lioptilus nigricapillus*
	Geocolaptes olivaceus	*Saxicola bifasciata*
	Hirundo atrocaerulea	
A2 (089)	South African forests EBA: All of the five species of this EBA that occur in Swaziland have been recorded at this site; see Table 2.	
A3 (A07)	Afrotropical Highlands biome: All of the 12 species of this biome that occur in Swaziland have been recorded at this site; see Table 3.	

Other threatened/endemic wildlife

The cycads *Encephalartos lanatus* (Rare), *E. paucidentatus* (VU) and *E. laevifolius* (EN) are protected here. All three species are extremely rare and localized, and much sought after by collectors for cultivation. The small tree, *Cassipourea swaziensis* (EN), virtually restricted to western Swaziland, occurs in the reserve. Among mammals, *Ourebia ourebi* (LR/cd), confined in eastern South Africa and Swaziland to the grassland areas of the high-altitude escarpment, occurs here, *Connochaetes gnou* (LR/cd) and *Damaliscus dorcas phillipsi* (LR/cd) have been reintroduced to the reserve, and the southern African endemics *Myosorex varius*, *Suncus infinitesimus*, *Amblysomus hottentotus* and *Pelea capreolus* also occur.

Conservation issues

Malolotja Nature Reserve was established in 1979 and is administered by the Swaziland National Trust. It was opened to the public in 1984 and remains the most pristine and unspoiled area in this densely populated country. Densities of *Hirundo atrocaerulea* at Malolotja are lower than at nearby sites in Mpumalanga. Availability of suitable nest-holes does not appear to limit bird numbers, but the instability of sinkholes is a factor that significantly affects breeding success in the Swaziland population. Unfortunately, developers wishing to mine for green chert seriously threaten the reserve. The mining would not only affect habitat for *Hirundo atrocaerulea*, but would also involve the clearance of the unique Mgwayiza Forest, which could lead to the extinction of *Zoothera gurneyi* in Swaziland.

Further reading

Allan *et al.* (1987), Anon. (1987), Boycott and Monadjem (1998), Monadjem *et al.* (in prep.), Evans (1998), Parker (1994), Snell (1963, 1969, 1970, 1979), Tucker (1957).

Hlane and Mlawula Game Reserves

SZ002

Admin region Lubombo
Coordinates 26º14′S 31º57′E
Area 40,000 ha **Altitude** 150–576 m
A2 (092), A3 (A09)
Game Reserves

Site description

These two reserves are situated in north-eastern Swaziland, c.12 km south of the town of Lomahasha and 20 km north of Siteki. The reserve complex covers the northern portion of the Lubombo range (up to the Mozambique border) and the plains to the west. The major part of the area lies at low altitude. The vegetation is predominantly mixed bushveld in Hlane and dry thornveld, open grassland and moist woodland in Mlawula. Trees of *Acacia*, *Sclerocarya*, *Combretum* and *Dichrostachys* are widespread and common. In the west of Hlane the bushveld is predominantly evergreen and the herbaceous layer is seasonal. In the lower-lying eastern Hlane and western Mlawula area, drier *Acacia* savanna dominates. There is some highly localized sandveld, which is dominated by *Terminalia*, *Strychnos* and *Perotis*. The riverine vegetation differs quite substantially from the surrounding woodland and is dominated by *Schotia*, *Ficus* and *Acacia*, and locally by dense stands of *Spirostachys* and *Euclea*. Ravines in the Lubombo range support dense moist forest, and the plateau is covered by open grassland savanna.

Birds

See Box and Tables 2 and 3 for key species. This is the only reserve complex in Swaziland holding breeding *Torgos tracheliotus* and *Trigonoceps occipitalis*. *Gyps coprotheres* is seen regularly, and it is suspected that the breeding colony in nearby Mozambique regularly obtains much of its food from this area. *Gyps africanus* also breeds here in important numbers; 26 pairs nest at Mlawula, and at least triple that number at Hlane (Monadjem in press). Other important raptor populations include breeding *Aquila rapax*, *Polemaetus bellicosus* and *Terathopius ecaudatus*. The sand forests and riparian fringes hold *Hypargos margaritatus*, *Lamprotornis corruscus* and *Nectarinia veroxii*. The surrounding bushveld and savanna support *Poicephalus cryptoxanthus*, *Cossypha humeralis*, *Eremomela usticollis* and *Telophorus quadricolor*.

Key species

A2 (092)	South-east African coast EBA: One of the two species of this EBA that occur in Swaziland has been recorded at this site; see Table 2.
A3 (A09)	East African Coast biome: All of the five species of this biome that occur in Swaziland have been recorded at this site; see Table 3.

Other threatened/endemic wildlife

This complex holds the endemic cycads *Encephalartos lebomboensis* (Rare) and *E. umbeluziensis* (VU). The latter is highly localized and extends just across the international border into Mozambique. Two other highly range-restricted plants, *Aloe keithii* (VU) and *Euphorbia keithii*, occur here. *Leptotyphlops telloi* and *Platysaurus lebomboensis*, two very range-restricted reptiles, found only in Northern KwaZulu-Natal, Swaziland and Mozambique, occur in the Lubombo sector of Mlawula Game Reserve. The endangered mammal *Ceratotherium simum* (LR/cd) has been reintroduced.

Conservation issues

King Sobhuza set part of Hlane aside as a royal hunting area; it was proclaimed a reserve in 1967 and managed for game and wild ungulate populations. Mlawula was proclaimed in 1980. Fire plays an important role in maintaining vegetation structure in Swaziland, and reserve managers use it as a tool to increase the cover of palatable grass and reduce bush encroachment. However, care should be taken to allow the burning regime to mimic natural fire events and maintain a natural mosaic of the representative communities within the reserve. The wild ungulate population was allowed to increase unchecked in Hlane during the 1970s and 1980s. The resultant overgrazing resulted in an extreme case of bush encroachment. Due to reductions in ungulate populations and better fire management, much of this encroachment was reversed in the 1990s. The recently initiated Lubombo Conservancy aims to forge management ties between Hlane, Mlawula and several smaller adjoining reserves.

Diamonds were found and prospecting was permitted in the north-western corner of Hlane in the 1970s, but this was eventually halted. Further mining opportunities threaten the future of this reserve. In Swaziland, agriculturists constantly encroach on land set aside for nature conservation; in the case of Hlane the land is wanted for sugar-cane production. A land swap was recently completed, in which Hlane lost c.500 ha to sugar cane, but gained c.1,500 ha (however, this land was already under its management, so there was a net loss of ‘bush’). The natural vegetation and associated fauna in this wildlife complex represent a natural relict of the erstwhile Swaziland lowveld. Extensive landscape alteration and modification is widespread outside this natural oasis. Vultures are used for traditional medicine quite heavily outside protected areas. The ranges of *Gyps africanus* and *Torgos tracheliotus* appear to have decreased dramatically in Swaziland over the last 20 years. All of Swaziland’s vulture species are included in the first schedule of the Game Act as Royal Game, and are consequently protected by law, although this is not always enforced. There are currently seven operational vulture restaurants in Swaziland, which supply an estimated 60% of the vultures’ food demands.

Further reading

Compton (1966), Gertenbach and Potgieter (1978), Parker (1988, 1994).

Mahamba Mountain

SZ003

Admin region Shiselweni
Coordinates 27°01′S 31°03′E
Area c.2,000 ha **Altitude** 950–1,390 m
A1, A3 (A07)
Unprotected

Site description

This area is located in south-western Swaziland, between the Mahamba border-post and the village of Gege, along the eastern Drakensberg escarpment of southern Africa. Shiselweni Forestry Company owns land east of this IBA. The site is dominated by the Mahamba Mountain, which rises from c.1,000 m to almost 1,400 m. The sides of the mountain are steep, but the plateau is relatively flat. The Mkhondvo river cuts through this mountain to form a spectacular gorge with sheer cliff-faces on both sides. Sour highland grassveld covers most of the mountain, interspersed with narrow drainage lines. Scrubby vegetation occurs patchily along clear mountain streams. Several forest patches are restricted to the more mesic valleys. Also present are rocky outcrops.

Birds

See Box and Table 3 for key species. Mahamba Mountain has yet to be properly surveyed. Mahamba holds suitable habitat for many important grassland-dependent species, including *Saxicola bifasciata* and *Geocolaptes olivaceus*. The largest breeding colony of *Geronticus calvus* in Swaziland breeds in the Mahamba Gorge. Several raptors breed here, including *Aquila verreauxii* and *Falco biarmicus*. *Podica senegalensis* and *Alcedo semitorquata* occur along the Mkhondvo river, while *Eupodotis afra* has been recorded in an adjoining area. Further ornithological exploration of this site will undoubtedly reveal more key bird species—for instance, it is likely that at least two species of the South African forests EBA and five species of the Afrotropical Highlands biome occur, but have so far been overlooked.

Key species

A1	*Geronticus calvus*	*Saxicola bifasciata*
	Geocolaptes olivaceus	
A3 (A07)	Afrotropical Highlands biome: Three of the 12 species of this biome that occur in Swaziland have been recorded at this site; see Table 3.	

Other threatened/endemic wildlife

Among plants, the near-endemic *Cassipourea swaziensis* (EN) and the threatened *Aloe dyeri* occur here. Most of the medium- and large-sized mammals have been hunted to extinction here. This is the only location in Swaziland where the elephant-shrew *Elephantulus myurus* is known to occur.

Conservation issues

Mahamba Mountain was recognized as a protection-worthy area in 1979, but it remains unproclaimed. The mountain is currently owned by three land-owners. However, the largest portion of the area falls within the boundaries of a single owner, who has expressed interest in developing his property for ecotourism. To this end, he has established hiking trails and is developing a rustic camp for overnight accommodation. The long-term conservation of this area, therefore, appears to be fairly secure.

The proposed damming of the Mkhondvo river may impact on the Mahamba Gorge, although the dam will be constructed upstream of the gorge. There have been reports of human disturbance of the *Geronticus calvus* colony breeding in the gorge, the impacts of which are presently unknown.

Further reading

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