

*B. Hillman-Lay*

# Threatened Vertebrates of Swaziland

Swaziland Red Data Book: Fishes, Amphibians, Reptiles,  
Birds and Mammals

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### *Protected areas in which present*

Ilhane National Park; Mkhaya Game Reserve; Mlawula Nature Reserve.

### *Existing conservation measures*

Protected by the Game Act.

### *Recommended conservation measures*

Protection by law is not sufficient to ensure the survival of this rare species in Swaziland. A general change of attitude toward this species is essential, and only achievable through environmental education. Perhaps the pangolin could be targeted by the National Environmental Education Programme, as well as by Yonge Nawe (a Swaziland environmental NGO), as a flagship species symbolising endangered species in the lowveld.

## BLACK RHINOCEROS

Bejane

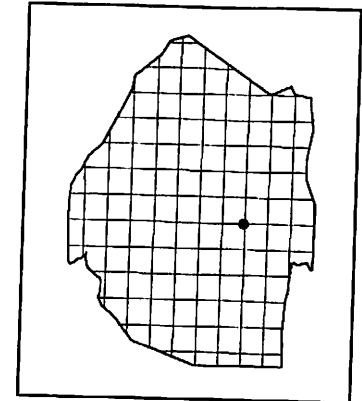
*Diceros bicornis*

Family: *Rhinocerotidae*

Swaziland Status: **ENDANGERED (A2d, D)**

International Status: **CRITICALLY ENDANGERED**

South African Status: **VULNERABLE**



## SPECIES DATA

### *Distribution and numbers*

This species was once widespread in Africa, but its numbers have been decimated in the face of persistent poaching. The global population of this species has been reduced by over 90% over the past 20 years, down to a mere 2700 individuals in 2001 (International Rhino Foundation, [www.rhinos-irf.org](http://www.rhinos-irf.org)). The black rhinoceros was hunted to extinction in Swaziland, the last individual probably shot before 1900. Historically, the black rhinoceros probably occurred throughout the middleveld and lowveld. A small number of individuals were re-introduced from Zimbabwe to Mkhaya Nature Reserve in 1988, where strict control measures have ensured their safety. A second re-introduction in 1995 was made from KwaZulu-Natal (South Africa). The population has increased to about 10 animals (the actual figure is withheld by the Big Game Parks, for security reasons).

### *Habitat and ecology*

This species inhabits a variety of savanna types, but generally prefers more developed (i.e. more bushy) woodlands than the white rhinoceros. In southern Africa it is often associated with riverine thickets. Home range size varies with habitat; in the Hluhluwe-Umfolozi Game Reserve (South Africa) adult males occupy mutually exclusive home ranges of around 4 km<sup>2</sup> which may be shared with non-breeding males (Owen-Smith, 1984). Home ranges of females are similar in size, but overlap extensively.

## CONSERVATION

### *Threats*

The black rhinoceros has been relentlessly slaughtered for its horn, which is mostly (if not

entirely) traded in markets in the Orient. Poachers are usually financed by powerful middlemen who often have links with wildlife officers, administrators and politicians. South Africa and Swaziland are the only countries to have successfully withstood this assault. Although global population numbers have stabilised over the past 5-6 years, the threat of poaching is still present.

*Protected areas in which present*  
Mkhaya Game Reserve.

#### *Existing conservation measures*

The black rhinoceros is listed on the First Schedule (Specially Protected Game) of the Game Act. In addition to being a non-bailable offence, offenders face a mandatory minimum five-year jail sentence. All black rhinoceroses are under 24 hour surveillance by dedicated and armed game scouts.

#### *Recommended conservation measures*

Suitable habitat exists in the Hlane-Mlawula-Mbuluzi reserve complex, and the possibility of re-introducing the black rhinoceros to this area should be considered.

#### *Remarks*

Introductions were of the subspecies *Diceros bicornis minor* (which formerly occurred in Swaziland).

## VULNERABLE

### Fishes

#### SOUTHERN ROSEFIN BARB

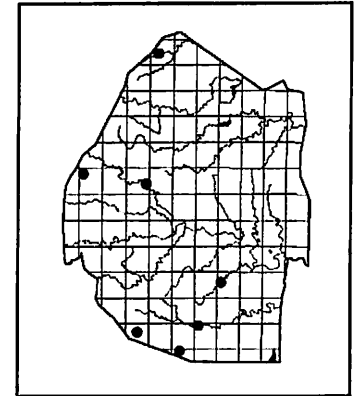
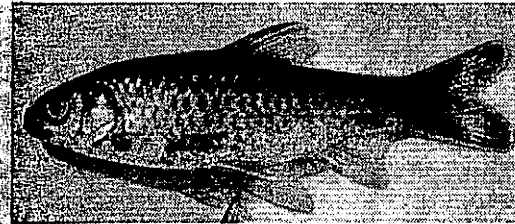
*Barbus crocodilensis*

Family: *Cyprinidae*

Swaziland Status: **VULNERABLE (B1a,b (iii))**

International Status: **NOT LISTED**

South African Status: **NOT LISTED**



#### SPECIES DATA

##### *Distribution and numbers*

This species was formerly referred to *Barbus argenteus*, a species occurring in south-eastern Africa and Angola (Skelton, 2001). The southern population is recognised as *Barbus crocodilensis* and is endemic to the Komati and Phongolo river systems. Although not recorded during Hyslop's (1994) survey, it was recorded by Clay (1976), in the Phongolo system from the upper reaches of the Lusutfu, Lusushwana and Ngwavuma Rivers. There are historical records based on voucher specimens in the Albany Museum (Grahamstown) from the Lusushwana River in Mlilwane Wildlife Sanctuary.

During recent surveys the species was recorded from headwater streams in the middleveld and highveld in the Komati and Lusutfu/Phongolo systems but was not recorded from the Mbuluzi system (Swaziland Fish & Fisheries Survey, unpublished data). It was fairly common at some sites such as the Shelangubo River, a tributary of the Lomati River, in the northern middleveld.

##### *Habitat and ecology*

The species occurs in clear, swift flowing mountain streams where there are riffles, cascades and quieter pools. It feeds on aquatic and flying insects (Skelton, 2001).

#### CONSERVATION

##### *Threats*

In Swaziland, threats to the species have not been determined.

when possible (J. Culverwell, personal observation).

#### *Protected areas in which present*

Hlane National Park; Mbuluzi Game Reserve; Mlawula Nature Reserve.

#### *Existing conservation measures*

Protected by the Game Act.

#### *Recommended conservation measures*

A survey of the existing population in north-east Swaziland would give an indication of status. If numbers are found to be still depressed despite the obvious abundance of prey and decades of protection, the possibility of reintroducing small numbers of hyena from a nearby gene pool could be considered. A focussed education programme aimed at cattle ranchers neighbouring Hlane National Park may be vital. Ranchers need to be able to determine the cause of death of their cattle. Livestock that die are not necessarily killed by hyenas or other indigenous predators.

## WHITE RHINOCEROS

Umkhombe

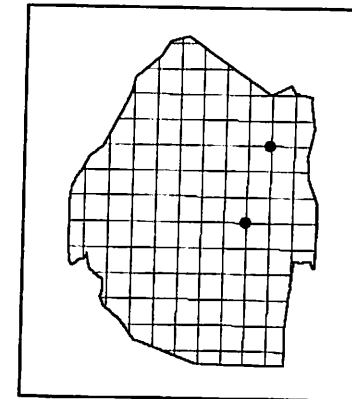
*Ceratotherium simum*

Family: *Rhinocerotidae*

Swaziland Status: **VULNERABLE** (A2d, D1, D2)

International Status: **NEAR THREATENED**

South African Status: **NOT LISTED**



## SPECIES DATA

### *Distribution and numbers*

The global population, as estimated in 2001, is approximately 10 000 individuals (International Rhino Foundation, [www.rhinos-irf.org](http://www.rhinos-irf.org)). The indigenous Swazi population was hunted to extinction by the late 1890s. Re-introductions began in 1965 when a pair of white rhinoceros (donated by the Natal Parks Board) were released onto Mlilwane Wildlife Sanctuary (Reilly, 1985). Subsequent re-introductions took place onto Hlane National Park, and from there to Mlawula and Malolotja Nature Reserves and Mkhaya Game Reserve. The Malolotja introductions were not successful, with five of the six introduced animals dying. The lone survivor was translocated to Mkhaya (Reilly & Reilly, 1994). The lowveld introductions were, however, successful with the total number of white rhinoceros in Swaziland estimated at 88 in 1990 (J. Culverwell, unpublished data). The wave of poaching in the early 1990s had a devastating effect on Swaziland's white rhinoceros population. By 1993 the total population had been reduced to less than 30 animals. The surviving rhinoceros were herded into a heavily guarded enclosure within Hlane National Park. Under this heavy security (and with the help of the revised Game Act) the white rhinoceros population has increased dramatically. Currently, white rhinoceros only occur at Mkhaya and Hlane National Parks. As of 2000, the white rhinoceros population is still increasing (T. Reilly, personal communication), and its status seems secure for the time being.

### *Habitat and ecology*

In South Africa, adult male white rhinoceros occupy non-overlapping territories of approximately 1-14 km<sup>2</sup>, while females range over larger overlapping home ranges (Pienaar

et al., 1993).

## CONSERVATION

### Threats

This species has been relentlessly killed for its horn, which is thought to have medicinal and cultural value in the East. This threat still exists, although the last white rhinoceros poached in Swaziland was in late 1992.

### Protected areas in which present

Hlane National Park; Mkhaya Game Reserve.

### Existing conservation measures

The white rhinoceros is listed on the First Schedule (Specially Protected Game) of the Game Act. In addition to being a non-bailable offence, offenders face a mandatory minimum five-year jail sentence. All white rhinoceroses are under 24 hour surveillance by armed game scouts.

### Recommended conservation measures

None.

### Remarks

The southern African subspecies is *Ceratotherium simum simum*. The Swaziland population originates from South Africa and, therefore, belongs to this subspecies.

## HIPPOPOTAMUS

Imvubu

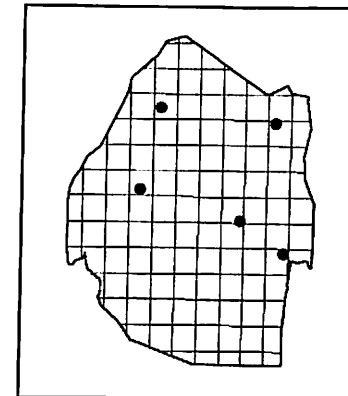
*Hippopotamus amphibius*

Family: Hippopotamidae

Swaziland Status: VULNERABLE (C1, D1)

International Status: NOT LISTED

South African Status: RARE



## SPECIES DATA

### Distribution and numbers

This species survives in the lower reaches of most of the larger lowveld rivers in Swaziland, as well as several impoundments in the sugar-growing areas. Overall numbers are low and very few animals occur within protected areas. Small numbers of hippo occur in the Mbuluzi River west of Maphiveni, in the Komati River west of Bhalekanc, in the Lusutfu River and in the Sifunga Dam near Big Bend, from which areas individuals are known to wander widely. Vagrants have been reported from the Komati River in Malolotja Nature Reserve, and in dams on various sugar estates in the lowveld. It is difficult to assess hippo numbers with any accuracy, given their cryptic habits where disturbed and their penchant for wandering. Hippo have been introduced to Mlilwane Wildlife Sanctuary (from both Kenyan and South African gene pools), and to Mbuluzi Game Reserve. The largest group consists of 12 individuals sighted in Sivunga Dam in May 2003 (R. Boycott, personal observation).

### Habitat and ecology

In riverine systems such as those occurring in the Swaziland lowveld, hippo may have been expected to occur in fairly high densities in the past. Hippo are predominantly short-grass grazers, but have been seen to eat the aquatic plant *Potamogeton* in the Sifunga Dam, possibly as a result of surrounding grazing pressure from cattle. Female harems and subadults are overseen by a dominant male.

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