IUCN Conservation Outlook Assessment 2017 **(archived)**
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Please note: this is an archived Conservation Outlook Assessment for Maloti-Drakensberg Park. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Maloti-Drakensberg Park

SITE INFORMATION

Country:
Lesotho, South Africa
Inscribed in: 2000
Criteria:
(i) (iii) (vii) (x)

Site description:

The Maloti-Drakensberg Park is a transboundary site composed of the uKhahlamba Drakensberg National Park in South Africa and the Sehlathebe National Park in Lesotho. The site has exceptional natural beauty in its soaring basaltic buttresses, incisive dramatic cutbacks, and golden sandstone ramparts as well as visually spectacular sculptured arches, caves, cliffs, pillars and rock pools. The site's diversity of habitats protects a high level of endemic and globally important plants. The site harbors endangered species such as the Cape vulture (Gyps coprotheres) and the bearded vulture (Gypaetus barbatus). Lesotho’s Sehlabathebe National Park also harbors the Maloti minnow (Pseudobarbus quathlambae), a critically endangered fish species only found in this park. This spectacular natural site contains many caves and rock-shelters with the largest and most concentrated group of paintings in Africa south of the Sahara. They represent the spiritual life of the San people, who lived in this area over a period of 4,000 years.
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SUMMARY

2017 Conservation Outlook

Good with some concerns

Management interventions since 2014 have significantly reduced the potential severity of the threats to the World Heritage site. The most significant threat to the biodiversity values of the site are from a too high burning frequency, particularly at high altitudes and from invasive alien plants. This might pose a serious threat to the outstanding biodiversity values. Other threats are, however, low. Threats to the scenic values are largely from outside the core area within the buffer zone. Possible developments near the site could have impacts on its values. Protection and management within the two national parks of which this transboundary site is composed are effective, but the Management Authorities need additional support from governments in order to counter the threats and ensure effective ongoing transboundary cooperation.

Current state and trend of VALUES

Low Concern
Trend: Stable

In terms of biodiversity values it is considered that the threats posed by possible high frequency of fires are not at a level where the Outstanding Universal Value of the site has been damaged. Nevertheless the potential remains. The scenic values of the core area are currently safe.

Overall THREATS

Low Threat

The most significant threats to the biodiversity values of the site are from too high burning frequency, particularly at high altitudes. This might pose a serious threat to the outstanding biodiversity values. Other threats are, however, low. Threats to the scenic values are largely from outside the core area within the buffer zone. Possible developments near the site (e.g. wind farms) could have

severe impacts on its values. Impacts of climate change on sensitive grassland and wetland species are anticipated.

Overall PROTECTION and MANAGEMENT

Mostly Effective

This transboundary site consists of the uKhahlamba Drakensberg National Park managed in accordance with an Integrated Management Plan and the Sehlabathebe National Park in Lesotho. The management capacity of the latter is currently rather limited and the Joint Management Committee could help share and build capacity in Lesotho. Much progress has been made in defining and identifying appropriate and inappropriate developments within the buffer zone and a public consultation has been held. It is expected that this process will result in improved integration of the site into local and regional plans and greater support for the site by communities.

FULL ASSESSMENT

Description of values

Values

World Heritage values

- **Outstanding scenic value expressed by the topographic variation, geology and vegetation**
  Criterion:(vii)

  The outstanding scenic value is expressed largely by the topographic variation, geology and vegetation. The Drakensberg Mountains have high escarpment walls of dark basalt that lie above a high layer of golden clarens sandstone. Soaring basaltic buttresses, incisive dramatic cutbacks and golden sandstone ramparts all contribute to a spectacular environment. There are long spurs, switchbacks and gorges through which waterfalls, pools and rivers flow. This landscape is covered by green grasslands in summer which turn to red in autumn and may then be snow covered at times during the colder winter.

- **Outstanding plant species richness**
  Criterion:(x)

  The site lies within the Drakensberg Alpine Region of Southern Africa and is part of the Southern African Montane (high altitude) Grassland system. It is a Centre of Biodiversity with high plant species richness. Among a total of 2,153 species of plant are included a large number of internationally and nationally threatened species. A significant feature is the high level of plant species endemism. Uniquely the grasslands reflect sharp altitudinal and topographic gradients.

▶ **Large number of endemic and globally threatened bird species**
Criterion:(x)

The site’s diversity of habitats protects a high level of endemic and globally threatened bird species. The avifauna of the site includes 296 species.

Other important biodiversity values

▶ **Paleo-invertebrate, reptile and mammal species**

Little is known about the many endemic paleo-invertebrates, particularly those species that inhabit the high altitude vegetation communities. Reptile fauna is also poorly understood although with relatively high diversity. Large mammals are well known but the diverse small mammal fauna is also poorly known.

Assessment information

Threats

Current Threats
Low Threat

The most significant threats to the biodiversity values of the site are from too high burning frequency, particularly at high altitudes. This might pose a serious threat to the outstanding biodiversity values. However, other threats are low. Threats to the scenic values are largely from outside the core area within the buffer zone.

▶ **Utility / Service Lines**
Low Threat
Outside site

Collisions between raptors including vulture species and other large birds

with powerlines has an adverse impact on the viability of the various species populations. Mitigation measures are essential (Karssing et al., 2012; Short et al., 2003; O'Connor, 2008; Kruger, 2005).

► Forestry/ Wood production

Very Low Threat
Outside site

A land reform development with forestry projects is taking place in an adjacent municipal area. The development is outside the core area of the site but within its buffer zone. However, aesthetic values of the site are affected (Forster et al., 2007).

► Flight Paths

Very Low Threat
Inside site, extent of threat not known
Outside site

Sound pollution affects the wilderness experience of some visitors (Forster et al., 2007).

► Fire/ Fire Suppression

High Threat
Inside site, widespread(15-50%)
Outside site

High altitude sub-alpine vegetation is being burnt too frequently with fires originating from Lesotho. High fire frequency will result in the loss of some plants and animals and may ultimately lead to some extinctions in time. Wild fires are frequent occurrences in these high altitude grasslands in winter and spring (Mander et al., 2008; O'Connor, 2008).

► Poaching

Very Low Threat
Inside site, localised(<5%)
Outside site

Levels of harvesting / poaching are low (Short et al., 2003; Arnott, 2004).

► Invasive Non-Native/ Alien Species

High Threat
Inside site, localised(<5%)
Outside site

Several invasive alien plant species threaten the natural vegetation communities and habitats (e.g. pine, wattle, American bramble, etc.). Alien invasive plant species replace and compete with indigenous plants leading to a change in the composition of vegetation communities and loss of species and habitats and a change of sense of place. The proximity of forestry plantations outside the park provides an important seed source (Mander et al., 2008; Forster et al., 2007).

► Housing/ Urban Areas

Very Low Threat
Outside site

There are proposals to change the town plan for the Cathkin Park village on the boundary from tourism to residential with the sub-division of agricultural land allowing for residential development. There is an increased number of rural homes in communally owned areas including the western boundary with Lesotho. The developments are outside the core area of the site but within its buffer zone. Aesthetic values are affected mainly locally both in approaching / travelling towards the site and views outwards from the site (Forster et al., 2007).

► Livestock Farming / Grazing

High Threat
Inside site, throughout(>50%)
Outside site

Possible intensification of dairy farming with associated infrastructure development (dams, pastures) would affect the site. Communally owned areas in Lesotho on the unfenced western boundary are subject to overgrazing with regular incursions into the park, affecting the majority (maybe 100%) of the property. Overgrazing of the high altitude grassland would result in a loss of palatable grass species and loss of other plant species due to erosion and trampling (Forster et al., 2007; Arnott, 2004;

Brown and Piper, 1987; Brown, 1992; Kruger, 2005).

► Marine/ Freshwater Aquaculture

Very Low Threat
Outside site

The expansion of the trout fish farm on Bushmans River might have a localised aesthetic impact. Possible escape of trout into the river also represents a minor threat (research has demonstrated adverse impacts of trout, an alien species, on biodiversity).

► Mining/ Quarrying

Data Deficient
Outside site

Letšeng Diamond Mine (in Lesotho, 13 km from the core area) has expanded. Possibly, two new diamond mines may be developed in future. Blasting operations result in vibrations; the consequences are unknown (e.g. on rock art). The development is just outside the buffer zone (Mander et al., 2008; Forster et al., 2007; IUCN Consultation, 2017).

► Roads/ Railroads

Low Threat
Inside site, localised(<5%)
Outside site

Upgrade of the Sani Pass road has progressed to Phase 2 and is to be completed by 2020. It will allow for much increased traffic as well as the section from Sani Top to Mahotlong. Upgrade of the road and pass to Sani Top will also increase the number of tourists to this high altitude sensitive area. The proposed development of a cable car and a possible lease of a tourism site to a private developer will also add to the increase in tourist numbers. Terms of reference for an environmental impact assessment have been developed and the applicant has appointed a consultant to undertake a feasibility study. The site Management Authority is engaging in the process (Forster et al., 2007; IUCN Consultation, 2017).

Potential Threats

High Threat

Possible developments near the site (e.g. wind farms) could have severe impacts on its values. Impacts of climate change on sensitive grassland and wetland species are anticipated.

▶ Oil/ Gas exploration/development

Data Deficient
Outside site

There is no information at present. Should exploration result in gas exploitation, impacts could be severe (Forster et al., 2007).

▶ Renewable Energy

Low Threat
Outside site

Lesotho Highlands Water Development Phase 2 incorporates a large dam where hydro power would also be generated. The developments are outside the core area of the site but within its buffer zone (Forster et al., 2007).

▶ Renewable Energy

Very High Threat
Inside site, extent of threat not known
Outside site

Two wind farms (with associated infrastructure) are at an advanced stage of planning near the western boundary with Lesotho. No progress on the project has been made since 2014 and little information is available at present (IUCN Consultation, 2017). Vortex modelling indicates that even limited wind farm development will have severe adverse impacts on raptor species, particularly the endangered bearded vulture and endemic Cape griffon and would lead to their extinction within the site and regionally (Forster et al., 2007; Kruger, 2005).

▶ Air Pollution

Data Deficient
Inside site, extent of threat not known

Outside site

Fallout of airborne particle pollutants (acid rain) from coal-fired power stations to the north (Mpumalanga province) carried by high-altitude winds has been recorded (Forster et al., 2007).

► Identity/ Social Cohesion/ Changes in local population and community

Data Deficient
Inside site, extent of threat not known
Outside site

Population increase and densification of settlements in surrounding areas of communal land cause ever increasing levels of ecological fragmentation and biological isolation of the park. Reduced biological connectivity may result in some species becoming extinct, particularly given predicted increased rates of climate change (Mander et al., 2008; Forster et al., 2007; Kruger, 2005).

Protection and management

Assessing Protection and Management

► Relationships with local people

Mostly Effective

Engagement and communication structures are in place and operative, for example, community forums, local boards and park staff providing conservation teaching services to communities (Forster et al., 2007). There are some unresolved land claims by communities who were deprived of their land during the apartheid period. These claims are still under investigation (IUCN Consultation, 2017). A land swap (park land in exchange for high altitude uninhabited communally owned land) has been approved in principle and a Discussion Document developed (IUCN Consultation, 2017This process is ongoing. Although ownership of land might change if a land claim is successful, it should not lead to any change in land use. Therefore, the integrity of the site would remain unaffected. However, co-management of protected areas is proving to be problematic. There is community pressure on low-lying areas to permit stock grazing (Forster et al., 2007). Increasing levels of poverty affect people living in communal areas adjacent to the park

and communities are frustrated by lack of service delivery by government that would improve their livelihoods. Should these social issues not be addressed, there would be a growing risk of the park being invaded by these people in order to access resources for their survival (Mander et al., 2008; Forster et al., 2007; Kruger, 2005).

The site has been accepted by UNESCO as part of a small grant Community Management of Protected Areas for Conservation programme (COMPACT). The Management Authority is undertaking an assessment and expects to launch the project in 2017 (IUCN Consultation, 2017).

▶ Legal framework

Highly Effective

Comprehensive World Heritage, Conservation and Environmental laws and policies are in place and being implemented (Mander et al., 2008; Forster et al., 2007).

▶ Enforcement

Mostly Effective

The national and provincial conservation and environmental laws and regulations are enforced by staff of the Management Authority stationed at strategic locations within the World Heritage property. Daily foot patrols are undertaken by field rangers throughout the area. Law breakers are caught, arrested and prosecuted.

▶ Integration into regional and national planning systems

Some Concern

The park is integrated into provincial and national biodiversity and tourism plans. Of concern is that integration at the local municipal level is poor / inadequate (Mander et al., 2008; Forster et al., 2007).
Progress is ongoing to establish the Buffer Zone. The boundary has been defined, stakeholder engagement and consultation have been completed. It will now go for approval and be sent to the Department of Environmental Affairs who will publish the environmental impact assessment notice (IUCN Consultation, 2017).
A consultation process has commenced regarding a Sustainable Tourism

Strategy (Connecting Practice) funded by UNESCO to integrate cultural and nature tourism (IUCN Consultation, 2017).

► Management system

Highly Effective

This transboundary site links the Sehlabathebe National Park in Lesotho with uKhahlamba Drakensberg Park in South Africa. Management is based on an Integrated Management Plan and subsidiary plans, all of which are being implemented. Management staff have received in-service capacity training and research is actively being carried out (Mander et al., 2008; O'Connor, 2003; World Heritage Committee, 2013; IUCN Consultation, 2017).

► Management effectiveness

Mostly Effective

Management effectiveness assessments have recently been conducted and a 63.23% score achieved in 2016-2017 (IUCN Consultation, 2017). This score is expected to improve despite budget challenges.

► Implementation of Committee decisions and recommendations

Mostly Effective

Generally most decisions and recommendations are implemented. There may be a delay in implementation due to insufficient staff or other management priorities. Recommendations by the World Heritage Committee to link / incorporate the northern portion to the southern part of the site have made significant progress with the communities that own the land (Forster et al., 2007; IUCN Consultation, 2017).

► Boundaries

Mostly Effective

Generally highly effective although the international western boundary is not demarcated and has resulted in legal issues and law enforcement challenges (Mander et al., 2008; Forster et al., 2007; IUCN Consultation, 2017). Consolidation of the two component areas of the site has been ongoing and a Management Plan developed through a process of consultation with the two communities that hold the land known as Upper Tugela linkage. The process

has come to a standstill as a dispute has arisen as to the boundary between the communal areas, although both parties are in favour of the area being incorporated into the site (IUCN Consultation, 2017).

▶ Sustainable finance

Some Concern

Funds for management of the site are allocated in annual budgets. However, these are insufficient to deal with some high priority threats such as alien invasive plant control, path maintenance and cultural heritage management (Mander et al., 2008; Forster et al., 2007).

▶ Staff training and development

Mostly Effective

In-service and external training and skills development are implemented on several important aspects of biodiversity management, conservation and environmental management (Forster et al., 2007).

▶ Sustainable use

Highly Effective

All natural resources that are used are done so on a sustainable basis with procedures and monitoring in place (Forster et al., 2007; IUCN Consultation, 2017).

▶ Education and interpretation programs

Some Concern

Much more could be done in the fields of education and interpretation of the natural features, biodiversity and rock art in the site (Mander et al., 2008; Forster et al., 2007).

▶ Tourism and visitation management

Mostly Effective

Facilities have a relatively high level of occupancy by visitors as a result of marketing the park as a prime destination for both local and international tourists (Mander et al., 2008; Forster et al., 2007).

► Monitoring

Mostly Effective

Climate, fire, large mammals and vultures are monitored annually. There is a need to increase monitoring especially of invertebrates, birds, small mammals, plants and indicators of climate change (Mander et al., 2008; Forster et al., 2007).

► Research

Highly Effective

There is a suite of research projects being undertaken by university students and scientific staff of the Management Authority resulting in publications in journals and theses. Priority research projects are identified and a formal project registration and approval process is in place. Two new research facilities have been opened (Mander et al., 2008; Forster et al., 2007).

Overall assessment of protection and management

Mostly Effective

This transboundary site consists of the uKhahlamba Drakensberg National Park managed in accordance with an Integrated Management Plan and the Sehlabathebe National Park in Lesotho. The management capacity of the latter is currently rather limited and the Joint Management Committee could help share and build capacity in Lesotho. Much progress has been made in defining and identifying appropriate and inappropriate developments within the buffer zone and a public consultation has been held. It is expected that this process will result in improved integration of the site into local and regional plans and greater support for the site by communities.

► Assessment of the effectiveness of protection and management in addressing threats outside the site

Some Concern

Generally the site is threatened by urban, tourism, infrastructure, agriculture and forestry developments and land uses and their cumulative impacts outside the core area and within the buffer zone. Ezemvelo KwaZulu-Natal

Wildlife (EKZNW) which is the management authority of the site through the environmental impact assessment process is able to influence environmental impact decisions made by ministries and decision makers including submission of a legal appeal (Ezemvelo KZN Wildlife, 2012). Its ability to influence decisions made in the neighbouring country of Lesotho is limited by bureaucratic and political procedures.

► **Best practice examples**

The methodology and process implemented by EKZNW in assessing management effectiveness of the various protected areas under its control is considered to be a significant best practice and more rigorous example that could be followed by other World Heritage site managers. The process of developing the buffer zone has been very active and inclusive, all government departments and municipalities are involved, and is a good example of cooperative governance.

State and trend of values

Assessing the current state and trend of values

World Heritage values

► **Outstanding scenic value expressed by the topographic variation, geology and vegetation**

Low Concern
Trend:Stable

The scenic values of the site are threatened by urban, tourism, infrastructure, agriculture and forestry developments and land uses and their cumulative impacts outside the core area and within the buffer zone. However, the Outstanding Universal Value of the site is still preserved (Mander et al., 2008; Forster et al., 2007; Kruger, 2005).

► **Outstanding plant species richness**

Low Concern
Trend:Stable

EKZNW is a competent conservation agency with a well trained staff. The conservation staff, who implement a hierarchy of integrated management plans and procedures, safeguard the biodiversity values of the site. There is concern about alien invasive plant species and a possible high frequency of fires, as well as the ongoing land use developments outside the site that results in ecological isolation of the site, habitat loss and fragmentation. Research and monitoring is in place (Mander et al., 2008; Forster et al., 2007; IUCN Consultation, 2017).

▶ **Large number of endemic and globally threatened bird species**

High Concern
Trend:Deteriorating

The population of bearded vulture and Cape griffon have shown a reduction in population size and breeding success (nest sites no longer in use). A monitoring and research programme is ongoing. The main agents of mortality affecting the population of these birds are the feeding on carcasses that have been poisoned by rural people and birds colliding with power lines. Body parts of the vultures have been found in traditional medicine markets. A bilateral Biodiversity Management Plan for vultures is in the process of being developed but implementation in both countries remains challenging.

Summary of the Values

▶ **Assessment of the current state and trend of World Heritage values**

Low Concern

Trend: Stable

In terms of biodiversity values it is considered that the threats posed by possible high frequency of fires are not at a level where the Outstanding Universal Value of the site has been damaged. Nevertheless the potential remains. The scenic values of the core area are currently safe.

▶ **Assessment of the current state and trend of other important biodiversity values**

Data Deficient

Trend: Data Deficient

Little is known about the many endemic paleo-invertebrates particularly those species that inhabit the high altitude vegetation communities. Reptile fauna is also poorly understood although with relatively high diversity. Large mammals are well known but the diverse small mammal fauna is poorly known.

Additional information

Benefits

Understanding Benefits

► **Water provision (importance for water quantity and quality)**

The site is the major high quality water producing area in South Africa (i.e. the water factory) supporting over 60% of the country's GDP and the livelihoods of a large majority of the population (World Heritage Committee, 2014).

► **Carbon sequestration**

Studies have shown that the site is a major / significant contributor for the sequestration of carbon and other benefits.

► **History and tradition, Sacred natural sites or landscapes, Wilderness and iconic features**

The site is the world's richest for outstanding San rock art (greatest number of sites and highest density of quality images). It is also the country's largest wilderness area.

► **Outdoor recreation and tourism**

The site provides a number of rest camps, campsites and other facilities for

tourists. Outside the site are many private facilities for tourist accommodation and recreation. The site is therefore an important destination for the country's tourism industry (i.e. amongst the top 10 regions).

► **Importance for research**

Many research projects (natural science, archaeology) have been and are being undertaken that have resulted in numerous publications. The site is also important for conservation and environmental education and is used by many school, university, technikon and adult groups.

Summary of benefits

Of major significance, the site provides both national and global benefits particularly in terms of environmental services, nature conservation, cultural, and tourism and recreation.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Ezemvelo KZN Wildlife, Endangered Wildlife Trust, Wildlands Conservation Trust.		Vulture research and monitoring programme
2	Ezemvelo KZN Wildlife		Fire management and monitoring project incorporates a database, implementation of a control burning plan, and management of a long-term experimental grassland fire plots.
3	Ezemvelo KZN Wildlife		Alien invasive plant control programme.
4	Ezemvelo KZN Wildlife		Anti-poaching law enforcement programme

№	Organization/ individuals	Project duration	Brief description of Active Projects
5	Ezemvelo KZN Wildlife, Bali Mountain National Park, Ethiopia, Frankfurt Zoological Society, and GIZ (coordinates a GEF project in Ethiopia).		‘Sister Parks’ cooperation programme with the Bali Mountain National Park that allows for exchanges in protected area management staff between the two Parks.

Compilation of potential site needs

№	Site need title	Brief description of potential site needs	Support needed for following years
1	N.A.	Research projects on the effects of global climate change on various elements of biodiversity and ecosystem services.	
2	Ezemvelo KZN Wildlife	Additional financial resources are required to fund the management interventions.	
3	Buffer zone policy and land use change	Effective implementation of a buffer zone policy and influence on land use change. Demarcation of international boundary and establishment of an effective buffer zone on the Lesotho component of the property.	

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