

Wilderness Stewardship Challenges in the uKhahlamba Drakensberg Park World Heritage Site

Sonja Krüger

Abstract—The location of the uKhahlamba Drakensberg Park wilderness areas along an international border and within a World Heritage Site and Transfrontier Conservation Area, provides unique opportunities and challenges for the stewardship of these areas. Although the wilderness areas were proclaimed more than 30 years ago, wilderness-specific planning, management and monitoring is a recent focus that is challenging managers and scientists to develop alternative management methods for the wilderness areas. Although the wilderness areas are buffered by the Park and transfrontier area, managers are faced with the present challenge of defending the wilderness philosophy and preserving wilderness qualities in an ever-changing environment dominated by social and political forces. An integrated planning and management approach is essential to ensure that the wilderness concept and the values and benefits of the wilderness resource are applicable to the majority of the population.

Introduction

The uKhahlamba Drakensberg Park (from hereon referred to as the Park) is a state owned mountain protected area in southeastern Africa controlled and managed by a provincial conservation body, Ezemvelo KwaZulu-Natal Wildlife (KZN Wildlife). The Park is located in the KwaZulu-Natal province of South Africa and forms part of the Maloti Drakensberg Transfrontier Conservation Area, sharing its boundaries with two other provinces of South Africa and the Kingdom of Lesotho (fig. 1). The Park comprises 12 component protected areas (IUCN Category II nature reserve) totaling 242,813 ha (600,002 acres).

The Park was listed as a RAMSAR site in 1997 because of its globally important wetlands. In terms of World Heritage Site status, the Park was listed as a “Mixed” heritage site in November 2000 because of the unique biological diversity and scenic splendor of the mountains (fig. 2), and the richness and diversity of the area’s rock art (fig. 3). Only 23 such sites of mixed value have been listed throughout the world.

Sonja Krüger, Ecologist, uKhahlamba Drakensberg Park World Heritage Site and its surrounds, Ezemvelo KwaZulu-Natal Wildlife, South Africa.

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Wilderness Resource

Of the total area of the Park, 48.5 percent (117,765 ha or 291,000 acres) comprises four legally proclaimed wilderness areas (IUCN Category I) and a further 41,388 ha (102,270 acres) are zoned as wilderness.

The South African National Environmental Management: Protected Areas Act No. 57 of 2003, defines a wilderness area as; “an area designated ... for the purpose of retaining an intrinsically wild appearance and character, or capable of being restored to such and which is undeveloped and roadless, without permanent improvements or human habitation.” The mission statement for the Park, contained in the Integrated Management Plan, states that the Park must be managed and conserved for its globally significant natural, cultural and wilderness values and life support systems

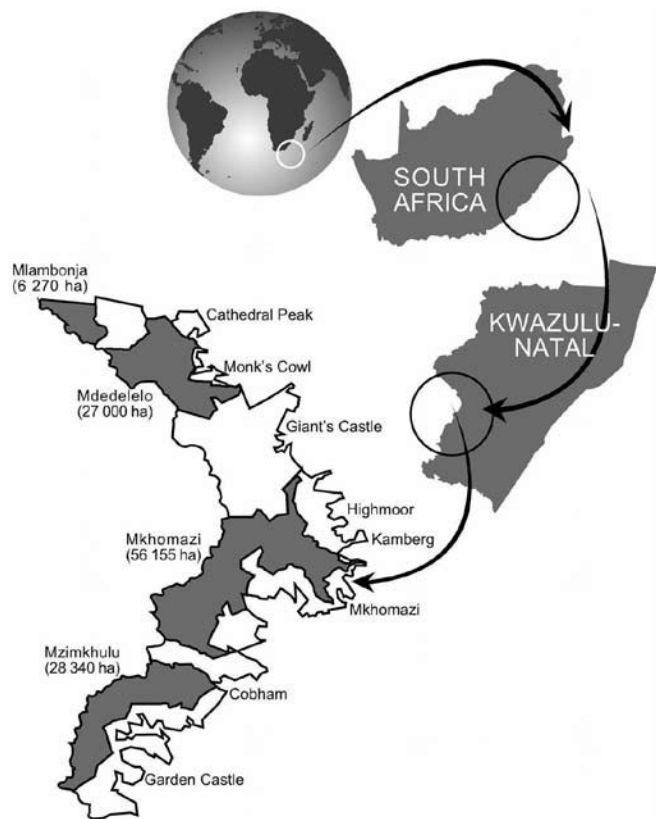


Figure 1—The location of the uKhahlamba Drakensberg Park Wilderness within KwaZulu-Natal, South Africa.



Figure 2—The scenic splendor of the mountains, one of the factors contributing to the park's World Heritage Status.



Figure 3—One of the 600 sites of San rock art within the Park. Overall, these sites comprise at least 35,000 individual images.

through co-management with partners and all stakeholders, and to provide a flow of benefits beyond the boundaries of the Park (Ezemvelo KZN Wildlife 2005a). Fulfilling this mission statement in the stewardship of the Park, presents the management team with a host of challenges and opportunities, particularly in the light of its status as a World Heritage Site, its location within a transfrontier conservation area, the social forces that challenge the integrity of the wilderness resource and the political forces that provide a framework for the integrated management of this resource in terms of new national laws.

The successful stewardship of the Park's wilderness will ensure that these areas will continue to allow for an experience of solitude within an intrinsically unaltered natural environment, and thus to provide opportunities for inspiration, enrichment, self-reliance, and physical adventure.

World Heritage Site Challenges to Wilderness

The wilderness areas of the Park were one of the major contributing factors to it being listed as a World Heritage Site for both its natural and cultural values. As the management authority of the World Heritage Site, KZN Wildlife has to meet the challenges that are associated with the elevated status of the Park.

Park management has to conform to the World Heritage Convention Act of 1999, which was enacted into law in the Republic of South Africa. The Act acknowledges that the loss, through deterioration, disappearance or damage through inappropriate development of any of these most prized possessions, constitutes an impoverishment of the heritage of all the peoples of the world and, in particular, the people of South Africa. The Act therefore provides for cultural and environmental protection by ensuring that cultural and ecological integrity are maintained through any development process, and that this cultural and natural heritage is transmitted to future generations. The requirements of the Act, forces managers to manage towards a higher state and according to international standards and ensures that future generations can benefit from the wilderness resource.

Although the Park is one of the top mountain destinations in the country, recreational impacts are minimal and focused monitoring of these has not taken place. The majority of the impacts are concentrated around the camps and areas that provide a significant destination, such as waterfalls and view sites. Only a small percentage of Park users venture into wilderness. The impact on the trail network by various user groups is one of the primary impacts experienced by the Park resulting in path maintenance being a high management priority. The status of the Park has already resulted in increased visitor numbers since 2000, and these are expected to escalate over the next few years with focused marketing of the Park as a world-class destination. A proactive implementation of monitoring strategies to address recreational impacts is thus required.

The Park's world heritage status provides an opportunity to raise the awareness of wilderness and gain international support to ensure its continued existence and to combat developments that threaten its integrity.

Wilderness Challenges Within a Transfrontier Conservation Area

The Park's location provides some unique challenges as well as opportunities in that its entire western border is the international boundary between South Africa and the Kingdom of Lesotho. The northern boundary of the Park is shared with Lesotho and the Free State province of South Africa, where the land is state owned but communally managed.

The Park is located in the center of the Maloti Drakensberg Transfrontier Conservation Area, a project established in 2002. The project aims to conserve globally significant biodiversity and cultural heritage and contribute to community development through sustainable livelihoods. The project includes several protected areas within South Africa and two protected areas within Lesotho, one of which (Sehlabathebe National Park) borders Garden Castle, the southern tip of the Park. Negotiations are underway to establish a Transfrontier Park between Garden Castle and Sehlabathebe. This high altitude montane protected area will provide an opportunity to extend Garden Castle's wilderness area into Lesotho. An integrated approach will be adopted by the two countries in terms of species and habitat management; for example grassland management in terms of stocking rates, fire management and water resource management. The integrated management of the Transfrontier Park will be a challenge for the two countries that differ vastly in their capacity, available resources and the legal framework within which they operate.

One of the opportunities provided by the transfrontier area is one of collaboration in the management of species whose breeding and foraging ranges extend across both countries. The conservation status of the species is dependent on addressing the threats to its survival in both countries, and implementing measures to safeguard the species and its habitat requirements in both countries. An example of such a species is the Bearded Vulture, *Gypaetus barbatus*, an endangered species whose population is restricted to the Maloti Drakensberg Mountains of the transfrontier area (fig. 4). The species can be viewed as wilderness dependent because it seeks solitude and remote places away from any



Figure 4—The Bearded Vulture, *Gypaetus barbatus*, an endangered species whose breeding range is restricted to the Maloti-Drakensberg Mountains.

disturbances. Although its breeding areas are inaccessible, its foraging range includes the commercial farms and communal rangelands on the Park's eastern and western boundary where it is vulnerable to several threats such as poisoning, collision with powerlines and a limited food supply. The transfrontier project provides an opportunity for collaboration in the monitoring of the species and managing its habitat through collaboration with various landowners and managers.

The Park's wilderness areas all abut the international boundary. The areas along the boundary are zoned either as pristine or primitive wilderness and are essentially buffered by the communal rangelands within Lesotho. Although there is no permanent human habitation in this area, there are sections that are heavily overgrazed, threatened by transfrontier crime, commercial developments aimed at boosting the local economy, and the injudicious use of fire. Transfrontier collaboration, as an integrated approach to the management of these areas, is essential.

Challenges Provided by Threats to Wilderness Stewardship

The various threats to the integrity of the wilderness resource that provide stewardship challenges include; transfrontier crime, the injudicious use of fire, soil erosion, alien (exotic) plants, land transformation and unsustainable tourism.

Transfrontier crime includes marijuana and firearm trafficking through the Park, attacks on hikers traversing the escarpment along the international border, illegal hunting, movement of stolen stock from commercial farms and communal land, and arson fires. Arson fires, or the injudicious use of fire, impacts significantly on the Park's fire management program, which is developed to achieve specific objectives. Grassland is often burnt by the stock thieves/traffickers to divert attention from the main smuggling routes, and also in retaliation to successful law enforcement. Poachers also burn grassland to attract game that are then hunted. A network of international and Park security forums has been

established through the transfrontier project to address the above-mentioned crimes.

Soil erosion, resulting from the creation of trails through illegal activities, poses a severe ecological threat and impacts on the wilderness user's experience. The lack of adequate budgets also means that existing trails cannot be maintained adequately, thus leading to further erosion.

Alien plants have a negative impact on water production and the sense of place experienced by wilderness users in an otherwise pristine environment. The National Department of Environment, Agriculture and Tourism has provided large amounts of funding for alien plant clearing both within and outside protected areas, through a poverty relief program focused on job creation.

One of the biggest challenges is that of managing for an unconfined wilderness experience in the midst of large scale developments and land transformation on the boundary of the Park, and inappropriate tourism developments inside the Park. Apart from the negative impacts on biodiversity, the visual impact of landscapes modified extensively through afforestation, cultivation or developments such as hotels and leisure resorts, also negatively affects one's wilderness experience.

All developments are subject to an Integrated Environmental Management process. However, although the necessary environmental laws are in place, there is a lack of capacity of government agencies to enforce them. Within the Park, the Integrated Management Plan provides the planning framework on which future development decisions are based (Ezemvelo KZN Wildlife 2005a). Only developments that are appropriate for the zonation of the area will be considered. Beyond the boundaries of the Park, KZN Wildlife as the conservation body for the province, comments on the impacts that proposed developments may have. Although impacts on the wilderness resource and the sense of place experienced by wilderness users are highlighted, it is the socio-economic and political factors that prevail when decisions to approve development applications are made.

One of the most significant threats and challenges facing wilderness managers in the Park and South Africa, in general, is the lack of sustainable financing of wilderness areas in the light of other social priorities. Through the Park's integrated planning process, a Business Plan will be produced in an attempt to ensure a constant government funding trend, set eco-cultural tourism net income targets, as well as to initiate actions to proactively explore and procure funding from other sources. One such source of funding is the concept of "payment for environmental services."

The Park's wilderness areas contribute to a wide array of environmental services. In particular, they contribute significantly to effective mountain catchment management ensuring an optimal flow of good quality water in one of the major water catchments areas of South Africa. The transfrontier project aims to influence government thinking towards the concept of "payment for environmental services" whereby water consumers will contribute towards the effective and appropriate management of mountain catchments. Should this be achieved, it will go a long way in achieving sustainable financing for the conservation of these wilderness areas.

Integrated Planning and Management of Wilderness

Although the Park's wilderness areas were among the first to be proclaimed in South Africa over 30 years ago, these areas have not been managed according to strict wilderness principles and objectives detailed in a management plan specific to the wilderness resource. A Wilderness Management Plan has recently been drafted in an attempt to safeguard the wilderness resource (Ezemvelo KZN Wildlife 2005b). The plan forms part of the Integrated Development Plan for the Park that was recently developed (Ezemvelo KZN Wildlife 2005a). An integrated approach was used to develop these plans to ensure adequate public participation during the planning process, and thereby support for the management philosophy adopted by the Park. The process included a stakeholder workshop at the outset to develop the objectives for the Park, the drafting of the plan by the Park management team, followed by a period for public comment. The five-year management plan (2006 to 2011) will be implemented as soon as the necessary authorizations have been received at a national level. In the meantime, the plan is available to guide management staff in their daily decision making process.

One of the primary objectives of the Park is the effective management and sustainable use of wilderness. In order to achieve this objective, alternative methods must be considered for the management of wilderness. Alternative methods include the minimum tool concept for animal monitoring and alien plant removal programs, as well as only considering wilderness dependent activities for visitors and researchers. To this end, the Park has been zoned using the Recreational Opportunity Spectrum and the Wilderness Opportunity Spectrum, developed by the United States Forest Service. In addition, an activities matrix has been developed that includes Limits of Sophistication for the various zones in the Park. In addition, a Limits of Acceptable Change monitoring system has been developed as the monitoring framework for activities in the Park (Cole and McCool 1997). The activities and issues that are currently monitored include the trail network, caves, campsites and visitor experiences. The system will be expanded to include the monitoring of various management activities as well as the airspace above the Park.

One of the challenges to wilderness stewardship is the proclamation of additional wilderness zones or areas identified during the planning process. The new National Environmental Management: Protected Areas Act No. 57 of 2003, allows for the proclamation of wilderness areas or zones within any protected area and on private land, rather than only those within forestry reserves as was previously the case.

Wilderness Education and Awareness

Apart from the Park-specific challenges to wilderness stewardship, wilderness managers on a national scale are faced with the challenge of defending the wilderness philosophy

and preserving wilderness qualities in an environment dominated by social, political and economic forces. Basic human needs such as the provision of food, health care and infrastructure are a priority, as is the constant pressure on the ecotourism sector to ensure that the country's protected areas become self-sustaining.

These pressures are compounded by the fact that a large proportion of the country's population does not understand the wilderness concept, even though the country has a history of wilderness stewardship of more than half a century. These factors all erode the wilderness resource and challenge managers to justify its existence. Although many do not understand the "American" concept of wilderness, the indigenous people of South Africa have certain areas that are sacred to them, and access to these is often forbidden. It is these "sacred places" that provide an opportunity for wilderness managers to set aside additional areas as pristine wilderness for the benefit of the majority.

Awareness is key to the acceptance of the wilderness philosophy among all South Africans to ensure its continued existence. The Park's awareness program focuses on the training of wilderness managers and hospitality staff, and on the production of various education and awareness materials such as pamphlets and posters (fig. 5) to benefit wilderness users.

Conclusion

Although the uKhahlamba Drakensberg Park World Heritage Site's management team faces a myriad of challenges in the stewardship of their wilderness resource, there are numerous opportunities available that pave the way to address these challenges. Considering that less than one percent of South Africa's land surface is wilderness and the Park contains 36 percent of the country's proclaimed wilderness, these opportunities must be embraced to ensure an enduring resource of wilderness.

Our commitment is to ensure that there will always be places where people will be able to absorb wilderness first



Figure 5—Poster celebrating over 30 years of wilderness in the Park, aimed at increasing awareness among visitors.

hand, and be changed by it. The wilderness philosophy is one of the pillars of KZN Wildlife's corporate identity, embracing a deep respect for our natural world, restoring it as far as is possible to what it once was, and preserving it in as whole and as natural a state as possible.

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