

Post-apartheid perceptions of the Greater St Lucia Wetland Park, South Africa

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SUMMARY

In the wake of apartheid, South African protected areas have come under increasing pressure to reconcile a wealth of natural resources with the acute social and economic needs of the black rural majority. Demands for land reform, poverty alleviation and job creation have all had profound implications for the conservation and management of the nation's protected areas. An attitudinal study was conducted within three diverse South African communities, and among employees of the Kwa Zulu-Natal Nature Conservation Service (KZN Wildlife) to assess how the Greater St Lucia Wetland Park (GSWP) and the authorities charged with its management are perceived in the context of post-apartheid South Africa. Despite significant revisions to South Africa's conservation policies in the post-apartheid era, attitudinal research has continued to focus on rural black communities, leaving white residents, urban black populations and the conservation authorities themselves largely under-represented. As a result, the relationships between local communities, protected areas and conservation authorities remain largely unknown and outdated. Qualitative analysis of 90 semi-structured interviews indicated limited support (5%) for the abolition of the GSWP. The potential loss of the GSWP was associated with negative economic (88%) and environmental (66%) impacts by all respondents, regardless of race, gender, age or residency. Contrary to previous research conducted during the apartheid era, an overwhelming majority of Zulu respondents perceived a positive association between nature conservation, tourism and improved local economic welfare. Thus, local attitudes towards protected areas appeared to be improving. There remained however a discrepancy between support for the GSWP and the management authorities, particularly among respondents with limited contact with conservation staff. This is consistent with previous surveys where residents expressed support for the concept of conservation, but significant hostility towards local conservation authorities. The distinction is critical, as negative attitudes towards

conservation authorities are often misinterpreted as a lack of support for conservation in general. Local residents (regardless of race or socioeconomic status) also expressed high expectations of KZN Wildlife to address issues of unemployment, poverty and tourism in the region. If these expectations are not met, support for the GSWP, as well as the conservation authorities, is likely to decline dramatically.

Keywords: conservation attitudes, South Africa, Zulu, ecotourism, apartheid, Greater St Lucia Wetland Park

INTRODUCTION

Under apartheid, notions of race, power and privilege shaped all aspects of South African society, including the creation and management of the nation's protected areas (PAs). Relationships between neighbouring communities and PAs were typically characterized by misunderstanding, conflict and distrust (Carruthers 1989; Ellis 1994). Much of this hostility was rooted in the nation's authoritarian conservation policies, which deliberately excluded (black) local residents from visiting, using or otherwise benefiting from PAs.

As race relations spiralled into a cycle of increasing violence, South Africa's PAs began to reflect the very oppression identified with the institution of apartheid. Until the early 1980s, black South Africans had only restricted access to most PAs or hunting reserves (Beinart 1989; Carruthers 1989). The legacy of discounting black participation in PA management perpetuated the perception among conservationists that rural black populations had little interest in wildlife conservation *per se*. As recently as 1993, this was recognized in an environmental and social impact study of the Greater St Lucia Wetland Park (Adam and Haynes 1993).

Following the demise of apartheid and first democratic elections in 1994, South Africa radically revised its conservation policies and institutions to redress the social and economic injustices associated with wildlife conservation and the establishment of PAs during the apartheid era (Wells 1996; Koch 1997; Honey 1999). A new national constitution declared that conservation and sustainable development would be pursued simultaneously in order to promote the economic and social development of previously disadvantaged communities (Constitution of the Republic of South Africa 1996). South African National Parks (SANP) also

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revised their mission to ‘transfer the power and control of natural resources from the minority that had been appointed and privileged by an undemocratic system, to the majority that participates in the new democratic process’ (South Africa National Parks 2002). With over 422 formal PAs covering roughly 6% of the land surface, PAs were now expected to serve a number of social, economic, and scientific purposes in South Africa. Despite this significant shift in policy, the authoritarian and punitive model of conservation remains embedded in the minds of many black South Africans. Consequently, South African PAs remain challenged with transforming historical perceptions of conservation and PA managers, while simultaneously linking the benefits of conservation to local communities.

Previous attitudinal studies conducted in South Africa vary considerably in the level of support demonstrated by local residents towards PAs (Keenan 1984; Infield 1988; Hackel 1990; Davies 1993). Results indicated that while local communities were generally supportive of neighbouring PAs, only a small percentage perceived any personal benefit from them (Keenan 1984; Infield 1988; Hackel 1990; Davies 1993). Previous research also indicated a weak level of perceived association between conservation, tourism and improved economic welfare among black residents in Kwa Zulu-Natal (J. Keenan, unpublished report 1984; Infield 1988). According to Infield (1988) ‘preservationist policies have convinced the majority of local communities that the central complex (the Hluhluwe/Umfolozi Game Reserves) are worthless from a practical point of view’ (Infield 1988).

Following the demise of apartheid, few attitudinal surveys have been conducted in South Africa, and none have undertaken a comparative analysis of local resident attitudes towards a PA or its managers. Thus, the perceptions of urban black populations, local white residents and the conservation authorities themselves remain largely unknown. In light of the monumental political and institutional changes that have occurred in South Africa, this survey attempted to update the results of an earlier attitudinal survey conducted during the apartheid era (Infield 1988). In particular, this study sought to determine if local perceptions of PAs and PA managers had changed since the demise of apartheid; did local residents perceive any direct benefit from PAs given the radical shift in the nation’s conservation policies; and were there differences in community attitudes towards PAs and PA managers?

METHODS

Site profile

The Greater St Lucia Wetland Park (GSWP) comprises approximately 300 000 ha of contiguous land along the eastern coast of South Africa in the Province of Kwa Zulu-Natal, approximately 240 km north of the city of Durban (Fig. 1). Originally established as the St Lucia Game Reserve in 1895, the GSWP encompasses one of the largest estuarine systems in Africa (Begg 1978; Taylor 1995) and is recognized

as both a UNESCO World Heritage Site and a Ramsar wetland of global significance. The GSWP comprises a wide diversity of ecosystems including: marine, inland lake, estuarine, forested dunes, mangroves and coastal lowland forests. This diversity provides critical habitat for a range of marine, wetland and savannah dependent species. Local Zulu communities have long valued the Park’s abundant source of reeds, thatching grass and medicinal herbs, which are essential elements of the Zulu culture and economy (Taylor 1993). The Park is also a common wilderness/fishing destination for white South Africans from the interior of the country (Zingel 1993).

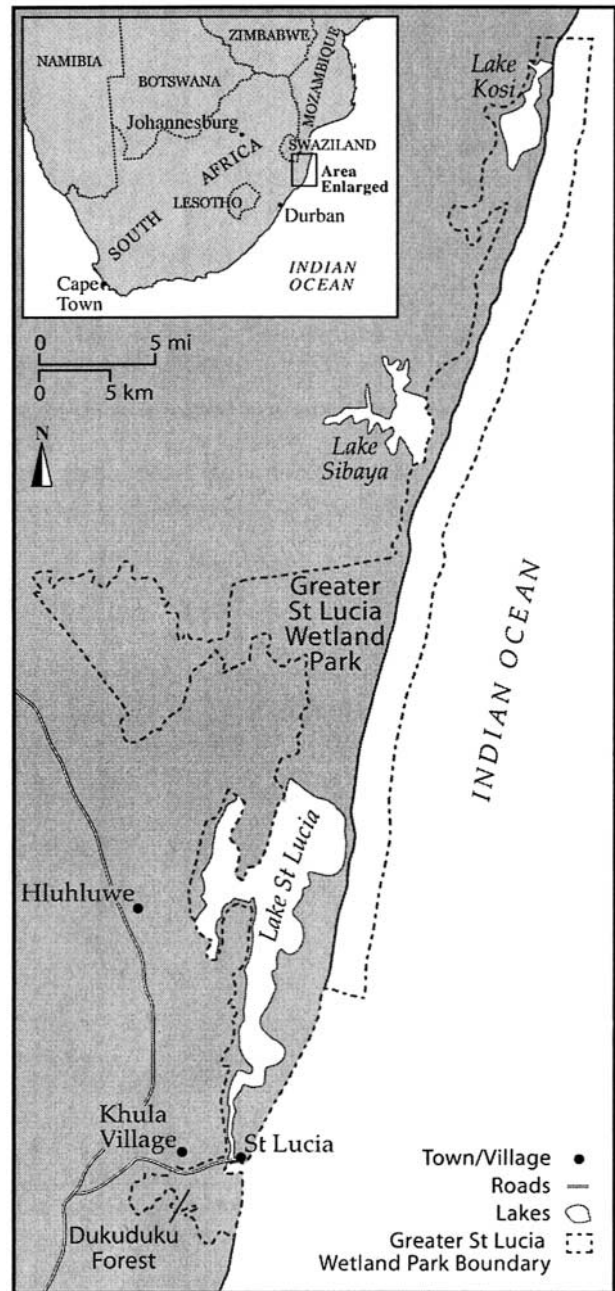


Figure 1 The Greater St Lucia Wetland Park, with surrounding towns and villages

In addition to biological diversity, the forested sand dunes of the GSWP also contain significant deposits of titanium ore (Adam & Haynes 1993). Attempts to mine the titanium in the dunes east of the GSWP have been a subject of great debate. In 1996, a nationally appointed independent review panel concluded that titanium mining was unsustainable, and recommended that the GSWP adopt a management plan that emphasized conservation and ecotourism in order to provide the maximum financial and other associated benefits to local communities who would have otherwise benefited from titanium mining (Leon 1996).

Stakeholder profiles

St Lucia

The town of St Lucia is entirely surrounded by the GSWP, with Lake St Lucia and the Indian Ocean forming its western and southern boundaries (Fig. 1). There are approximately 500 permanent residents in St Lucia; however, the population can swell to 6000 individuals during the holiday season (Dominy 1993). Despite the town's proximity to Khula Village and Dukuduku Forest (Fig. 1), it is almost entirely composed of white South Africans. Tourism is the foundation of the town's economy and employs approximately 60% of the population. Another 20% of St Lucia's permanent residents are retired (Zingel 1993).

Dukuduku Indigenous Forest

The Dukuduku Indigenous Forest is comprised of 6500 ha of indigenous coastal lowland forest. Only 10% of the original indigenous coastal lowland forest remains intact in South Africa, and 40% of this remnant can be found in Dukuduku Forest (Everard 1992). Despite its protected status, there are an estimated 12 000 to 30 000 individuals residing illegally in the Dukuduku Forest (Everard 1992; Sapa News Agency 2000). Attempts to evict the Forest residents have been met with fierce armed resistance, in one instance leaving two people dead and several wounded (Carnie 1998). Despite their illegal status, the residents of Dukuduku have, to date, not been relocated from the Forest.

Khula Village

In 1993, approximately 3000 residents voluntarily agreed to leave the Dukuduku Indigenous Forest at the request of provincial government who were interested in preventing the further deforestation of the coastal lowland forest. In exchange for their relocation, government authorities established a residential clearing directly across the road named 'Khula Village'. In 2001, Khula had an estimated population of at least 15 000 Zulu residents. Unemployment remains a chronic problem, and research indicates that less than 15% of the population is formally employed (Shange 1996). Approximately 22% of those who are employed work in tourist related businesses in the nearby town of St Lucia (Shange 1996).

Kwa Zulu-Natal Wildlife (KZN Wildlife)

KZN Wildlife is a relatively new institution that represents a merger between the Natal Parks Board and the former Department of Nature Conservation (which was previously responsible for conservation in the black 'homelands' developed under the apartheid regime). KZN Wildlife manages over 80 PAs with approximately one million visitors per year, and employs approximately 4000 individuals across the province of Kwa Zulu-Natal.

Data collection and analysis

Research was conducted within Khula Village, Dukuduku Forest, St Lucia and among employees of KZN Wildlife between May and August 1999, and during May–June 2000. The content of the interviews were largely influenced by a 1986 attitudinal study that examined attitudes towards both nature conservation and the Natal Parks Board among rural Zulu villagers living adjacent to the Hluhluwe/Umfolosi Game Reserve (Infield 1988). The aforementioned Game Reserve is approximately 60 km from the GSWP. The Zulu participants in the Infield (1988) survey share similar cultural and demographic variables with the residents of Khula Village and Dukuduku Forest.

Given the lack of accurate and recent census data for Khula Village and Dukuduku Forest, obtaining a truly random sample from each community was problematic. Interviews were based on chance encounter throughout the day and evening in order to ensure meeting as wide a range of participants as possible. Particular attention was paid to interview a representative sample of ages, genders, professions and socio-economic levels. A stratification of participants was determined in consultation with elders from Dukuduku and Khula Village, KZN Wildlife staff, local non-governmental organization (NGO) representatives and a review of the most recent demographic data and literature (Everard 1992; Dominy 1993; Shange 1996). By stratifying the sample of participants, chances were markedly improved that the interviews were as representative as possible. Interviews conducted in Khula Village and Dukuduku Forest were completed in Zulu with the assistance of a single translator throughout the entire study. In addition to individual interviews, over a dozen community conservation meetings were attended in Khula, St Lucia and other nearby communities.

Oral interviews were conducted with adults 18 years and older (mean age = 39 years). A series of open-ended questions were posed regarding individual attitudes towards nature conservation, the GSWP, and KZN Wildlife. In order to ensure a random and stratified sample as possible, a brief set of fixed questions were also asked to determine the respondent's age, gender, length of residence, household size, number of children and education. Interviews were pre-tested for comprehension and length with a total of six small focus groups in Khula Village, St Lucia and KZN Wildlife. In total, 90 interviews (56% male, 44% female) of approximately 90

minutes in length were conducted with the residents of St Lucia, Khula Village, Dukuduku Forest and KZN Wildlife staff.

The depth and detail of responses received was well suited to content analysis. Defined as a systematic and replicable technique for compressing text into discrete categories (Krippendorff 1980; Bernard 1995), content analysis was used to identify trends and patterns among responses and provide a baseline for monitoring shifts in public perceptions of the GSWP and KZN Wildlife. After a preliminary examination of the data, a word frequency count was conducted for each question. Responses were then organized and coded into content clusters consisting of a set of common words or phrases. Particular attention was paid to acknowledge a diversity of word usages, synonyms and inferences. Content clusters were then analysed to identify common trends and patterns both within and among the communities surveyed. Data are presented as raw response frequencies within each community, as well as for the entire study. Respondents often provided more than one response per question. Accordingly, the response rate may sum to greater than 100%. Individual quotations have also been used to illustrate specific points or observed patterns of difference among the stakeholder groups.

Two open-ended questions were asked to assess stakeholder perceptions of the GSWP: (1) what is the purpose of the Greater St Lucia Wetland Park; and (2) what would happen if the Park were to be abolished? The questions were designed to understand how individuals define and perceive the formal purpose of the Park (question 1); to determine if there is support for abolishing the Park (question 2); and to assess what (if any) personal values and benefits are associated with the Park (question 2). In order to assess local perceptions of the conservation authorities, residents from each of the three stakeholder groups (as well as KZN Wildlife staff themselves) were also asked: (3) what is the job of KZN Wildlife; and (4) what does KZN Wildlife do for your community?

RESULTS

What is the purpose of the GSWP?

Out of 77 total respondents, 79% described the primary function of the GSWP as 'protecting' or 'conserving' natural resources (Table 1). Further discussion with participants revealed a broader set of assumptions behind why the GSWP required protection in the first place. Participants from Khula Village expressed the need to protect the GSWP because residents lacked the requisite scientific knowledge to sustainably manage and/or regulate the resources themselves. Khula residents were also the only stakeholder group to ascribe the Park's purpose with a bequest value; which they described in terms of the Park's ability to protect wild animals, *incema* grass (*Juncus kraussi*) and trees for 'the next generation' (Table 1).

Respondents from St Lucia perceived the purpose of the GSWP as a mechanism to 'protect' unique natural resources (Table 1). The Park's purpose was commonly described in association with law enforcement, prohibitions and control. Respondents from St Lucia and KZN Wildlife staff (Table 1) were the only communities to recognize and name the variety of ecosystems located within the GSWP (wetland, marine, estuarine, savannah, etc.).

Half of the Dukuduku residents interviewed stated that the GSWP's purpose was to protect wildlife, although this was often framed in the context of wildlife having more privileges and benefits than their own community. An additional 37% of Dukuduku residents surveyed stated that the GSWP was for tourists, and another quarter answered that they did not know what function the Park served (Table 1). This was the highest frequency of 'don't know' responses received for this question.

Tourism was the second most frequent description of the GSWP's purpose among all the stakeholders (Table 1). Residents from Khula Village and Dukuduku made the distinction that the Park was for tourists, whereas participants from St Lucia and KZN Wildlife described tourism in the context of 'multiple-use', which they defined as multiple recreational opportunities for visitors as well as local residents. St Lucia residents often alluded to the boating, fishing and hiking opportunities that were available to them, and indicated that these activities were the primary reason they had chosen to live in the area. Conversely, not a single respondent from Khula or Dukuduku mentioned any recreational benefits associated with the Park or the concept of multiple use. Survey results also revealed that few residents from Khula and Dukuduku (<5%) had ever visited the GSWP, as compared to every participant interviewed from St Lucia.

What would happen if the GSWP were to be abolished?

Ninety-five per cent of participants surveyed predicted a negative outcome if the GSWP were to be abolished (Table 1). Respondents associated both negative economic and environmental impacts with the loss of the GSWP. Eighty-eight per cent stated that the local economy would be negatively affected by the loss of the Park due to the potential loss in tourism, which in turn would result in fewer jobs and lost revenues. The negative environmental impact of abolishing the Park (for example, as a result of poaching, deforestation and human encroachment) was mentioned by a total of 66% of all individuals surveyed (Table 1).

In Khula Village, 74% of respondents felt that the natural environment would in some way suffer if the Park were abolished (Table 1). Residents stated wild animals would be poached for personal consumption, indigenous trees would be cut down, and residents would encroach on the GSWP to establish agricultural plots and housing. An additional 18% of Khula respondents also mentioned that the loss of the

Table 1 Perceptions of the Greater St. Lucia Wetland Park. *n* = number of respondents.

<i>Stakeholder</i>	<i>Statement</i>	<i>Response (%)</i>
<i>What is the purpose of the GSWP?</i>		
Khula Village <i>n</i> = 29	Protect wild animals and indigenous trees	86
	For tourists	20
	For future generations	17
St Lucia <i>n</i> = 20	Protect natural resources	100
	Protect a unique environment that contains many ecosystems	40
	Multiple use	20
Dukuduku Forest <i>n</i> = 16	Protect wild animals	50
	For tourists	37
	Don't know	25
KZN Wildlife <i>n</i> = 12	Conservation of biological diversity	90
	Multiple use	60
	Maintain unique environment (wetlands, estuary, mangroves)	25
<i>What would happen if the GSWP were to be abolished?</i>		
Khula Village <i>n</i> = 27	Environment would be destroyed by people	74
	Local economy would suffer due to unemployment and lost revenue	70
	Incema grass would be over harvested and no longer available	18
St Lucia <i>n</i> = 16	Tourism would decline	100
	Park would be destroyed by people	62
	Uncontrolled development would occur in the region	25
Dukuduku Forest <i>n</i> = 16	Tourism and employment would decline	100
	People would relocate into the Park	25
KZN Wildlife <i>n</i> = 13	Local economy would decline and affect all local residents	100
	Park would be negatively impacted by over-use and lack of regulation	69
	Conflicts between local communities would increase	15

GSWP would result in an overharvesting of incema grass (Table 1). Almost three-quarters of respondents from Khula stated that the local economy would suffer if the Park were to be abolished. Respondents described the economic consequences of abolishing the GSWP in terms of fewer tourists and reduced income due to a reduction in gate fees, curio sales and jobs.

When presented with the hypothetical abolition of the GSWP, residents of St Lucia focused almost entirely upon the potential economic losses that they would incur due to the loss in tourism. All of the respondents from St Lucia stated that tourism in the area would decline, and 73% stated that the town would not survive if the Park were abolished (Table 1). An additional 62% of respondents from St Lucia also mentioned the negative environmental impacts that would be incurred if the GSWP were abolished (Table 1). Potential environmental impacts included the widespread perception that the neighbouring black communities (particularly Khula Village and the residents of Dukuduku Forest) would immediately inhabit the Park. Uncontrolled development for housing and hotels was also mentioned by a quarter of St Lucia residents as a potential result of abolishing the Park (Table 1). This question often provoked comments from the residents of St Lucia regarding the lack

of a 'conservation ethic' among the local Zulu communities. Respondents pointed to the recent deforestation within Dukuduku Forest and the lack of animals sighted along the main road as examples of a lack of concern for the natural environment among their Zulu neighbours.

Respondents from Dukuduku Forest described both negative economic and environmental impacts that would be incurred should the GSWP be abolished (Table 2). The majority of Dukuduku residents alluded to the tension between the economic benefits associated with the ecotourism from the GSWP, and their communities' simultaneous need for land. One-quarter of participants in Dukuduku perceived the abolition of the GSWP as an opportunity to relocate their homes in the Park.

What is the job of KZN Wildlife?

The majority of all participants described the job of KZN Wildlife as protecting the natural resources and wildlife inside the Park (Table 2). Within Khula Village, three-quarters of respondents stated that KZN Wildlife was responsible for 'protecting wildlife and looking after the environment', while another 20% mentioned the authority's responsibility to work with local communities by providing employment or

Table 2 Perceptions of the Kwa Zulu-Natal Wildlife Service. *n* = number of respondents.

<i>Stakeholder</i>	<i>Statement</i>	<i>Response (%)</i>
<i>What is the job of the KZN Wildlife?</i>		
Khula Village <i>n</i> = 30	Protect wild animals/look after the environment	76
	Help local communities	20
	Don't know	17
St Lucia <i>n</i> = 15	Conserve/protect natural resources	100
	Enforce Park regulations	33
	Maintain tourist facilities	16
Dukuduku Forest <i>n</i> = 14	Protect wildlife	57
	Take land away from this community	46
KZN Wildlife <i>n</i> = 13	Conserve biodiversity	100
	Provide environmental education opportunities	30
	Work with local communities /help them to benefit from the Park	30
<i>What benefits does KZN Wildlife provide for your community?</i>		
Khula Village <i>n</i> = 23	Don't know	32
	Siyabonga Craft Market	26
	Work with traditional healers/build medicinal herb garden	21
	Protect community from dangerous wildlife, especially hippopotami	21
St Lucia <i>n</i> = 15	Provide environmental education programmes	46
	Nothing	30
	Maintain tourist facilities	20
Dukuduku <i>n</i> = 14	Nothing	57
	Don't know	43
KZN Wildlife <i>n</i> = 13	Facilitate projects with local disadvantaged communities	38
	Provide employment to local communities	38
	Provide recreational experiences/maintain tourist facilities	23

training opportunities (Table 2). A minority (17%) of Khula respondents could not identify any aspect of the conservation authority's job.

Every individual surveyed from St Lucia described the job of KZN Wildlife as including some form of protection or conservation of the Park's natural resources. A third of those interviewed in St Lucia made references to law enforcement, including 'arresting poachers to save wildlife from extinction', 'fining fishermen for taking undersized or illegal fish', 'enforcing the rules of the park' and 'keeping the Park safe for both the environment and visitors'. In contrast to Khula Village, none of the respondents from St Lucia mentioned the responsibility of KZN Wildlife to work with local communities.

More than half the participants from Dukuduku Forest stated that the job of KZN Wildlife was to protect wild animals and the environment, and 46% of residents provided negative responses portraying KZN Wildlife as an organization whose mandate was to take land away from local communities (Table 2). By way of explanation, one elderly woman stated, 'It is their job to make people not feel free. They are always telling us that we must move our homes, because they say this place is for the wild animals and trees.'

When asked to describe their own mandate, all KZN Wildlife staff made reference to conserving the Park's 'biodi-

versity', however, one-quarter of staff members also defined their responsibilities as including either environmental education or working with local communities to help them benefit from the GSWP.

What benefits does KZN Wildlife provide for your community?

When asked what benefits KZN Wildlife provided for their community, respondents from Khula Village provided the most positive and diverse array of responses among all the stakeholder groups. More than half of the respondents described one or more community outreach projects, including a local craft market built in part by KZN Wildlife, a medicinal garden for traditional healers, and protection from dangerous wildlife (Table 2). Khula respondents often praised the latter two projects because they created jobs and provided income for local residents.

Almost half of the respondents in St Lucia, described educational and information-based programmes provided by KZN Wildlife, and another 30% commented that KZN Wildlife 'did nothing' for their community (Table 2). The most negative responses were elicited from residents of Dukuduku Forest, where more than half of those surveyed

stated that the conservation authorities 'did nothing' for their community, and another 43% responded that they 'did not know' what benefits (if any) KZN Wildlife provided (Table 2). Conversely, KZN Wildlife staff perceived themselves to be providing a wide range of services on both sides of the Park's fence. Almost 40% of staff mentioned either the craft market, or the medicinal nursery, while another 38% of employees described job creation as a benefit or service to the community (Table 2).

DISCUSSION

Perceptions of the Greater St Lucia Wetland Park

In contrast to previous attitudinal surveys conducted in South Africa, three conclusions can be drawn regarding local attitudes towards the GSWP. First, the majority of local residents have an improved understanding of a neighbouring PA's formal purpose. Second, there is limited support for the abolishment of the GSWP due to the perceived negative economic and environmental impacts that would be incurred by all local residents. Third, participants revealed a diversity of intrinsic, bequest and cultural values associated with the GSWP that may be undervalued and overlooked by PA managers and policy makers.

Improved understanding of PAs

Among residents of Khula Village, 76% described the job of KZN Wildlife as protecting natural resources and wildlife inside the Park. This improved understanding strongly contrasts with Infield's (1988) study, where Zulu participants responded that they either 'did not know' the neighbouring PA's purpose (55%) or agreed with the statement 'the Natal Parks Board keeps this area because they do not want people to have the land' (28%) (Infield 1988). Local residents from each community also expressed expectations of the GSWP to provide social and economic development opportunities for their community.

Half of the Dukuduku residents described the purpose of the GSWP as protecting wildlife. Their responses were qualified, however, with tremendous frustration that the conservation authorities placed the priorities of flora and fauna above human needs. In the words of one woman, 'They [KZN Wildlife] only think of themselves and the animals. They do not understand that we grow our crops here. This is how we make money. This is how we feed our children.' An additional 25% of Dukuduku residents stated that they 'did not know' the purpose of the GSWP, indicating that residents have no understanding about the GSWP's purpose, or are uncomfortable criticizing KZN Wildlife. Together these results indicate the fragility of the Dukuduku communities' support for the Park, and the immediate need to address the tension between conservation authorities and local residents.

Residents of St Lucia were far more likely to associate the GSWP's purpose with law enforcement and regulation of the Park's resources. Similar perceptions have been recorded in

Botswana, Zambia and Kenya, where local residents perceived conservation authorities to be doing their job well when they are arresting people (Lewis undated; Parry & Campbell 1992; Akama *et al.* 1995). The more educated and affluent residents of St Lucia and KZN Wildlife staff exhibited the greatest knowledge of the GSWP's ecosystem diversity, flora and fauna.

The role of tourism

A total of 94% of all respondents predicted substantial economic and/or environmental impacts when confronted with the possible abolishment of the GSWP. Regardless of the community in which they resided, local residents perceived a positive association between nature conservation, tourism and their personal economic welfare. This represents an important shift in attitude towards conservation in South Africa, and strongly contrasts with the previous study by Infield (1988), where only 4 out of 151 individuals perceived a positive link between tourists, revenue and employment, and 33% agreed with the statement, 'tourists who visit the conservation area are good for the community' (Infield 1988). The change evident in the responses received indicates that tourism is now perceived as a major source of revenue and employment generation for local communities.

While the concept of ecotourism is widely promoted in and around the GSWP as a means to achieve social and economic development, there remains great variance in levels of community participation, ownership and profit distribution from ecotourism enterprises. To date, none of the ecotourism initiatives surrounding the GSWP are owned or managed by black residents, unemployment in Khula remains exceptionally high (84%), and the majority of tourism-related benefits continue to accrue primarily to the residents of St Lucia (Shange 1996; Scheyvens 1999).

Intrinsic, cultural and bequest values associated with the GSWP

In addition to the perceived economic value associated with the GSWP, stakeholders also described a variety of intrinsic, cultural and bequest values associated with the Park. St Lucia residents repeatedly referred to the area as 'unique' and described the GSWP as one of the only 'wild places left in South Africa'. Their perceptions were decidedly preservationist in tone and often described the GSWP as an isolated landscape, devoid of any human impact or influence. This perception differed from the Zulu communities, who perceived the GSWP in terms of both utility and conservation, as a haven for wild animals, indigenous trees, medicinal herbs, incema and thatching grass.

The cultural and economic importance of incema grass to the residents of Khula and Dukuduku Forest should not be overlooked. The GSWP is one of only three areas left in the Kwa Zulu-Natal where incema grass can be legally harvested under KZN Wildlife's sustainable use programme. Between 800–1000 women from Khula Village and Dukuduku Forest harvest approximately 200 000 kg of incema grass annually (Christiansen 1999). The grass is primarily used to weave

Zulu wedding mats, which are an essential gift from a bride to each member of the prospective husband's family. The majority of women who discussed the importance of incema grass were single mothers, widows, or had an unemployed spouse. While a long-term study of the socio-economic role of incema grass is needed, it is clear that this resource is a critical economic supplement to households under financial duress, and local black residents consider it one of the primary benefits associated with the conservation of the GSWP. Interestingly, residents of St Lucia expressed very limited knowledge of the cultural and economic value of incema grass within the Zulu culture.

Bequest value was identified by 17% of residents from Khula Village, who stated that the GSWP was a place for future generations and the rest of the world to see wild animals and indigenous trees. Although utilitarian values may take precedence over aesthetics for the residents of Khula and Dukuduku Forest, they remain strong supporters of the GSWP and its continued use as a conservation area. The perception that poor rural residents are not concerned with biodiversity conservation (Terborgh *et al.* 2002) is therefore simplistic and inaccurate.

Perceptions of the Kwa Zulu-Natal Nature Conservation Service (KZN Wildlife)

Two final conclusions related to perceptions of KZN Wildlife can be drawn from this study. First, consistent with previous attitudinal studies in Africa (Infield 1988; Hackel 1990; Newmark *et al.* 1993; Gillingham & Lee 1999), Dukuduku residents expressed support for the concept of conservation and the GSWP, but significant hostility towards local conservation authorities. The distinction is critical because negative attitudes towards conservation authorities are often misinterpreted as a lack of support towards conservation in general (Newmark *et al.* 1993; Gillingham & Lee 1999). Second, the majority of local residents, regardless of race, income or place of residence, expected KZN Wildlife to provide a range of economic and social services to their community. If these expectations are not met, support for the GSWP, as well as the conservation authorities, is likely to decline dramatically.

Distinguishing between support for PAs and PA managers

Despite exhibiting support for the GSWP, respondents from Dukuduku also expressed negative perceptions of KZN Wildlife. Approximately half of the participants from Dukuduku Forest described the job of KZN Wildlife as taking land away from their community. However, contrary to past interpretations by media, residents of St Lucia and conservation officials, this study demonstrated that the majority of Dukuduku residents did not support the abolition of the GSWP, and relied heavily upon the Park and its tourists for income, employment and access to valuable natural resources such as incema grass. Interviews with Dukuduku residents also revealed that they experienced the

least amount of contact with KZN Wildlife staff, were offered fewer employment opportunities by conservation authorities and maintained the lowest rate of (legal) Park visitation among all stakeholder groups. Results from a similar attitudinal study in Tanzania (Gillingham & Lee 1999) confirm that local attitudes towards PA managers are strongly influenced by perceived familiarity and contact with PA managers, as well as the types of services and benefits they receive from PA managers.

Managing expectations

When asked to describe the job of KZN Wildlife, over 30% of the KZN Wildlife employees interviewed discussed working with local communities as part of their responsibility. This represents an important departure from earlier attitudinal studies where conservation officials rarely described a responsibility for working with local residents (Abrahamson 1983; Infield 1988; Newmark *et al.* 1993; Akama *et al.* 1995). Twenty per cent of Khula residents stated KZN Wildlife should 'help their community'. Upon further discussion, another 69% of residents also mentioned that KZN Wildlife should provide preferential employment opportunities to local residents. The pressure on the GSWP to deliver tangible benefits to local residents is starkly apparent, as the transition to majority rule has intensified expectations among the black populace that a more equitable distribution of resources and employment is imminent.

Such expectations beg the question of what role and obligation does KZN Wildlife have in improving the welfare of local residents? If the organization accepts the challenge of improving local livelihoods and reducing widespread poverty in the region it risks raising unrealistic expectations among residents, and placing additional constraints on limited PA budgets. Alternatively, if KZN Wildlife were to return to a protectionist paradigm, the GSWP would be perceived as increasingly irrelevant, or worse, deliberately oppressive.

A recent backlash among conservation practitioners and academics has advocated a return to a much stricter enforcement paradigm, and a total disengagement of biodiversity conservation efforts from improving the economic welfare of local residents (Kramer *et al.* 1997; Oates 1999; Terborgh 1999; Terborgh *et al.* 2002). Advocates of this approach claim that this would in turn liberate valuable financial resources and allow PA managers to refocus on their primary mission, the conservation of biological diversity. In short, biological diversity cannot be conserved while simultaneously promoting human economic development (Oates 1999).

The contested nature of conservation in South Africa illustrates the peril of a protectionist strategy towards conservation. Specifically, such an approach resulted in: exacerbating tensions between local communities and PAs, divorcing the local population from traditional systems of resource management and land tenure, and ultimately engendering an attitudinal shift among African populations whereby the concept of nature conservation became intimately associated with dispossession and the apartheid policies of the national

government (Beinart 1989; Carruthers 1989, 1995; Cock 1998). The protectionist model failed in South Africa precisely because it overlooked the social and political processes in which conservation is deeply immersed (Carruthers 1994; Brechin *et al.* 2002). Returning to a protectionist paradigm in the GSWP risks repeating the failures of the past, and overlooks the realities of the present. Results from this study indicate that residents themselves make no distinction between the dual objectives of biodiversity conservation and sustainable community development. Accordingly, the future of the GSWP will ultimately rest upon the ability of PA managers and local stakeholders to resist such narrow protectionist-oriented strategies and instead 'collectively negotiate legitimate, enforceable agreements' (Brechin *et al.* 2002; Wilshusen *et al.* 2002) regarding the distribution and management of the GSWP's natural resources. The GSWP cannot solve poverty and underdevelopment, but it can contribute to solving problems, while ensuring its own continued success by recognizing and engaging local residents as equitable partners in biodiversity conservation.

CONCLUSIONS

Following the demise of apartheid, attitudes towards PAs appeared to have improved among local residents. It has been argued that poor rural communities often have little interest in conservation or PAs (Adam & Haynes 1993; Oates 1999; Terborgh *et al.* 2002). This study demonstrates otherwise. Results indicate that the majority of local residents, regardless of their socio-economic status, associate the GSWP with an improved quality of life and do not support its abolition. Even residents of Dukuduku Forest, who demonstrated the most limited support for KZN Wildlife, associated positive economic and cultural values with the GSWP. While the GSWP cannot solve all the legacies of the apartheid era, its neighbours perceive it to be the foundation for biodiversity conservation and economic development within the region. If conservation is to sustain itself in a majority-ruled South Africa, PAs must deliver conservation-related benefits and build genuine and lasting support among local residents.

Success will, in part, require: (1) recognition among both stakeholders and conservation authorities that PAs alone cannot resolve poverty and underdevelopment in the surrounding region; (2) increased attention to the value of community-based conservation and social ecology within KZN Wildlife; and (3) strengthening the capacity of community representatives to engage equitably in conservation policy and planning. Building capacity must move beyond the rhetoric and enable a restructuring of power relations between conservation officials, policy makers and local communities.

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