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WAYS OF BELONGING: MEANINGS OF “NATURE” AMONG XHOSA-SPEAKING TOWNSHIP RESIDENTS IN SOUTH AFRICA

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The concept of biocultural diversity, originally used to describe indigenous people and their ways of using and managing natural resources, has more recently been applied within the urban context to understand the variability of interactions between humans and nature. Significant progress has been made internationally in acknowledging the need to preserve and maintain green spaces in urban environments. Current efforts to address the need for greening urban areas in South Africa primarily focus on the establishment and maintenance of botanical gardens and parks as well as various green belts within the urban landscape. South Africa's urban areas are overwhelmingly shaped by the historical segregation of space and stark disparities in wealth. The distribution, quality, and extent of urban green spaces reflect this. Many township dwellers do not have access to these amenities and their interactions with nature are thus usually constrained to access to municipal commonages. This article explores how areas of natural vegetation in municipal commonages on the outskirts of urban centers in South Africa continue to offer places of cultural, spiritual, and restorative importance to Xhosa-speaking township dwellers. A case study from Grahamstown, an urban center in the Eastern Cape with a population of around 80,000, illustrates how ability to access and move through such places contributes to people's well-being, identity formation, and shared heritage. A case is made for adopting a biocultural diversity approach to spatial planning and urban development within the South African context.

Keywords: *commonage, biocultural diversity, green space, urban environments*

Introduction

What I enjoy the most about my favorite place [on the commonage outside Grahamstown] is its beautiful green scenery, which I always find beautiful and fascinating. There is also a stream of water nearby and I like to watch the water as it runs down the stream...I notice that when I am there I automatically become relaxed, comfortable, peaceful, happy, and inspired...What I like the most about this particular place is that no one will disturb me while I am there, as it is quiet and secluded. While I am there I become happy in my heart because my cattle are also being well fed in that healthy environment...This place is particularly beautiful in spring and early summer. (Jabulani, personal communication, 2011)

Jabulani is a young, unemployed man in his mid-twenties. He grew up on a farm in the Eastern Cape, South Africa, and recently relocated to the nearby city of Grahamstown. He is currently living with his mother and his baby daughter in

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Fingo Village, one of the oldest parts of the “township” extending eastwards of the city. While he was growing up on the farm, he and his peers spent many hours herding the family’s livestock and collecting firewood in the surrounding vegetation. Jabulani’s family brought their livestock with them when they moved to Grahamstown. The forest remains an important place for him to visit regularly. Locally referred to as *ihlathi*, which translates as “bush” or “forest,” in botanical terms *ihlathi* is not a true forest. Rather, the term refers to patches of dense, sometimes tall subtropical thicket and thicket-grassland mosaic.

Jabulani’s attachment to nature could be interpreted simply as that of a cattle owner seeking better pastures for his cattle, and may appear to be exceptional in an urban setting. However, Jabulani’s story echoes that of many urban Xhosa-speaking residents, including people who grew up in the city, and reflects a more fundamental and multifaceted relationship with nature than is currently acknowledged. It is this largely unexplored relationship between urban residents and their surrounding natural environment which is the focus of this paper.

Through interactions with nature, individuals form relationships, memories, and meanings, which form the basis of the recreational, aesthetic, cultural, and spiritual values that nature holds for many people (Fredrickson and Anderson 1999; Kelly and Hosking 2008; Kyle et al. 2004; Williams et al. 1992). There is now abundant empirical evidence that time spent in nature contributes to physical, psychological, and spiritual health and well-being (Russell et al. 2013). In recognition of these values, considerable progress has been made internationally in acknowledging the need to create and maintain green spaces in urban environments.

The provision of natural spaces in urban contexts centers on facilitating recreational activities, which are usually recognized as being pursued for health or enjoyment (Zylstra et al. 2014). In order to highlight and quantify these non-material benefits of nature, the conceptualization and valuation of cultural ecosystem services recently has received much attention (Milcu et al. 2013). Implicit in this approach is the western perspective of humans being separate from nature, consumers of the services nature provides (Milcu et al. 2013; Turnhout et al. 2013). This fails to take into account the fact that many indigenous people do not perceive of themselves as distinct from nature, but instead view people and the environment as part of one another, existing in a complex web of interrelatedness (Bird-David 1999; Descola 2013; Descola and Pálsson 1996; Milton 1996). Nature is conceived as being an integral part of one’s identity, contributing towards a shared heritage (Clayton and Opatow 2003a, 2003b; Pretty et al. 2009; Rössler 2006).

These studies have highlighted the need to explore more nuanced understandings of the ways humans live in, understand, and shape their environment and the nonhuman species with which they share their world (Coates et al. 2006). Since the mid-1990’s, social scientists have challenged modern intellectual traditions working from the dualistic premise (see e.g., Descola and Pálsson 1996; Ingold 2000, 2011; Milton 1996) and, in response, calls have recently been made, particularly from the global South, to acknowledge other ways of being in this world (Garuba 2013). Biocultural diversity has emerged as an approach based on the idea that nature and culture are not in

opposition to each other but interlinked (Maffi 2005; Maffi and Woodley 2010). The concept of biocultural diversity was originally proposed to denote the intimate link between nature and culture in relation to indigenous communities, especially those living in areas of high biodiversity (Maffi 2005; Maffi and Woodley 2010; Posey 1999) and later expanded to recognize the diversity of life in all its manifestations—biological, cultural, and linguistic—which are inter-related and, likely, co-evolved within a complex socio-ecological system (Maffi 2007; Maffi and Woodley 2010). Biocultural diversity also has been used as a framework to acknowledge the diversity of manifestations that are reflected in cultural heritage sites and cultural landscapes (Rössler 2006) and in calling for the development of rural and indigenous communities to be rooted in their distinct cultural identities, justifying their claims to greater control over land, development, and identity (Davidson-Hunt et al. 2012). More recently, there is growing awareness that even in contemporary urban and rural contexts, a great variety of manifestations of biocultural diversity exists (Elands et al. 2015; Leikkilä et al. 2013; Moreno-Penaranda 2013). In many parts of the developed world, these cultural interactions with nature are being recognized legislatively and form part of novel approaches to facilitating access to green spaces in cities by diverse user groups. In this way, cultural interactions with nature form a vital part of the city's cultural heritage and identity (Elands et al. 2015).

Within South Africa, biocultural diversity is evident in the enduring nature of cultural associations and values that many rural and urban Xhosa-speaking people attach to elements of the natural environment and the activities carried out there (Alexander 2011; Cocks 2006; Cocks and Wiersum 2014; Cocks et al. 2006; McAlister 2012; Mogano 2013). For many, the natural environment of the Eastern Cape is an integral part of their identity and shared heritage (Cocks and Wiersum 2014; Dold and Cocks 2012). The local name *ihlathi lesiXhosa* ("Xhosa forest"), given to the indigenous thicket vegetation, reflects the significant role it plays in local identity (Cocks et al. 2012).

This article explores the effects of living in an urban environment on people's relationship with nature, including the meanings and attachment, people—many of whom moved from rural areas—have to their peri-urban natural environment. It discusses the activities that facilitate and mediate interactions between people and nature and whether these sustain this relationship amongst Xhosa-speaking residents living in the townships of Grahamstown. While the exposure to, and relationship with, nature varies considerably between individuals, our research uncovers several common themes that characterize the way nature, and particularly *ihlathi* (forest), is meaningful to people well beyond its utilitarian value.

Urbanization and the Changing Role of Municipal Commonages

South African cities continue to reflect the legacy of colonialism and Apartheid rule, which severely limited the movements of African and mixed-race citizens. Black Africans were restricted to living in racially defined suburbs,

locally referred to as “townships” (Wilkinson 1998). These areas were poorly serviced, with a high proportion of informal structures, backyard dwellers, and widespread poverty. Whether through formal planning or informal expansion (in the form of “squatter camps”), natural areas in the townships rapidly converted to informal settlements due to the desperate need for housing.

Before the advent of democracy in South Africa, black Africans were required to establish a home base in one of several ethnically defined Bantustans (or “homelands”) as the apartheid government aimed to restrict the number of black Africans residing within urban areas. The effect of this was to slow urbanization for several decades (McConnachie and Shackleton 2010). With the advent of democracy, all citizens were allowed free movement and South Africa saw a massive increase in urbanization after 1994. A significant contributing factor was retrenchment of farm workers in the wake of changing government policies intended to strengthen farm workers’ rights, promote land reform, and cut subsidies to the commercial farming sector (Connor 2005, 2014; Mkhize 2014; Simbi and Aliber 2000; Spierenburg and Brooks 2014). Many of these new migrants live at the urban periphery, often in informal settlements and in severe poverty (Atkinson and Büscher 2006; Hunter and Posel 2012).

The new democratic government sought to address the backlogs in housing and service delivery created under apartheid by making significant investments into township areas (McConnachie and Shackleton 2010; Wilkinson 1998). An emphasis was placed on the delivery of large numbers of houses for the poor and previously disadvantaged at as low a cost as possible (Gilbert 2004). The uniform settlements of low-cost “RDP houses” (named after the government’s Reconstruction and Development Programme) have become characteristic of the landscape across South Africa (Figure 1). While significant inroads have been made to address backlogs in service provision, the rapidly rising rate of migration to larger cities means the state is focused on providing housing and basic services such as water, sanitation, and electricity to township areas. Protection of the natural environment and provision of green spaces is not a priority and existing parks and remnant vegetation in townships typically are neglected, used for dumping waste, vandalized, or avoided for fear of criminal activity (McConnachie and Shackleton 2010; Shackleton and Blair 2013).

Around the fringes of larger metropolitan centers, smaller cities, and towns, township dwellers have the right to access municipal commonages. These provide access to nature, usually in the form of indigenous vegetation types, although these commonly are transformed as a result of over-utilization. Municipal commonages were originally established in the 1800s and regulated use was provided for mainly white townspeople to keep transport animals, milking cows, and animals for slaughter (Anderson and Pienaar 2003; Atkinson and Büscher 2006). The post-1994 democratic state gradually terminated commercial farmers’ leases on commonages in order to make them accessible for the growing population of urban poor, predominantly black residents living in township settlements. This shift was officially recognized in the White Paper on South African Land Policy of 1997, which stipulated that “poor people need to gain access to grazing land and small arable/garden areas in order to



Figure 1. Example of an RDP housing settlement (Photo credit Tony Dold).

supplement their income and to enhance household food security” in urban areas (Department of Land Affairs 1997).

It is now recognized that “a large proportion of South Africa’s urban poor rely to some extent on municipal commonage for either livestock or natural resources for direct subsistence use or indirectly for generating income” (Davenport 2008:86). This has added to our understanding of the contribution of natural resources to people’s livelihoods and their role as a “safety net” for the rural poor (Shackleton and Shackleton 2004; Shackleton et al. 2000).

While important—and still under-represented in policy (Vetter 2013)—the livelihood and safety-net values of natural resources are only one part of the complex interactions between people and nature. Little attention has been given to how residents of the urban margins utilize and relate to their environments, their attachments to these spaces, and the intangible benefits and values associated with them. Qualitative and quantitative data from residents of the Grahamstown townships paint a different picture than merely that of a “safety net” that people reluctantly fall back on. What emerges instead is an enduring, culturally mediated connection to nature that retains its relevance and importance even when urban people become less dependent on the material benefits derived from natural resources.

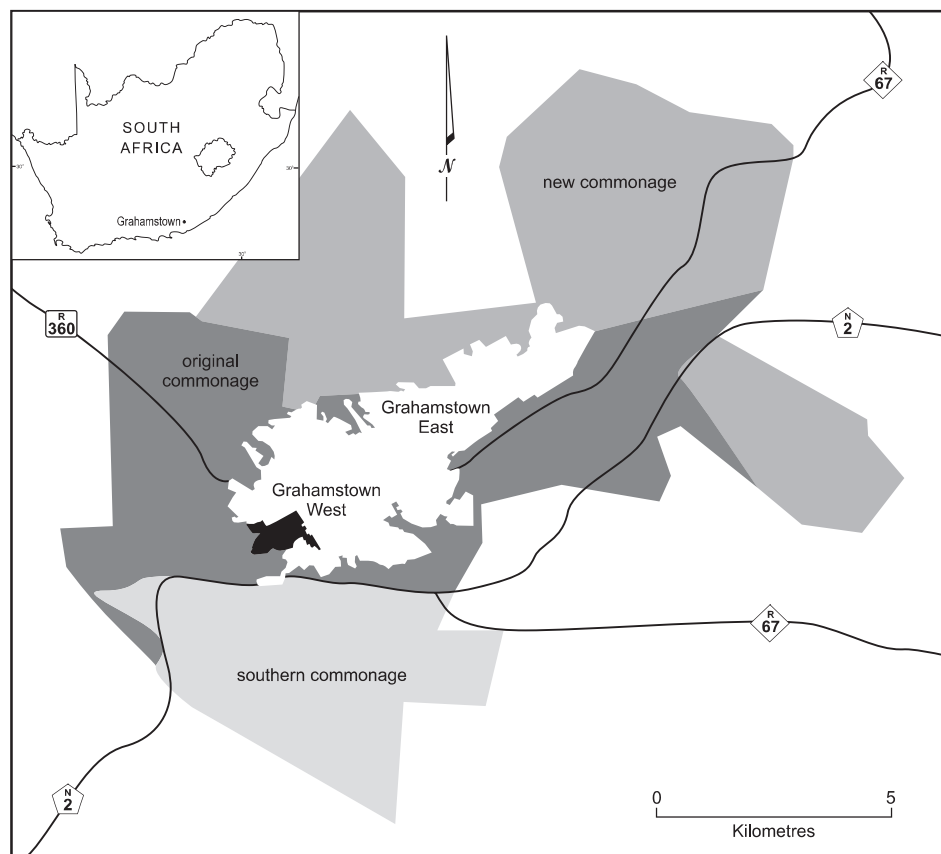


Figure 2. The town of Grahamstown and surrounding municipal commonage areas. The area shaded in black includes the Rhodes University campus. The areas accessed by township residents are mainly those parts surrounding Grahamstown East.

The Grahamstown Case Study

Grahamstown was originally established as a military fort in the early nineteenth century and played a key role in the expansion of colonial rule in the Eastern Cape. Today it is a city with its own municipal government and a small central business district. It has an estimated population of just over 80,000, of which 67% identify as Xhosa people (Stats SA 2011). The historically black township area stretches eastwards of the city center (Figure 2) and comprises a mix of formal residential areas, RDP housing, and informal settlements. The majority of its residents are Xhosa-speaking Africans (Møller 2008). Over 50% of the township residents live in poverty and 67% of working-age people are unemployed (Stats SA 2011). Frustration with poor living conditions, crime, and lack of economic opportunities is widespread and has led to the eruption of (sometimes violent) protests.



Figure 3. New RDP settlement and municipal commonage. In the distance patches of thicket (*ihlathi*) are accessed.

The Grahamstown municipal commonage covers approximately 9083 ha of land immediately surrounding the city (Puttick 2008). About half of this is made up of “old” commonage, which has been owned by the Grahamstown municipality since the establishment of the town in the early 1800s. The other half is “new” commonage, which consists of previously white-owned commercial farms that have been incorporated into the commonage as part of the government’s land redistribution program. This commonage comprises a mosaic of vegetation types, including grassland, small fragments of Afromontane forest, and variants of subtropical thicket, some of which form dense stands of tall trees with a forest-like appearance. Vegetation to the north and east remains relatively natural and recognizable despite overgrazing and other forms of environmental degradation (Figure 3).

Methods

This article is based on several sources of qualitative and quantitative data collected in Grahamstown between 2006 and 2014. An initial exploratory set of interviews and “walks in the woods” (Cunningham 2001; Puri and Vogl 2004) with residents sought to explore the different meanings and values nature (in

particular, thicket and forest) has to Xhosa people living in rural and urban areas (Cocks et al. 2012). This work revealed a widespread and deep appreciation for *ihlathi lesiXhosa* ("Xhosa forest"), as a place where ancestral spirits reside and communicate with the living, a place of purity, natural beauty, and tranquility and a place where people derive spiritual satisfaction while engaging in activities such as resource collecting, herding livestock, and hunting. A phenomenological study (Mogano 2013) delved more deeply into the everyday lived experiences of nature and the meanings of nature to township dwellers. In addition to the general insights generated by this work, two case studies from this research (Jabulani and Ntombi) are included in this article. An ongoing study on the connection between rituals and natural spaces (J. Alexander, unpublished data, 2014) yielded further qualitative data. All interviews were conducted with the help of a Xhosa-speaking translator after making the purpose of the research clear and obtaining informed consent. Narrative excerpts have been included in the text to illustrate the depth of meanings numerous respondents conveyed. To protect respondents' identity, pseudonyms have been used.

Finally, we surveyed just under 700 individuals from five locations spanning a gradient from a large metropolitan area to rural villages to determine the generality of some of the emerging themes from this and related research and further explore the connections between nature experience, cultural beliefs and practices, and personal well-being (Cocks et al. unpublished data). Questionnaires comprised of personal particulars, a range of categorical, quantitative, or Likert-scale questions designed for statistical analysis, and several open-ended questions yielding qualitative data. These included asking participants to describe their personal experiences of nature, significant periods of their lives, and the contribution of being in nature during these times. Grahamstown was included in this survey. Here, we drew on responses from the 143 Grahamstown residents who participated in the survey (66 men and 77 women). Respondents were interviewed within five Grahamstown East (Rhini) locations chosen to represent older and newer and more and less affluent parts of the township. Detailed economic data were not collected, in part to avoid adding to the already considerable length of the questionnaire and partly because this information is complex and sensitive. Instead, respondents were asked to self-assess their economic status as falling into one of six categories ranging from "wealthy" to "very poor." Sampling was purposeful and aimed at representing a spread of economic status, age, and gender. Questionnaires were translated and administered in isiXhosa by trained facilitators whose home language was isiXhosa, but who were fluent in English and able to translate the responses accurately.

Results

Of the 143 people interviewed in Grahamstown, 82% had lived in Grahamstown more than five years and 65% grew up in Grahamstown. The rest had moved from other towns, villages, or farms in the Eastern Cape. Only 27% of respondents were employed at the time of the survey. None assessed

themselves as being “wealthy” or “very poor”; 4% felt they were “very comfortable,” 15% felt they were comfortable but had no luxuries, 69% were “just getting along,” and 17% considered themselves poor. Of the sampled respondents, 94% (98% of men and 90% of women) had been to a forest at some point in their lives. At the time of the survey, 58% of men and 61% of women were no longer visiting a forest. Fifteen percent of men and 18% of women visited a forest once or twice a year and 27% of men and 19% of women visited regularly (at least once a month).

A handful of themes emerged from the qualitative and quantitative data, which were shared by a wide range of participants despite marked differences in individuals’ experiences and views. Key themes included: a) the sensory experience of being in the forest; b) the forest as a place for personal inspiration, reflection, and healing; c) nature as a place of remembrance; d) importance of natural places (especially forest) for rituals and well-being; e) importance of indigenous forest landscapes to Xhosa cultural identity; and f) gendered forest experience. While these closely resembled those of our rural respondents, the urban context brings particular challenges, which mostly included issues of safety and access which currently impede people’s ability to interact with nature.

Sensory Experience

It is peaceful there. I like the cool atmosphere that is there. (Jabulani, personal communication, 2011)

Many of the township residents interviewed described the sensory experience of nature and its various elements as a source of wonder and inspiration. Respondents described feeling enthralled by seeing the forms and colors of leaves.

I love to just view the botanical features (e.g., growth, structure, complex patterns, colors, etc.) of the trees and the different smells of the flowers from different plants. (Woman, 33 years)

Some participants appreciated the soundscape of the forest, in particular the sounds of certain bird calls, falling leaves as the wind blows through the trees, and gently splashing water. Bird songs were perceived as blending with other forest sounds to create a harmonious and uplifting experience.

I often see birds and I get to view their beautifully woven nests. Sometimes I could hear them sing from the other side and I am always curious about which animal it may be and what it may be doing. I am always excited when I see new animals for the first time and those I haven’t seen in a long time. It is just impossible for me to ignore them! That’s how it is in *ihlathi*; you often get a chance to see something fascinating. (Man, 40 years)

Sightings of wild animals evoked moments of joy, and some respondents were particularly inspired by these animals’ ability to endure the difficulties they face surviving in the forest. The opportunity to see and learn about wild animals and plants in their natural habitat also was appreciated. For some, these

experiences were an opportunity “to appreciate the splendor of God’s nature.” The cool purity of the air in the forest was also highlighted by many and perceived to allow one to think clear and clean thoughts.

Personal Inspiration, Reflection, and Healing

Ihlathi gives you peace and forgiveness. (Jabulani, personal communication, 2011)

For many, inherent qualities of the forest contribute to a sense of tranquility, stillness, and peace, which allows one to unwind and relax. In the survey, 85% of respondents agreed that being in the forest made them feel “inspired and revitalized” and 80% agreed that it made them feel “cleansed and refreshed.”

You’ll notice that when you are in a green area, you are attracted by it and it inspires life in you because it’s green all around. You can see that that place is beautiful and appealing and you are happy ... you can rest there. Your heart will be at peace. (Woman, 33 years old)

Given that around 60% of respondents do not currently visit the forest, this in many cases reflects memories rather than present-day experience, but it also highlights that the values of forest are appreciated even by those who seldom visit and whose lifestyles currently show little evidence of nature experiences.

Visiting the forest can ease feelings of hardship, stress, and loneliness—a reality common for many who are dealing with unemployment, insufficient income, violence, and poor living conditions. Lush green vegetation was perceived by some as embodying the “life” of the forest, providing them with a sense of hope, consolation, and healing within body, mind, and spirit.

Even all the bad things you were thinking about...your mind changes when you are in the forest, that place tells you that there is life ahead. You feel revived, refreshed, and inspired. The atmosphere and that green place change how you feel and eventually you change your mind as well...that’s how you find a way to console yourself. *Ihlathi* gives you peace and forgiveness. (Man, 33 years)

If you visit nature while sick you come back healed. (Woman, 56 years)

Time spent in the forest—usually while carrying out activities such as harvesting or herding, but in some cases simply to spend time alone in nature—can help one gain perspective on one’s life. Jabulani finds that when he is in the forest, he has enough time and space to think carefully through some of the challenges he faces.

Sometimes I go to that place because I’ve had an argument with someone or when I’m feeling frustrated by the challenges of life. Being a single parent is not easy and sometimes it’s difficult to share this with anyone because most of them don’t understand. In such cases, you end up thinking of committing suicide, but somehow you become inspired when you are in such a place. That place allows me to think through my

problems and feelings. I am able to think positive things about myself when I am there. I forget many things for a while and focus on what is important in life.

Jabulani believes it is the green environment and the quiet atmosphere in *ihlathi* that is psychologically restorative and this experience helps him to develop hope for the future and a positive outlook on life. The particular place he likes to visit has become an important part of his life and he wishes to bring his family to it one day so they can get to know it and enjoy the experience with him.

Ancestral spirits (*izinyanya*, hereafter referred to as “ancestors”) are venerated and considered to be part of people’s daily lives. They are believed to act as benevolent guides, mentors, and protectors. The forest is widely believed to be a sacred place where ancestors communicate with their living descendants (Cocks et al. 2012). Thus, other respondents attributed some of the peaceful and healing qualities of the forest to the fact that it provides a recognized means by which one can access ancestral protection and healing.

The forest can fill the loneliness gap in your life. It can provide relief from a stressful situation at home or in the community. By spending time in the forest you can regain your health and strength. You have the feeling of being watched in the forest, you can feel the ancestral spirits present. (Man, 66 years)

You visit these places and all bad luck will go away like unemployment, sickness, stress...Also your troubles are reduced; business will run smoothly when you visit [those] ancestors. It also sustains your marriage and opens opportunities. (Woman, 43 years)

Many respondents described the importance of the forest as a place to pray, due to the peaceful environment and their awareness of the ancestral presence in these spaces.

The feeling of being listened to and visible to ancestors is stronger there in the quietness [of the forest] than in our local neighbourhood. (Man, 52 years)

Place of Remembrance

Ihlathi brings back memories of love and courtship. These were some of the most joyous and significant periods of my life. (Jabulani, personal communication, 2011)

For many urban residents, the significance of the forest remains undiminished. Although access to forest may have become more limited, many have cherished memories of spending time in the forest in their childhood and youth, both around Grahamstown and in the rural areas where they grew up. Eleven percent of survey respondents rated their youth as the best period of their lives and this was typically associated with the freedom to move around, participating in traditional children’s activities such as stick fighting, hunting birds, eating

Table 1. Percentage of 143 respondents who answered “yes” to questions about cultural practices and the need for natural spaces and products to carry them out.

Survey Question	% respondents (of 143)
Does your family perform <i>amasiko</i> (rituals)?	92
Are ancestors present in <i>ihlathi</i> ?	80
Are ancestors present in the river?	87
Are ancestors present in the veld?	52
Is it necessary to communicate with ancestors in nature?	84
Do you need the natural environment for rituals?	58
Do you need natural environment for initiation?	79
Do you need resources from the natural environment for cultural practices?	66

wild fruit, and playing in the forest or by the river. Many felt a general sense of safety they do not feel today.

These memories were not restricted to the experiences of youth and several respondents who had moved to Grahamstown from other areas stated their best times related to the resources which were freely available at their previous homes, which they could no longer access. For example, some respondents stated they were happier in rural areas or on farms, where they could be more self-sufficient. Free access to plentiful natural resources and arable land enabled them to feed their families without relying on social grants or cash income.

The best period in my life was when I was able to harvest from my own garden before when I was still on the farm. Talking of these things brings back good memories of the past. (Man, 66 years)

Places for Rituals and Well-being

Our ancestors live there, so we need to go to those places for certain rituals. (Jabulani, personal communication, 2011)

Xhosa-speaking peoples observe transitions through life stages from birth, to death, to being brought back as an ancestor through the means of cultural rituals. Rituals are considered essential in maintaining the connection between ancestors and the living. Despite modernization and urbanization, many of these rituals continue to be seen as sacrosanct. For example, boys who do not go through initiation into manhood suffer lifelong stigmatization as they are not considered “real men.” Ninety-two percent of survey respondents reported they performed cultural rituals and two thirds of respondents stated they needed natural resources in order to conduct their rituals. Nearly 60% of respondents also stated they considered a place in the natural environment necessary for rituals, with 79% of respondents stating the forest was considered essential to initiation rituals (Table 1).

Historically, male initiates lived in the forest for many months, during which they participated in activities such as hunting, which is seen as culturally relevant to masculine identity. Nowadays, initiation has to fit into the school holiday periods and also is constrained by the economic means of the family. In the township setting, it also has to take place amidst other activities and in



Figure 4. Initiation huts located on municipal commonages.

available spaces. These may not provide the conditions considered ideal, such as a secluded piece of forest, nearby running water, and abundant animal and bird life. Despite all of these changes, initiation sites remain a presence near many townships (Figure 4). Many male respondents in the survey (30%) considered their time spent “in the bush” during initiation as the best period of their lives and their initiation sites retain importance to them for the rest of their lives.

Survey respondents were asked to rate the importance of factors to their well-being, in order to gauge how important access to nature was considered in relation to other needs. Factors included those related to material welfare (access to basic services, sufficient money, secure employment), as well as other factors affecting quality of life, such as education, being part of supportive family and social networks, safety from crime, the ability to carry out cultural and religious practices, and access to nature for subsistence, spiritual, and recreational reasons (Table 2). Despite the poor delivery of basic municipal services in much of the township, the high level of unemployment among respondents, and the fact that a high percentage of respondents considered themselves to be poor or just getting by, there was no evidence that material needs were considered of paramount importance. In contrast, the vast majority of people considered the whole range of factors important to their well-being, with mean scores (rated on a scale from 0 to 10) ranging from 9.6 for “being part of a loving family that support each other in times of need” to 6.8 for “to go to nature to get away from my daily worries.”

Table 2. Factors considered important for well-being.

How important do you consider the following for your well-being?	N=143, Mean+/-sd
To be part of a loving family	9.60+/-1.06
To have a decent education for my children	9.41+/-1.95
To be safe from crime	9.36+/-1.54
Access to good, working municipal services (e.g., roads, water, sanitation)	9.29+/-1.33
To have sufficient money	9.21+/-1.61
To be part of a community who help each other	9.16+/-1.22
To have access to natural places for rituals, initiation, etc.	8.59+/-2.23
To have a decent education for myself	8.52+/-2.92
To have a secure job	8.40+/-2.85
To be able to see beautiful trees and natural scenery	8.20+/-1.61
Access to natural resources to fulfill livelihood needs	8.19+/-1.64
To be able to practice my cultural traditions	7.91+/-2.77
To go to church	7.90+/-2.6
Access to natural resources for cultural practices	7.79+/-2.66
To be able to spend time in nature to communicate with ancestors	6.95+/-3.09
To go to nature to get away from my daily worries	6.82+/-2.44

Within this range, functional basic services (9.3) and sufficient money (9.2) ranked fourth and fifth respectively out of the 16 factors listed. Secure employment (8.4) was ranked lower than having access to natural places for rituals and initiation (8.6) and just ahead of the ability to see beautiful trees and natural scenery (8.2).

Xhosa Cultural Identity

Without the forest, we cannot be true Xhosa people. (Jabulani, personal communication, 2011)

The local name, *ihlathi lesiXhosa*, conveys the enduring link between this vegetation and cultural identity (Dold and Cocks 2012). Many respondents expressed how important it was for their children to be able to go to an indigenous forest, as it is only through their engagement with the forest that they can learn the things they need to know to be a “true” Xhosa person (Cocks et al. 2012; Dold and Cocks 2012). The statement by a middle-aged man that “[our] children must go to the forest to learn everything about *isithethe* [the manner of doing things; the way of life] of the amaXhosa” reflects a common sentiment, especially among older respondents. At the end of each survey interview, respondents were given the opportunity to comment on the content discussed. An overwhelming majority expressed the positive emotions that the questionnaire had evoked for them, with many stating that it had reminded them how central their relationship with nature was to their identity. Many expressed concerns that they currently saw no way of passing on to their children these experiences and the relationship with nature that they themselves had experienced as children. Some deem themselves spiritually and culturally impoverished by lack of regular access to forest. More than one respondent expressed the sentiment that “without the forest, we cannot be true Xhosa people.”

Special significance also is attached to products harvested from the forests. A survey carried out in 2002 in two urban centers in the Eastern Cape revealed that 99% of households still made use of natural resources, with a mean amount of 2,301 kg (5072.8 lb) per annum, 85% of which was used for cultural purposes (Cocks 2006). The Grahamstown survey similarly revealed most households utilized natural resources and 93% of survey respondents disagreed or strongly disagreed with the statement "I no longer need resources from the forest." This is further supported by the flourishing trade in medicinal plants (Dold and Cocks 2002), grass brooms (Cocks and Dold 2004), and wild leafy vegetables ("pot herbs," or *imifino*) in many urban centers of the Eastern Cape (Cocks et al. 2014). While wealthier people no longer have to personally collect these products, the thriving trade in them reveals their continuing cultural importance within the urban setting.

Gendered Forest Experience

I can't go to the forest because our times now are wrong. (Jabulani, personal communication, 2011)

While young men like Jabulani can visit natural areas fairly frequently, accessing the many benefits of nature is not a possibility for all. Survey data showed that both men and women visit the forest less frequently than in the past, but while there was little gender difference in the past, women presently visit the forest less frequently than men. Safety concerns account for at least some of this difference: 54% of female compared to only 20% of male respondents agreed or strongly agreed that it was not safe to go to the forest.

Ntombi is a single parent and a widow in her early 60s. When she was younger, she loved going to the forest to collect firewood. She proudly described that she used to have a huge *igoqo* (symbolic woman's woodpile in the homestead; see Cocks et al. 2006) which she felt also visually displayed her love for going to the forest. These days she seldom goes to the forest because of age-related illnesses, but most particularly because she fears becoming a victim of crime if she goes to the forest alone. Crime has become a major concern for her, both within her community and in the forest, such that it affects her general outlook on life. After thieves broke into their house and stole their gas heater, the family became dependent on fuel wood for heating and cooking purposes. Ntombi herself was too old to collect this and thus relied on her grandchildren to collect firewood for her, especially during the winter season.

Even though my grandchildren do it out of love and sympathy for me, it is a risk and it bothers me a lot...I hate always being anxious and feeling pre-occupied with what could go wrong when I am in my house or even in the forest. This is why I cannot stay alone without my grandchildren and daughter.

Babalwa, 70 years, would like to continue to collect firewood, but is unable to do so due to safety fears. A young man from her family now collects fuelwood for her.



Figure 5. Women collecting bundles of firewood from the commonage.

I cannot go to cut firewood. We want to go there, but because of today, the boys [young men who have not yet been initiated] could rape us if we go to the forest. We are not safe unless we are inside our houses. We are here, and there is no other place to go. We are not safe in this community...I used to collect wood in my youth...It is not possible to go to cut wood now. Someone will rape and kill you. You cannot go to the places you want to in the forest now, someone will kill you. It's not the government that is stopping us. It is because of these people that will kill others now. It is not safe.

Access to the forest is not only limited by safety. Initiation into manhood exposes the vast majority of Xhosa-speaking men to some form of wooded natural environment and often instils an appreciation of the forest (and confidence in accessing it) in the process. While for men the transition to manhood is associated closely with being in nature, women's coming of age—these days associated almost exclusively with marriage and/or motherhood—is closely tied to the domestic sphere. While some of the activities signifying “proper” womanhood—such as collecting firewood (Figure 5) or water—traditionally take women into the forest and to rivers, activities associated with male cultural identity, especially initiation, take precedence when these activities are in conflict. Around urban areas, for example, lack of space and the need for

seclusion of initiates commonly results in women being forced to avoid areas within sight of the initiation lodges (often under threat of violence) during the times that initiation occurs (Kepe et al. 2015). Ntombi becomes anxious and angry during these times:

This is a huge inconvenience and it is often problematic for us as according to our custom, women are not allowed to be seen anywhere near the initiates' lodges. Unfortunately, as part of our custom, the initiates or their guards have the right to assault any woman if she is seen or found near the initiates' camp during this seclusion period. So we really have to be cautious when we go to the forest.

Discussion

Our research in Grahamstown shows nature remains profoundly important for urban township residents, even though its significance in people's lives is diverse and actual time spent in nature often is limited. Its relevance ranges from daily activities such as the collection of wood, wild fruits, vegetables, and medicinal plants, or cattle herding to the activities that form part of cultural rituals. Environmental attachment is not restricted to daily livelihood activities. For many people, spaces visited only for rites of passage retain lifelong significance and memories of times when nature was more ubiquitous in their daily lives are cherished. The survey data confirmed the qualitative data, showing clearly that township residents considered access to the natural environment (including in the often transformed and degraded form in which it is found outside cities) to be very important to their well-being, rather than a luxury to consider only once basic needs have been met.

In contrast, the South African state's priority to deliver much-needed basic services such as housing, electricity, water, and sanitation often happens at the expense of a wide variety of other needs. For example, many natural features, such as wetlands and indigenous vegetation, have been destroyed in the rollout of RDP housing on township edges, where municipal commonages often are located. Protection of the natural environment is often held up as "anti-development," an elitist pre-occupation that deprives people of the ability to meet their most basic needs. A more informed planning strategy would take cognizance of people's diverse and interrelated needs, which include access to natural areas. Such an approach would incorporate natural elements into the urban landscape, to maintain biodiversity while at the same time meeting township dwellers' diverse needs and alleviating some of the stresses and disconnection they currently experience on a daily basis.

In doing so, it will be important to recognize gendered uses and activities and find ways to avoid or resolve the conflicts that can arise between them. Management of municipal commonages focuses almost exclusively on the creation and management of small-scale livestock farming activities and support for local livelihoods. The focus on livestock farming often comes at the expense of

the needs of women and youth (Kepe et al. 2015; Kleinbooi 2013; Vetter 2013). Similarly, the high importance accorded to male initiation should not override the need for women to access natural spaces for utilitarian and other purposes.

Our findings also speak to the need to acknowledge the significant role that forests (in the broad sense used here) play in providing not only access to resources, but also places for rituals, spirituality and solace, and where activities for the constructions of markers of identity are carried out. The significance of forests has been underestimated by many earlier researchers (e.g., Berglund 1976; Hammond-Tooke 1975; Prins and Lewis 1992), who were influenced by western viewpoints and the theoretical preoccupations of their time. The strong focus on the beliefs and rituals that took place near the home, particularly in the kraal¹, with little acknowledgment of those that took place in forest, reflects the nature-culture divide of the homestead being portrayed as a place of safety and the forest as a place of danger (Bernard 2010). This has meant that there has been a failure to fully understand the complex layers that connect Xhosa-speaking peoples with their natural environment, especially with forests (Bernard 2010).

Our findings further show that cultural worldviews and practices have proved to be remarkably enduring and have retained their relevance among urban people with modern lifestyles and aspirations. Over 92% of the respondents surveyed still performed cultural rituals, and 80% believed their ancestors were present in the forest. Similar examples of hybridization have been cited elsewhere. For example, Groenfeldt (2003:921) describes how a Cherokee Indian medicine woman, who works in an administrative position within the US Air Force and lives in a middle-class suburban community in Washington, D.C., on weekends works as a healer by invoking spirit forces from a Cherokee pantheon, as her grandmother taught her. Since the Xhosa worldviews and cultural practices, at least in our study area, are inextricably linked to natural places and resources, this highlights the importance of safeguarding people's access to nature in urban environments.

In order to give recognition to such persistent values and practices within an urban context, we call for the incorporation of a biocultural diversity approach into urban planning programs. Biocultural diversity has the dynamic interrelationships and interdependencies between humans and nature as its underlying premise (Folke 2006). Attention should therefore be directed towards ensuring that opportunities to "live with" biodiversity are maintained and created (Turnhout et al. 2013). Examples in developed countries include public parks and outdoor recreation areas, communal gardens providing local food and ornamental plants, and innovative green architectural buildings (Elands et al. 2015). In South Africa, this would also include commonages, especially in the many township areas where formal recreational areas and green spaces are rare, poorly maintained, and often avoided for fear of crime. The incorporation of such an approach also would ensure diverse cultural interactions with nature form a vital part of the city's cultural heritage and identity. A biocultural diversity approach provides opportunities for active involvement of civil society and citizens in decision making processes (Elands et al. 2015). Many of the respondents, including Grahamstown urban residents, indicated at the end of the survey that they would welcome such opportunities. Doing so would allow

them to reflect and take ownership of their cultural heritage and, finally, be acknowledged as belonging.

Note

¹ A kraal is livestock enclosure (isiXhosa—*ubuhlanti*; South African English—kraal).

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References Cited

- Alexander, J. K. 2011. Stories from Forest, River and Mountain: Exploring Children's Cultural Environmental Narratives and their Role in the Transmission of Cultural Connection to and Protection of Biodiversity. Unpublished Master's Thesis, Department of Anthropology, Rhodes University, Grahamstown, South Africa.
- Anderson, M., and K. Pienaar. 2003. Municipal Commonage. Evaluating Land and Agrarian Reform in South Africa. *Occasional Paper Series*, No. 5. Programme for Land and Agrarian Studies, School of Government, University of the Western Cape, Cape Town.
- Atkinson, D., and B. Büscher. 2006. Municipal Commonage and Implications for Land Reform: A Profile of Commonage Users in Philippolis, Free State, South Africa. *Agrekon: Agricultural Economics Research, Policy and Practice in Southern Africa* 45:437–466.
- Berglund, A. 1976. *Zulu Thought – Patterns and Symbolism*. C. Hurst and Company, London.
- Bernard, P. 2010. Messages from the Deep: Water Divinities, Dreams and Diviners in Southern Africa. Unpublished Doctoral Dissertation, Department of Anthropology, Rhodes University, Grahamstown, South Africa.
- Bird-David, N. 1999. "Animism" Revisited: Personhood, Environment, and Relational Epistemology. *Current Anthropology* 40:567–591.
- Coates, J., M. Gray, and T. Hetherington. 2006. An Eco-spiritual Perspective: Finally, a Place for Indigenous Approaches. *British Journal of Social Work* 36:381–399.
- Cocks, M. L. 2006. Wild Resources and Practices in Rural and Urban Households in South Africa: Implications for Bio-cultural Diversity Conservation. Unpublished Doctoral Dissertation, Wageningen University, The Netherlands.
- Cocks, M. L., L. Bangay, K. F. Wiersum, and A. P. Dold. 2006. Seeing the Wood for the Trees: The Role of Woody Resources for the Construction of Gender Specific Household Cultural Artefacts in Non-Traditional Communities in the Eastern Cape, South Africa. *Environment, Development and Sustainability* 8:519–533.
- Cocks, M. L., and A. P. Dold. 2004. A New Broom Sweeps Clean: The Economic and Cultural Value of Grass Brooms in the Eastern Cape Province, South Africa. *Journal of Ethnobiology* 26:33–42.
- Cocks, M., T. Dold, and M. Husselman. 2014. New Shoots, Old Roots—the Incorporation of Alien Weeds into Traditional Food Systems. In *Social-ecological Diversity and Traditional Food Systems: Opportunities from the Biocultural World*, edited by R. K. Singh, N. Turner, V. Reyes-Garcia, and J. Pretty, pp. 199–215. New India Publishing Agency, New Delhi.
- Cocks, M. L., A. P. Dold, and S. Vetter. 2012. 'God is my Forest' – Xhosa Cultural Values Provide Untapped Opportunities for Conservation. *South African Journal of Science* 08:1–8.

- Cocks, M. L., and K. F. Wiersum. 2014. Reappraising the Concept of Biocultural Diversity: A Perspective from South Africa. *Human Ecology* 42:727–737.
- Connor, T. 2005. Locality and Belonging in the Sundays River Valley: Farm Workers and the Greater Addo Elephant National Park, Eastern Cape. *Social Dynamics: A Journal of African Studies* 31:59–83.
- Connor, T. 2014. *Conserved Spaces, Ancestral Places: Conservation, History and Identity among Farm Labourers in the Sundays River Valley, South Africa*. UKZN Press, Durban.
- Clayton, S., and S. Opatow. 2003a. Identity and the Natural Environment. In *Identity and the Natural Environment*, edited by S. Clayton and S. Opatow, pp. 1–24. MIT Press, Cambridge, MA.
- Clayton, S., and Opatow, S. 2003b. Justice and Identity: Changing Perspectives on What is Fair. *Personality and Social Psychology Review* 7:298–310.
- Cunningham, A. B. 2001. *Applied Ethnobotany. People, Wild Plant Use and Conservation. People and Plants Conservation Manual*. Earthscan, London.
- Davenport, N. 2008. The Contribution of Municipal Commonage to Local People's Livelihoods in Small South African Town. Unpublished Master of Science Thesis. Department of Environmental Science, Rhodes University, Grahamstown, South Africa.
- Davidson-Hunt, I. J., K. L. Turner, A. T. P. Mead, J. Cabrera-Lopez, R. Bolton, C. J. Idrobo, I. Miretski, A. Morrison, and J. P. Robson. 2012. Biocultural Design: A New Conceptual Framework for Sustainable Development in Rural Indigenous and Local Communities, *S.A.P.I.E.N.S.*:5(2).
- Department of Land Affairs. 1997. White Paper on South African Land Policy. Pretoria, South Africa.
- Descola, P., ed. 2013. *Beyond Nature and Culture*. University of Chicago Press, Chicago.
- Descola, P. and G. Pálsson, eds. 1996. *Nature and Society. Anthropological Perspectives*. Routledge, London.
- Dold, A. P., and M. L. Cocks. 2002. The Trade in Medicinal Plants in the Eastern Cape Province, South Africa. *South African Journal of Science* 98:589–597.
- Dold, T., and M. L. Cocks. 2012. *Voices of the Forest*. Jacana Press, Johannesburg.
- Elands, E., K. F. Wiersum, A. Buijs, M. Buizer, and K. Vierikko. 2015. Policy Interpretations and Manifestation of Biocultural Diversity in Urbanised Europe: Conservation of Lived Biodiversity. *Biodiversity Conservation* 24:3347–3366.
- Folke, C. 2006. Resilience: The Emergence of a Perspective for Social-Ecological Systems Analyses. *Global Environmental Change* 16:253–267.
- Fredrickson, L. M., and D. H. Anderson. 1999. A Qualitative Exploration of the Wilderness Experience as a Source of Spiritual Inspiration. *Journal of Environmental Psychology* 19:21–39.
- Garuba, H. 2013. Economic Development and Cosmopolitical Re-involvement: From Necessity to Sufficiency. In *Contested Ecologies: Dialogues in the South on Nature and Knowledge*, edited by L. Green, pp. 28–42. HSRC Press, Cape Town.
- Gilbert, A. 2004. Helping the Poor through Housing Subsidies: Lessons from Chile, Colombia and South Africa. *Habitat International* 28:13–40.
- Groenfeldt, D. 2003. The Future of Indigenous Values: Cultural Realism in the Face of Economic Development. *Futures* 35:917–929.
- Hammond-Tooke, W. D. 1975. The Symbolic Structure of Cape Nguni Cosmology. In *Religion and Social Change in Southern Africa*, edited by M. G. Whisson and M. West, pp. 15–33. David Phillip, Cape Town.
- Hunter, M., and D. Posel. 2012. Here to Work: The Socioeconomic Characteristics of Informal Dwellers in Post-apartheid South Africa. *Environment and Urbanization* 24:285–304.
- Ingold, T. 2000. Ancestry, Generation, Substance, Memory, Land. In *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill*, edited by T. Ingold, pp. 132–151. Routledge, London.
- Ingold, T. 2011. *Being Alive: Essays on Movement, Knowledge and Description*. Routledge, Abingdon, UK.
- Kelly, G., and K. Hosking. 2008. Non-Permanent Residents, Place Attachment and Sea Change Communities. *Environment and Behaviour* 49:575–594.
- Kepe, T., G. McGregor, and P. Irvine. 2015. Rights of 'Passage' and Contested Land Use: Gendered Conflict over Urban Space during Ritual Performance in South Africa. *Applied Geography* 57:91–99.
- Kleinbooi, K. 2013. Reshaping Women's Land Rights on Communal Rangeland. *African Journal of Range and Forage Science* 30:17–21.
- Kyle, G., A. Graefe, R. Manning, and J. Bacon. 2004. Effects of Place Attachment on Users'

- Perceptions of Social and Environmental Conditions in a Natural Setting. *Journal of Environmental Psychology* 24:213–225.
- Leikkilä J., M. Faehnle, and M. Galanakis. 2013. Promoting Interculturalism by Planning of Urban Nature. *Urban Forestry and Urban Greening* 12:183–190.
- MA (Millennium Assessment). 2005. *Ecosystems and Human Well-being: Synthesis*. Island Press, Washington, DC.
- Maffi, L. 2005. Linguistic, Cultural, and Biological Diversity. *Annual Review of Anthropology* 34:599–617.
- Maffi, L. 2007. Biocultural Diversity and Sustainability. In *The Sage Handbook of Environment and Society*, edited by J. Pretty, A. Ball, T. Benton, J. Guivant, D. Lee, D. Orr, M. Pfeffer, and H. Ward, pp. 267–275. Sage Publications, London.
- Maffi, L., and E. Woodley, eds. 2010. *Biocultural Diversity Conservation: A Global Sourcebook*. Earthscan, London, Washington.
- McAlister, G. 2012. You don't love your mother just because she feeds you: amaXhosa and Woodlands in the Peddie district, Eastern Cape. Unpublished Master's Thesis, Rhodes University, Grahamstown, South Africa.
- McConnachie, M. M., and C. M. Shackleton. 2010. Public Green Space Inequality in Small Towns in South Africa. *Habitat International* 34:244–248.
- Milcu, A., J. Hanspach, D. Abson, and J. Fischer. 2013. Cultural Ecosystem Services: Literature Review and Prospects for Future Research. *Ecology and Society* 18:44. Available at: <http://dx.doi.org/10.5751/ES-05790-180344>. Accessed on 22 September 2016.
- Milton, K., 1996. *Environmentalism and Cultural Theory: Exploring the Role of Anthropology in Environmental Discourse*. Routledge, London.
- Mkhize, N. 2014. Game Farm Conversions and the Land Question: Unpacking Present Contradictions and Historical Continuities in Farm Dwellers' Tenure Insecurity in Cradock. *Journal of Contemporary African Studies* 32: 207–219.
- Mogano, L. 2013. Unearthing the Essence of Nature and the Perception of Natural Landscape among amaXhosa in the Eastern Cape: An Exploratory Study. Unpublished Master's Thesis. Anthropology Department, Rhodes University, Grahamstown, South Africa.
- Møller, V. 2008. Living in Rhini: A 2007 Update on the 1999 Social Indicators Report. *ISER Research Report Series* (No. 14). Institute of Social and Economic Research, Rhodes University, Grahamstown, South Africa.
- Moreno-Penaranda, R. 2013. Biodiversity and Culture, Two Key Ingredients for a Truly Green Urban Economy: Learning from Agriculture and Forestry Policies in Kanazawa City, Japan. In *The Economy of Green Cities: A World Compendium on the Green Urban Economy*, edited by R. Simpson and M. Zimmermann, pp. 337–349. Springer, Dordrecht, The Netherlands.
- Pretty, J., B. Adams, F. Berkes, S. Ferreira de Athayde, N. Dudley, E. Hunn, L. Maffi, K. Milton, D. Rapport, P. Robbins, E. Sterling, S. Stolton, A. Tsing, E. Vintinnerk, and S. Pilgrim. 2009. The Intersections of Biological Diversity and Cultural Diversity: Towards Integration. *Conservation and Society* 7:100–112.
- Prins, F. E., and H. Lewis. 1992. Bushmen as Mediators in Nguni Cosmology. *Ethnology* 31:133–148.
- Puri, R. K., and C. Vogl. 2004. A Methods Manual for Ethnobiological Research and Cultural Domain Analysis. Anthropology Department, University of Kent, Canterbury, UK.
- Puttick, J. 2008. Municipal Commonage: Livestock, Livelihoods and Land Degradation in Grahamstown, South Africa. Master's of Science mini-thesis, University of Cape Town, Cape Town.
- Posey, D. 1999. *Cultural and Spiritual Values of Biodiversity*. United Nations Environmental Programme. UNEP and Intermediate Technology Publications, London.
- Rössler, M. 2006. World Heritage Cultural Landscape: A UNESCO Flagship Programme 1992–2006. *Landscape Research* 31:333–353.
- Russell, R., A. D. Guerry, P. Balvanera, R. K. Gould, X. Basurto, K. M. A. Chan, S. Klain, J. Levine, and J. Tam. 2013. Humans and Nature: How Knowing and Experiencing Nature Affect Well-Being. *The Annual Review of Environment and Resources* 38:473–502.
- Shackleton, C. M., and A. Blair. 2013. Perceptions and Use of Public Green Space is Influenced by its Relative Abundance in Two Small Towns in South Africa. *Landscape and Urban Planning* 113:104–112.
- Shackleton, C. M., and S. Shackleton. 2004. The Importance of Non-Timber Forest Products in Rural Livelihood Security and as Safety Nets: A Review of Evidence from South Africa. *South African Journal of Science* 100:658–664.
- Shackleton, S., C. M. Shackleton, and B. Cousins. 2000. Re-Valuing the Communal Lands of Southern Africa: New Understandings of Rural Livelihoods. *Natural Resource Perspectives*: 62. Overseas Development Institute, London.

- Simbi, T., and M. Aliber. 2000. Agricultural Employment Crisis in South Africa. Trade and Industry Policy Secretariat 13.
- Spierenburg, M., and S. Brooks. 2014. Private Game Farming and its Social Consequences in Post-apartheid South Africa: Contestations over Wildlife, Property and Agrarian Futures. *Journal of Contemporary African Studies* 32:151–172.
- Stats SA (Statistics South Africa). 2011. Makana. [Online] URL: http://beta2.statssa.gov.za/?page_id%993&id%4makana-municipality. Accessed on 22 September 2016.
- Turnhout, E., C. Waterton, K. Neves, and M. Buizer. 2013. Rethinking Biodiversity: From Goods and Services to “living with”. *Conservation Letters* 6:145–161.
- Vetter, S. 2013. Development and Sustainable Management of Rangeland Commons – Aligning Policy with Realities of South Africa’s Rural Landscape. *African Journal of Range and Forage Science* 30:1–9.
- Wilkinson, P. 1998. Housing Policy in South Africa. *Habitat International* 22:215–229.
- Williams, D. R., M. B. Patterson, J. W. Roggenbuck, and A. E. Wats. 1992. Beyond the Commodity Metaphor: Examining Emotional and Symbolic Attachment to Place. *Leisure Sciences* 14:29–46.
- Zylstra, M. J., A. T. Knight, K. J. Esler, and L. L. Le Grange. 2014. Connectedness as a Core Conservation Concern: An Interdisciplinary Review of Theory and a Call for Practice. *Science Reviews* 2:119–143.