African Journal of Hospitality, Tourism and Leisure, Volume 6 (3) - (2017) ISSN: 2223-814X

What should be included in an ecotourism rating system for protected areas?

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Abstract

South Africa has various rating systems / schemes for tourism related enterprises, however there are no acknowledged rating systems for ecotourism products in South Africa National Parks. The shortcomings of the current rating systems are that they rate mostly the hospitality and accommodation sectors. These systems need to be adapted for nature/wildlife products and the problem that this study addressed was to develop a needed ecotourism rating system for South African National Parks. Therefore, the primary objective of this study was to develop a possible ecotourism rating system for South African National Parks. A questionnaire was distributed electronically on the SANParks' website to numerous respondentrs. Data collection took place during April 2013. A total of 308 responses were received during the period of data collection. The main findings of the study identified eight core principles of ecotourism. In addition, these eight core principles were used for the development of the rating system. The study made an important contribution in that it developed the first ecotourism rating system for South African National Parks that is based on verifiable research data. It is also the first time that related literature and all relevant aspects of ecotourism were identified and developed into a useful questionnaire.

Keywords: Protected areas, rating system, ecotourism, national parks

Introduction

The former Minister for Tourism in South Africa, Martinus van Schalkwyk, stated in a speech at the South African Travel and Tourism Conference held in September 2012, that tourism will be positioned as a service-driven industry though the implementation and application of standards and self-assessment tools and South Africa, will then be

seen as a globally competitive service economy. Therefore, the industry is urged to become an active participant and improve its service levels in line with expected world-class standards. This is what led the minister to the rating of accommodation and tourism establishments in South Africa (Van Schalkwyk, 2012; Rhodes & Saayman 1998:50). Mr. Glenn Philips, former Managing Executive Tourism and Marketing for South African National Park, and currently park manager at Kruger National Park, also stressed the importance of a rating/grading systems for South African National Parks, which are currently lacking a rating/grading system for tourism (Philips, 2009). The latter is important since South African National Parks is the largest contributor to ecotourism in South Africa, with 19 national parks (more than 4 million hectares of land) and the single largest provider of accommodation in the country with 15 670 beds (camping 8820 and 6850 fixed roof beds) providing a variety of ecotourism products (SANParks, 2008).

Font and Buckley (2001:3) define eco-ratings systems as methods to standardise the promotion of environmental claims by following compliance to set criteria, generally based on third party, impartial verification, usually by governments or non-profit organisations. The International Standards Organisation (ISO) defines eco-rating as: “a voluntary, multiple-criteria based, third-party programme that awards a license that authorises the use of a product within a particular product category based on life cycle considerations” (Global Ecolabelling Network, 1999). An often-quoted definition of eco-rating, as applied to tourism, is: “an officially sanctioned scheme in which a product or service may be awarded an ecological label on the basis of its acceptable level of environmental impact. The acceptable environmental impact may be determined by consideration of a single environmental hurdle, or after undertaking an assessment of its overall impacts” (Synergy, 2000:vii).

Starkey (1998), Salzhaeur (1991), Rivera (2002), Sasidharan, Sirakaya and Kerstetter (2002), Honey and Stewart (2002), WTO (2003), Bien (2003), Sanabria, Skinner, Font, MacCorone-Eaglen, Sallows and Frederiksen (2003) and Sallows and Font (2004) indicated that rating/grading ecotourism establishments have important advantages for the host community, specifically:

- It offers substantial consumer confidence
- Grading gives organisations a competitive advantage, a higher company profile
- Grading is a constant quality control tool
- It provides industry with a marketing tool
- Business sustainability is promoted (as resources are used responsibly)
- It provides economic benefits to participants
- Helps organisations to protect their market niches as ecotourism destinations
- Improves industry practices by encouraging environmentally sensitive operations
- Assists industry in developing standards for environmentally sensitive services and products
- Can be extended to certify the environmental soundness of tourist destinations as well as the natural resources at these destinations
- Enables tourists to make informed choices when selecting tourism products

Various rating/grading systems are available in South Africa such as The Heritage Ecotourism Rating Scheme and Fair Trade, however, they are not specifically developed for ecotourism products situated in South Africa National Parks (e.g. protected areas). Rating systems mentioned above tend to focus on building exteriors, bedrooms, bathrooms, public area, general facilities, general services, housekeeping services, additional facilities and responsible environmental and business practices. None of these

rating systems focuses primarily on ecotourism principles namely education, community, environment or promote conservation to name but a few (Page & Dowling, 2002). These systems need to be adapted for nature/wildlife products such as national parks (as the ecotourism product differ) and therefore the aim of this paper was to identify the required components of an ecotourism rating system needed for protected areas with South African National Parks by use of a case study research methodology.

Literature study

The 'father' of ecotourism, Ceballos-Lascurain, first defined ecotourism as "responsible travel to relatively undisturbed natural areas, with the object of studying, admiring and enjoying the natural landscape and its wild plants and animals, as well as existing cultural manifestations (both present and past) found in these areas" (Van der Merwe, 1996). Wearing and Neil (1999) state that ecotourism involves travelling to relatively undisturbed or protected areas, fostering understanding, appreciation and conservation of the flora, fauna, geology and ecosystems of an area. Ceballos-Lascurain later made some adjustments to his first definition and added that ecotourism is environmentally responsible travel and visitation to enjoy (tourists experience) and appreciate nature (and any accompanying cultural features), that promotes conservation and sustainable development, has low visitor impact, and provides for beneficial active socio-economic involvement of local populations (Van der Merwe, 1996).

Page and Dowling (2002: 61) indicated that ecotourism is a form of tourism inspired primarily by the natural history of an area, including its indigenous cultures. Ecotourists visit relatively undeveloped areas to appreciate and participates in a spirit of sensitivity to the natural area. The ecotourist participates in the non-consumptive use of wildlife and natural resources and contributes to the visited area through labour support and/or financial support. Ecotourism is aimed at conservation and the economic well-being of the local residents and is ethically managed to be low-impact, non-consumptive, and locally-orientated (benefits, control and profits). Page and Dowling (2002: 61) added that ecotourism implies a managed approach by the host country or area and management must be committed to establish and maintain the site (conservation area) to be sustainable and provide a learning experience concerning nature.

From the definitions and literature, four pillars have been identified for ecotourism, namely, ecotourism products must contribute to the conservation and enhancement of the natural and cultural environment, they must provide environmental education opportunities, they should be planned and managed in a sustainable manner and should provide the tourists with an enlightened natural experience (Geldenhuys, 2009: 5; Diamantis, 2004: 5; Van der Merwe, 2004: 19); Weaver, 2005: 440; Blamey, 2001: 6). Therefore, any rating system developed for an ecotourism destination such as South Africa National Parks should have aspects of these pillars included first and foremost.

Research conducted by De Witt (2011) regarding an ecotourism model for national parks in South Africa and critical ecotourism factors for national parks (De Witt, 2014), identified similar aspects, namely product development, local community involvement, environmentally friendly practices, ethics, food and activities and policies as key to ecotourism and also ratings systems for protected areas. Coupled with the four pillars and the prior mentioned aspects, Page and Dowling (2002) have identified a number of universal principles and characteristics for ecotourism as listed in Table 1. In the process of identifying components of an ecotourism rating system, the work of Page and Dowling

(2002) (pillars and principles of ecotourism), De Witt's (2011) (model for ecotourism in national parks) and De Witt *et al*.'s (2014) (critical factors for ecotourism) played an important role.

Table 1: Key ecotourism components

• Promote understanding and involve partnerships between role players: government, non-governmental organisations, industry, scientists and local people • Promote moral and ethnic responsibilities • Nature conservation and local economic benefit • Public and private ecotourism businesses should have an environmental strategy • Well educated staff • High environmental standards • Culturally and economically sensitive community development is necessary • Policies	• Should not damage the resource • Developed in an environmentally sound matter • Food and activities • Ethical issues • Long-term benefits • Should provide first-hand participatory and enlightening experiences • Education among all parties • Encourages recognition of the essential values of the resource by all parties • Involve recognition of the resource on its own terms and in recognition of its limits, which involves supply-orientated management

(Sources: Eagles, 1996; Blamey, 2001; Page & Dowling, 2002; Fennell, 2008; Geldenhuys, 2009; Saayman, 2009; De Witt, 2011).

The purpose of an eco-rating systems in protected areas is to highlight the best practices for products and services (Diamantis & Westlake, 2001: 27). Such rating or grading schemes aim to ensure that different components of the tourism industry, from both the demand and supply elements, are conducting their practices with fewer negative impacts on the environment, on society and on the economy (pillars of ecotourism) (Diamantis & Westlake, 2001: 27). Diamantis and Westlake (2001: 27) state that, eco-rating systems in tourism have been operationalised to ensure more sustainable management or sustainable consumption in tourism practices.

These different scenarios with regard to ecotourism, present an alternative way of thinking in terms of matching the definitional limitations of ecotourism with the needs of the different ecotourism destinations. A key element of the success of eco-rating systems, according to Diamantis and Westlake (2001: 35), is that they should be accompanied by an appropriate selection of indicators as well as the support of the different stakeholders and local communities.

An analyses was conducted on grading and rating systems currently found for ecotourism in Southern Africa as indicated in Table 2 as well as the pillars of ecotourism (discussed above), to determine what aspects need to be included in a rating systems for protected areas in order to develop the measuring instrument needed for the research.

Table 2: Analysis of rating systems

Activities	Market sector	Main criteria
Centre for environmental responsible tourism	Accommodation, tour and transport companies	Commitment to integrating environmental issues into their office environment, their business planning, and by making a financial contribution to conservation projects.
Heritage ecotourism rating South Africa	Accommodation, tour operators, restaurant, attractions, conference centre and service providers	Purchasing and procurement; business partnerships; design and construction elements; transport and maintenance flora, fauna and land; communications and marketing; management systems (i.e. noise, energy, water, etc.); community involvement
Eco-rating Scheme Kenya	Accommodation (hotels, lodges, camps, bush homes and bandas)	Environmental; economic; social (employees); social (community)
Botswana Ecotourism Certification System	Tourism businesses (Accommodation)	Minimising negative (social, cultural, environmental); Maximising the involvement (Host communities); Maximising revenues; Educating; Delivering
ISO14001	All tourism industrial sectors	Environmental Guidelines are applicable to any organization, regardless of size, type or level of maturity that is interested in developing, implementing of improving an environmental management system – and therefore not only tourism enterprises may use it.
Green Globe 21	Accommodation, activities, administration offices, cableways, airlines, airports, attractions, community/destination, convention centre, cruise vessel, ecotourism, exhibition hall, farmstay, golf course, marina, railway, Tourism certification initiatives in Africa, resort, restaurant, tour company, tour operator, trailer park, vehicles, vehicle rental,	*Ecotourism standards* (Ecotourism policy, performance and regulatory framework; Natural area focus; Interpretation and education; Ecologically compatible infrastructure; Ecologically sustainable practice Contributing to conservation; Ecotourism benefiting local communities; Cultural respect and sensitivity; Customer satisfaction; Responsible marketing; Ecotourism product minimal impact) *Community standard* (Community Authority,

	vineyard, visitor centre, and winery	Regulatory Framework; Environmental and social Sustainability; Policy; Environmental and social Sustainability; Planning Systems Environmental and Social Sustainability; Benchmarking; Community; Stakeholder) *Design and construction* (Consultation and performance reporting; Sustainable design and construction policy; Regulatory framework; Sustainable design assessment; Sustainable design process management; Sustainable construction process management; Community and stakeholder, consultation and performance reporting
Greenstop.net	Hotels, conference venues, holiday and travel companies that are making an effort to work in an environmentally responsible manner	Checklist that addresses waste, water, energy, purchasing, transport, and future plans

(Adapted from: Spenceley, 2004)

As illustrated in Table 2 the different rating systems do account for all the tourism related sectors: accommodation and facilities, tour operators, transport and attractions. Aspects identified in the literature that is imperative for ecotourism rating/grading systems are environmental aspects, community aspects, socio-economic aspects, design and construction, management, impacts (maximise and minimise, waste management (recycle, reuse and reduce), sustainable design, interpretation and education, customer satisfaction and conservation. When combined these identified aspects formed the bases of the components of an ecotourism rating measuring instrument developed for the research and they were tested.

Methodology

In order to achieve the aim of this research four steps were followed: Step 1 - a literature analysis was conducted and experts in the field of ecotourism were consulted, Step 2 - data collection from respondents, Step 3 - identification of rating items and Step 4 - identification of rating system components through factor analysis.

Step 1: Literature analysis

In order to develop the questionnaire multiple references (De Witt *et al.*, 2014; De Witt, 2011; Du Plessis, 2010; Geldenhuys, 2009: 5; Saayman, 2009: 70; Fennell, 2008: 23; Blamey, 2001:12; Eagles, 1996; Page & Dowling, 2002) were used to identify the key items for a proposed rating system. The literature study identified eight ecotourism components each with its own unique items (see Table 3). The components identified are conservation of nature; conservation of culture; community involvement; environmental education; tourist satisfaction; sustainable/responsible tourism practices; the role players participating in ecotourism namely the tourist and accommodation.

These components and their items were key in the development of the measuring instrument (questionnaire) that was used for this research. The draft questionnaire was tested amongst a panel of experts who consisted of practitioners and academics in the field of ecotourism. Recommendations and modifications were incorporated into the questionnaire before it was distributed to respondents.

The questionnaire consisted of two sections. The first section focussed on the profile of the respondents and included demographic features such as age, gender, language and province of residence. Section two comprised all the components of the rating system, each with its sub-items that was measured on a five-point Likert scale where one represented "not at all important" and five "extremely important". This was done to test the perceptions of ecotourists to South African National Parks.

Step 2: Survey and data analysis from respondents' perception

The questionnaire was loaded on the website of South African National Parks from April to June 2013. Benefits of the web-based method are quick responses; flexibility; lower costs and ease of data handling (Reynolds, Woods & Baker, 2007: 110). According to Tustin, Ligthelm, Martins and Van Wyk, (2005: 346), Fricker, Galesic, Tourangeau and Yan (2005: 371), Roth (2006: 191), and Brennan, Rae and Parackal (1999: 4) the use of the internet is a successful medium to conduct surveys. Their research revealed that the internet is a highly viable tool to use for research. Care was taken to ensure that visitors only completed one questionnaire by requesting and capturing their e-mail addresses in a database. This ensured that each respondent could only complete one questionnaire.

A total of 308 (n) questionnaires were received electronically which were used for the statistical analysis. This number of questionnaires (n=308) is regarded by Cooper and Emory (1995), Buckingham and Saunders (2004) and by Floyd and Fowler (2009) as valid to use for statistical analysis. Given this validity of the findings, conclusions and recommendations may be confidently drawn from the results.

Step 3: Identifications of rating items

In the third step, completed questionnaires were returned electronically, after which they were analysed statistically making use of the statistical programme SPSS (Statistical Package for Social Sciences). Exploratory factor analysis was conducted on each of the eight components identified in Table 3. A pattern matrix with the principal axis factoring extraction method and Oblimin rotation method was used in each case. Bartlett's test of specificity indicated that the factors yielded p-values of <0.001, which indicates that the correlation structure is valid for factor analysis of the data collected. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of each of each factor indicates that the patterns of correlation are relatively compact and should yield distinct and reliable factors (Field, 2009). According to Field (2009) a KMO statistic of between 0.7 and 0.8 is good, while a KMO statistic of 0.8 to 0.9 is great and a KMO statistic above 0.9 are superb. All constructs were included in the factor analysis as all constructs had factor loadings above 0.2. The factor labels were determined by analysing the common themes underlying the constructs within each factor. A Cronbach's Alpha (1 = very reliable) and inter-item correlation reliability tests were also conducted. A correlation matrix gives the correlation co-efficient between a specific factor and all the other factors (Tustin *et al.,* 2005).

In order to improve the quality and applicability of the rating system it was decided to exclude factor loadings below 0.3. This was done by excluding the constructs that do not significantly contribute to each factor. Factor loadings below 0.3 is: the interaction with nature, such as hiking and mountain climbing, is offered (0.283); the roads are built around indigenous trees (0.238); that roads that are not in use are being rehabilitated (0.201) and that hiking trails are marked clearly (0.186). The rating system developed consisted therefore of aspects of an in-depth literature review which was verified by means of an empirical analysis improving the reliability of the rating system. Additionally, the Cronbach's Alpha value also supported the reliability of the criteria.

Step 4, identifying components of the rating system. This was done by making use of a factor analysis, and discussed under results.

Step 4:
The eight different components identified (*conservation of nature, conservation of culture, community involvement, environmental education, tourist satisfaction, responsible tourism practices, environmental education, tourist satisfaction, responsible tourism practices, role players participating in ecotourism–the tourist and accommodation*) and their corresponding items are listed in Table 3, and will be discussed accordingly. Only the top three items of each component is referred to in the discussion due to length of the manuscript.

- "*Conservation of nature"*: water sources are protected (M=4.83; SD±.449), noise is limited in natural areas (M=4.70; SD±.564), awareness is being raised regarding biodiversity and conservation (M=4.65; SD±.636).
- *"Conservation of culture"*: integrity of cultural and heritage sites not be effected (M=3.83; SD±1.089), employees are from the local community (M=3.69; SD±1.180) and a certain percentage of fees paid by tourists be directed to conservation of culture as well as natural sites (M=3.47; SD±1.261).
- *"Community involvement"*: local community is taught about conservation (M=4.69; SD±.669), the local community is provided with opportunities to enhance their personal welfare and such as training and education about the tourism industry (M=4.01; SD±1.089).
- *"Environmental education"*: information about rules and regulations is on display (M=4.67; SD±.619), tourists are educated about waste reduction when visiting parks (M=4.42; SD±.857) and that education sessions are held to inform guests about conserving of fauna and flora (M=4.27; SD±.881).
- *"Tourist satisfaction"*: risks involved are clearly stated (M=4.41; SD±.755), tourists are briefed beforehand about what the product entails (M=4.24; SD±.891) and that the product gives a quality experience filled with either education, excitement or cultural benefits (M=4.18; SD±.940).
- *"Responsible tourism practices"*: waste, including cigarette butts, into allocated waste bins is encouraged (M=4.73; SD±.551), dripping taps are fixed immediately (M=4.70; SD±.653) and accommodation is built without harming the environment (M=4.65; SD±.657).
- *"Role players participating in ecotourism"*: tourists are told not to touch or disturb birds and animals (M=4.76; SD±.576), tourists are aware of the impact they have on the environment (M=4.60; SD±.678) and tourists are encouraged to keep on the walking trails (M=4.56; SD±.760).

- *"Accommodation"*: dripping taps are fixed immediately (M=4.66; SD±.712), that water is saved by using rain water tanks (M=4.60; SD±.689) and that accommodation is built without harming the environment (M=4.54; SD±.734).

The items listed under "important to extremely important" in Table 3, correspond well with the research conducted by De Witt's (2011) (ecotourism model for national parks), namely everyone has a responsibility to maintain a litter-free environment; do not feed the animals; everyone has a responsibility to save water and electricity; to implement practices to reduce pollution and litter; specimens should not be collected and taken out of the park; visitors should not drive "off-road" or on roads with a "no entry" sign; stick to the speed limit; tourism within SANParks must be in support of conservation; ensure employees understand and adhere to all aspects of the SANParks' policy to prevent negative impacts on the environment and local communities; and all stakeholders including government, tourism product providers, tourists and local communities should recognise their responsibility to achieve sustainable tourism. These components and items also correspond strongly with research from DEAT (2003: 6); Tassiopoulus (2008: 310); Coetzee and Saayman (2009: 131) and Keyser (2009: 42) regarding responsible ecotourism, which recognises the need for all stakeholders to take responsibility for their actions and also then to behave in an ethically appropriate manner.

Table 3: Components of an ecotourism rating system

4 = Very important								
3 = Important								
2 = Slightly important								
1 = Not at all important								
		1	**2**	**3**	**4**	**5**		
Responsible ecotourism principles		Percentage					Mean Value	Std. Deviation
COMPONENT 1: CONSERVATION OF NATURE								
1	New roads are restricted to existing roads in the national park	3	8	32	30	27	3.71	1.045
2	EIA has been conducted before development	0	2	8	16	74	**4.63**	.704
3	That the roaming of vehicles is restricted	1	4	14	28	53	4.29	.901
4	That hiking trails are marked clearly	1	2	15	39	43	4.19	.867
5	Roads are built around indigenous trees	2	4	14	19	61	4.36	.948
6	Roads that are not in use are being rehabilitated	3	11	21	32	33	3.81	1.112
7	Tourist numbers are restricted per season	2	5	23	33	37	3.97	.998
8	Building materials are environment-friendly	1	1	8	24	66	**4.56**	.714
9	Natural ventilation is used to regulate temperatures in buildings	2	7	16	22	53	4.16	1.060
10	That alternative water storage is in place, for example tanks used to save rain water	1	4	13	27	55	4.32	.888

11	That human waste is treated in environment-friendly way	1	3	14	26	56	4.36	.845
12	That noise is limited in natural areas	0	0	6	19	75	**4.70**	.564
13	New indigenous trees are being planted	1	1	15	19	64	4.47	.815
14	Alien trees are being used for fire wood	1	5	20	27	47	4.15	.966
15	That alien plants are being removed	2	3	11	20	64	4.43	.892
16	That water used in kitchens is being reused	1	5	19	38	37	4.05	.922
17	That cleaning substances used are environmentally friendly	1	2	12	27	58	4.43	.788
18	That water sources are protected	0	0	3	11	86	**4.83**	.449
19	That interaction with nature, such as hiking and mountain climbing, is offered	5	11	23	34	27	3.68	1.123
20	That development is slow and thought through in order to lower the impact on the environment	1	2	13	29	55	4.38	.820
21	That ecotourism operations take place on a relatively small scale	4	10	33	28	25	3.61	1.084
22	That awareness is being raised regarding biodiversity and conservation	0	1	8	19	72	**4.65**	.636

Responsible ecotourism principles		**Percentage**					**Mean Value**	**Std. Deviation**
COMPONENT 2: CONSERVATION OF CULTURE								
1	Food served is made from locally recipes	13	24	33	17	13	2.95	1.207
2	Local cultures are still permanent residents on the land	20	20	31	18	11	2.79	1.260
3	That local cultures may hunt and fish freely on the property if in need of food	43	25	19	8	5	2.05	1.163
4	That local cultures are allowed to plant own food in the national park	49	26	16	7	2	1.89	1.066
5	That local cultures are allowed to practice their heritage in the national park	28	24	27	13	8	2.49	1.254
6	Were the local culture taken into consideration when development started?	10	10	34	23	23	**3.40**	1.227
7	That tourism development take in consideration heritage and local culture	8	12	31	23	26	**3.46**	1.223
8	Employees are from the local community	5	11	25	27	32	**3.69**	1.180
9	That cultural activities are offered	12	21	33	22	12	3.00	1.189
10	That the integrity of cultural and heritage sites not be effected	4	7	26	30	33	**3.83**	1.089
11	That a certain percentage of fees paid by tourists be directed to conservation of cultural as well as natural sites	9	12	28	24	27	**3.47**	1.261

Responsible ecotourism principles		**Percentage**					**Mean Value**	**Std. Deviation**
COMPONENT 3: COMMUNITY INVOLVEMENT								
1	That cultural activities are hosted by the local culture/community	9	14	34	27	16	3.26	1.158

2	That the local community is involved with development decisions	10	16	28	26	20	3.32	1.227
3	That the local community is involved in the management of the national park	22	21	31	18	8	2.71	1.227
4	That the local community gains financial advantage from the product	11	14	34	24	17	3.21	1.208
5	That the local community is able to show and teach their culture to tourists	10	13	33	30	14	3.27	1.139
6	Local community is taught about conservation	1	1	7	13	78	**4.69**	.666
7	That the local community was used for the purposes of building facilities	5	8	31	27	29	3.69	1.099
8	That funds are being raised for the local community by the national park	16	18	25	21	20	3.11	1.336
9	That the local community is provided with opportunities to enhance their personal welfare, such as training and education about the tourism industry	4	4	24	24	44	4.01	1.089
Responsible ecotourism principles		**Percentage**					**Mean Value**	**Std. Deviation**
COMPONENT 4: ENVIRONMENTAL EDUCATION								
1	That information about rules and regulations is on display	0	1	5	20	74	**4.67**	.619
2	That education sessions are held to inform guests about conserving fauna and flora	1	3	16	30	50	4.27	.881
3	That tourists are learning about the different cultures	6	12	30	26	26	3.54	1.184
4	Tourists are learning about green practices	0	4	16	32	48	4.23	.876
5	That tourists are learning about their carbon footprint	1	5	16	28	50	4.22	.942
6	That tourists are learning about the economic impact of buying local products	4	5	22	32	37	3.93	1.068
7	That tourists are educated about waste reduction when visiting parks	1	3	12	23	61	4.42	.857
Responsible ecotourism principles		**Percentage**					**Mean Value**	**Std. Deviation**
COMPONENT 5: TOURIST SATISFACTION								
1	That tourists are briefed beforehand about what the product entails	2	3	15	32	48	4.24	.891
2	That the risks involved are clearly stated	0	2	11	31	56	4.41	.755
3	That the product gives a quality experience filled with either education, excitement or cultural benefits	2	3	16	33	46	4.18	.940
Responsible ecotourism principles		**Percentage**					**Mean Value**	**Std. Deviation**

COMPONENT 6: RESPONSIBLE TOURISM PRACTICES								
1	That activities of learning sessions take place in a natural area	2	8	33	35	22	3.68	.961
2	That tourists get to interact with nature	1	4	22	34	39	**4.06**	.930
3	That water usage is limited by means of implementing, for example, showers instead of baths, water saving showerheads and dual flushing toilets.	1	2	11	21	65	**4.49**	.813
4	Paper and other materials are recyclable	0	2	8	21	69	**4.58**	.702
5	That solar heating systems are in place	1	1	11	22	65	**4.50**	.776
6	That walking or bicycles are encouraged in suitable areas in parks	7	9	23	23	38	3.76	1.245
7	That accommodation is built without harming the environment	0	1	6	19	74	**4.65**	.657
8	That biodegradable products are encouraged, such as biodegradable soap	1	3	11	21	64	**4.46**	.825
9	That dripping taps are fixed immediately	1	1	6	15	77	**4.70**	.653
10	The correct disposal of waste, including cigarette buds, into allocated waste bins is encouraged	0	1	4	17	78	**4.73**	.551
11	That bedding and linen are made from recycled materials	7	16	31	20	26	3.43	1.231
12	That timers are installed in the rooms for the lights as well as for air conditioning	6	12	22	25	35	3.72	1.224
13	That the waste and water are being treated, controlled and reused	1	1	18	22	58	**4.38**	.835
14	That all notifications and information sheets are printed on recycled paper	0	4	26	20	50	**4.14**	.990
15	That building materials used are environmentally friendly	1	2	16	20	61	**4.39**	.864
16	That there is participation in “Plant-a-tree” day by parks and tourists	3	8	23	23	43	3.94	1.134
Responsible ecotourism principles		**Percentage**					**Mean Value**	**Std. Deviation**
COMPONENT 7: ROLE PLAYERS PARTICIPATING IN ECOTOURISM:								
THE TOURIST								
1	Tourists be informed of benefits of conservation	0	1	9	29	61	**4.50**	.703
2	That tourists are limited to untouched/undisturbed natural areas	4	7	19	25	45	4.00	1.146
3	That tourists are encouraged to keep on the walking trails	1	1	8	21	69	**4.56**	.760
4	That tourists are informed about energy saving practices	1	2	16	26	55	4.32	.874

5	That tourists are encouraged to view animals and birds from a distance	2	6	19	22	51	4.14	1.057
6	That tourists are aware of the impact they have on the environment	1	1	6	24	68	**4.60**	.678
7	That tourists are told not to touch or disturb birds and animals	1	1	4	13	81	**4.76**	.576
Responsible ecotourism principles		**Percentage**					**Mean Value**	**Std. Deviation**
COMPONENT 8: ROLE PLAYERS PARTICIPATING IN ECOTOURISM:								
ACCOMMODATION								
1	That accommodation is built without harming the environment	1	1	9	23	66	**4.54**	.734
2	That water usage is limited by means of implementing, for example, showers instead of baths, water saving showerheads and dual flushing toilets.	1	1	12	21	65	**4.48**	.809
3	That water is saved by using rain water tanks	1	1	9	19	70	**4.60**	.689
4	That the waste and water are being treated, controlled and reused	1	1	14	22	62	**4.46**	.795
5	That drain water is being purified	1	3	17	25	54	4.28	.917
6	That dripping taps are fixed immediately	1	1	8	13	77	**4.66**	.712
7	Paper and other materials are recyclable	1	1	17	20	61	4.40	.868
8	That solar heating systems are in place	1	1	13	22	63	**4.45**	.815
9	Solar power appliances be used	1	2	17	25	55	4.29	.923
10	That there are energy saving programmes in place, or a contribution is made towards energy saving	1	1	13	27	58	4.39	.845
11	That timers are installed in the rooms for the lights as well as for air conditioning	4	9	21	25	41	3.90	1.149
12	That biodegradable products are encouraged, such as biodegradable soap	1	4	16	23	56	4.32	.912
13	That eco-friendly non-toxic cleaning supplies are used	1	3	13	23	60	4.41	.853
14	That bedding and linen are made from recycled materials	8	13	30	18	31	3.54	1.264
15	Reuse of towels and linen programmes	3	2	24	25	46	4.08	1.023
16	That non-disposable ware such as glassware, chinaware and silverware are used	2	5	18	25	50	4.18	1.001
17	That building materials used are environmentally friendly	0	3	12	24	61	**4.45**	.785
18	That there are no visible electricity lines	5	12	27	19	37	3.71	1.215
19	That there are fresh-air exchange systems in place	3	4	27	30	36	3.92	1.035
20	That the accommodation or camps welcome smaller groups	3	6	27	25	39	3.92	1.076
21	That the accommodation is not significantly impacted by a town site, noise, traffic, smog or pollution	1	2	9	21	67	**4.52**	.821

An exploratory factor analysis was conducted on each component as listed in Table 3, to determine each components factors. These results are listed in Table 4 below.

Table 4: Factor analysis of ecotourism rating aspects

COMPONENT 1: CONSERVATION OF NATURE					
	Five factors				
	Conservation practices	Controlled development	Environment friendly	Alien Plants control	Water saving measurement
Mean values	4.48	3.96	4.36	4.29	4.24
Cronbach's Alpha	0.68	0.67	0.67	0.65	0.70
Inter-Item correlations	0.25	0.26	0.27	0.65	0.43
COMPONENT 2: CONSERVATION OF CULTURE					
	Two factors				
	Cultural involvement	Cultural rights			
Mean values	3.48	**2.44**			
Cronbach's Alpha	0.86	0.85			
Inter-item correlations	0.50	0.53			
COMPONENT 3: COMMUNITY INVOLVEMENT					
	Two factors				
	Benefit of local community	Community education			
Mean values	3.22	4.35			
Cronbach's Alpha	0.91	0.52			
Inter-item correlations	0.58	0.40			
COMPONENT 4: ENVIRONMENTAL EDUCATION					
	One factors				
	Learning experience				
Mean values	4.18				
Cronbach's Alpha	0.87				
Inter-item correlations	0.50				
COMPONENT 5: TOURISTS SATISFACTION					
	One factors				
	Tourist satisfaction				
Mean values	4.27				
Cronbach's Alpha	0.84				
Inter-item correlations	0.64				
COMPONENT 6: RESPONSIBLE TOURISM PRACTICES					
	Three factors				
	Recycling and environmental friendly practices	Interaction with nature	Responsible practices		
Mean values	4.50	3.83	3.69		
Cronbach's Alpha	0.91	0.67	0.72		
Inter-item correlations	0.53	0.43	0.46		
COMPONENT 7: TOURIST PARTICIPATING IN ECOTOURISM					
	Factors				
	Informed tourist				
Mean values	4.41				

Cronbach's Alpha	0.83	
Inter-item correlations	0.46	
COMPONENT 8: ACCOMMODATION		
	Factors	
	Recycling and environmental friendly practices	Touch the earth lightly
Mean values	4.31	4.02
Cronbach's Alpha	0.95	0.70
Inter-item correlations	0.55	0.37

In Table 4 the eight ecotourism rating components and their underlining factors are illustrated. Each factor is listed with its mean value (Likert scale 1-5), Cronbach Alphas value and Inter-item correlation. The identified components for ecotourism ratings systems in protected areas are as follows:

- Component one *(conservation of nature)*: five factors were identified from 22 items, and are conservation practices, controlled development, environmental friendly practices, alien plant control and water saving measurements.
- Component two *(conservation of culture)*: two factors were identified from 11 items and are cultural involvement and cultural rights.
- Component three *(community involvement)*: two factors were identified from 9 items and are (benefit of local community and community education)
- Component four *(environmental education)*: only one factor with 7 items were identified, namely learning experience.
- Component five *(tourists' satisfaction)*: only one factor with 3 items was identified, namely tourist satisfaction.
- Component six *(sustainable tourism practices)*: revealed three factors from 16 items, namely recycling and environmental friendly practices, interaction with nature and responsible tourism.
- Component seven *(tourist participation in ecotourism)*: one factor was found from 7 items namely informed tourists.
- Component eight *(accommodation)*: revealed three factors from 21 items of which only two were used (recycling and environmental practices and touch the earth lightly) as one factor had only one item, and therefore it discarded.

It is thus suggested that these factors should be key in any ecotourism rating/grading system in protected areas. The next section will discuss the findings and implications of this study.

Findings and implications

The research regarding required components of and ecotourism rating system for protected areas revealed the following two important findings and their implications.

First finding: The most important factors for an ecotourism rating systems in protected areas (based on their mean values as listed in Table 4) of the different components, were: *conservation practice, recycling and environment friendly practices, alien plant control, water saving measurements, community education, provide a learning*

experience, tourists satisfaction, inform tourists and touch the earth lightly. This combination of factors has not been identified in the literature previously and also confirms that rating systems differ from sector to sector. The implication is that these factors need to be seen as the minimum requirements that must be part of any ecotourism rating/grading system and that rating systems need to be sector specific. It also shows that involving tourists in the development of a rating system makes good sense. Each of these factors consist of a number of important aspects which is outlined below:

- *Conservation practices:* that an EIA has been conducted before development; that awareness is being raised regarding biodiversity and conservation; that noise is limited in the protected area; that water sources are protected and insure that roads are built around indigenous forest or environment sensitive areas. Page and Dowling (2002: 60) confirmed that low impacted nature tourism contributes to the maintenance of species and habitats through a contribution to conservation. Diamantis (2004: 6), Saayman (2009: 4) and Van der Merwe (2004: 7-8) confirmed that one of ecotourism's core characteristics is conserving nature and therefore this aspect must form part of any rating system.
- *Recycling and environment friendly practices*: that natural ventilation is used to regulate temperatures in buildings; that indigenous trees are planted; that building materials are environment friendly; that trails are marked clearly, that cleaning substances used are environment friendly, that dripping taps (water leakages) are fixed immediately, correct disposal of waste, that paper and other materials are recycle, that facilities (accommodation) are built without harming the environment, water usage is limited by means of implementing, for example, showers instead of baths, water saving shower heads and dual flushing toilets, that solar heating systems are in place, that waste and water are being treated, controlled and reused, that all notifications and information sheets are printed on recycled paper. De Witt's (2011) study implied that by implementing environmentally friendly practices such as recycling, ecotourism product owners would be able to maximise positive impacts and minimise negative impacts on the environment.
- *Alien plant control*: that alien plants and animals are being removed and that only alien trees are being used for fire wood. Reid (1999: 33), Blamey (2001: 12), Fennell (2008: 23) and Geldenhuys (2009: 5), confirmed that the above mentioned factor is an important one for an ecotourism rating system.
- *Water saving measurements*: that human waste is treated in environment-friendly way, that alternative water storage is in place and that water used is reused where possible. Du Plessis' (2010) study on "How environment friendly are South African National Parks?" confirmed that examples of functioning more environment friendly includes: saving water and energy and using grey water.
- *Community education*: that the local community is provided with opportunities to enhance their personal welfare, such as training and education about the tourism industry and that the local community is taught about conservation, in other words, awareness should be created for important stakeholders. Previous research by Van der Merwe (2004: 29), Cole (2006: 630), Wight (2003: 51), Richards and Hall (2003: 1) endorses the importance that local communities be educated in the vicinity of the ecotourism product on the subject of conservation of wildlife natural resources and therefore forms an important part for a ratings system. Stem, Lassoie, Lee, Deshler and Schelhas (2003: 393) agree that when communities are not educated, they will not understand the importance of conserving wildlife and then the parks have few chances of surviving because those communities which live adjacent to parks are

not necessarily concerned about conservation, and this is when for example poaching and other unfavourable activities increase.

- *Learning experience*: that tourists are taught about 'greening' issues and their carbon footprint impacts, that tourists are educated about waste reduction when visiting protected areas that tourists are taught about the economic impact of buying local produce that tourists are taught about different cultures and the conservation of fauna and flora, and that rules and regulations are on display for tourists to read. Page and Dowling (2002: 1), Van Loggerenberg (2015) and De Witt (2011) supported this by pointing out that the vital characteristics that differentiates ecotourism from any other tourism product is environmental education and interpretation which further helps to create an enjoyable and meaningful ecotourism experience.
- *Tourist satisfaction*: that tourists are briefed beforehand about what the product entails, that the products and activities provide tourists with a quality experience filled with education and excitement with risks clearly stated. This is confirmed by Chan and Baum (2007: 526) and Clifton and Benson (2006: 239). The purpose of creating experiences is to satisfy the needs and wants of current and potential ecotourists (De Witt, 2011).
- *Informed tourist:* that tourists are aware of the impact they have on the environment, tourists are informed about energy saving practices, tourists are told not to touch or disturb birds and animals, tourists are informed of the benefits of conservation, tourists are encouraged to keep on trails, tourists are encouraged to view animals and birds from a distance and tourists numbers are limited to untouched/undisturbed areas. Costello (2002: 1) confirmed this factor, by stating that knowledge and understanding (informed tourists) of ecosystems and human impacts on the environment advances the call for environmental protection by tourists.
- *Touch the earth lightly*: the accommodation and camps welcome smaller groups; there are no visible electricity lines; the accommodation is not significantly impacted by a town site, noise, traffic, smog or pollution and there are fresh-air exchange systems in place. This factor is confirmed by Page and Dowling (2002: 1), Hudman and Jackson (2003: 39), Diamantis (2004: 15), George (2008: 306), Holden (2008: 18), through stating that to implement environment friendly practices will assist the ecotourism product to touch the earth lightly.

Second finding: The research revealed that cultural rights and community benefits are of lesser importance for an ecotourism rating system in protected areas, than nature related aspects as listed above in the first finding. This does not imply that a rating system must exclude these factors but rather forms a smaller part of a rating system in protected areas or where it can be incorporated. This finding contradicts in a sense the current literature regarding ecotourism, which rates community benefits as being very important (Page & Dowling, 2002). This is understandable to an extent since tourists first concern is for themselves and their experiences in protected areas, the quality of the nature in the protected area, and to lesser extent the needs of communities found in and around protected areas. It is therefore the responsibility of managers of protected areas to establish the desired balance.

Aspects that were highlighted are that local communities are allowed to plant their own food in protected areas, local communities may also hunt and fish in protected areas, local communities can practice their heritage in protected areas and food served is made from locally indigenous recipes. Not all protected areas will be in a position to incorporate these aspects. For example, hunting would not easily be conducted in national parks in South Africa unless for culling purposes, and from a practical point of view to only serve food made from local recipes will also be a troublesome issue since this may not be

attractive to all tourists. Equally, to allow communities to plant food in protected areas again might not be possible in South African national parks but perhaps in a small game reserve this would be a workable notion.

Conclusion

The aim of this research was to identify the key components of an ecotourism rating system for tourism products found in protected areas. The contribution of this research was the following: A rating system was develop that encompasses the pillars and principles of ecotourism that is specifically developed for national park or protected areas as no such rating system is currently available in South Africa. Such a rating system can be implemented in national parks and other conservation areas. This rating system will also be a useful rating tool in other ecotourism establishments as it does not only focus on accommodation, as most rating systems found in the literature study do, but rather also uses the key ecotourism principles found in the literature and those weighted in the empirical results of the research. One should keep in mind that the results from the questionnaire were scientifically tested, therefore making this rating system somewhat unique. Key factors identified in the different rating component's conservation practice, recycling and environment friendly practices, alien plant control, water saving measurements, community education, provision of a learning experience, tourist's satisfaction, inform tourists and touch the earth lightly. These factors are seen as the minimum requirements for any ecotourism rating system in protected areas.

References

Bien, A. (2003). *A simple user's guide to certification for sustainable tourism and ecotourism*. Washington, D.C.: TIES.

Blamey, R.K. (2001). Principles of ecotourism. In Weaver, D. (Ed.) *Encyclopeadia of ecotourism*. Wallingford, UK: CABI. 5:22.

Brenna, M., Rae, N. & Parackal, M. (1999). 'Survey-based experimental research via the web: some observations'. *Marketing Bulletin*, 10(5): 83-93.

Buckingham, A. & Saunders, P. (2004). *The survey methods workbook: from design to analysis*. Thousand Oaks, Clalif: Sage.

Chan, J.K.L. & Baum, T. (2007). 'Ecotourists' perception of ecotourism in lower Kinabatangan, Sabah, Malaysia'. *Journal of Sustainable Tourism*, 15(5): 574-590.

Clifton, J. & Benson, A. (2006). 'Planning for sustainable ecotourism: the case of research ecotourism in developing country destination'. *Journal of Sustainable Tourism*, **14**(3): 238-254.

Coccossis, H. (1996). Tourism and sustainability: perspective and implications. **In** Priestley, G.K., Edward, J.A. & Coccossis, H. (Eds.) *Sustainable tourism? European experiences*. Wallingford, Oxford: CAB International, 1-21.

Coccossis, H., Edwards, J.A & Priestly, G.K. (1996). *Sustainable tourism: European experiences*. Guilford: Biddles.

Coetzee, W. & Saayman, M. (2009). Sustainable and ecotourism. In Saayman, M. (Ed.) *Ecotourism: getting back to the basics.* Potchefstroom: Leisure Publications, 131-146.

Cole, S. (2006). 'Information and empowerment: the keys to achieving sustainable tourism'. *Journal of Sustainable Tourism*, 14(6): 629-644.

Cooper, D.R. & Emory, C.W. (1995). *Business research methods* (5th ed.) Chicago, III.: Irwin.

Costello, P. (2002). Part II: *Australian's long-term demographic and economic prospects*. Canberra, AT: Commonwealth of Australia.

De Witt, L. (2011). *An ecotourism model for South African National Parks* (Thesis – PhD). North-West University, Potchefstroom.

De Witt, L., Van Der Merwe, P. & Saayman, M. (2014). 'Critical Ecotourism Factors Applicable to National Parks: A Visitor Perspective'. *Tourism Review International*, 17(3): 179-194.

Department of Environmental Affairs and Tourism (DEAT). (2003). *Responsible tourism handbook: A guide for tourism operators*. Pretoria, South Africa.

Diamantis, D. & Westlake, L. (2001). Sustainable tourism and ecotourism. **In** Font, X. & Buckley, R.C. (Eds.). *Tourism ecolabelling: certification and promotion of sustainable management.* New York: CABI, 27-40.

Diamantis, D. (2004). *Ecotourism: management and assessment*. London: Thomson Learning.

Du Plessis, L. (2010). *Tourists' perceptions of tourism impacts on the environment: the case of South African National Park* (Dissertation – MA.). North-West University, Potchefstroom.

Eagels, P.F.J. (1996). *Fragile Landscapes: Seeking eco-benefits*. Ecodecision, 20: 17-20.

Fennell, D.A. (2008). *Ecotourism* (3rd ed.) New York: Riutledge.

Field, A. (2009). *Discovering statistics using SPSS*. Sage publications

Floyd, J. & Fowler, J. R. (2009). *Survey research methods*. London: SAGE publications.

Font. X. & Buckley, R.C. (2001). *Tourism ecolabelling: certification and promotion of sustainable management.* New York: CABI.

Fricker, S., Galesic, M., Tourangeau, R. & Yan, T. (2005). 'An experimental comparison of web-based and telephone surveys', *Public Opinion*, 69(3): 370-392.

Geldenhuys, S. (2009). Ecotourism criteria and context. In M. Saayman (Ed.), *Ecotourism: getting back to the basics*. Potchefstroom: Institute for Tourism and Leisure Studies, North-West University, 3.

George, R. (2008). *Marketing tourism in South Africa* (3rd ed.). Cape Town: Oxford University Press.

Global Ecolabelling Network (GEN). (1999). What is ecolabelling? Retrieved from http://www.gen.gr.jp/eco.html (Access: 12 April 2010).

Holed, A. (2008). *Environment and tourism* (2nd ed.). New York: Routledge.

Honey, M. & Stewart, E. (2002). *Ecotourism and certification: setting standards in practice*. Washington D.C., U.S.A: Island Press.

Hudman, L.E. & Jackson, R.H. (2003). *Geography of travel and tourism* (4th ed.). New York: Thomson.

Ioannides, D. (2001). Sustainable development and shifting attitudes of tourism stakeholders: toward a dynamic framework. In McCool, S. F. & Moisey, R.N. (Eds). *Tourism, recreation and sustainability*. New York: CABI Publishing, 55-77.

Keyser, H. (2009). *Developing tourism in South Africa: towards competitive destinations* (2nd ed). Cape Town: Oxford University Press.

Page, S.J. & Dowling, R.K. (2002). *Ecotourism*. Harlow: Prentice Hall.

Philips, G. (2009). *Tourism Impact*. The 3rd ICTN conference on national parks. Conference held in Potchefstroom, South Africa: North-West University.

Reynolds, R.A., Woods, R. & Baker, J.D. (2007). *Handbook of research on electronic surveys and measurements*. London: Idea Group.

Rhodes, J.A. & Saayman, M. (1998). *Statistical analysis of domestic and international tourists*: general. Potchefstroom: Institute for Tourism and Leisure Studies, North-West University.

Richards, G. & Hall, D. (2003). *Tourism and sustainable community development*. London, UK: Routledge.

Ried, D.G. (1999). *Ecotourism development in Eastern and Southern Africa*. Guelph: University of Guelph.

Rivera, J. (2002). 'Assessing a voluntary environmental initiative in the developing world: the Costa Rican Certification for Sustainable Tourism', *Policy Sciences*, **35**: 333-360.

Roth, M. (2006). 'Validating the use if internet survey techniques in visual landscape assessment: an empirical study from Germany', *Landscape and urban planning*, **78**: 179-192.

Saayman, M. (2009). *Ecotourism: getting back to the basics*. Potchefstroom: Institute for Tourism and Leisure Studies, North-West University.

Sallows, M. & Font, X. (2004). Ecotourism certification, criteria and procedures: implication for ecotourism management. **In** D. Diamantis (Ed.) *Eco-tourism: management and assessment*. London: Thompson Learning, 89-109.

Salzhaeur, A.L. (1991). 'Obstacles and opportunities for a consumer ecolabel'. *Environment,* **33**(9), 10-15, 33-38.

Sanabria, R., Skinner, E., Font, X., MacCorone-Eagel, A., Sallows, M. & Frederiksen, M. (2003). *Sustainable tourism stewardship council: rising the standards and benefits of sustainable tourism and eco-tourism certification. How can a worldwide certification body for sustainable tourism be created*? New York: Rainforest Alliance.

SANParks (South African National Parks). (2008). SANParks: *Economic impact assessment*. Retrieved from http://www.sanparks.org/about/ecomonic_impact_study_sept08.pdf. [Accessed : 8 February 2009].

Sasidharan, V., Sirakaya, E. & Kerstetter, D. (2002). 'Developing countries and tourism ecolabels', *Tourism Management*, 23(2): 161-174.

Spenceley, A. (2004). *Tourism certification in Africa: marketing, incentives and monitoring*. Report to the International Ecotourism Society. Wits, Pretoria, University of Witwatersrand.

Starkey, R. (1998). *Environment issues series: environmental management tools for SMEs: a handbook.* Copenhagen: European Environmental Agency.

Stem, C.J., Lassoie, J.P., Lee, D.R., Deshler, D.D. & Schelhas, J.W. (2003). 'Community participation in ecotourism benefit: the link to conservation practices and perspectives. Society and natural resources', *An International Journal*, 16(5): 387-413.

Synergy. (2000). *Tourism certification: an analysis of Green Globe 21 and other tourism certification programmes*. Report prepared for the WWF-UK.

Tassiopoulos, D. (2008). *New tourism ventures: an entrepreneurial and managing approach*. Cape Town: Juta.

Tustin, D.H., Ligthelm, A.A., Martins, J.H. & Van Wyk, H.J. (2005). *Marketing research in practice.* Pretoria: Unisa Press.

Van der Merwe, P. (1996). 'How it all began', *African Wildlife*, 50(3): 7-8.

Van der Merwe, P. (2004). *Game farms as sustainable ecotourism attractions*. Potchefstroom: Institute for Tourism and Leisure Studies, North-West University.

Van Loggerenberg, E. (2015). *Development of an interpretation framework for Kruger National Park*. PhD, North-West University

Van Schalkwyk, M. (2012). Speech delivered by Minister Marthinus Van Schalkwyk at the World Tourism Day Business Breakfast, East London. Retrieve from http://www.tourism.gov.za/AboutNDT/Branches1/domestic/News/Pages/World-Tourism-Day-Business-Breakfast.aspx (Accessed: 20 April 2016).

Wearing, S. & Neil, J. (1999). *Ecotourism: impacts, potentials and possibilities* (2nd ed). London: Butterworth/Elsevier.

Weaver, D. (2005). 'Comprehensive and minimalist dimensions of ecotourism', *Annals of Tourism Research,* **32**(2): 439–455.

World Tourism Organisation (WTO). (2003). *Recommendations to governments for supporting and/or establishing national certification systems for sustainable tourism*. Madrid: World Tourism Organisation.

Wright, P.A. (2003). Supporting the principles of sustainable development in tourism and ecotourism: government's potential role. In Luck, M. & Kristges, T. (Eds). *Global ecotourism policies and case studies: perspectives and constrains*. Clevedon, Oh.: Channel View Publishers, 50-72.