Perceptions and activity profiles of Blue Flag beach users in South Africa

R. Slater
Department of Environmental Sciences
University of South Africa, South Africa

K. Mearns*
Department of Environmental Sciences
University of South Africa, South Africa
mearnkf@unisa.ac.za

Corresponding author*

Abstract

Eco-labels are an important tool within the tourism industry. They ensure effective management and aim to limit negative impacts on the environment by promoting sustainable development. The Blue Flag award is considered an internationally renowned eco-label that focuses on the sustainable management of urban beaches. The Blue Flag award requires the applicant to achieve high standards in four main criteria, namely: Environmental Management, Environmental Education and Information, Safety and Services and Water Quality. If an applicant applies and achieves the requirements of all four criteria, they are awarded Blue Flag status. Although the Blue Flag programme focuses on Beaches, Boats and Marinas; this research focuses entirely on only the Blue Flag beaches. The Blue Flag programme has been implemented in South Africa for 17 years within in three provinces, namely: Western Cape, Eastern Cape and KwaZulu Natal. Although the Northern Cape does have a coastline and beaches, there are no Blue Flag beaches in the Northern Cape. Coastal tourism is an essential part of South Africa's GDP hence the need for eco-labels like the Blue Flag programme to attract tourists to the country. There has been no previous formal study to ascertain the preferences and reasons beach users select certain Blue Flag beaches to visit. This research aims to measure the preferences of beach users and the activities that are undertaken at Blue Flag beaches along the South African coastline. Although beach user preferences vary slightly according to province, the top three beach user preferences nationally showed to be clean beaches, the actual beach itself (sense of place) and water quality. All criteria are important and need to be achieved, it is recommended that coastal municipalities need to focus on ensuring good water quality and clean beaches. Blue Flag beach operators need to continue to collect data in order to better understand their beach users to fulfil their needs and improve tourist satisfaction.

Keywords: Blue Flag Beaches, perceptions, activity profiles

Introduction

"In every outthrust headland, in every curving beach, in every grain of sand there is the story of the earth"
Rachel Carson (American biologist and writer)

The Blue Flag programme is an international award made annually that focusses on the management of coastlines and coastal waters. This voluntary eco-label aims to guide tourism and development towards meeting standards of excellence in safety, services, cleanliness, environmental education and environmental management including water quality. The Blue Flag is arguably the world's most recognised eco-label with over 4500 awarded sites across the world that meet the Blue Flag standard. The Blue Flag awards have become known internationally as a symbol of quality for beaches, boats and marinas. Eco-labels can be described as one of the tools within the toolbox of Sustainable Tourism and Integrated Environmental Management. The ultimate goal of Sustainable Tourism and Integrated Environmental Management is to achieve

greater harmony with the planet. In South Africa, sustainable development underpins legislation whether it is the Bill of Rights (Constitution), National Environmental Management Acts or Agenda 21. Through these legislative and other measures South Africa is making an effort towards achieving a sustainable future. Although as Sipic (2017) states legislation and other policy measures may be effective as tools to drive greater environmental sensitivity and consideration in many industries these measures are not as easily implemented within the tourism industry as a result of the diverse and complex nature of the tourism industry. Eco-labels however present an opportunity for the South African tourism industry to get close to achieving the goals of sustainable development. The Blue Flag eco-label presents the coastal tourism industry the achieving greater sustainability and environmental sensitivity. South Africa is in its 17th year of implementing the internationally recognised Blue Flag eco-label within the coastal tourism industry (Beaches, Boats and Marinas).

The Blue Flag Programme has become a symbol of excellence and high standard of urban beach management. Although voluntary, South Africa has been able to achieve positive support for the Blue Flag eco-label. In the past 30 years research has been done on the Blue Flag Programme internationally but very little research has focussed on the implementation and impacts of the programme within a South African context. The effect that Blue Flag programme has on South Africa's coastal tourism is fairly unknown. This research aims to determine the preferences of beach users at Blue Flag beaches across three coastal provinces in South Africa. By measuring these preferences, the Blue Flag operators (city or regional local authorities) will be able to understand the reasons why beach users are selecting beaches that implement the Blue Flag standards. The research will assist in helping municipalities with Blue Flag beaches understand preferences of beach users and be able to more effectively manage beaches. This research will aid in understanding and meeting the preferences of Blue Flag beach users. Although the Blue Flag award includes marinas and boats, this study will only investigate Blue Flag beaches.

Literature review

Integrated Environmental Management (IEM) has been a concept used in South Africa since the 1980s as a system and set of principles to manage the environment (DEAT, 2004). IEM in South Africa aims to promote tools for managing the environment in a sustainable way (DEAT, 2004). IEM has been viewed as a system in place to manage or police development and thus limit development. It should in actual fact be seen as a way of thinking that aims to assist the development process to ensure the best interests of the environment are taken into account with all developments (DEAT, 2004). IEM aims to integrate the tools provided into the way we make development decisions. Tools are provided to cover all spheres of society whether it be social, economic and/or environment (DEAT, 2004). Runhaar (2015) mentions that the tools within IEM are provided to integrate policies, monitoring and assessments, planning, developing indicators and identify environmental objectives. Runhaar (2015) goes on to mention that the different tools developed can be put into various categories: Regulatory tool, Economic tools, Communication /information /analytical tools and Organisational tools. Integrating the environment into policies and planning has shown to be an effective way in achieving sustainable development. According to Nel and Wessels (2010), in order to ensure sustained environmental performance, IEM tools need to be used in conjunction with each other and not alone. According to DEAT (2004), the tools provided are used to support the IEM and are therefore in place to achieve or bring South Africa closer to the goal of Sustainable Development.

Eco-Labelling is a valuable tool within the IEM toolbox for sustainable tourism. Eco-labels play two important roles; firstly, they serve as a guide to the industry to improve their performance by providing operational guidelines and secondly, ecolabels act as a communication tool for consumers in identifying products and services that have met or exceeded a set of defined criteria (FEE, UNEP & UNWTO, 2006). According to Duglio and Beltramo (2016), ecolabels within the tourism industry offer a better image, more competitiveness and high quality in order

to mitigate impacts. Ecolabels often become recognised and used by people when selecting places to visit. According to Font and Tribe (2001) and Rotherham (2005) there is very little data that shows the effectiveness of eco-labelling. That being said, eco-labels would no longer exist if they were not having an effect. Eco-labels are often used in the tourism industry to show that the organisation maintaining their high quality and positive environmental performance. According to Dimitriou (2017), the tourism industry is one of the fastest and largest industries in the world and still growing. Philips and House (2009), describes Tourism and Travel as the largest industry in the world, beaches and beach holidays being one of the main drivers of growth. To ensure a more appropriate and responsible approach to the ever-growing tourism industry, sustainable tourism was developed.

Sustainable tourism ensures that issues attaining to morals, cultures, the environment and societal functions are addressed (Dimitriou, 2017). While Sustainable Tourism is an ever-growing part of the tourism industry, it can be described as a being an effective way of meeting the needs of people/tourists while at the same time, protecting the environment (Dedeke, 2017). The Blue Flag award programme is one of the potential ecolabels that can communicate sustainable tourism within a beach context so that visitors have a clean, safe and healthy beach experience. Blue Flags have proven to be a key factor helping to turn sustainable development principles into practice within a coastal beach management context. Buckley (2002; 2013) however indicates that eco-labels are not the "silver bullet" Aand they can be poor substitutes for environmental regulations. Eco-labels such as Blue Flags are most effective when used in conjunction with other environmental management strategies and regulations.

The Blue Flag eco-label started in 1987 in France as an award scheme designed for marinas and beaches (Foundation for Environmental Education, 2018a) and was used as a tool for Environmental Education. Today the Blue Flag eco-label is owned by the Foundation for Environmental Education (FEE). Blue Flag is an internationally recognised eco-label that recognises beaches, boat and marinas that fulfil the stringent requirements of education, environmental management, safety and water quality. There are currently 4266 Blue Flag beaches, boats and marinas across 47 countries (Foundation for Environmental Education, 2018b). Nelson *et al.* (2000), mentions that Blue Flag is the most recognised and prestigious beach award in Europe.

The Wildlife and Environment Society of South Africa (WESSA) is the National operator of the Blue Flag eco-label within South Africa. WESSA is responsible for all administration and operation of the eco-label and report directly to the Foundation for Environmental Education (FEE). WESSA works closely with the awarded Blue Flag Beach, Boat and Marina operators to ensure that they achieve the high standards set by the FEE. According to McKenna *et al.* (2011), South Africa was the first country outside of Europe to implement the Blue Flag programme. It was reported that when a beach lost its Blue Flag status, it had an impact on the tourism industry. According to Nahman and Rigby (2008), between R17 and R25 million per year could be lost within the tourism industry in South Africa when a Blue Flag is taken away due to visitors no longer going to the affected beach.

McKenna *et al.* (2011), mentions that Blue Flag has value to the sustainability to coastal development. In a study done in Europe, they concluded that there wasn't evidence that the award directly attracted visitors (McKenna *et al.*, 2011). However, according to Lucrezi and Saayman (2014), the Blue Flag award can create environmental awareness while being a management tool for ensuring waste management and cleanliness. Blue Flag beaches can manage to get ahead of non-Blue Flag beaches in South Africa as they can be seen as being more competitive through adhering to high safety, environmental and cleanliness standards (Lucrezi and Saayman, 2014).

In South Africa, the main identified hurdle keeping site operators from bringing more sites onto the Blue Flag programme is firstly the cost of implementation (Admin and maintenance costs)

and secondly the difficulty of achieving the stringent water quality standards. Although South Africa may have some reservations toward the Blue Flag eco-label, is it having a positive impact within South Africa's coastal tourism industry (Slater, 2018).

The Blue Flag eco-label implements four main criteria that must be adhered to in order for a site to be awarded the Blue Flag status (Mir-Gual *et al.*, 2015). Mir-Gual *et al.* (2015) goes on to mention that these four main criteria themes are Water Quality, Environmental Management, Environmental Education and information and Safety and Services. The 33 detailed criteria for 2018 are indicated in Table 1.

The implementation of these criteria are there to promote sound environmental management of urban beaches. Municipalities often request the use of Blue Flag as a tool to manage the overcrowded beaches. Mir-Gual *et al.* (2015) mentions that the Blue Flag does not account for all environmental aspects of the beach and only focusses on the needs of beach visitors and beach recreation. The Blue Flag can be seen as a symbol of quality or prestige and has an impact on the choice of beach to visit (Mir-Gual *et al.*, 2015).

Although the beach award informs visitors about what beaches to go to, they also need to take into account that not all beaches have equally important requirements with regard to preferences (Morgan, 1999). Often beaches that do not have Blue Flag status will be seen as problematic and therefore do not receive the same number of visitors. Receiving the Blue Flag award allows beaches to market themselves and attract more tourists to the area (Mir-Gual *et al.,* 2015).

According to Mir-Gual *et al.* (2015), although a valuable tourism management tool, the award neglects the important management of coastal systems. The Blue Flag award is however designed to focus more on the beach visitor needs (safety, cleanliness and education) than on the conservation of the coastline.

This paper seeks to investigate Blue Flag beach users preferences, and activities when choosing to use a Blue Flag beach along the South African Coastline.

Table 1: Blue Flag Beach Criteria (FEE, 2018c).

Environmental Education and Information
Criterion 1. Information about the Blue Flag Programme and other FEE eco-label must be displayed.
Criterion 2. Environmental education activities must be offered and promoted to beach users
Criterion 3. Information about bathing water quality must be displayed.
Criterion 4. Information relating to local eco-systems, environmental elements and cultural sites must be displayed.
Criterion 5. A map of the beach indicating different facilities must be displayed.
Criterion 6. A code of conduct that reflects appropriate laws and/or regulations governing the use of the beach and surrounding areas must be displayed.
Water Quality
Criterion 7. The beach must fully comply with the water quality sampling and frequency requirements.
Criterion 8. The beach must fully comply with the standards and requirements for water quality analysis.
Criterion 9. Industrial, waste-water or sewage-related discharges must not affect the beach area.
Criterion 10. The beach must comply with the Blue Flag requirements for the microbiological parameter Escherichia coli (faecal coli bacteria) and intestinal enterococci (streptococci).
Criterion 11. The beach must comply with the Blue Flag requirements for physical parameters.
Environmental Management
Criterion 12. The local authority/beach operator should establish a beach management committee.
Criterion 13. The local authority/beach operator must comply with all laws and/or regulations affecting the location and operation of the beach.
Criterion 14. Sensitive areas must be managed.
Criterion 15. The beach must be clean.
Criterion 16. Algal vegetation or natural debris must be left on the beach.
Criterion 17. Waste disposal bins/containers must be available at the beach in adequate numbers and they must be regularly maintained.
Criterion 18. Facilities for the separation of recyclable waste materials must be available at the beach.
Criterion 19. An adequate number of toilet or restroom facilities must be provided.
Criterion 20. The toilet or restroom facilities must be kept clean.
Criterion 21. The toilet or restroom facilities must have controlled sewage disposal.

Criterion 22. There must be no unauthorised camping or driving and no dumping on the beach
Criterion 23. Access to the beach by dogs and other domestic animals must be strictly controlled.
Criterion 24. All buildings and beach equipment must be properly maintained.
Criterion 25. Marine and freshwater sensitive habitats (such as coral reefs or sea grass beds) in the vicinity of the beach must be monitored.
Criterion 26. A sustainable means of transportation should be promoted in the beach area.
Safety and Services
Criterion 27. Appropriate public safety control measures must be implemented.
Criterion 28. First aid equipment must be available on the beach.
Criterion 29. Emergency plans to cope with pollution risks must be in place.
Criterion 30. There must be management of different users and uses of the beach so as to prevent conflicts and accidents.
Criterion 31. There must be safety measures in place to protect users of the beach and free access must be granted to the public.
Criterion 32. A supply of drinking water should be available at the beach.
Criterion 33. At least one Blue Flag beach in each municipality must have access and facilities provided for the physically disabled.

In a study done in the UK, questionnaires were used to understand the preferences of beach visitors when selecting a beach (Morgan, 1999). These questionnaires made use of a number of categories with which to assess the preferences namely: sand colour, bathing water temperature, beach facilities and beach regulation (Morgan, 1999). This study in turn will look at the preferences of South African beach users, based on the Blue Flag criteria. A similar study was undertaken by Ariza *et al.* (2008) on the Catalan coast where coastal tourism plays an integral role. The aim of that study was to find out what the most common beach management issues where that were experienced along the coast (Ariza *et al.,* 2008). The result of the study showed that there was a lack in beach management strategy plans and that this needed to be rectified in order to minimise a number of issues (Ariza *et al.,* 2008).

According to Lucrezi and Saayman (2014), tourists preferences when visiting Blue Flag beaches are influenced by their socio-economic background, their perception towards the eco-label as well as their understanding of the Blue Flag eco-label. According to Lucrezi and Saayman (2014), beach managers apply the same management schemes to all beaches and don't take into account the preferences of the beach visitors. Lucrezi and Saayman (2014) mention that beach managers need to know and understand the background and preferences of the beach visitors in order to manage their beaches more effectively. This study attempts to improve this understanding in relation to beach user preferences and activities on Blue Flag Beaches along the South African Coastline.

On the other hand if beach users do not continue using a coastal resort, there is an economic impact on that area. According to Lucrezi and Saayman (2014), awards such as Blue Flag have been used to improve the quality of such beaches. Lucrezi and Saayman (2014) investigated visitor preferences when selecting a beach, it was discovered that cleanliness and safety were the top preferences respectively. Although these factors were most prominent, some beach users were also influenced by water quality, scenery, costs, vicinity, and tranquillity when selecting a certain beach to visit. The results of the study mentioned above will be compared to when discussing the results of this research.

Methodology

Blue Flag beach user preferences are unknown in South Africa. Although the Blue Flag standards and criteria are set and have been implemented internationally, there is no knowledge of which criteria are preferred when selecting a beach to visit along the South African coastline. This research was carried out as a secondary data analysis to describe why beach users making use of Blue Flag beaches across South Africa form the Western Cape, Eastern Cape and KwaZulu Natal. There are no Blue Flag beaches in the Northern Cape province and have therefore not been included in the study.

Data was collected through questionnaires and observations to determine the main beach user preferences and beach user activities respectively in line with the method used by Hearne and Salinas (2001). The questions have been designed according to the main Blue Flag criteria themes (Water Quality, Environmental Management, Education and Information and Safety and Services). The answers will assist in determining the impact that meeting Blue Flag standards has on the Blue Flag site and why the beach user is choosing that site. The visitor questionnaire comprised of 28 questions that have been designed to build a visitor profile. The beach user activity profile data was collected through observations whereby the beach stewards would walk around daily and record what activities were taking place on the respective Blue Flag beaches.

A cell phone app has used to undertake the surveys and required direct interactions with beach visitors. The surveys were implemented over the 2016/2017 Blue Flag seasons by youth that have been employed as tourism Beach Stewards and have been placed at Blue Flag sites across the three regions (Western Cape, Eastern Cape and KwaZulu Natal). Each team has been issued with a cell phone to conduct the surveys. Once a survey has been completed and submitted, it goes through to the main database where it can be downloaded and analysed. The results of the survey questionnaires will be displayed in the form of graphs and charts.

Over the 17 years of Blue Flag being implemented in South Africa, there have been a number of sites that have fallen off the programme. This raises concerns within the local coastal communities. The follow categories were studied during the preferences questionnaire: Signage (Rules and regulations), Water Quality, Availability of Life guards, Availability of security, Clean ablution facilities, Clean beach, Safe swimming conditions, Availability of Parking, Close to shops and services, Kids play area, Actual beach itself (Sense of place). The beach users were asked to rate each item from 1 to 5 according to their importance to them.

Although the Blue Flag programme includes Boats and Marinas, this study was only focused on Blue Flag Beaches. The study area was undertaken at all South African Blue Flag beaches. Blue Flag South Africa has both Full and Pilot sites, Pilot site are recognised for working towards full Blue Flag status. This study is however, only looking at Full Blue Flag sites. Table 2 and Figure 1 list the beaches that have been awarded Full Blue Flag status.

Table 2: Summary of Blue Flag beaches across the Western Cape, Eastern Cape and KwaZulu Natal for the 2016/17 season.

	Western Cape	Eastern Cape	KwaZulu Natal	Total
Blue Flag Beaches	29	7	9	**45**

Figure 1: South African beaches awarded Blue Flag status in 2017/2018 (FEE, 2018b)

The participation of beach users was voluntary and all information has been kept confidential as no names or personal details were requested. The Beach Stewards conducting the questionnaires were trained accordingly and ensured that they introduced themselves and provided clarity and explanations for the reason for the study and the questions being asked.

Results and discussion

The results are directly related to the aim of determining the beach user preferences and beach user activity profiles.

Beach user preferences

Figure 2 displays the beach user preference ratings for the Western Cape beaches. The top three preferences of the Western Cape were clean beach, actual beach itself (sense of place) and water quality respectively. The least preferences were towards proximity to shops, kids play area, and security respectively.
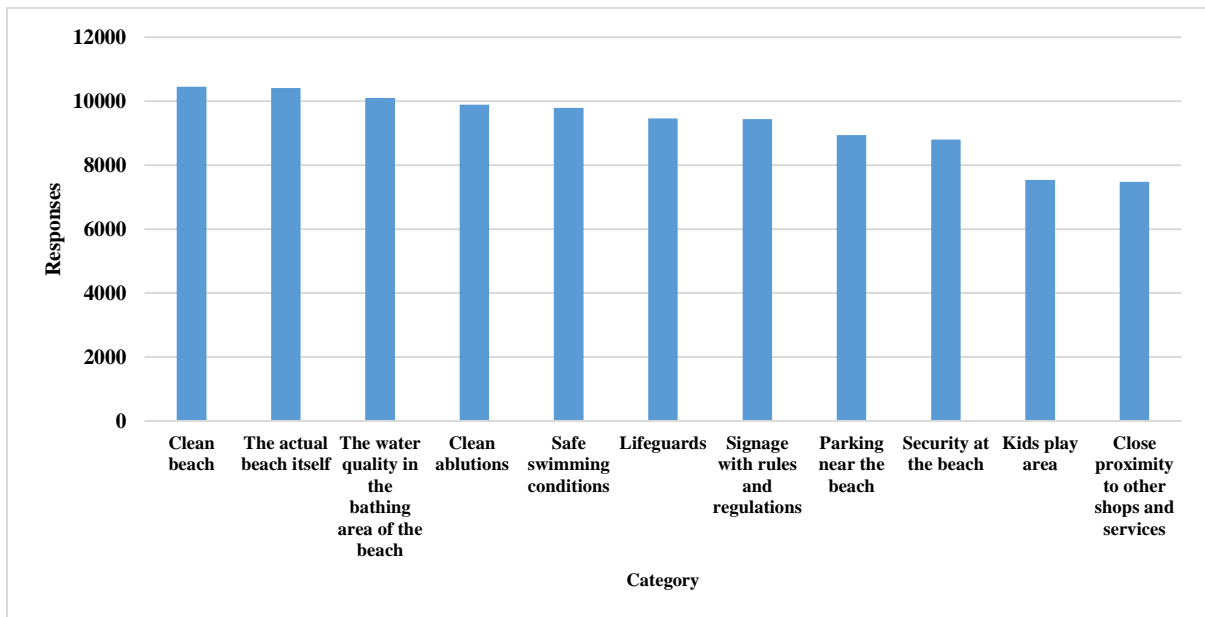
Figure 2: Beach user preferences in the Western Cape

The beach user preference ratings for the Eastern Cape beaches in illustrated in Figure 3. The top three preferences of the Eastern Cape were clean beach, actual beach itself (sense of place) and safe swimming conditions respectively with water quality following closely after. The least preferences were towards proximity to kids play area, shops and security respectively.
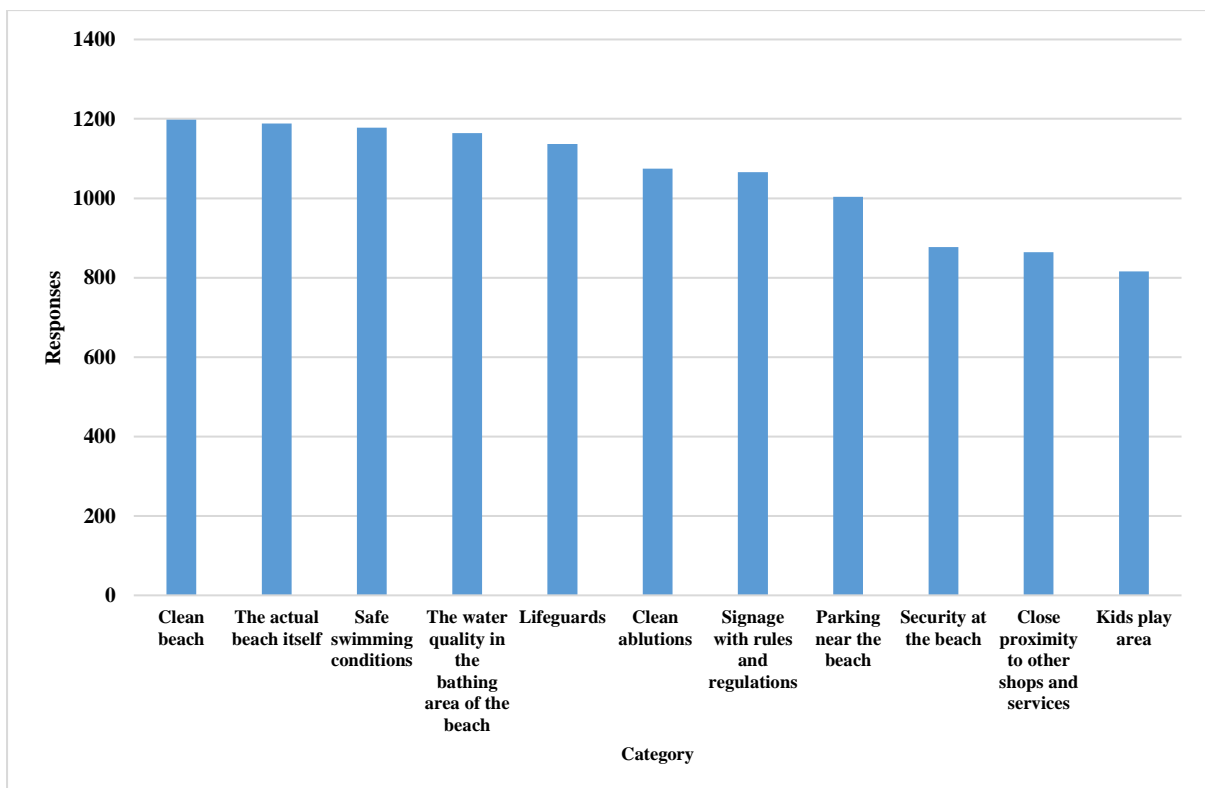

Figure 3: Beach user preferences in the Eastern Cape

Figure 4 displays the beach user preference ratings for the KwaZulu Natal beaches. The top three preferences of KwaZulu Natal were lifeguards, clean beach and actual beach itself (sense of place) respectively with water quality following closely after. The least preferences were towards kids play area, proximity to shops and security respectively.
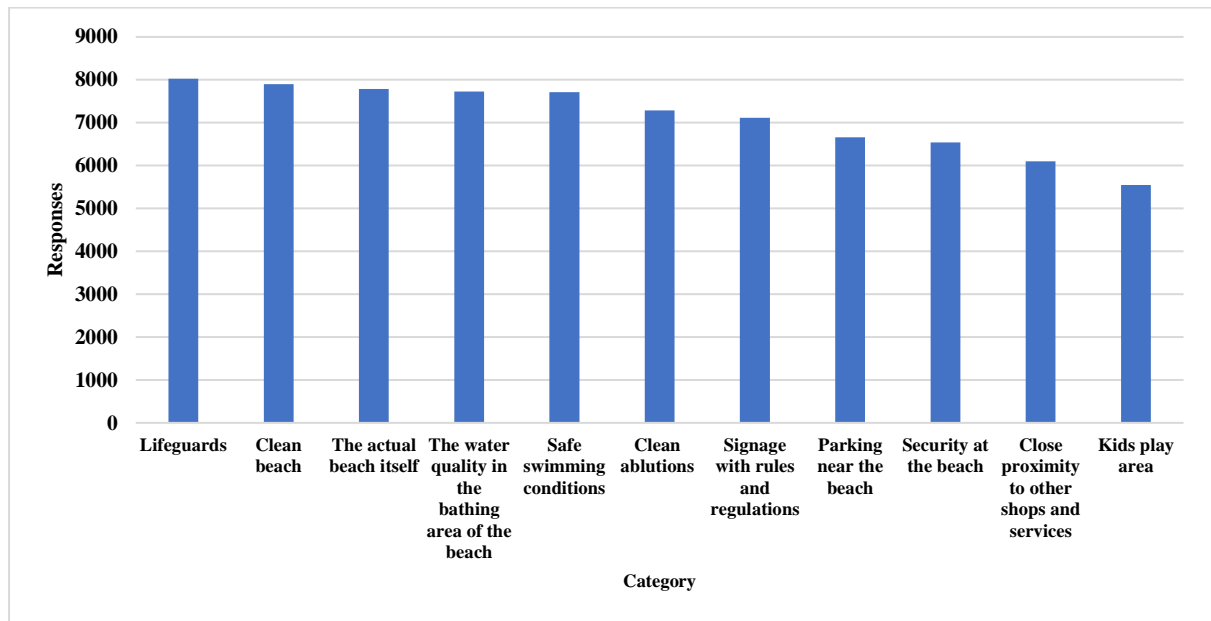

Figure 4: Beach user preferences in the KwaZulu Natal

Figure 5 displays the Blue Flag beach user preference ratings nationally. The top three preferences of beach users nationally were, clean beach and actual beach itself (sense of place) and water quality respectively. Safe swimming conditions and lifeguards showed to be equally as important and followed closely after water quality. The least preferences were towards kids play area, proximity to shops and security respectively.
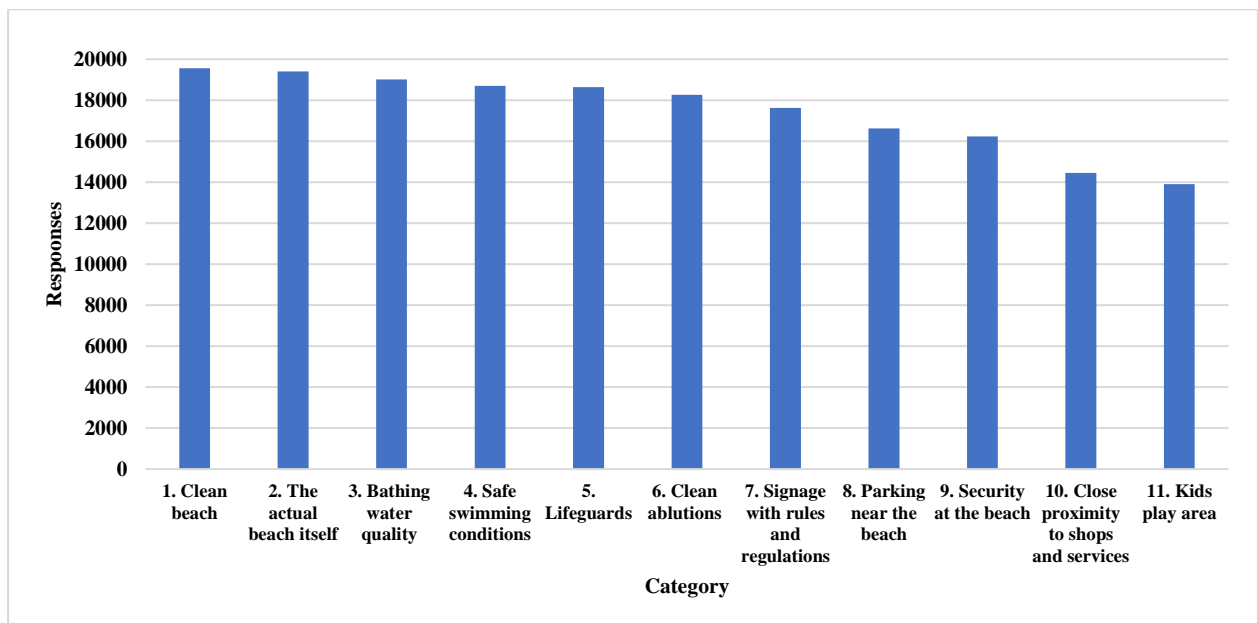

Figure 5: South African Blue Flag beach user preferences

Beach user activity profiles

Figure 6 displays the beach user activity profiles for the Western Cape beaches. The most common activities observed at Western Cape Blue Flag beaches showed to be swimming, tanning and surfing respectively.
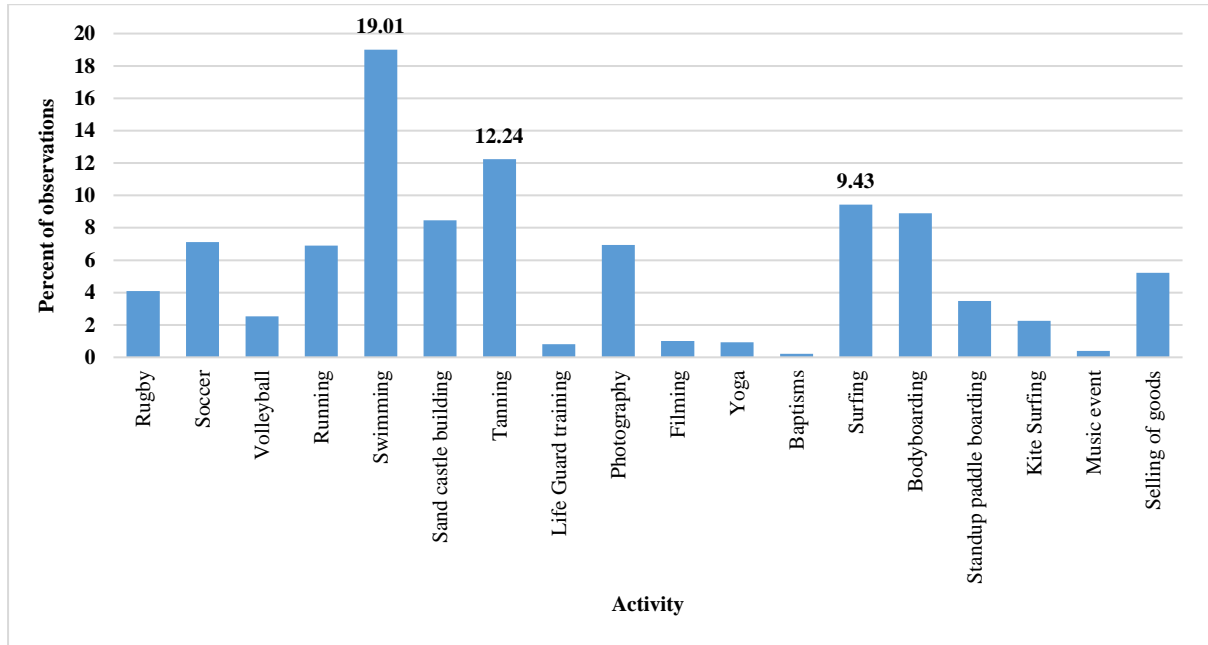

Figure 6: Western Cape beach activity profiles

The beach user activity profiles for the Eastern Cape beaches are indicated in Figure 7. The most common activities observed at Eastern Cape Blue Flag beaches showed to be swimming, surfing and selling of goods respectively. Tanning was also observed to be a very common activity at Eastern Cape beaches.
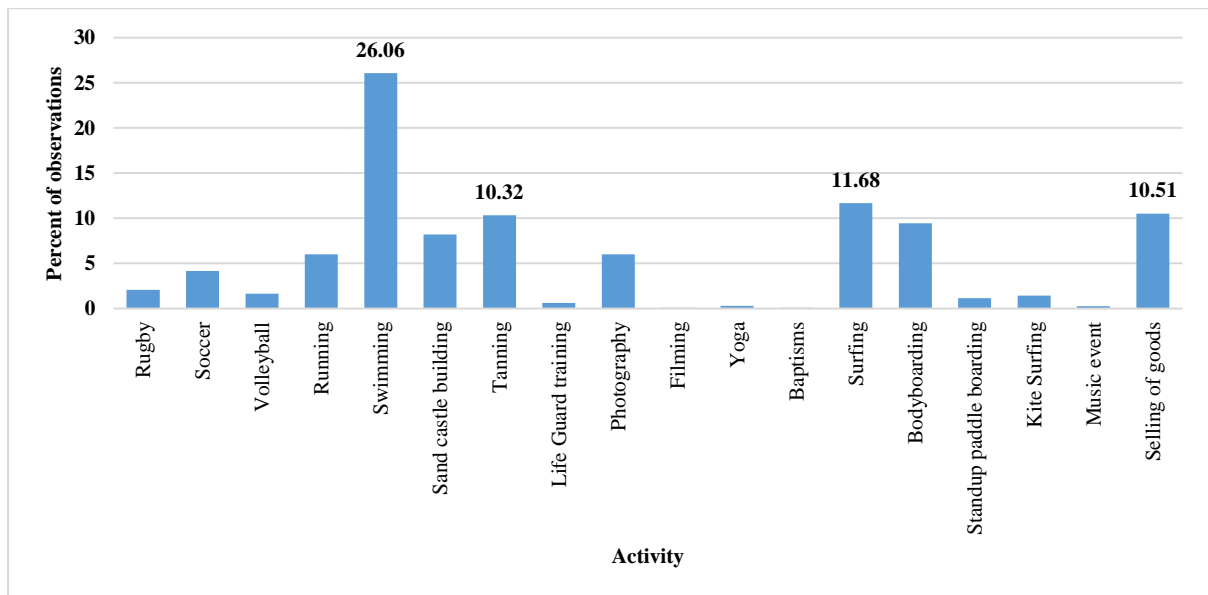

Figure 7: Eastern Cape beach activity profiles

Figure 8 displays the Beach user activity profiles for the KwaZulu Natal beaches. The most common activities observed at KwaZulu Natal Blue Flag beaches showed to be swimming, selling of goods and sand castle building respectively.
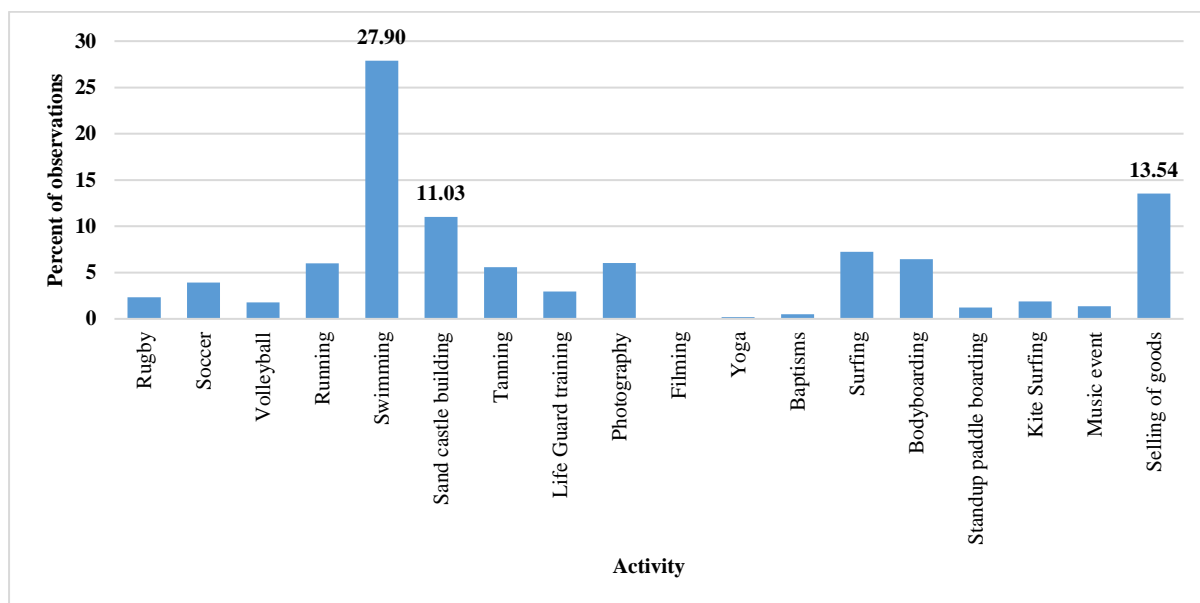

Figure 8: KwaZulu Natal beach activity profiles

Figure 9 displays the beach user activity profiles nationally for all Blue Flag beaches. The most common activities observed nationally at Blue Flag beaches showed to be swimming, tanning and sand castle building respectively. While running, surfing and selling of goods also showed to be a popular activities that were observed.
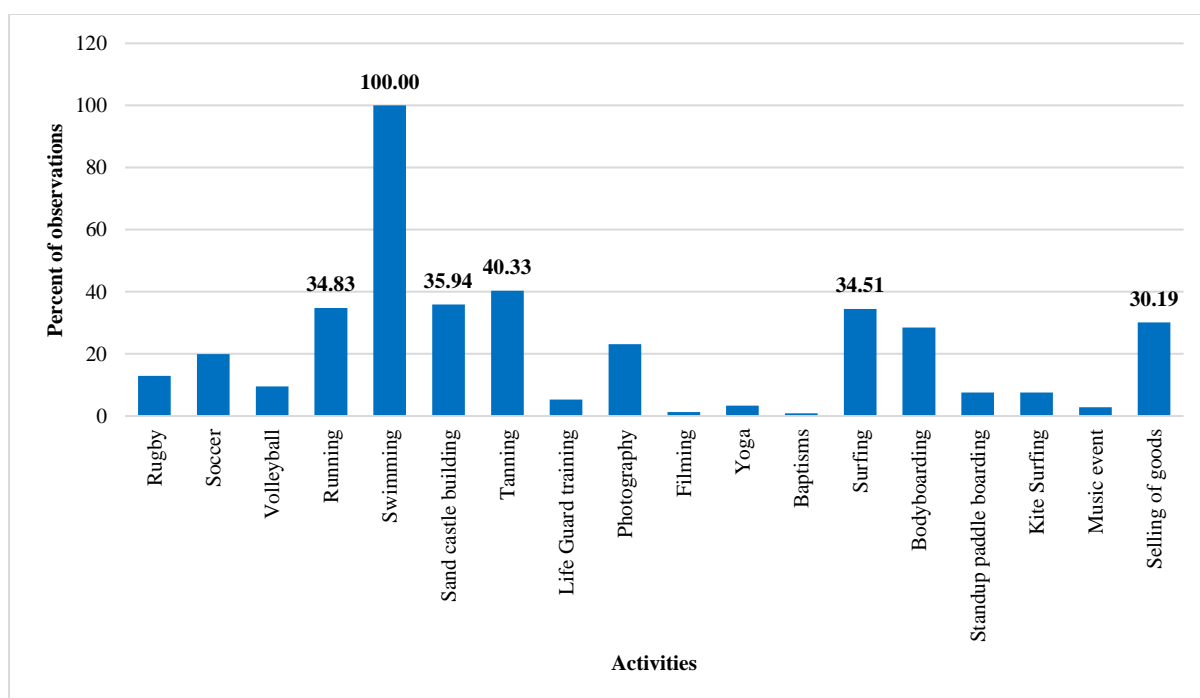

Figure 9: National Blue Flag beach activity profile

Implications of results

The Western Cape Beach visitor preference questionnaires resulted in the number one choice preference being a clean beach. This is the same result as the study done by Lucrezi and Saayman (2014) where cleanliness was found to be the number one preference. The second and third ranked preferences were the actual beach itself (sense of place) and the water quality respectively. According to Lucrezi and Saayman (2014), safety ranked as the second most important preference. Security at the beach fell in the bottom three preferences along with kids play area and nearby shops. Although security was the third lowest preference safe swimming conditions did come in as the fifth highest preference. When comparing this to Lucrezi and Saayman, (2014) the definition of safety and the definition of security may have caused this discrepancy.

The Eastern Cape beach user preference questionnaires resulted in the number one choice preference being a clean beach (same as the Western Cape). The second and third ranked preferences were the actual beach itself (sense of place) and the safe swimming conditions respectively. Safe swimming conditions may be a result of the large number of rip tides along the Eastern Cape coast. Security at the beach fell in the bottom three preferences along with kids play area and nearby shops. Cleanliness and safety preferences of beach users in the Eastern Cape match those resulting from Lucrezi and Saayman (2014) which was undertaken in the KwaZulu Natal. The KwaZulu Natal region experienced different results to the other two regions.

The number one preference as a result of the questionnaires was lifeguards with clean beach and the actual beach itself (sense of place) following respectively. The preference here for life guards could be as a result of the large number of beach users that go to the KwaZulu Natal coastline as a result of the warmer water making it more suitable for visitors many of whom may not have a high level of swimming skills and the public perception of the prevalence of sharks along this coastline could be reasons for these preferences. Security at the beach fell in the bottom three preferences along with kids play area and nearby shops. Where safety came in as the second highest ranked preference in the result of the study done by Lucrezi and Saayman (2014), security fell in the bottom three preferences for all three regions. Nationally, clean beaches, the actual beach itself (sense of place) and water quality fell in the top three preferences respectively. Security at the beach fell in the bottom three preferences along with kids play area and nearby shops. The National results display strong similarities to the results of Lucrezi and Saayman (2014).

The beach activity data was collected through observations made by the beach stewards. The most common activities observed in the Western Cape swimming, tanning and surfing respectively. The Eastern Cape showed that swimming, surfing, selling of goods and tanning, were the top four activities respectively. KwaZulu Natal showed that swimming, selling of goods and sand castle building were the most common activities observed respectively. The combined national activity profiles preferences were swimming, tanning, sand castle building, running, surfing and selling of goods respectively.

Conclusion

Municipalities located along stretches of beach should continue to implement the Blue Flag criteria so as to ensure they maintain their Blue Flag status. The beach user surveys should continue to be implemented over a number of Blue Flag seasons to obtain more results and greater understanding of the user.

There are both positive and negative views toward the Blue Flag programme but by implementing the standards, the operator is showing that they are managing that site effectively. Understanding

the needs of the consumer (in this case, the beach user) is essential for ensure that they are motivated to coming back. The result of the surveys shows that by implementing the Blue Flag standards, the beach users is consciously selecting Blue Flag beaches for preferences that are already being implemented. Beach user preferences can be directly linked to the Blue Flag criteria whether the beach user knows the site has Blue Flag status or not. Blue Flag beaches have become synonymous with quality, and thus responsive to ever increasing tourist demands and expectations for a healthy environment (Sipic, 2017).

Acknowledgements

References

Ariza, E., Jime´nez, J. A. & Sarda, R. (2008). A critical assessment of beach management on the Catalan coast. *Ocean and Coastal Management,* 51(2), 141-160.

Buckley, R. (2002).Tourism ecolabels. *Annals of Tourism Research*, 29(1), 183-208.

Buckley, R. (2013). Sustainability: Three reasons for eco-label failure. *Nature*, 500(7461), 151.

Dedeke, A. (2017). Creating sustainable tourism ventures in protected areas: An actor network theory analysis. *Tourism Management,* 61(1), 161-172.

Department of Environmental Affairs and Tourism. (2004). Overview of Integrated Environmental Management. DEAT. Pretoria.

Dimitriou, C. K. (2017). The quest for a practical approach to morality and the tourism industry. *Journal of Hospitality and Tourism Management*, 31, 45-51.

Duglio, S. & Beltramo, R. (2016). Environmental Management and Sustainable Labels in the Ski Industry: A Critical Review. *Sustainability,* 8 (581), 1-13.

Font, X. & Tribe, J. (2001). Promoting green tourism: the future of environmental awards. *International Journal of Tourism Research*, 3(1), 9-21.

Foundation for Environmental Education, United Nations Environmental Programme & United Nations World Tourism Organisation. (2006). *Awards for Improving the Coastal Environment: The example of the Blue Flag.* FEE, Copenhagen.

Foundation for Environmental Education. (2018a). http://www.fee.global/our-history/, [Accessed 02 June 2018].

Foundation for Environmental Education. (2018b). http://www.blueflag.global/, [Accessed 04 September 2018].

Foundation for Environmental Education. (2018c). Blue Flag criteria and explanatory notes http://www.blueflag.global/criteria/, [Accessed 30 September 2018].

Hearne, R. R. & Salinas, Z. M. (2001). The use of choice experiments in the analysis of tourist preferences for ecotourism development in Costa Rica. *Journal of Environmental Management,* 65 (2) 153-163.

Lucrezi, S. & Saayman, M. (2014). Beachgoers' Demands vs. Blue Flag Aims in South Africa. *Journal of Coastal Research*, 31 (6) 1478-1488.

McKenna, J., Williams, A. T. & Cooper, J. A. G. (2011). Blue Flag or Red Herring: Do beach awards encourage the public to visit beaches? *Tourism Management,* 32(3), 576-588.

Mir-Gual, M., Pons, G. X., Martín-Prieto, J. A. & Rodríguez-Perea, A. (2015). A critical view of the Blue Flag beaches in Spain using environmental variables. *Ocean and Coastal Management.* 105, 106-115.

Morgan, R. (1999). A novel, user-based rating system for tourist beaches. *Tourism Management,* 20(4), 393-410.

Nahman, A. & Rigby, D. (2008). Valuing Blue Flag status and estuarine water quality in Margate, South Africa. *South African Journal of Economics*, 76(4), 721-737.

Nel, J. & Wessels, J. A. (2010). Closing the loops – Integrated application of environmental management tools throughout the project cycle: lessons learned from a regional shopping mall development project, Potchefstroom, South Africa. North-West University.

Nelson, C., Morgan, R., Williams, A. T. & Wood, J. (2000). Beach Awards and Management. *Ocean and Coastal Management*, 43(1), 87-98.

Phillips, M. R. & House, C. (2009). An evaluation of priorities for beach tourism: Case studies from South Wales, UK. *Tourism Management,* 30(2), 176-183.

Runhaar, H. (2015). Tools for integrating environmental objectives into policy and practice: What works where? *Environmental Impact Assessment Review*, 59, 1-9.

Rotherham, T. (2005). *The Trade and Environmental Effects of Ecolabels: Assessment and Response.* United Nations Environment Programme.

Sipic, T. (2017). Eco-labelling of marine recreation services: the case of Blue Flag price premium in Croatia. *Journal of Ecotourism,*16(1), 1-23.

Slater, R. (2018). Personal Communication, WESSA's National Coordinator Blue Flag Programme. (June 18, 2018)