

Behavioural involvement in avitourism: An international case study

Mrs N. Conradie* & Prof C van Zyl
University of South Africa
E-mail: onran@unisa.ac.za

Corresponding author*

Abstract

Despite the rapid growth of avitourism (birding tourism) globally, the international market potential of avitourism in Africa, with its remarkable birdlife, is not yet being utilised to its full potential. The purpose of the research reported in this article was to explore the behavioural involvement of the international avitourist in the birding activity to clarify avitourist behaviour. Primary data was gathered by distributing questionnaires at the British Birdwatching Fair and Dutch Vogelfestival. These two bird fairs attract exhibitors and birders from all over the world. Three birder types (casual, active and committed) were examined in terms of six behavioural involvement indicators, including number of years involved in birding; number of birds on the birders' life list; reading behaviour and club memberships of birders; birding equipment used for the identification of birds; behaviour of birders; and consumptive behaviour of birders. Analysis of variance (ANOVA) was applied. Additionally the Post Hoc (Duncan) test was used to compare the means of the three birder types. Results indicated significant differences between casual, active and committed birders on all the indicators of behavioural involvement. The results confirm that committed birders are more intensely involved in birding than active birders; and active birders are more involved than casual birders. These findings could assist managers and marketers in their efforts to target birding programme amenities and promotional materials towards distinct segments of the birding population. Results support the notion of avitourism development in Africa, more specifically South Africa, in guiding avitourism managers in product development and destination marketing.

Key words: Avitourism (birding tourism), behavioural involvement, leisure behaviour, Africa, South Africa

Introduction

"Niche tourism is garnering an increasing critical international scholarship" (Rogerson, 2011:199). Avitourism (travel for the specific purpose of birdwatching), an example of niche tourism, is identified as a growth area and a trend in tourism (DoT, 2011b:10; Wheeler, 2008:208; Cordell and Super, 2004:135). As Africa has a remarkable wealth of birdlife and because birding is one of the fastest growing niche tourism markets around the world, avitourism provides an opportunity in terms of economic value, development impact and growth potential.

The South African government supports tourism development as it has the potential to help reduce widespread poverty and high levels of unemployment, as highlighted in the National Tourism Sector Strategy (DoT, 2011a:7). This notion is applicable to most destinations on the African continent. Avitourism has become incorporated into national tourism planning for South Africa – the final draft of the National Avitourism Strategy of South Africa set out the country's vision of "positioning South Africa as a globally competitive avitourism destination" (DoT, 2011b:12). However, no strategy can be successful without an up-to-date understanding of consumer behaviour (Okumus, Altinay & Chathoth, 2011:54; Winer, 2007:88).

Consumer behaviour in tourism concerns the study of why people buy the products and services they do, how tourists make purchasing decisions, and the way tourists behave in terms what they buy (Page, 2015:90; Swarbrooke & Horner, 2007:6). Avitourism behaviour therefore concerns the way avitourists, as purchasers of products and services, behave in terms of spending, and their attitudes and values towards what they buy (Page, 2015:90). Role-players, such as governments, avitourism management and marketers of birding products, are concerned with avitourist behaviour, as their tasks involve making and enabling decision-making or policy choice about avitourist activities (Pearce, 2005:6). If these role-players understand what prompts avitourists to leave their place of residence and travel to birding destinations, they may be able to develop approaches that help manage avitourists and assist them in planning more enjoyable experiences (Page, 2015:76). For marketers who sell and promote avitourism products and services, these factors are crucial to the way in which they divide avitourists into groups in order to provide specific products to specific people (Page, 2015:90). The outcomes that arise from avitourist behaviour and activity, such as features affecting the avitourist, hosts and setting, can consequently be improved (Pearce, 2005:17).

Avitourist behaviour is influenced by various aspects, such as cultural (culture, social class), social (reference groups, family), and personal (age, life-cycle, personality) factors (Kotler et al., 2006:199); and motivations and preferences of avitourists (Cooper et al., 2008:46). Behavioural involvement is one such aspect that influences tourist behaviour and tourist decision-making (Sato, Jordan, Kaplanidou & Funk, 2014:2; Chen, Hwang & Lee, 2006:1169). Involvement refers to the level of perceived personal importance and/or interest evoked by a stimulus (or stimuli) within a specific situation (Antil, 1984:204; Kotler & Keller, 2009:214). Behavioural involvement is defined as “time and/or intensity of effort expended in pursuing a particular activity” (Stone, cited in Kim, Scott & Crompton, 1997:321). Behavioural involvement in the context of leisure is described by measures such as ability or skill, number of memberships, frequency of participation, money or time spent, equipment owned, miles travelled and experience (Havitz & Dimanche, 1990:184; Kim *et al.*, 1997:321). According to Solomon, Bamossy and Askegaard (2002:104), an avitourist’s degree of involvement can be conceived as a continuum, ranging from a lower level of interest at the one end, to obsession at the other. Determining the level of an avitourist’s involvement (low/high) is useful for the examination and prediction of avitourist behaviour (McGehee, Yoon & Cárdenas, 2003:308; Decrop, 2006:10). The level of an avitourist’s involvement has an impact on types of searching, information processing, decision-making, responses to advertising and financial commitment (Solomon *et al.*, 2002:104; McGehee *et al.*, 2003:308; Decrop, 2006:10). Therefore, leisure behaviour research, particularly research in avitourism, could add the factor of involvement to clarify the behaviour of avitourists.

An attempt to develop avitourism in Southern Africa without consulting the international avitourism market would be fruitless, as the international avitourist is the target. The need to consider the avitourism market and its requirements is supported by Biggs, Turpie, Fabricius and Spenceley (2011:88), who contend that increased commercial viability will increase the prospects of avitourism initiatives surviving in the long term. Therefore, the purpose of the research that informed this article was to explore the behavioural involvement of the international avitourist in the birding activity. In order to consult with the international market, data was collected at two international bird fairs, namely the British Birdwatching Fair (2008) in Rutland (England) and the Dutch Vogelfestival (2008) in Lelystad (Netherlands).

A literature review on avitourism, avitourist behaviour and behavioural involvement is presented in this article. The empirical design and method applied in the research are discussed, followed by an analysis of data and avitourism results. The article closes with conclusions and recommendations for avitourism development and management in South Africa.

Literature review

Avitourism context and definitions

Definitions of avitourism provided in the literature include birding and birdwatching. According to Sekercioğlu (2002:282), birding is defined as the act of observing and identifying birds in their native habitats. Birdwatching, or the birding activity, is referred to as 'avitourism' or 'birding tourism' if the birder undertakes a trip of a mile (1.6km) or more from home for the primary purpose of observing birds in a natural setting (La Rouche, 2003:4; Lindsay, n.d:1). Avitourism is classified as a component of ecotourism that focuses specifically on birds and birdwatching, since it is expected to contribute to ecotourism's goal of enhanced conservation (Sekercioğlu, 2002:282; Hvenegaard, 2002:21). Backyard birding or watching birds around the home is the most common form of birding, while birders who take trips away from home (for example away-from-home, non-residential birders or avitourists) participate in a more active form of birding. Currently in South Africa, avitourism is defined in the National Avitourism Strategy (DoT, 2011b: 10) as travel outside of a person's usual environment for the purpose of viewing birds in their natural habitats.

In summary, avitourism is defined for the purpose of this article as being an activity of observing and identifying birds in their native habitats where the birder needs to take a trip away from home for the primary purpose of observing birds. Furthermore, it is a component of ecotourism that is focused specifically on birds and birdwatching as an activity and is also described as a sub-segment within nature-based travel. Lastly, avitourism excludes backyard birding, where the birder merely watches birds around the home, noticing birds while mowing the lawn or picnicking at the beach, or through trips to zoos or the observation of captive birds.

The categorisation of avitourists

Turpie and Ryan (1998:27) state that "large numbers of people enjoy watching birds from time to time, some more frequently and enthusiastically than others". Birders are not all alike and consist of "a group of heterogenous recreationists, exhibiting a diversity of skills and interests (Steven, Morrison & Castley, 2015:1268; Maple, Eagles & Rolfe, 2010:219; Welford & Barilla, 2013:401; Scott & Thigpen, 2003:201; Hvenegaard, 2002:22; McFarlane, 1994:362; Kellert & Brown, 1985:273) and classifications and categorisation of birders is becoming more important (Czajkowski, Giergiczny, Kronenberg & Tryjanowski, 2014:353). Scott, Ditton, Stoll and Eubanks (2005:65) developed three measures of birding specialisation to ascertain the best predictor of birder motivations. In their research, respondents had to indicate whether they were a committed birder, an active birder, or a casual birder. The three birder categories were defined as follows (Scott *et al.*, 2005:65):

- **Committed birders:** In general, people who are willing to travel at short notice to see a rare bird, who subscribe to a number of birding magazines (such as Birding) that specialise in the identification of birds and places where they may be seen, who lead field trips or seminars for local birding clubs, who keep a detailed life list as well as a daily journal, who purchase

ever-increasing amounts of equipment to aid in attracting, recording and seeing birds, and for whom birding is a primary outdoor activity.

- Active birders: In general, people who travel infrequently away from home specifically to go birding, who may or may not belong to a local birding club, who subscribe to general interest bird magazines (such as Wild Bird or Birdwatcher’s Digest), who participate in but do not lead local field trips or seminars, who keep a general list of birds seen, and for whom birding is an important but not exclusive outdoor activity.
- Casual birders: In general, people whose birding is incidental to other travel and outdoor interests, who may not belong to a formal birding organisation, who may read an article on birds in a local newspaper but do not subscribe to birding magazines, who keep no life list, and for whom birding is an enjoyable yet inconsistent outdoor activity.

Furthermore, various other authors (Scott & Thigpen, 2003:206; Hvenegaard, 2002:25; Cole & Scott, 1999:44; McFarlane, 1994:364) have used recreational specialisation to categorise birders in their studies, which are reported in the literature. Researchers have regarded recreational specialisation as an indicator of intensity of involvement and have used it to access differences among participants (Scott & Shafer, 2001:319).

A summary of the categorisation of avitourists by various authors in the literature (Maple, *et al.*, 2010:223; Scott *et al.*, 2005:65; Eubanks, Stoll & Ditton, 2004:158; Scott & Thigpen, 2003:206; Hvenegaard, 2002:25; Cole & Scott, 1999:44; Turpie & Ryan, 1998:4; McFarlane, 1994:364; Kellert, 1985:343) is presented in Table 1.

Table 1: The categorisation of avitourists

Maple, Eagles & Rolfe (2010)	Scott, Ditton, Stoll and Eubanks (2005)	Eubanks, Stoll and Ditton (2004)	Scott and Thigpen (2003)	Hvenegaard (2002)	Cole and Scott (1999)	Turpie and Ryan (1998)	McFarlane (1994)	Kellert (1985)
Beginner	Casual	Casual	Casual	Novice	Casual wildlife watchers	Casual	Novice	Passive or casual
Intermediate	Active	Active	Involved	Advanced-active	Serious birders	Enthusiastic/Active	Casual	Active or committed
Expert	Committed	Committed	Active	Advanced-experienced		Fanatic / Committed	Intermediate	
			Skilled				Advanced	

Sources: Maple, *et al.*, 2010:223; Scott *et al.*, 2005:65; Eubanks *et al.*, 2004:158; Scott & Thigpen, 2003:206; Hvenegaard, 2002:25; Cole & Scott, 1999:44; Turpie & Ryan, 1998:4; McFarlane, 1994:364; Kellert, 1985:343.

This section illustrates that avitourists are not homogeneous and that they can be categorised into different groups. Behavioural involvement is discussed in the next section.

Behavioural involvement context and definitions

A customer analysis is one of the key building blocks of a marketing plan and strategy, and no strategy can be developed without an up-to-date understanding of consumer behaviour (Winer,

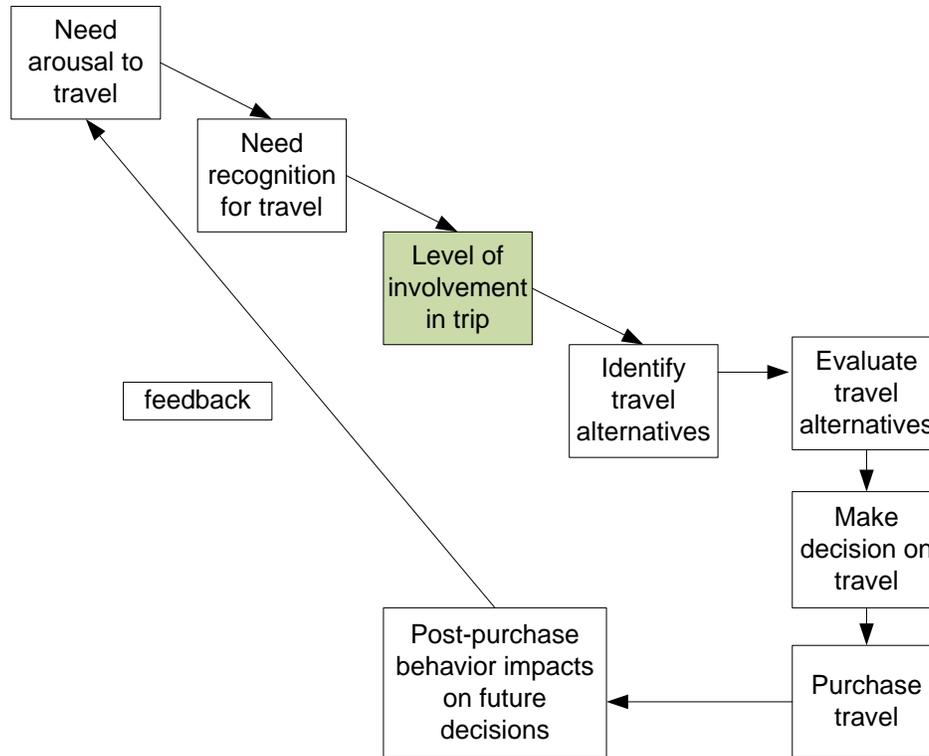
2007:88). Behavioural involvement, one aspect of consumer behaviour, is an important aspect in determining avitourist behaviour and a moderating variable in the decision-making processes of avitourist behaviour (Chen *et al.*, 2006:1169). The findings of Kim *et al.*, (1997:320) show that behavioural involvement are likely to be substantially more useful in predicting birders' intentions than measures of social psychological involvement. This section outlines theoretical concepts related to the behavioural involvement of avitourists in the birding activity.

'Involvement' refers to the level of perceived personal importance and/or interest evoked by a stimulus (or stimuli) within a specific situation (Kotler & Keller, 2009:214; Antil, 1984:204). Havitz & Dimanche (1990:184) define involvement in a tourism setting as "a psychological state of motivation, arousal or interest between an individual and tourism destination, at one point of time characterised by the perception of the following elements: importance, pleasure, value, sign, risk consequence and risk probability". Bloch (in Antil, 1984:204) adds that involvement is "an unobservable state reflecting the amount of interest, arousal or emotional attachment evoked by the product in a particular individual". These emotional responses could create a deep commitment to the product or activity, which refers to a high level of consumer involvement (Solomon, *et al.*, 2002:93). A person's degree of involvement can be conceived as a continuum, ranging from absolute lack of interest at the one end to obsession at the other (Solomon *et al.*, 2002:104). According to Kim *et al.*, (1997:322), several leisure researchers measured involvement in behavioural terms. Stone (in Kim *et al.*, 1997:321) defines behavioural involvement as "time and/or intensity of effort expended in pursuing a particular activity".

In summary, 'behavioural involvement' refers to:

- The level of perceived personal importance and/or interest evoked by a stimulus (or stimuli) within a specific situation
- A psychological state of motivation, arousal or interest
- The perception of elements such as importance, pleasure, value, sign, risk consequence and risk probability
- The amount of interest, arousal or emotional attachment evoked by the product in a particular individual that could create a deep commitment to the product or activity
- The person's degree of involvement, which can be conceived as a continuum ranging from high to low
- The time and/or intensity of effort expended in pursuing a particular activity.

Cooper, Fletcher, Fyall, Gilbert & Wanhill (2008:55) demonstrate that avitourist behaviour is normally conceived as a process of stages, and that the decision to travel is influenced by the involvement of the avitourist in some or all of the stages. These stages of the buying decision process in avitourism are illustrated in Figure 1.



Source: Cooper *et al.*, 2008:56

Figure 1: Role of involvement in the buying decision process in avitourism

The starting point is where the need is aroused and recognised when the individual is energised to become a potential avitourist. The level of involvement refers to the amount of time and effort invested in the decision process, for example the degree of search for information. The identification of alternatives stage refers to the point at which brands initially come to mind when considering the purchase (evoked set), while in the evaluation of alternatives stage, comparisons are made based on the criteria of the potential avitourist. Thereafter, the decision choice is made, followed by the purchase and finally the post-purchase behaviour, when the feelings that an avitourist experiences after the purchase influence future decisions (Cooper *et al.*, 2008:56).

Decrop (2006:10) perceives involvement as a concept related to motivation and states that involvement is the result of an avitourist/product interaction, whereas motivation, by contrast, characterises the avitourist alone. Motivation occurs when a need is aroused that the avitourist wishes to satisfy. This need may be predominantly utilitarian (a desire to achieve a functional or practical benefit, such as buying binoculars for birding), or it may be predominantly hedonic (an experiential need, involving emotional responses, such as a person with an intense commitment to birding that buys special birding equipment, for instance, a telescope). These emotional responses could create a deep commitment or a higher degree of involvement to the product or activity. The distinction between the two is thus a matter of degree (Solomon *et al.*, 2002:93).

Avitourists are not motivated to the same extent, as some may be convinced that they cannot live without the latest fashion (or birding equipment), while others may not be interested in such items at all (Solomon *et al.*, 2002:104). According to Solomon *et al.*, (2002:104), an avitourist's degree of involvement can be conceived as a continuum, ranging from absolute lack of interest

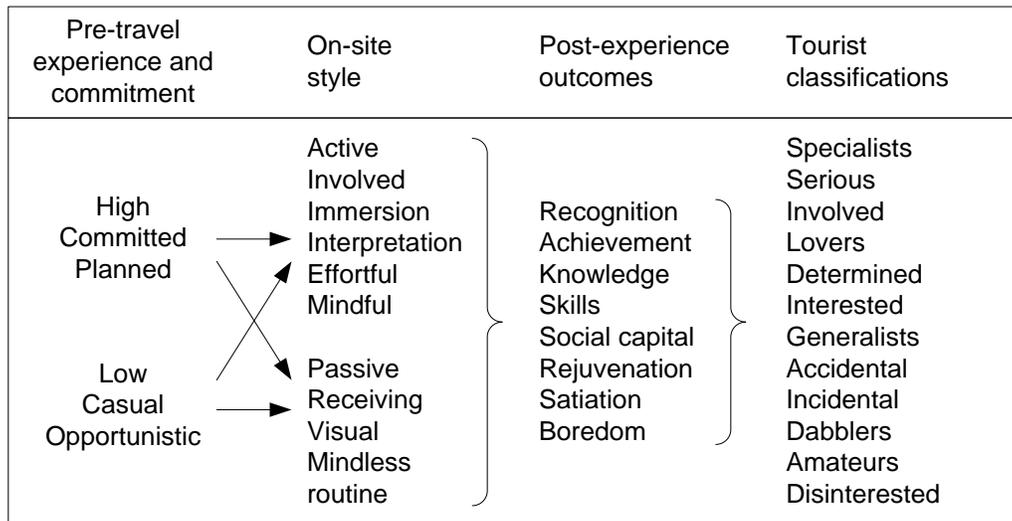
at the one end, to obsession at the other. Consumption at the low end of involvement is characterised by inertia, with decisions being made out of habit because the avitourist lacks the motivation to consider alternatives, while at the high end of involvement, passionate intensity that carries considerable significance for the avitourist might be expected (Solomon *et al.*, 2002:104). Some people are so involved in an activity that they can be termed 'fanatics' (Solomon *et al.*, 2002:93). Whether they are training for a triathlon, playing music or participating in birding, such people tend to become altogether engrossed in an activity to the point that their involvement has been called a 'positive addition' (Solomon *et al.*, 2002:93).

Determining the level of an avitourist's involvement (low/high) is useful for the examination and prediction of avitourist behaviour (Maple *et al.*, 2010:221; Decrop, 2006:10; McGehee *et al.*, 2003:308). The level of an avitourist's involvement has an impact on types of searching, information processing, decision-making, responses to advertising and financial commitment (Decrop, 2006:10; McGehee *et al.*, 2003:308; Solomon *et al.*, 2002:104). A survey by Hill and Robinson (1991) on triathletes found that intense commitment to the sport resulted in a highly modified training schedule, unwillingness to stop training even if injured, major dietary changes and, of most relevance to marketers, a substantial financial commitment to travel to races, specialised clothing and health club memberships (in Solomon *et al.*, 2002:93). According to Bryan (2000), respondents would, over time, move along a continuum from low involvement to more specific interests; thus novice birders would participate infrequently with a variety of motivations, whereas advanced birders would participate more frequently with more specific motivations (in Hvenegaard 2002:22).

High and low involvement is also illustrated in Engel, Blackwell and Miniard's problem-solving models. These models are classified according to the degree of search and problem-solving behaviour by the consumer (avitourist) (in Cooper *et al.*, 2008:56):

- Limited problem-solving models: These models are applicable to repeat purchases with a low level of involvement. Apart from short birding trips near to home, these are not applicable to avitourism. Low-involvement decisions suggest that avitourists are likely to receive information passively and would not make any extra effort to find a birding destination that might optimally meet their needs.
- Extended problem-solving models: These models apply to purchases associated with high levels of perceived risk and involvement, and information search and evaluation of alternatives play an important part in the purchase decision. High-involvement decisions are perceived as important and personally very relevant to the avitourist.

Experience is often a good indicator of vacation involvement. Experience also strengthens involvement and causes an upward shift of expectation level in with respect to quality and quantity (Decrop, 2005:239). Previous experience, knowledge of the activity and level of investment all assist in classifying a person as having a specialist interest (Pearce, 2005:53). The specialisation concept is intertwined with the career concept (refer to the discussion of travel career pattern in section 3.4.1), and both offer a way of assessing and thinking about tourist involvement in activities and the growth of involvement (Pearce, 2005:53; McFarlane, 1994:367). Pearce (2005:46) classifies tourists involved in tourism products or activities on the basis of serious leisure. The emphasis is on strong commitment to the activity, a potential career in the activity, and durable benefits from participation. The model also pays attention to mindfulness and considers quality interpretation as a form of involvement likely to promote mindfulness (Pearce, 2005:45). This classification is shown in Figure 2.



Source: Pearce, 2005:45

Figure 2: Classifying tourists involved in tourism products

The model considers previous experience and commitment of the tourist, which could vary along the high and low involvement dimensions. The on-site style category may be active and involved where interpretation possibly results in mindfulness and active mental processing, while in contrast, some on-site tourism behaviours are restricted to passive observation and limited involvement. The post-experience outcomes category illustrates levels of the range of benefits and psychological states such as achievement and skills at the high level of involvement and boredom at a lower level of involvement. These three phases of experience lead to product classifications of tourists that range from specialists to disinterested tourists (Pearce, 2005:45). Researchers or managers who neglect the features of this total tourist behaviour framework would have only a partial picture of product-based tourist interests (Pearce, 2005:45). Behavioural involvement of avitourists will therefore now be discussed.

Behavioural involvement of avitourists

The following authors (Maple *et al.*, 2010:219; Scott & Thigpen, 2003:208; La Rouche, 2003:13; Kim *et al.*, 1997:321; McFarlane, 1994:364) investigated behaviour involvement of avitourists and this is reported in the literature. A summary of each of these studies is provided below:

- Maple *et al.* (2010:219) examined the characteristics of birders at three specialisation levels (beginners, intermediate and expert birders) in a national park setting. Their results indicate that the beginner group required programmes aimed at an introduction to the park, regional area, birding and a wide range of activities and sites, while the more experienced birders required specialised programmes on bird identification, bird biology and bird watching (Maple *et al.*, 2010:219).
- Scott and Thigpen (2003:208) examined four birder groups in terms of eight measures of behavioural involvement, including years involved in birding; number of field guides owned; total number of miles travelled for birding; number of birds on life list; number of days intending to go birding in the next year; number of sites intended to visit along the Great Texas Coastal Birding Trail; and the likeliness of attending the Hummer/Bird

Celebration in the next three years. Their findings indicate that skilled birders were significantly more likely than other birders to report that they had been birding for more years, owned more field guides, spent more money on birding and have more species recorded on their life lists. Their results also indicate that skilled and active birders have travelled significantly more miles to go birding than casual and interested birders, which confirms that active and skilled birders are more intensely involved in birding than casual and interested birders (Scott & Thigpen, 2003:207).

- In order to determine the extent of birder interest and the level of avidity in the USA, La Rouché (2003:13) considered the following factors: the number of days spent birding, the number of species they could identify, and whether they kept a bird life list. The results indicate that the number of days for backyard birders was 90, and for away-from home birders (avistourists) it was 10 days; levels of skill are higher for birders who travel from home to participate in birding; and only 5% of birders kept bird life lists.
- Kim *et al.* (1997:322) stated that there was no standard scale used by leisure researchers to measure behavioural involvement and conducted an exploratory factor analysis for the behavioural involvement indicators (Kim *et al.* 1997:330). Five factors were identified and were termed 'reading behaviour and memberships', 'identification of birds', 'birding behaviour in Texas', 'birding behaviour outside Texas' and 'consumptive behaviour'.
- McFarlane (1994:362) investigated the specialisation framework to examine the motivations of birdwatchers and the process of birding involvement. The variables used to measure birding specialisation, which include behaviour indicators, included for example the number of bird species on life list and the Number of birding magazine subscriptions. The results indicate that birders can be segmented into distinct groups based on a specialisation framework. The casual group had the lowest and the advanced group the highest scores on the specialisation components (McFarlane, 1994:364).

The research method is discussed in the next section.

Research methods

In this empirical study a survey was used to collect primary data, therefore the research is quantitative in nature.

Population and sample

The population for the research that informed this article comprised international birders who attended the British Birdwatching Fair and the Dutch Vogelfestival in August 2008. Since a sampling frame of potential visitors to the two fairs was not available, the numbers of visitors attending both fairs in 2007 was used as a guideline and the total population (N) was estimated to be approximately 27 000 bird fair attendees. The guidelines for determining sample size put forward by Cooper and Emory (1995:207) and Krejcie and Morgan (1970:608) were used. For a population size of 30 000 the recommended sample size is 379. The information reported in this article was provided by a total of 439 respondents (birders) visiting the British Birdwatching Fair (n=304) and the Dutch Vogelfestival (n=135) during August 2008.

A non-probability sampling method, purposive sampling was used. With purposive sampling, as the name implies, respondents are chosen for a particular purpose (Neuman, 2007:142; Leedy

& Ormond, 2010:212). The British Birdwatching Fair and Dutch Vogelfestival are annual events that are popular among international birding enthusiasts, and these events were chosen for the specific purpose of selecting an appropriate audience of the international birding population.

Measuring instrument

Questionnaires for birders were developed to answer the purpose of the research; and to form the basis for the research findings and conclusions of the study (Kumar, 2005:153). In the questionnaire, respondents were asked to categorise themselves into one of the following three birder types, namely:

- Casual birders, who enjoy birds in the garden or during leisure activities
- Active birders, who attend bird courses and go on trips primarily to watch birds
- Committed birders, who spend most of their spare time birding

These categories are indicators of avidity with respect to the birding activity. The category names (casual, active and committed birders) were based on the work of Scott *et al.*, (2005:65), Eubanks *et al.*, (2004:158) and Turpie & Ryan (1998:34), while the definition of each category was taken from Turpie and Ryan (1998:34). Although the avidity levels of these groups were not measured according to the specialisation framework, and different people might have different ideas of how the categories should be defined, consensus on these categories was obtained by field experts (I.A. Coetzer; M. Crosbie; A.J. Hugo; P. Milstein, personal communication, 2008) and during survey pilot tests.

Behavioural involvement in birding was addressed by the inclusion of questions derived from similar research conducted by various authors (Scott & Thigpen, 2003:208; La Rouche, 2003:13; Kim *et al.*, 1997:321; McFarlane, 1994:364). The number of years involved in birding (Question A-1), an open-ended question, was taken from Scott and Thigpen (2003:208). Question A-3, enquiring whether birders keep a bird life list, was derived from La Rouche (2003:13). The number of birds on the birders' life list (Question A-3) was based on the work of Scott & Thigpen (2003:208), Turpie & Ryan (1998:3464) and McFarlane (1994:364). The categories used by Turpie and Ryan (1998:34) were adapted for the purpose of this research.

Kim *et al.* (1997:322) state that there is no standard scale used by leisure researchers to measure behavioural involvement and conducted an exploratory factor analysis for the behavioural involvement indicators (Kim *et al.*, 1997:330). Consistent with Kim *et al.*, (1997:330), the current research used reading behaviour and memberships, birding equipment for the identification of birds, birding behaviour and consumptive behaviour to determine the behavioural involvement of birders who attended the British Birdwatching Fair and the Dutch Vogelfestival. Content validity was established in that four academics, examined the questionnaire. Minor modifications were implemented based on their recommendations, where after the study was pre-tested.

Data collection procedure

The data was collected by means of self-administered questionnaires that were distributed to birders at the BirdLife® South Africa (conservation and birding non-governmental organisation in South Africa) exhibition at the British Birdwatching Fair and the Dutch Vogelfestival. Bird fair

organisers granted permission to distribute questionnaires from the BirdLife® South Africa stand at both these events. Respondents were selected on the basis of passing the stand, irrespective of their intention to visit the stand. Screening questions were used to select the target population. In total, 439 useful responses were obtained, with 304 from the British Birdwatching Fair and 135 from the Dutch Vogelfestival.

Statistical analysis

Once the data was coded, captured and cleaned, the data was analysed using Statistical Package for the Social Sciences (SPSS 17.0). Analysis of variance (ANOVA), a statistical technique used to determine whether samples from multiple groups come from populations with equal means (i.e. Do the group means differ significantly?) (Hair, Black, Babin & Anderson, 2010:440). A post hoc analysis, in this case the Post Hoc (Duncan) test, was applied to compare the means (Hair *et al.*, 2010:440). The following procedure was followed in performing the f-test (the statistical test for ANOVA):

- Firstly, the sample results were examined to establish whether there might be differences between the different birder types at both fairs.
- The ANOVA test was performed to determine the difference between more than two groups; in this case the ANOVA test was done for the three birder types (casual, active and committed) into which the respondents were classified. The results of the ANOVA test indicated that there were significant differences between casual, active and committed birders on all the indicators of behavioural involvement;
- The level of significance was indicated. A 1% level of significance (p-value < 0.01) and a 5% level of significance (p-value < 0.05) were indicated.
- In the case of significant differences, the additional Post Hoc test (more specifically the Duncan test) was carried out to determine which of the three birder types were significantly different from one another.

The results with respect to categorisation of avitourists and behavioural involvement of respondents at the British and Dutch bird fairs are presented in the following section.

Results

Firstly, the results with respect to categorisation of avitourists are presented and thereafter the results of the behavioural involvement of respondents at the British and Dutch bird fairs.

Categorisation of avitourists into birder types

In Figure 3, the categorisation of birder types as casual, active or committed is illustrated for respondents at both fairs.

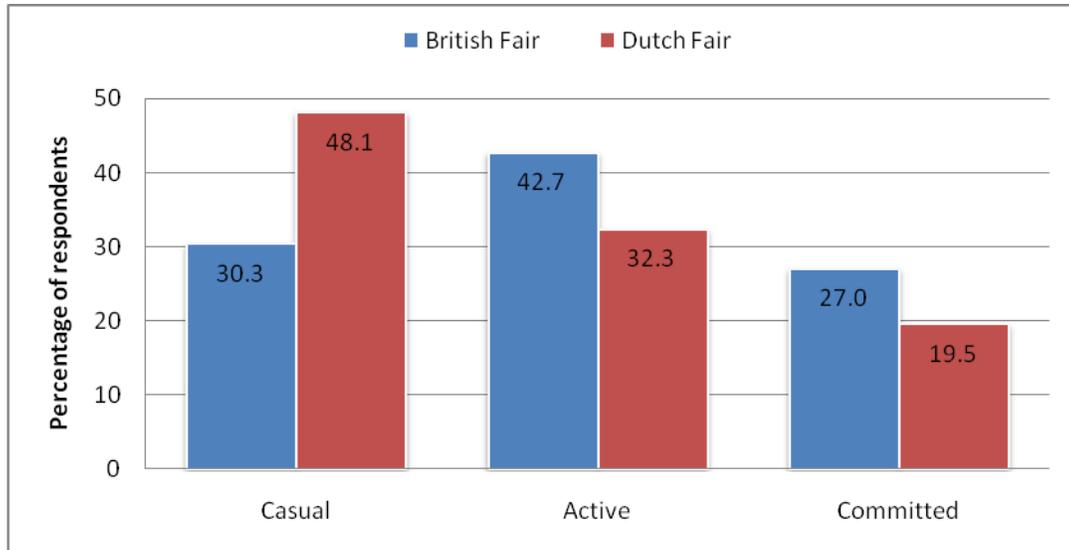


Figure 3: The three birder types among respondents at the British and Dutch bird fairs

Figure 3 provides an interesting contrast between the birder types at the two bird fairs in the study. In this study, birders at the British Birdwatching Fair consisted mostly of active birders (42.7%), followed by casual birders (30.3%) and lastly, committed birders (27.0%). Most of the participants at the Dutch Vogelfestival (48.1%) were casual birders, while 32.3% were active and only 19.5% described themselves as committed birders. Interestingly, the respondents at the British fair tended to be more active and committed, while the respondents at the Dutch fair seemed to be mostly casual and active birders. Marketing aimed at the British birder should therefore concentrate on more serious birding activities, while marketing aimed at the Dutch birding community could concentrate more on leisure activities. The behavioural involvement of avitourists is discussed next.

Behavioural involvement of avitourists

The research on which this article is based used behavioural involvement to investigate the behaviour of birders who attended the British and Dutch bird fairs.

Table 2 provides a comparison of the three birder types in terms of behavioural involvement indicators and the results of the ANOVA tests, which test for the equality of means across the three groups.

Table 2: Behavioural involvement of birders attending the British Birdwatching Fair and Dutch Vogelfestival, by birder type

BIRDER TYPE	BOTH FAIRS				ANOVA		
	<i>Casual</i>	<i>Active</i>	<i>Committed</i>	Total	2-tailed		
	Mean	Mean	Mean	Mean	F-test	p-value	Sig.
Number of years involved in birding	16.43	24.51	29.28	22.80	96.215	0.000	***
Number of birds on the birders' life list ¹	1.73	5.36	6.96	4.46	4.323	0.014	**
<i>Reading behaviour and club</i>							

memberships of birders							
Number of bird field guides owned	5.03	13.40	19.94	12.04	51.048	0.000	***
Number of other bird books owned	10.19	44.05	80.18	44.81	14.327	0.000	***
Number of subscriptions to birding magazines	0.79	1.58	3.14	1.68	36.774	0.000	***
Number of memberships of birding organisations	1.17	2.37	3.74	2.28	42.674	0.000	***
Birding equipment used for the identification of birds							
Number of spotting scopes owned	0.59	1.16	1.36	1.01	25.951	0.000	***
Number of binoculars owned	1.76	2.07	2.22	2.00	4.036	0.018	**
Behaviour of birders							
Number of birding trips in the last 12 months	2.65	3.79	7.06	4.04	16.780	0.000	***
Number of days spent birding in the last 12 months	20.90	37.95	45.18	33.55	15.648	0.000	***
Consumptive behaviour of birders							
Total amount (€) spent on birding in the last 12 months	2052.13	4098.17	5254.76	3629.94	11.285	0.000	***
Distance travelled to go birding (km)	8425.43	13124.31	34802.91	15794.07	10.951	0.000	***

*** Significant at 1% level of significance (p-value < 0.01)

** Significant at 5% level of significance (p-value < 0.05)

¹ The mean represents the code in the questionnaire (1 = 1 – 100; 2 = 101 – 200; 3 = 201 – 300; 4 = 301 – 400; 5 = 401 – 500; 6 = 501 – 600; 7 = 601 – 700; 8 = 701 – 800; 9 = more than 800 birds)

The results are discussed in the following paragraphs.

Number of years involved in birding

To determine the level of experience of the participating birders at the British and Dutch fairs, respondents were asked to indicate the number of years they had been involved in birding.

Table 2 indicates that the average number of years' involvement in birding was 23 years. Committed birders had been involved in birding for an average of 29 years, active birders for 25 years and casual birders for 16 years. The statistical results indicate a significant difference in means between the different birder types. The ANOVA test confirmed significant differences between the three birder types at a 1% level of significance (p = 0.000). The Post Hoc (Duncan) test was used to determine where significant differences existed, and indicated that the three types of birders differed significantly from one another. Consistent with previous studies, the results indicate that committed birders had been involved in birding significantly longer than active and casual birders, and active birders had been involved in birding significantly longer than casual birders.

Number of birds on the birders' life lists

Figure 4 indicates the percentage of birders who keep and who do not keep bird life lists for respondents at both the British and the Dutch bird fairs.

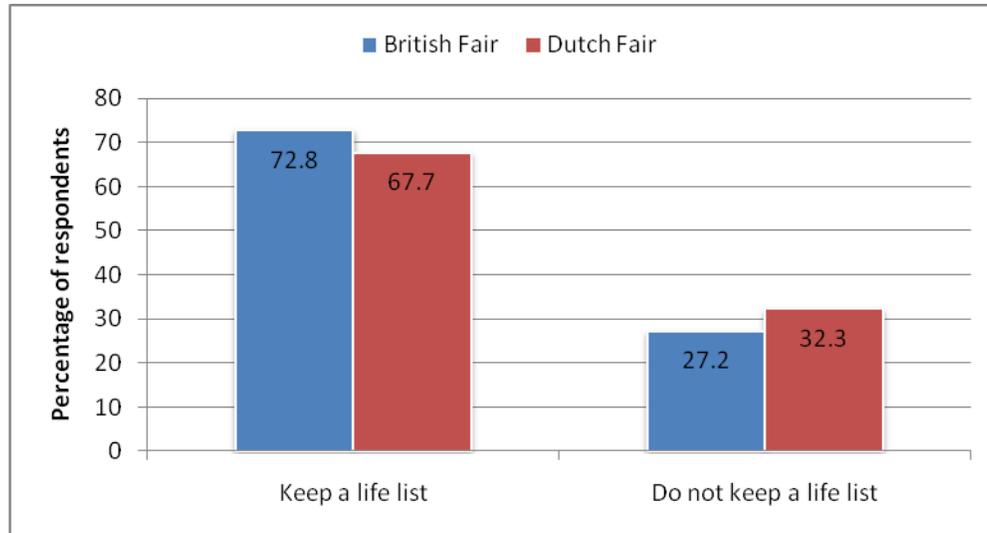


Figure 4: Birders at the British and Dutch bird fairs who keep and who do not keep bird life lists

The majority of respondents reported that they do keep bird life lists; 72.8% of those at the British Birdwatching Fair and 67.7% of those at the Dutch Vogelfestival keep bird life lists. Only 27.2% of participants at the British Birdwatching Fair do not keep a life list, while a similarly low percentage of participants at the Dutch Vogelfestival (32.3%) also do not keep a bird life list. This indicates that many birders, from casual to committed, are serious enough to potentially become involved in avitourism in Southern Africa, and that marketing should not exclude the less serious birders.

Table 2 indicates that the average number of birds on birders' life lists was 301–400 birds: 601–700 birds for committed birders, 401–500 for active birders and 101–200 for casual birders were reported. Significant differences were found ($p = 0.014$) at a 5% level of significance ($p\text{-value} < 0.05$), and the Post Hoc test indicated that the three birder types differed significantly from one another. The results indicate a strong correlation between the number of birds on their life list and the level of involvement of the three birder types. These findings imply that tourism managers should have well-designed and user-friendly bird lists available for avitourists visiting Southern Africa.

Reading behaviour and club membership of birders

Respondents had to indicate the number of bird field guides and other bird books in their possession, as well as the number of subscriptions to birding magazines and memberships of birding organisations.

Table 2 shows that respondents own an average of 12 bird field guides. The birder types own on average the following number of bird field guides: committed (20), active (13) and casual (5)

birders. The ANOVA test confirmed significant differences ($p = 0.000$), and the Post Hoc test indicated that the three birder types differed significantly from one another. On average, respondents at both bird fairs own 45 other bird books. With respect to other bird books owned, committed birders owned 80 other bird books, followed by active (44) and casual (10) birders. The ANOVA test confirmed significant differences ($p = 0.000$), and the Post Hoc test indicated that the three birder types differed significantly from one another. Ownership of bird books therefore appears to increase with the level of commitment. Respondents subscribe to an average of two birding magazines. Subscriptions to birding magazines by birder types differed, with committed birders having an average of three subscriptions, active birders two and casual birders one. Significant differences were found ($p = 0.000$), and the Post Hoc test indicated that the three birder types differed significantly from one another.

Most respondents in the sample were members of birding organisations. The average number of memberships of birding organisations is two memberships. The number of memberships differed among the birder types, with committed birders having an average of four memberships, active birders two memberships and casual birders one membership of birding organisations. Most respondents were members of birding organisations. The number of memberships differed significantly ($p = 0.000$) among the birder types, and the Post Hoc test indicated that the three birder types differed significantly from one another. The results indicate that reading behaviour and memberships increase with the level of involvement in the birding activity.

Birding equipment used for the identification of birds

To capture information with respect to birding equipment, the questionnaire asked respondents to indicate the number of spotting scopes and binoculars in their possession. Table 2 indicates that committed (1.36), active (1.16) and casual (0.59) birders owned an average of one spotting scope, while committed (2.22), active (2.07) and casual (1.76) birders owned an average of two binoculars. The number of items of birding equipment owned increases gradually from casual to committed birders. The ANOVA test confirms significant differences for spotting scopes ($p = 0.000$) and binoculars ($p = 0.018$). For the number of spotting scopes owned, the Post Hoc test indicated a significant difference between casual, active and committed birders, but there was no significant difference between active and committed birders. With respect to the number of binoculars owned, the significant difference lies between casual and committed birders and there was no significant difference between casual and active birders, or between active and committed birders.

The sample results show that respondents own more binoculars than spotting scopes, and as the intensity level of involvement increases, so does the number of spotting scopes and binoculars. Most avitourists to South Africa will probably bring their own equipment with them, rather than buying new equipment in South Africa. Their spending while abroad will probably be more focused on birding and other tourism activities related to nature, birding books and general travelling costs, such as transport, accommodation and leisure.

Behaviour of birders

The birding behaviour of respondents at the British and Dutch bird fairs was investigated by asking respondents to indicate:

- The number of birding trips in the 12 months prior to the study
- The numbers of days spent birding in the 12 months prior to the study.

Table 2 shows that respondents had taken an average of four birding trips in the last 12 months. Birder types differed in the terms of number of trips in the last 12 months: committed birders (7), active birders (4) and casual birders (3) trips. The ANOVA test confirmed significant differences ($p = 0.000$) and the Post Hoc test indicated that the three birder types differed significantly from one another.

Overall, respondents spent an average of 34 days birding in the last 12 months. Committed birders spent a total of 45 days birding in the last 12 months, active birders 38 days, and casual birders 21 days. The ANOVA test confirmed significant differences ($p = 0.000$), and the Post Hoc test indicated a significant difference between casual birders; and active and committed birders. However, the difference between active and committed birders was not significant. The results indicate that birding behaviour, in terms of the number of trips and days spent birding, increased with the level of involvement of the three birder types.

Consumptive behaviour of birders

The behaviour of respondents with regard to consumption was recorded in terms of money spent on birding in the 12 months prior to the study and the distance they had travelled to go birding.

Table 2 indicates that respondents at both bird fairs had spent an average of €3629.94 on birding in the last 12 months. The total amount of money spent by the various birder types in the last year differed as follows: committed birders (€5254.76 / R68 311.88), active birders (€4098.17 / R53 276.21) and casual birders (€2052.13 / R26 677.69). These figures include accommodation, transport and incidental expenses. The ANOVA-test confirmed significant differences ($p = 0.000$), and the Post Hoc-test indicated that the three birder types differed significantly from one another.

On average, committed birders travelled more kilometres (34 802.91 km) than active birders (13 124.31 km) and casual birders (8425.43 km). Significant differences were found ($p = 0.000$), and the Post Hoc test indicated that the three birder types differed significantly from one another, with the kilometres travelled increasing with the level of commitment.

The results indicate that expenditure increased with the level of involvement of the three birder types. The level of involvement was also reflected in the distance respondents had travelled to go birding in the last 12 months, as committed birders travelled significantly further than active and casual birders.

Consistently with Scott and Thigpen (2003:207), these results confirm that committed birders are more intensely involved in birding than active birders; and active birders are more involved in the birding activity than casual birders. Committed birders were significantly more likely to report that they had been involved in birding for longer, had more birds on their life lists, owned more bird field guides and other bird books, had more subscriptions to birding magazines and

more memberships at birding organisations, spent more days and money on birding and travelled more kilometres than active and casual birders.

Discussion and recommendations

The purpose of this research was to confirm that avitourists cannot be seen as a homogeneous market segment. The research therefore explored the behavioural involvement of the international avitourist in the birding activity and anticipated differences between birder types. A discussion on the categorisation of birders and recommendations with regards to behavioural involvement follows.

Categorisation of birders into birder types

Some birders enjoy watching birds more frequently and enthusiastically than others. Birders thus consist of a group of heterogenous recreationists, exhibiting a diversity of skills and interests (Steven *et al.*, 2015:1268; Maple *et al.*, 2010:219; Scott & Thigpen, 2003:201; Hvenegaard, 2002:22; Turpie & Ryan, 1998:27; McFarlane, 1994:362; Kellert & Brown, 1985:273). The results of this study also indicated that avitourists are not homogeneous and are categorised as casual, active and committed birders.

Respondents at the British Birdwatching Fair tend to be more active (42.7%) and committed (27.0%), while respondents at the Dutch Vogelfestival seem to be mostly casual (48.1%) and active (32.3%) birders. Marketing aimed at the British birder should therefore concentrate on the more serious birding activities, such as seeing rare species of birds, while marketing aimed at the Dutch birding community might concentrate more on birding activities such as being outdoors and enjoying birds and the natural environment, as well as other leisure activities. Avitourism managers should acknowledge differences between birder groups, thereby customising birding products in such a way as to attract and satisfy the needs and expectations of casual, active and committed avitourists, depending on their preference. The behavioural involvement of respondents at the bird fairs is discussed in the next section.

Behavioural involvement of respondents at the British and Dutch bird fairs

The discussion and recommendations are provided according to the following six factors that measured behavioural involvement:

- Number of years involved in birding
- Number of birds on the birders' life lists
- Reading behaviour and club membership of birders
- Birding equipment used for the identification of birds
- Behaviour of birders
- Consumptive behaviour of birders.

The results indicate that committed birders (29 years) had been involved in birding significantly longer than active (25 years) and casual (16 years) birders, and active birders had been involved in birding significantly longer than casual birders. Committed respondents therefore tended to be more experienced than the active and casual respondents. The results are consistent with the work of Scott & Thigpen, 2003:207 who also indicated that skilled birders

were significantly more likely than other birders to report that they had been birding for more years, which confirms that committed and active birders are more intensely involved in birding than casual birders.

Most respondents (approximately 70%) at both bird fairs keep bird life lists. The results indicate a strong correlation between the number of birds on their life list and the level of involvement of the three birder types. This results indicates that many birders, from casual to committed, are serious enough to potentially become involved in avitourism in South Africa, and that marketing should not exclude the less serious birders. Furthermore, the results imply that the media and tourism managers should have well-designed and user-friendly bird life lists available for potential birders visiting Africa, more specifically South Africa.

The findings in terms of reading behaviour indicated that the media and tourism managers in South Africa should ensure that good bird field guides and other bird books are available to avitourists. The fact that birders subscribe to birding magazines means that the tourism marketers could consider marketing Africa, specifically South Africa as a birding destination birding magazines. Most respondents in the sample were also members of birding organisations. Furthermore, the results indicated that reading behaviour and memberships increase with the level of involvement in the birding activity. Similarly, the number of bird field guides owned increases with the level of involvement of the three birder types: casual birders own an average of five field guides, active birders 13, and committed birders 20. Subscriptions to birding magazines also increase with the level of involvement: casual birders subscribe to a mean of one magazine, active birders to two, and committed birders to three.

Committed (1.36), active (1.16) and casual (0.59) birders owned an average of one spotting scope, while committed (2.22), active (2.07) and casual (1.76) birders owned an average of two binoculars. The findings illustrate that respondents own more binoculars than spotting scopes, and as the intensity level of involvement increases, so do the number of spotting scopes and binoculars. As the findings indicate that most avitourists already own birding equipment, it seems that birders to South Africa (or Africa) would probably bring out their own equipment, rather than buy new equipment in Southern Africa. An assumption can be made that, their spending while abroad would probably be more focused on birding and other tourism activities related to nature, birding books and general travelling costs, such as transport, accommodation and leisure.

Results in terms of birding behaviour shows that respondents had taken an average of four birding trips and spent an average of 34 days birding in the last year. This suggests that there is significant potential to attract birders to South Africa, as respondents tend to take part in several birding trips annually and spend considerable time on birding trips per year. The results indicated that birding behaviour, in terms of the number of trips and days spent birding, increases with the level of involvement of the three birder types. Expenditure increased with the level of involvement of the three birder types. On average, committed birders spend more (€5254.76 / R68 311.88) than active birders (€4098.17 / R53 276.21) and casual birders (€2052.13 / R26 677.69). These results are consistent with the literature, as Solomon *et al.*, (2002:104) argues that the level of an avitourist's involvement has an impact on financial commitment. The level of involvement was also reflected in the distance respondents travelled to go birding in the last 12 months, as committed (34 802.91 km) birders travelled significantly more than active (13 24.31 km) and casual (8 425.43 km) birders.

In summary, committed birders are more likely to report that they have been involved in birding for longer, have more birds on their life lists, own more bird field guides and other bird books, have more subscriptions to birding magazines and more memberships of birding organisations, spend more days and money on birding, and travel more kilometres than active and casual birders. Consistent with Scott and Thigpen (2003:207), these results confirm that committed birders are more intensely involved in birding than active birders; and active birders are more involved than casual birders.

Conclusion

Avitourism is recognised as being an important niche market with high potential to induce economic, social and conservation benefits for birding destinations. Since information on avitourist behaviour is needed for effective planning, managing and developing programmes and products, this study focused on international avitourism behaviour. Leisure behaviour research, particularly research in avitourism, could add the factor of involvement to clarify the behaviour of avitourists. Determining the level of an avitourist's involvement (low/high) is useful in examining and predicting the behaviour of avitourists. Therefore the purpose of this research was to explore the behavioural involvement of the international avitourist in the birding activity to explain avitourist behaviour.

Based on the results obtained from questionnaires completed at the British Birdwatching Fair and the Dutch Vogelfestival, this study provides insight into international avitourist behaviour. This research examined three birder types (casual, active and committed birders) in terms of behavioural involvement measures. The results of the analysis suggest the following:

- Committed respondents were longer involved in birding and therefore tended to be more experienced than the active and casual respondents.
- Most respondents at both bird fairs keep bird life lists. The results indicate a strong correlation between the number of birds on their life list and the level of involvement of the three birder types.
- Birders own a substantial amount of bird field guides and bird books. Most respondents in the sample subscribe to birding magazines and were also members of birding organisations. Reading behaviour and memberships increased with the level of involvement in the birding activity.
- Respondents own more binoculars than spotting scopes, and as the intensity level of involvement increases, so do the number of spotting scopes and binoculars.
- Birders tend to take part in several birding trips annually and spend considerable time on birding trips per year. Furthermore, the number of trips and days spent birding increased with the level of involvement of the three birder types.
- Committed birders spent more money on birding and travelled significantly more for the purpose of birding than active and casual birders. It is therefore argued that the level of an avitourist's involvement has an impact on financial commitment and willingness to travel.

These results confirm that committed birders are more intensely involved in birding than active birders; and active birders are more involved than casual birders. These findings could assist managers and marketers in their efforts to target birding programme amenities and promotional materials towards distinct segments of the birding population.

International avitourism has the ability to contribute significantly towards growing the tourism sector in terms of increasing the tourist's length of stay, spreading, geographical distribution and volumes; reducing seasonality and reducing unemployment and poverty through employment creation and poverty alleviation. Birding destinations worldwide, specifically Africa could utilise this opportunity to share in the economic, social and conservation benefits as spinoffs of successful avitourism.

References

- Antil, J.H. (1984). Conceptualization and operationalization of involvement. *Advances in consumer research*, 11:203–209. [Online] Available from: <http://www.acrwebsite.org/volumes/display.asp?id=6243> [Downloaded: 2009-10-12].
- Biggs D, Turpie J, Fabricius C, Spenceley A (2011). The value of avitourism for conservation and job creation – An analysis from South Africa. *Conservat Soc.*, 9(1): 80–90.
- Chen, H.J., Hwang, S.N. & Lee, C. (2006). Visitors' characteristics of guided interpretation tours. *Journal of Business Research*, 59(10–11):1167–1181.
- Coetzer, I.A. (2008). Personal communication on 30 June. Pretoria.
- Cole, J.S. & Scott, D. (1999). Segmenting participation in wildlife watching: a comparison of casual wildlife watchers and serious birders. *Human Dimensions of Wildlife: An International Journal*, 4(4):44–61.
- Cooper, D.R. & Emory, W. (1995). *Business research methods*. 5th ed. Chicago; London: Irwin.
- Cooper, C., Fletcher, J., Fyall, A., Gilbert, D. & Wanhill, S. (2008). *Tourism: principles and practice*. 4th ed. Harlow: Financial Times Prentice Hall.
- Cordell, H.K. & Super, G.R. (2004). *Trends in Americans' outdoor recreation*. USA: CABI Publishing.
- Crosbie, M. (2008). Personal communication on 23 July. Pretoria.
- Czajkowski, M., Giergiczny, M., Kronenberg, J. & Tryjanowski, P. (2014). The economic recreational value of a white stork nesting colony: A case of 'stork village' in Poland. *Tourism management*. 40:352-360.
- Decrop, A. (2005). Personal aspects of consumers' decision-making processes revisited through a rounded theory of Belgian vacationers. In: Woodside, A.G., Crouch, G.I., Mazanec, J.A., Opperman, M. & Sakai, M.Y. (eds) *Consumer psychology of tourism, hospitality, and leisure*. Wallingford: CABI Publishing.
- Decrop, A. (2006). *Vacation decision making*. Wallingford: CABI.
- DoT (Department of Tourism). (2011a). National Tourism Sector Strategy. Pretoria: DoT.

DoT (Department of Tourism). (2011b). Final Draft National Avitourism Strategy of South Africa. Pretoria: DoT.

Eubanks, T.L., Stoll, J.R. & Ditton, R.B. (2004). Understanding the diversity of eight birder sub-populations: socio-demographic characteristics, motivations, expenditures and net benefits. *Journal of Ecotourism*, 3(3):151–172.

Hair, J.F., Black, B., Babin, B., Anderson, R.E. (2010). *Multivariate data analysis*. 7th ed. New Jersey; Harlow: Pearson Education International.

Havitz, M.E. & Dimanche, F. (1990). Propositions for testing the involvement construct in recreational and tourism contexts. *Leisure Sciences: An Interdisciplinary Journal*, 12(2):179.

Hugo, A.J. (2008). Personal communication on 15 July. Pretoria.

Hvenegaard, G.T. (2002). Birder specialisation differences in conservation involvement, demographics and motivations. *Human Dimensions of Wildlife*, 721–736.

Kellert, S.R. (1985). Birdwatching in American society. *Leisure Sciences: An Interdisciplinary Journal*, 7(3):343–360.

Kellert, S.R. & Brown, P.J. (1985). Human dimensions information in wildlife management, policy, and planning: introductory comments to the special issue on human dimensions in wildlife management. *Leisure Sciences: An Interdisciplinary Journal*, 7(3):269–280.

Kim, S., Scott, D. & Crompton, J.L. (1997). An exploration of the relationships among social psychological involvement, behavioral involvement, commitment, and future intentions in the context of birdwatching. *Journal of Leisure Research*, 29(3):320–341.

Kotler, P. & Keller, K.L. (2009). *Marketing management*. International ed. New Jersey: Pearson Prentice-Hall.

Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3):607–610.

Kumar, R. (2005). *Research methodology: a step-by-step guide for beginners*. 2nd ed. London: SAGE.

La Rouche, G.P. (2003). *Birding in the United States: a demographic and economic analysis*. Washington DC: U.S Fish and Wildlife Service.

Leedy, P.D. & Ormrod, J.E. (2010). *Practical research: planning and design*. 9th ed. Boston: Pearson Education International.

Lindsay, M. (n.d.). *The Great Texas Coastal Birding Trail: a tool for avitourism*. [Online] Available from: <http://www.birds.cornell.edu/pifcapemay/lindsay.htm> [Accessed: 2008-06-13].

Maple, L.C., Eagles, P.F.J. & Rolfe, H. (2010). Birdwatchers' specialisation characteristics and national park tourism planning. *Journal of Ecotourism*, 9(3):219-238.

McFarlane, B.L. (1994). Specialization and motivations of birdwatchers. *Wildlife Society Bulletin*, 22(3):361–370. [Online] Available from: <http://www.jstor.org/stable/3783377> [Downloaded: 2008-04-18].

McGehee, N.G., Yoon, Y. & Cárdenas, D. (2003). Involvement and travel for recreational runners in North Carolina. *Journal of Sport Management*, 17(3):305–324. [Online] Available from: EBSCOHost: Business Source Complete: <http://search.global.epnet.com> [Downloaded: 2010-01-15].

Milstein, P. (2008). Personal communication on 21 July. Pretoria.

Neuman, W. (2007). *Basics of social research: qualitative and quantitative approaches*. 2nd ed. Boston; London: Pearson, Allyn and Bacon.

Okumus, F., Altinay, L. & Chathoth, (2011). *Strategic management for hospitality and tourism*. Oxford: Butterworth-Heinemann.

Page, S.J. (2015). *Tourism management*. 5th ed. New York: Routledge.

Pearce, P.L. (2005). *Tourist behaviour: themes and conceptual schemes*. Clevedon: Channel View Publications.

Rogerson, C.M. (2011). Niche tourism policy and planning: The South African experience. *Tourism Review International*, 15: 199–211.

Salkind, N.J. (2009). *Exploring research*. 7th ed. New Jersey: Pearson Prentice-Hall.

Sato, M., Jordan, J.S., Kaplanidou, K. & Funk, D.C. (2014). Determinants of tourists' expenditure at mass participant sport events: a five-year analysis, *Current Issues in Tourism*. [Online] Available from: <http://www.tandfonline.com/action/showCitFormats?doi=10.1080/13683500.2014.892918> [Accessed: 2014-07-25].

Steven, R., Morrison, C. & Castley, J.G. (2015). Birdwatching and avitourism: a global review of research into its participant markets, distribution and impacts, highlighting future research priorities to inform sustainable avitourism management. *Journal of Sustainable Tourism*, 23(8-9):1257–1276.

Scott, D., Ditton, R.B., Stoll, J.R. & Eubanks, T.L. (2005). Measuring specialization among birders: utility of a self-classification measure. *Human Dimensions of Wildlife: An International Journal*, 10(1):53.

Scott, D. & Shafer, C.S. (2001). Recreational specialization: a critical look at the construct. *Journal of Leisure Research*, 33(3):319–343.

Scott, D. & Thigpen, J. (2003). Understanding the birder as a tourist: segmenting visitors to the Texas Hummer/Bird Celebration. *Human Dimensions of Wildlife*, 8(3):199–218.

Sekercioğlu, C.H. (2002). Impacts of birdwatching on human and avian communities. *Environmental Conservation*, 29(3):282–289. [Online] Available from: <http://www.stanford.edu/~cagan/SekercioğluOrniTourismEnvCons2002.pdf> [Downloaded: 2008-02-11].

Solomon, M.R., Bamossy, G. & Askegaard, S. (2002). *Consumer behaviour: a European perspective*. 2nd ed. England; New York: Financial Times/Prentice-Hall.

Swarbrooke, J. & Horner, S. (2007). *Consumer behaviour in tourism*. 2nd ed. Amsterdam; London: Butterworth-Heinemann.

Turpie, J. & Ryan, P.G. (1998). The nature and value of birding in South Africa. Unpublished Report. Cape Town.

Welford, M. & Barilla, A. (2013). Is neotropical conservation sold-short: Diminishing returns for birding suggest ecolodges could encourage longer stays. *Journal for nature conservation*, 21: 4001-405.

Wheeler, T. (2008). Future destinations. In: Conrady, R. & Buck, M. (eds) *Trends and issues in global tourism 2008*. Berlin; Heidelberg: Springer-Verlag.

Winer, R.S. (2007). *Marketing management*. 3rd ed. New Jersey: Pearson Prentice-Hall.