Short Communication

The Role of Wildlife-viewing Activity at Tabin Wildlife Reserve

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Abstract

The Tabin Wildlife Reserve is the only gazetted wildlife reserve in Sabah. For it to remain sustainable, tourism is strategically taken as a socio-economy instrument with wildlife-viewing currently being the most important tourism activity. But tourism could also be used as a conservation instrument, and a scientific research was carried out to determine the role of wildlife-viewing in conservation at the Reserve. This research comprises a social media content analysis, on-site observations and interviews with the Reserve's tourists, and findings show that the Reserve has the basic facilities for tourists to view wildlife. Besides this, the findings also show that the Reserve's tourists were satisfied with their wildlifeviewing experiences. However, the findings also reveal that the tourists' viewing experiences and satisfactions did not influence their understanding of conservation. Instead, the experiences and satisfactions prompted them to revisit and promote the destination to other people. These findings suggest the wildlifeviewing as an activity enforces conservation interest rather than increases conservation interest, which brings the understanding that tourism is a selective conservation instrument.

Keywords: Conservation, Environmental Awareness, Tourism

Introduction

On the eastern part of Sabah where large scale alienation of land for agricultural purposes has taken place, the Tabin Wildlife Reserve was established under the Sabah Forestry Enactment 1968. Much like an island, it is surrounded by alienated land. The Reserve was established to manage the human-wildlife relationship of the area; and under the gaze of conservation, tourism was used from 1999 onwards as a management strategy.

Wildlife tourism is a tourism niche that focuses on travels relating to the viewing or searching of wild animals. It is about tourists wanting to interact with the animals (Peter, 2011), and it has been extremely popular among Europeans as safari tours in African nations since the early 19th century. This tourism niche has expanded greatly over the past decades generally in and particularly in Tabin Wildlife Reserve. An increased understanding about the relationship between tourists and wildlife would contribute to the conservation of wildlife as well as the sustainability of tourism (Rodger & Moore, 2004). Among the two matters that need better understanding include the influences to tourists' behaviour during visits (Orams & Hill, 1998) and tourists' motivations to contribute monetarily and nonmonetarily towards the environment (Powell & Ham. 2008). With regards to tourism at Tabin Wildlife Reserve and the involvement of many stakeholders, and the fact that there are only a handful of tourism related studies to support nature related tourism expansion (Peters, 2000), the two matters have already become a complex social phenomenon to manage. Thus, understanding about the tourists-wildlife relationship is crucial to a place like Tabin Wildlife Reserve.

Literature about wildlife tourism and the relationship between tourists and wildlife are available. Many of these are tourism market reports that outline market factors (Fredline & Faulkner, 2001). Interestingly, central to the literature is the ability and reliability of sighting wildlife. The lack of viewing opportunities would give a negative impact on tourists' experiences and thus affect their overall decision to return to a particular destination or tell someone about the destination (Kuhar et al., 2010). As noted in the literature, anything can affect that sighting opportunity. The structure of a forest could affect the reliability of sighting wildlife. Height and width of tropical rainforest trees would have an impact on one's ability to see certain animals (Marshall, Lovett, & White, 2008). Tourists face a certain amount of risk when wanting to see a wild animal up close. For example, in Tabin's two decade tourist-wildlife relationship history, a tourist was killed in 2011 when the victim viewed a lone male bull Borneo pygmy elephant up close ("Fatal elephant attack the first in Sabah Resort," 2011). This incident raised the question about wildlife visibility and proximity as an essentiality of wildlife tourism; which is baseless under certain strict conditions. If an animal is endangered, not being able to see it during a tour does nothing for the development of wildlife tourism (Saikim, 2008). Being able to see an animal is not everything.

Tourists' satisfaction is about the feelings and attitudes of tourists after having experienced a particular tourism product. The question about what satisfies tourists has been asked repeatedly. This is an important question because under wildlife tourism the concept of satisfaction is linked to the tourists' affinity towards a certain environment (Tonge & Moore, 2007), Information about tourists' satisfaction is important to tourism services providers. Such information could affect the attractiveness of a particular tourism destination, which in turn increases the possibility of repeat visits and bring about the sustainability of the place as a destination (Spenceley & Snyman, 2017; Tonge & Moore, 2007). The act of revisiting or promoting could indicate a person's attitude towards the conservation of that attraction (Karppinen, 2005; Reynolds & Braithwaite, 2001: Tisdell & Wilson, 2004). And yet, in a Kenyan case study, tourists' arrivals at certain destinations were in decline although the tourists were very satisfied (Akama & Kieti, 2003). Because of this limitation and earlier understanding about the essentiality of wildlife visibility (Akama & Kieti, 2003), it is unclear if viewing satisfactions would promote better conservation understanding particularly in Sabah's Tabin Wildlife Reserve.

Tourism service providers need to know about tourists' wildlife-viewing satisfaction so that they can provide services in a safe manner while fulfilling conservation roles. What are the factors that make wildlife tourism so satisfying? Does a person become more aware about conservation after having the opportunity to see a particular animal? Or, would the person only become aware on conservation when he or she is satisfied? For a place like Tabin Wildlife Reserve to take tourism as a conservation tool, these are relevant questions. To answer these questions, this study explored tourists' animal-viewing expectations, satisfaction level and its role in conservation at Tabin Wildlife Reserve.

Methods and Materials

As introduced, Tabin Wildlife Reserve was established in 1968 as a reserve for large mammals. Three largest and endangered species of North Borneo i.e. Borneo Pygmy Elephant (Latin: *Elephas maximus*), Sumatran Rhinoceros (Latin: *Dicerorhinus sumatrensis*) and Tembadau (Latin: *Bos javanicus*) are found here. It is situated at Sabah's Dent Peninsular and the location is illustrated in the following figure.

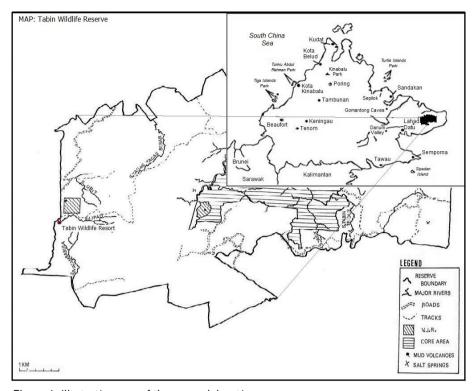


Figure 1. Illustrative map of the research location

Tourists' satisfaction at the research location is the result of many factors. Apart from factors such as the quality of services, feelings and attitudes of tourists; wildlife viewing is also a factor. These factors and thus the satisfaction of tourists can change over a period of time. This is the nature of a tourism destination; it evolves (Butler, 1980). Because of this, a case study is needed.

As a method, a case study allows an investigation to retain the holistic and meaningful charateristics of real-life events. It arises out of the desire to understand complex social phenomena (Yin, 2009). Wildlife tourism is a complex social phenomenon. In this case study, data collection was carried out through three different methods namely a) the documentation method, b) direct observation method and c) the interview method. The documentation method was carried out on reports in the print and electronic media about Tabin Wildlife Reserve until December 2016. Direct observation method was carried out during routine tourists' engagements e.g. guest registration and walks in the first half of 2015. The interview method was carried out on

tourists using a category and 5-point Likert Scale structured questionnaire at a tourism facility within the research location in the first half of 2015. The questionnaire contained questions about the tourists' demographic background, tourists' satisfaction concerning the visibility of wildlife, tourists' travel intentions and perceptions, and their awareness on the conservation of wildlife. The collected data from the interview was analysed statistically to determine tourists' wildlife related expectations, experiences, satisfaction, and motivation to support conservation. These analyses were then used in an explanation-building approach to determine the social phenomenon that exist in the reseach location (Yin, 2009). The results are provided in the following section.

Results and Discussion

Tabin Wildlife Reserve was gazetted by the Sabah Government in 1968. The main tourism attractions of the Reserve to date are its wildlife, mud volcano and a waterfall adjacent to the mud volcano. In 1999, about two (2) decades later, the only tourism facility known as the Tabin Wildlife Resort (TWResort) was established within the Reserve; and it is managed by Tabin Wildlife Holiday Pte Ltd. This facility was given the privilege of exclusivity on the understanding that market competition could be detrimental to conservation efforts, an understanding that has already been documented elsewhere (Spenceley & Snyman, 2017). Through direct observation, the Resort comprises of a main structure that houses a restaurant, a souvenir shop and a reservation section. Apart from the main structure, there are a number of cabins connected to the main structure by a network of elevated boardwalks. There is a 13KM trail walk system and an observation tower belonging to the Sabah State Wildlife Department i.e. Reserve Manager. The tourism environment of Tabin is as follows:

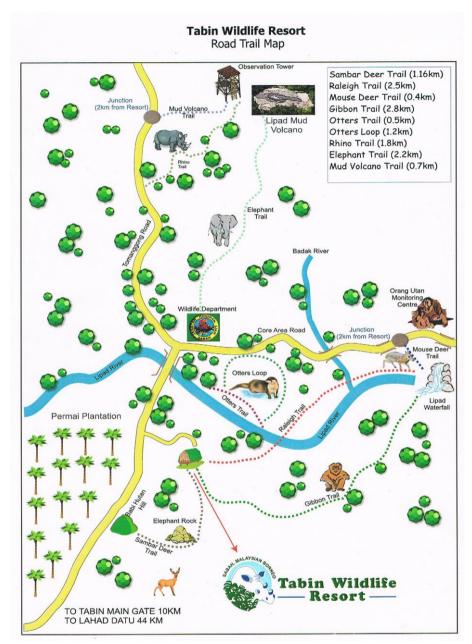


Figure 2. Tabin tourist map Illustration retrieved on 07/03/2017 from http://www.abctours.com.my/uploads//Tabin%20Wildlife/Tabin%20Trail%20map%20large.jpg

Through the documentation method of print media, among activities that are carried within the Reserve include jungle trekking, trail walks, night drive/safari, night walks, swimming, picnic, wildlife sensoring, birdwatching and environmental education. Tourists at Tabin Wildlife Reserve would take part in seemingly standardised three-day-two-nights (3D/2N) tour package. The package at Tabin is designed to give tourists a variety of experiences. This package includes trail walks, mud volcanos and night drives on the first day. On the second day, the package focuses on visiting the viewing platform, waterfalls, and night walks; while on the last it the package is based on the either leisure or water activities. Overall, the activities allow tourists to have a chance to view both diurnal and nocturnal animals.

Through documentation method of electronic media using the popular electronic media tripadvisor® Malaysia, a total of 131 reviews about TWResort up to 2016 were noted. The reviews started coming in since late 2008. At least 65% of those reviews ranged from average to excellent. The positive reviews were in relation to the authenticity of the forest experience and wildlifeviewing experiences and guiding services to promote that authenticity. Negative reviews were mainly about the tourism facility.

On the ground, a total of 77 tourists were interviewed. The respondents' size was not large, and this was because tourists stated that they had to address logistic and financial challenges before visiting it. This finding is similar to other wildlife tourism related researches (Lindsey, Alexander, Mills, Romanach, & Woodroffe, 2007). Foreigners constituted 97.4% of the respondents whereby 77.9% were of the female gender. Some 58.4% of the 77 respondents were above 51 years of age, while 1.3% of the respondents were below 20 years of age. In relation to their education level, 47.3% of the 77 respondents possess tertiary education with the rest having secondary education. In terms of the respondents' demographic characteristic, the findings of this study are similar to findings from other wildlife tourism related studies conducted elsewhere (Kirchberg, 1996; Lemelin & Smale, 2006). In terms of the respondants' answers to questions prepared using the 5-point Likert Scale, Spearman Correlation Analysis was used to analyse the compiled data. From the collected data and analysis, foreigners toured TWResort because they wanted to see wildlife animals, and what drove them to support wildlife conservation was their viewing satisfaction. This study found that the tourists had satisfactory viewing experiences and this is largely due to viewing conditions and the help from local guides. While that satisfaction may motivate tourists to revisit or promote the Reserve, it does not make the

tourists loyalists or essentially strong supporters of conservation. The viewing statisfaction does not change the tourists' understanding about conservation of wildlife. Nevertheless, tourists are willing to pay for conservation.

Good environmental conditions and guiding assistance ensured tourists' satisfaction of their viewing experiences.

People visit a wildlife tourism destination for many reasons. In this study, 68.6% of the respondents visited Tabin Wildlife Reserve to see animals. Twelve per cent of the respondents visited the Reserve because they were curious and wanted to get involved with conservation work, while 18.60% respondents travelled for a holiday. From those who visited TWR, 96.1% of them expected to see wildlife, while 3.9% of the respondents did not expect anything. Of those interviewed, 84.4% of the respondents expressed their satisfication, 11.7% responded indifferently, while 1.3% was not happy with their wildlifeviewing experiences and 3.9% of the respondents were dissatisfied of their wildlife viewing experiences. This finding is similar to an Australian wildlifeviewing satisfaction study that was conducted in 2001. In that study, 81.4% of respondents were satisfied with their experience and they were satisfied because they had good wildlife-sighting experiences (Fredline & Faulkner, 2001). While there are many factors observed in this study, the most dominating factor was the weather (27.3%); followed by the quality of tourist guides (24.7%) due to the belief that the ability of tourists guides in wildlifespotting assists in increasing tourist' wildlife-viewing experience. Not only do those guides provide some sort of safety and security services, the guides also increased the reliability of the sighting. This finding supports the understanding that the professionalism of tourist guides are crucial in wildlifebased tourism (J. A. Bennett, Jooste, & Strydom, 2005). The next dominating factor is vegetation foliage (19.5%), while other contributing factors included the planned activities, distance from wildlife, wildlife behaviour, and tourist group size. This suggests that Tabin Wildlife Reserve is a tourism destination with certain world class charateristics; it has good conditions for viewing wildlife and it is operatored by capable people i.e. local guides.

The relationship between wildlife-viewing satisfaction and the motivation to promote or revisit a destination.

A tourist's affinity towards a particular natural attraction is associated with many factors. A tourist's viewing satisfaction is notioned to affect the tourist's affinity towards a particular place (Tonge & Moore, 2007). Using Spearman Correlation Analysis, the correlation efficient i.e. relationship between tourists' wildlife-viewing satisfaction and the motivation to revisit and

promote Tabin Wildlife Reserve were valued at 0.400 and 0.396 respectively. While these average values show that viewing satisfaction does motivate tourists to revisit and promote TWR, it shows that satisfaction does not overly motivate tourists to revisit or promote the destination. The finding is consistent with an understanding that satisfaction does not necessarily equate with loyalty (R. Bennett & Rundle-Thiele, 2004). But more importantly, as noted in literature about tourists' act to revisit or promote a destination as an indicator of the tourists' attitude towards the conservation (Karppinen, 2005; Reynolds & Braithwaite, 2001; Tisdell & Wilson, 2004), the finding suggests that tourists may not want to support conservation by revisiting the destination.

Satisfaction rather than awareness affects tourists' willingness to support wildlife conservation.

It is largely accepted that there is a direct relationship between the economy and conservation of wildlife; a person with a high awareness level might provide that economic support when he or she is satisfied (Trauger et al., 2003: Žabkar, Brenčič, & Dmitrović, 2010). In this study, the tourists were asked if they would like to conserve wildlife and if they are aware about the threates that endangered wildlife faced. Using Spearman Correlation Analysis, the correlation efficient i.e. relationship between tourists' viewing satisfaction and the interest in conservation is valued at 0.529 whereas the relationship value between tourists' viewing satisfaction and the awareness about the threat to wildlife is 0.173. These findings show tourists may be aware of the threats that wildlife face but that awareness does not affect the tourists' wildlife viewing satistfaction in any way. In this case study, 66.7% respondents claimed that their wildlife conservation awareness would not be affected by the ability or inability of viewing a particular wildlife. Thus, similar to the findings of Saikim and Prideaux (2014), this study confirms that wildlifeviewing satisfaction does not influence the understanding of wildlife conservation.

In relation with tourists' willingness to participate or pay for conservation at Tabin Wildlife Reserve, the respondents were asked if they would voluntarily carry out wildlife conservation related activities and if they would contribute financially to support the conservation in Tabin Wildlife Reserve. Using the Spearman Correlation Analysis, the correlation efficient of tourists' willingness-to-participate and tourists' willingness-to-pay were determined at 0.399 and 0.853 respectively. Since 81% of the respondents were found to be satisfied with their viewing experience, these findings show that satisfied

tourists, though unwilling to participate in a conservation activity, they were willing to pay for so that other people could do conservation work. Based on these findings, which support Žabkar et al. (2010) findings, a key factor of conservation contribution comes of tourists' satisfaction rather then from their awareness about the threats to wildlife.

Conclusion

Tabin Wildlife Reserve was designated by the Sabah Government in 1968 to preserve a population of Sabah's wildlife from the threat of extinction resulting from deforestation. As tourists' demand to experience Sabah's rich biological diversity steadily rose in the early 1980s, a certain part of the Reserve was developed as a wildlife tourism destination with tourism funding management of the Reserve.

Tourists take part in wildlife tourism to see wild animals. In context of wildlife conservation, it is generally understood that tourists' expectations and satisfactions could act as a platform to increase the tourists' wildlife conservation awareness. It is often stated that tourists could be educated so that their environmental awareness increases and they exhibit positive behaviour towards wild animals and their habitat (Duffus & Dearden, 1992). Wildlife-related education tours can cause a behavioural change and an increase in knowledge, which subsequently promote responsible actions towards wild animals and the natural surroundings, and encourage conservation research and contribution. To address the needs of tourists, two strategies were taken, namely the increment of the reliability of sighting and the engagement of quality tourist guides.

From this investigation, Tabin's tourists were satisfied with their visit. They were satisfied because they received good services and were able to see wild animals. Also, from this investigation, the tourists' satisfaction motivated them to share their experiences with their friends and to revisit the Reserve. Future visitors' arrival at the Tabin Wildlife Reserve is anticipated to increase. Nevertheless, this study revealed that Tabin's tourists' wildlife-viewing satisfaction did not influence the tourists' awareness level or their interest to do conservation. Wildlife-viewing at Tabin Wildlife Reserve has an impact only on financing the conservation of wildlife. While wildlife-viewing is good for tourism, it may not be necessary to the conservation awareness of a particular wildlife. This was because the tourists were already aware about wildlife conservation before visiting the Reserve. Instead, wildlife-viewing affected the

tourists' relationship with locals. The effects were positive, and it was because there is a sharing of information between tourists and locals. Wildlife-viewing satisfaction could improve hospitality between hosts and guests; and for this, further investigation is needed.

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