

Redefining Nature-Based Tourism in Malaysia: Activities and Nature Sites

Surya Ayu Sabaruddin¹, Salamiah A Jamal², Hassnah Wee³

¹SAITO University College, Malaysia, ^{2,3}Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, 42300 Puncak Alam, Selangor, Malaysia
Corresponding Author Email: drsalamiah@uitm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i5/17016> DOI:10.6007/IJARBSS/v13-i5/17016

Published Date: 05 May 2023

Abstract

Nature-based tourism has recently been the tourism industry's focus, and nature has become a tourist attraction worldwide. The increased activities and participation in this type of tourism have escalated the growth of research within the area. Malaysia's current definition of nature-based tourism is vague, narrow, and fragmented. As nature-based tourism is an essential component of the country's tourism industry, it is necessary to redefine nature-based tourism since its features vary from one destination to another. Hence, this paper proposes to compile and categorise nature-based tourism in Malaysia. The objective was achieved through a content analysis of the different definitions used in selected developed and developing economies that were available in the published literature. This study identified and synthesized 92 articles from 1979 to 2022 using an extensive literature search on nature-based tourism of research interest. With a clear insight into what nature-based tourism should ideally encompass, the findings from the study should assist stakeholders in re-positioning nature-based tourism as a critical niche industry and boosting domestic tourism.

Keywords: Nature-based Tourism, Nature-Based Tourist, Nature Travel, Park, Ecotourism

Introduction

The COVID-19 pandemic has seen the rise of domestic travel, creating multiple segments of tourists and has changed the ways of travel businesses and destination choices (Haliza, 2020). With domestic travel recovering more quickly than international travel, people's preferences for long-distance destinations have also changed to smaller and closer locations (Gyimóthy, 2022). Malaysia has also announced a 'green travel bubble' to accelerate growth in the domestic tourism sector (Aiman, 2020). Hence, many proactively start travelling to local destinations to relieve stress due to MCO (movement control order). Ecotourism destinations are among the tourism sites that have been allowed to resume their operation, thus bringing good news for nature lovers to satisfy their desire for nature-related activities (Goh, 2020). As a result, there is a need for constant reorganisation in the processes, management, and marketing strategies of tourism products to ensure that specific businesses remain relevant to the changing tourism time (Roult et al., 2016).

However, many travel organisations have yet to exploit the full potential of nature-based tourism destinations despite the staggering reports on how participating in nature-based activities could be a way to improve people's physical and mental health (Sia, 2020). Thus, regular physical activity lowered the risk of more than 20 chronic illnesses, including diabetes, hypertension, cardiovascular disease, and cancer (Remme et al., 2021). It also believes that the physical enjoyment of untouched natural landscapes through nature-based tourism is a significant factor in helping individuals recover from stress and mental exhaustion (Qui et al., 2021). According to Saatchian et al (2021), physical activity is essential to mental health and cognitive function as it can prevent and reduce depressive symptoms and anxiety. COVID-19 is bringing global tourism to a grinding halt, and thousands of people are now more concentrated on experiencing travel outside their homes (De Hass et al., 2020). The trends in people's activities, how they function, and how they move in everyday life have also changed (Nair & Sinha, 2020).

Before the COVID-19 pandemic, nature-based travel had become popular, especially among local tourists, and it has depicted an upward trend in Malaysia and globally (Cockrell, 2020). These spikes of interest happened especially in nature as many travelers are looking for natural habitats on the staycation route. Despite several studies reported that visiting nature-based destinations is strongly associated with psychological factors and wellness (Saatchian et al., 2021; Sia et al., 2020; Twohig-Bennett & Jones, 2018; De Vries et al., 2003; Swarbrooke et al., 2003), in Malaysia, the stand of this specific segment remains unknown.

Literature Review

Nature-based Tourism Definitions

Nature-based tourism has been generally defined as tourism based on the enjoyment of natural areas, which has a low impact environmentally and contributes socially to the country (Lucas, 1985). Many social analysts have also discussed that nature-based tourism worked as a subset of a larger class of tourism styles or developments. According to Larman and Durst (1987), nature-oriented tourism is any tourism activity involving education, recreation, and adventure.

Meanwhile, Deady and Schwartzman (1990) described nature-based tourism as tourism activities related to education and the environment. Alaeddinoglu and Can (2011) added that nature-based tourism relates to places far away from settlements in relatively natural places concerned with the immediate enjoyment of undisturbed areas of nature. Nature includes ecotourism, adventure tourism, extractive tourism, wildlife tourism, and nature retreats (PATA, 2015). It contains scenic beauty, beaches and marine areas, flora and fauna, and parks and conservation areas that are part of tourist attractions (Goh, 2017).

According to Boo (1990); Lang and O'Leary (1997), nature-based tourism is also synonymous with ecotourism, where people travel to undisturbed or uncontaminated natural areas to study, admire, and enjoy the scenery and wild plants and animals, including cultural manifestations. Many researchers did relate nature-based tourism with ecotourism as it also referred to activities that involved undisturbed natural areas with the objectives to study, enjoy the scenery, view wild animals and plants, and learn about and participate in cultural features found in those areas (Table 1).

Table 1

Various terms are used to refer to nature-based tourism (NBT)

Author	Other terms for NBT
<i>Valentine (1993)</i>	Nature-based tourism Nature travel Nature-oriented tourism Environment-friendly tourism Environmental pilgrimage Sustainable tourism Alternative tourism Ethical tourism Soft tourism Eco-tourism Nature tourism Wildlife tourism Green tourism Special interest tourism Appropriate tourism Responsible tourism Community-based tourism Soft and hard tourism
<i>Mirzae (2013)</i>	Nature-oriented tourism Nature travel Wildlife tourism Environmental pilgrimage Ecotourism Ethical tourism Nature tourism Soft tourism Special interest tourism Agr tourism Green tourism Agricultural tourism Farm tourism Alternative tourism Adventure tourism Sustainable tourism Educational tourism

Nature-based tourism covers activities people engage in while on holiday, focusing on nature and overnight stays (Tyrväinen & Silvennoinen, 2014). The overnight stay in protected areas can include forests, lakes, the seaside, or the countryside (Fredman & Tyrväinen, 2010).

Types of Nature-Based Tourism

Nature-based tourism is a vital tourism component and can be categorised into several segments, including marine park tourism, cruise ship tourism, cultural heritage tourism, cycle

tourism, ecotourism, geo-tourism, and wildlife tourism (PATA, 2015). Table 2 summarises the possible categories of nature-based tourism.

Table 2

Categories of nature-based tourism (NBT)

Segment	Description	Sub Activity	Location
Marine Park tourism	The recreational activities involved activity in the coastal zone, as well as the adjacent saline waters and scuba diving (Geldenhuis, Van der Merwe, & Slabbert, 2014)	<ul style="list-style-type: none"> ▪ Sailing ▪ Boating ▪ Scuba diving ▪ Sportfishing ▪ Wildlife reserve ▪ Turtle sanctuary ▪ Underwater guiding programme ▪ Whale watching 	Sipadan Island, Sabah Layang-layang Island, Sabah Redang Island, Terengganu Langkawi Island, Kedah Tioman Island, Perak Aur Island, Johor Kapas Island, Terengganu Perhentian Island, Terengganu Mantanani Island, Sabah Matakang Island, Sabah Mabul Island, Sabah Sipadan Island, Sabah Payar Island, Kedah
Cruise tourism	Cruise activities nowadays vary and expand and include nature-related ones (Ward, 2014).	<ul style="list-style-type: none"> ▪ Ice skating ▪ Rock climbing ▪ Golfing ▪ Rollerblading ▪ Wave surfing 	Sunway Pyramid, Kuala Lumpur Jesselton Park, Penang Bukit Keteri, Perlis Templer Park, Selangor Mont Kiara Skatepark, KL Shah Alam skatepark, Selangor Cherating, Pahang Batu Burok, Terengganu
Cycle tourism	This cycling activity promotes appreciation for nature as it is suitable for stimulating the fear and anxiety centres in the brain (Matsuo, 2021).	<ul style="list-style-type: none"> ▪ Mountain biking ▪ Day-trip trail cycling ▪ City cycling 	Cameron Highlands, Pahang Langkawi Island, Kedah Genting Sempah, Pahang Shah Alam, Selangor
Ecotourism	Nature tourism is when the traveller visits a	<ul style="list-style-type: none"> ▪ Visiting wildlife ▪ Visiting the 	Sepilok Orang Utan, Sabah

	destination with indigenous interest in one or more features of that destination's natural history (Swarbrooke, 1999).	with indigenous community		Mossy Forest, Pahang Baru 12, Gombak Selangor Mah Meri Cultural Village, Selangor
Geo-tourism	Featuring geological features encompassing several attributes, including geology, tourism, geo site visits, and interpretation (Dowling, 2013).	▪ Cave ▪ Waterfalls ▪ Karst environment		Niah Caves, Sarawak Kota Tinggi, Johor Mulu National Park, Sabah
Wildlife tourism	It comprises viewing wild animals in their natural habitats (UNWTO, 2020).	▪ Safari tours ▪ Mountain tourism		Taiping Zoo, Perak Mt Kinabalu, Sabah
Adventure tourism	Activities involve natural areas that specialise in sports and use a tool to stimulate excitement among the participants (Buckely, 2007).	▪ Whitewater rafting ▪ Parasailing ▪ Paragliding		Gopeng, Perak Ulu Slim River, Perak Langkawi Island, Kedah Kuala Kubu Bharu, Selangor

Nature-Based Tourism Sites in Malaysia

Malaysia is a green country with diverse natural resources that visitors love to engage in, including tropical rainforests, mountains, hills, islands, beaches, and wildlife (Razak, 2018). Malaysia's unique features are a vital pull factor, especially among foreign tourists (Marzuki et al., 2014). Malaysia has relied heavily on natural resources in its tourism growth and development since the country has an abundance of them to offer.

Across the country, there are more than 54 protected areas across the country, consisting of 1,485 hectares or 4.5 per cent of the country's land surface (Marzuki et al., 2011). These protected areas encompass 28 strict nature reserves, 19 national parks, nine managed nature reserves or wildlife sanctuaries, and one protected landscape. This has justified why nature-based activities were among the fastest-growing tourism products in the country, and the country was well positioned for nature-based tourism (Marzuki et al., 2011).

Natural resource features have been created in Peninsular Malaysia since 1925 (Moste, 1998). The protection of natural marine parks began in the early 1980s which started with Redang Island in Terengganu, which later was classified as a Marine Protected Area for the waters within 8 km surrounding the island (Department of Fisheries, 1996; cited in Yacob et al., 2008). In addition, there are 15 sites of nature-based attractions found in south Kelantan. In the northern state of Malaysia, Perlis was found to be a strategic location of natural resources and has the potential to be developed as a nature-based tourism site (Marzuki et al., 2014).

Malaysia has many national and state parks that offer unique wildlife and lush tropical rainforests. This study catalogued the national parks (Table 3) and stated parks according to 15 states (Table 4). There are six listed national parks in Malaysia, including Royal Belum Park

(Perak), Endau Rompin National Park (Johor), Batang Ai National Park (Sarawak), Kinabalu Park (Sabah), and Penang National Park (Penang) (Chin, 2018).

Table 3

National Park

No.	Parks
1.	Taman Negara National Park, Pahang
2.	Endau Rompin National Park, Johor
3.	Gunung Ledang National Park, Johor
4.	Penang, National Park, Penang
5.	Gunung Mulu National Park, Sarawak
6.	Niah National Park, Sarawak
7.	Kinabalu Park, Sabah

Sources: Amanda (2021); Chin (2018); Backhaus (2006)

Table 4

State parks, forest reserves, and other conservation areas

State	Parks
Perlis	Perlis State Park Bukit Ayer Recreational Forest
Kedah	Pedu Lake Ulu Muda Forest Reserve Bukit Hijau Recreational Forest Jeram Kedah Waterfall, Kedah
Penang	Bukit Panchor State Park Bukit Mertajam Recreational Park
Perak	Royal Belum State Park Kuala Gula Bird Sanctuary Matang Mangrove Forest Reserve Sungai Wildlife Reserve Temenggor Forest Reserve Hutan Lipur Ulu Licin Beruas Lenggeng Recreational Forest
Selangor	Ampang Forest Reserve, Selangor Ayer Hitam Forest Reserve, Selangor Bukit Besi Alam Damai, Selangor Bukit Gasing Forest Park, Selangor Bukit Jalil Park, Selangor Bukit Kembara, Selangor Bukit Putih, Selangor Bukit Sri Bintang, Selangor Commonwealth Forest Park, Selangor Forest Research Institute Malaysia (FRIM), Selangor Kanching Forest Reserve, Selangor Kota Damansara Community Forest Reserve, Selangor Kuala Selangor Nature Park, Selangor Sungai Congkak, Selangor

	Sungai Dusun Wildlife Conservation Centre Sungai Gabai Waterfall, Selangor Templer Park, Selangor Sungai Sendat, Selangor Sungai Tekala Recreational Forest, Selangor Sungai Tua, Selangor
Kuala Lumpur	Ketumbar Hill, Kuala Lumpur
Putrajaya	Paya Indah Wetlands, Putrajaya
Terengganu	Tasik Kenyir Bakau Tinggi Recreational Park Rantau Abang Turtle Sanctuary
Pahang	Kenong Rimba Park Tasik Bera Lata Jarum & Pulau Chekas Kuala Gandah Elephant Sanctuary Kuala Woh Recreational Forest Pahang Lata Jarum & Pulau Chekas
Kelantan	Gunung Stong State Park, Kelantan
Johor	Pulau Kukup Kota Tinggi Waterfalls Tanjung Piai, Johor
Melaka	Sungai Udang Recreational Forest
Negeri Sembilan	Jeram Tengkek Forest Eco-Park, Negeri Sembilan Kenaboi State Park, Negeri Sembilan Sungai Menyala Edu-Ecotourism Centre
Sabah	Tunku Abdul Rahman Park Pulau Tiga Park Turtle Islands Park Tun Sakaran Marine Park Sipadan Island Park Tun Mustapha Park Crocker Range Park Tawau Hills Park
Sarawak	Lambir Hills National Park Similajau National Park Gunung Gading National Park Kubah National Park Loagan Bunut National Park Talang Satang National Park Maludam National Park Santubong National Park Bako National Park Batang Ai National Park Gunung Gading National Park Kubah National Park Lambir Hills, National Park Laogan Bunut, National Park

Maludam National Park
Matang Wildlife Centre
Sama Jaya Nature Reserve
Semenggoh Nature Reserve
Bukit Lima Nature Reserve
Piasau Nature Reserve
Bukit Sembiling Nature Reserve
Bukit Hitam Nature Reserve

Sources: Malaysian National Parks Forest Reserves & Recreational Parks (2021); Sarawak Forestry (2021); Sabah Parks (2021)

Nature-Based Tourist

According to the International Ecotourism Society (2000), 60 percent of international tourists can be considered nature-based tourists. According to a World Resource Institute report, the demand for this type of tourism keeps increasing and has gained popularity over the last decade (Arnegger et al., 2010; Frost & Hall, 2009; Huybers & Bennett, 2003; Kim et al., 2015; Lee et al., 2013; Luo & Deng, 2008; Mehmetoglu, 2005). Some people love to explore the natural environment and resources as the primary purpose of travelling (Beh & Bruyere, 2007; Luo & Deng, 2008; O'Neil et al., 2010). For tourists, getting in touch with local people, understanding the ecosystem, and participating in conserving natural resources bring meaningful experiences and contribute to their well-being and happiness (Calderón et al., 2022).

Various scholars developed tourist typologies by considering pluralistic patterns instead of grouping the tourists (Hamilton-Smith, 1987; Mo et al., 1993; Pearce, 1982; Yannakis & Gibson, 1992). Various typologies discovered different types of nature-based experiences, activities, and tourists. According to Laarman and Durst (1987), the categories of hard and soft nature tourists are determined based on tourist interest and the physical attitude involved during nature activities. Lindberg (1991) added four classifications from binary typologies: hard-core nature tourists, dedicated nature tourists, mainstream nature tourists, and casual nature tourists.

A hard-core nature tourist refers to scientific researchers or members of tours who engage in activity for education, removal of litter, or similar purposes, while dedicated nature tourists are those who take trips to undisturbed areas to understand local, natural, and cultural history. The mainstream nature tourist visits exotic destinations such as Rwanda Gorilla Park or Amazon, while the casual nature tourists are those who engage with nature as part of a broader trip (Lindberg, 1991). Acott et al (1998) added that the range from egocentrism to anthropocentrism is where an individual is believed to be an ecotourist in any location.

Cohen (1979) has classified tourists into institutionalisation, drifter, explorer, individual mass tourist, and organised mass tourist. Yannakis and Gibson (1992) added ten more types of tourists: sun lovers, action seekers, anthropologists, archaeologists, thrill seekers, jet setters, seekers, high-class tourists, escapists, and sports lovers. Cohen's typology has suggested the different types of nature-based tourism from one extreme to another, where the individuals are divided into opposites identified as specialists and generalists. The non-institutionalised tourist is among drifters or explorers, whereby the latter refers to institutionalised tourists among mass or individual mass tourists.

Perceived Benefits and Motivation of Nature-Based Tourists

According to a WHO (2020) survey of 130 countries, including Asia Pacific countries, the pandemic has disturbed mental health to the point where the demand for care is increasing, and the urgent need for funding is crucial. Many people have triggered mental health conditions due to income loss, loved ones, isolation due to Movement Control Orders (MCOs), and many more. Thus, increased drug and alcohol usage levels, insomnia, and anxiety have been observed as many people face unmanageable stress. Following this, nature-based tourism and participating in related activities could be one way to improve people's physical and mental health during epidemics. As Saatchian et al (2021) highlight, physical activity is essential to mental health and cognitive function as it prevents and reduces depressive symptoms and anxiety.

Studies suggest that different types of trips, such as nature-based, educational, cultural, and pilgrimage tourism, directly affect subjective well-being (Uysal et al., 2012). Emotional well-being is essential to determine the individual's feelings toward life and the perception of the individual to achieve what they want in life (Veenhoven, 1991). Palacio and McCool (1997) concluded from a case study of visitors to Belize that the four aspects that tourists perceived as the benefits of nature-based tourism or ecotourism include escape, learning about nature, health enhancement, and cohesiveness.

Motivation is the main factor that derives all actions and understanding of tourism behaviour in choosing a destination (Mansfeld, 1992). It is essential regarding psychological needs and wants, which affect people's behavioural activity, including the integral dimension (Pearce & Caltabiano, 1983). Many motivation factors encourage tourists to get involved with nature, such as seeing wildlife before it is too late and a desire to escape the routine day of life. Tourists can engage in many interests and activities with nature, such as trekking, bird watching, canoeing, white-water rafting, and kayaking (Whelan, 1991).

Eagles (1992) discovered different motivations of nature-based tourists, including those looking to experience new lifestyles, visit rural areas or coastal scenery, and meet new friends with similar interests. Holden and Sparrowhawk (2002) later identified five comprehensive motivational factors that encouraged people to travel to nature-based destinations: relaxation, thrills and excitement, social interaction, self-esteem, and development.

Meanwhile, in studies in specific areas such as a national park in North Western Thailand, the visitor's motivation ranges from discovering birds and wildlife, scenery and waterfalls, culture and hill tribes, natural environment, vacation, and physical activities (Hvenegaard, 2002). Meng et al (2006) discovered four main reasons for visiting a nature-based resort in Southwest Virginia: relaxation, novelty, gathering with family and friends, and engaging in nature-based related activities. Mehmetoglu (2007) identified the primary travel motivation among nature-based tourists in northern Norway: enjoying nature, participating in physical activities, learning new things, and experiencing recent activities. Luo and Deng (2008), in their examinations of tourists visiting a national forest park in China, revealed novelty/self-development, return to nature, knowledge, and fitness as motivational factors. Raadik et al (2010) listed self-discovery, experiencing places, seeking solitude, and challenging oneself as the main motives of tourists visiting a national park in Sweden.

Discussion

Nature-based tourism has gained popularity at a rapid pace all over the world in the last decade (Dowling, 2011; Newsome & Dowling, 2010). It can be concluded that many researchers have looked into nature-based tourism (Orams, 1996; Bruner & Rosenfeld, 1999;

Weaver, 2001; Hall & Boyd, 2005; Marzuki et al., 2011; Marzuki et al., 2014) and the number of tourists getting increased focus on visiting national parks and protected areas (Huybers & Bennett, 2003; Lee et al., 2013; Luo & Deng, 2008; Mehmetoglu, 2005; Uysal et al., 1994; Weaver, 2005; Arnegger et al., 2010; Frost & Hall, 2009). Many tourists are looking for an opportunity to get in touch with nature, understand the ecosystem, and be involved in conserving natural resources.

Many categorised NBTs have been discussed in previous research, including marine park tourism, cruise tourism, cycle tourism, ecotourism, geo-tourism, wildlife tourism, adventure tourism, island bird sanctuary, underwater guiding programme, whale watching, wilderness safari, and many more. Malaysia has many spectacular natural destinations aged over 100 years and provides excellent sites for nature-based tourism. Malaysia's unique factors can be a vital pull factor, especially among foreign tourists (Marzuki et al., 2014). The national parks and protected areas created in Peninsular Malaysia since 1925 are essential attributes of natural resources (Moste, 1998; cited in Yacob et al., 2008).

Since the COVID-19 pandemic, many people have been searching for nature-based activities which they believe can improve physical and mental health (Calderón et al., 2022; Nordin & Jamal, 2021; Sia, 2020) after long movement control order periods implemented by governments starting from March 2020. This shows how important it is for travel organisations to utilise the full potential of nature-based tourism destinations in better showcasing their product. Thus, the finding from this study in compiling the NBT and categorising the site should assist travel organisations in focusing on and developing potential activities for tourist participation shortly that will affect choices made on impulse (Mehmetoglu, 2013).

This paper reviews the literature on redefining nature-based tourism within hospitality and tourism, which is relevant to current studies. Research gaps and direction for future empirical research should include (a) subjective norms, including motivation, perceived value, destination image, and eWOM, and (b) social norms based on psychological well-being as an indicator of a traveller's willingness to revisit intention. A conclusive framework that looks into the demand side of NBT needs to be proposed to achieve a more comprehensive view. Additionally, data on tourist profiles, such as demographic and the tourist's psychological well-being, can be an advantage for nature-based tourism companies to produce better offerings to the tourists.

Acknowledgement

This study was made possible by the continuous support from Universiti Teknologi MARA UiTM. Grant: 600-RMC/GPK 5/3 (050/2020).

Corresponding Author

Salamiah A Jamal. Faculty of Hospitality and Tourism Management, Universiti Teknologi MARA Cawangan Selangor, Malaysia
Email: drsalamiah@uitm.edu.my

References

Abdul Razak, N. (2018). From hunting to adventure with nature: Analysing the representation of natural tourism attractions in Malaysia (Dari memburu ke kembara alam: Analisis representasi tarikan pelancongan berasaskan alam semula jadi di Malaysia). *Journal of Business and Social Development*, 6(1), 15-28.

- Acott, T. G., Latrobe, H. L., and Howard, S. H. (1998). An Evaluation of Deep Ecotourism and Shallow Ecotourism. *Journal of Sustainable Tourism* 6(3): 238-253
- Alaeddinoglu, F., & Can, A. S. (2011). Identification and classification of nature-based tourism resources: Western Lake Van basin, Turkey. *Procedia-Social and Behavioral Sciences*, 19,198-207. <https://10.1016/j.sbspro.2011.05.124>
- Aiman, A. (2020). Govt approves 'green travel bubble' to boost domestic tourism. *Freemalaysiatoday*.
<https://www.freemalaysiatoday.com/category/nation/2020/11/20/govt-approves-green-travel-bubble-to-boost-domestic-tourism/>
- Amanda. K. (2021). 7 National Parks in Malaysia. Retrieved from <https://www.sgmytaxi.com/malaysia-national-parks/#5>
- Arnegger, J., Woltering, M., & Job, H. (2010). Toward a product-based typology for nature-based tourism: A conceptual framework. *Journal of Sustainable Tourism*,18(7), 915–928. <https://doi:10.1080/09669582.2010.485680>
- Backhaus, N. (2006). *Tourism and Nature Conservation in Malaysian National Parks*. Transaction Publisher.
- Balmford, A., Beresford, J., Green, J., Naidoo, R.,Walpole, M., & Manica, A. (2009). A global perspective on trends in nature-based tourism. *PLoS Biology*,7(6), e1000144. <https://doi:10.1371/journal.pbio.1000144>.
- Beh, A., & Bruyere, B. L. (2007). Segmentation by visitor motivation in three Kenyan national reserves. *Tourism Management*, 28(6), 1464–1471. <https://doi.org/10.1016/j.tourman.2007.01.010>
- Boo, E. (1990). *Ecotourism: The Potential and Pitfalls*, Volume 1 and 2, World Wide Fund for Nature, Washington, D.C.
- Bruner, A., & Rosenfeld, A. (1999). *The Green Host Effect: An Integrated Approach to Sustainable Tourism and Resort Development*. Washington, DC: *Conservation International*.
- Buckley, R. (2007). Adventure tourism products: price, duration, size, skill, remoteness. *Tourism Management*, 28, 1428e1433. <https://doi.org/10.1016/j.tourman.2006.12.003>
- Chin.C. (2018). 6 Magnificent national parks in Malaysia. *The Star*. <https://www.thestar.com.my/lifestyle/travel/2018/10/23/go-back-nature-6-magnificent-national-parks-Malaysia>
- Cockrell, R. (2020). Malaysia bets on domestic tourism, and nature attractions are tipped to do well. <https://www.webintravel.com/malysias-focus-on-domestic-tourism-will-pave-the-way-for-travel-recovery/>
- Cohen, E. (1979). A phenomenology of tourist experiences. *Sociology*, 13(2), 179–201.
- Deady, T. and Schwartzman, M. T. (1990). Ecotourism: Travelling to Save the Planet, *Travel Weekly*, 48(84), 8–9.
- De Vries, S., Verheij, R. A., Groenewegen, P. P., & Spreeuwenberg, P. (2003). Natural environments—healthy environments? An exploratory analysis of the relationship between greenspace and health. *Environment and Planning A*, 35(10), 1717-1731. <https://doi.org/10.1068/a35111>
- Dowling, R. K., & Newsome, D. (Eds.). (2010). *Global geotourism perspectives*. Oxford, UK: Goodfellow Publishers.
- Dowling, R. K. (2011). Geotourism's global growth. *Geoheritage*, 3(1), 1-13.
- Dowling, R. K. (2013). Global geotourism—an emerging form of sustainable tourism. *Czech Journal of Tourism*, 2(2), 59-79.

- Eagles, P. F. J. (1992), "The travel motivations of Canadian ecotourists", *Journal of Travel Research*, 31(2), 3-7. <https://doi.org/10.1177/004728759203100201>
- Fredman, P., & Tyrva"inen, L. (2010). Frontiers in nature-based tourism. *Scandinavian Journal of Hospitality and Tourism*, 10(3), 177–189. <https://doi:10.1080/15022250.2010.502365>
- Frost, W., & Hall, C. M. (2009). *Tourism and national parks. International perspectives on development, histories and change.* New York, NY: Routledge.
- Geldenhuys, L. L., Van der Merwe, P., & Slabbert. (2014). Who is the scuba diver that visits Sodwana Bay and why? *South African Journal for Research in Sport, Physical Education and Recreation*, 36(2), 91–104. <https://hdl.handle.net/10520/EJC159567>
- Goh, H. C. (2017). Nature and Community-based tourism (CBT) for poverty alleviation: A case study of Lower Kinabatangan, East Malaysia. *Geografia-Malaysian Journal of Society and Space*, 11(3).
- Goh, M. L. (2020). Time to give locals more Cuti-Cuti Malaysia options. The Star. https://www.thestar.com.my/lifestyle/travel/2020/07/29/time-for-more-options-for-cuti-cuti-malaysia?__sta=%7CYQTI&__stm_medium=bpn&__stm_source=smartech
- Gyimothy, S., Braun, E., & Zenker, S. (2022). Travel-at-home: Paradoxical effects of a pandemic threat on domestic tourism. *Tourism Management*, 93, 104613. <https://doi.org/10.1016/j.tourman.2022.104613>
- Haliza, A. R. (2020). Merangsang Sektor Pelancongan Domestik Pasca PKP, Keperluan Melestari Alam. <https://www.bernama.com/bm/tintaminda/news.php?id=1874166>
- Hall, C. M., and Boyd, S. (2005), *Nature Based Tourism in Peripheral Areas*, Channel View Publications, Clevedon.
- Hamilton-Smith, E. (1987). Four kinds of tourism? *Annals of Tourism Research*, 14(3), 332–344. [https://doi.org/10.1016/0160-7383\(87\)90106-X](https://doi.org/10.1016/0160-7383(87)90106-X)
- Hvenegaard, G. T. (2002). Using tourist typologies for ecotourism research. *Journal of Ecotourism*, Vol. 1 No. 1, pp. 7-18. <https://doi.org/10.1080/14724040208668109>
- Holden, A., and Sparrowhawk, J. (2002). Understanding the motivations of ecotourists: the case of trekkers, in Annapurna, Nepal. *International Journal of Tourism Research*, Vol. 4 No. 6, pp. 435-446. <https://doi.org/10.1002/jtr.402>
- Huybers, T., & Bennett, J. (2003). Environmental management and the competitiveness of nature-based tourism destinations. *Environmental and Resource Economics*, 24(3), 213–233. <https://doi:10.1023/A:1022942001100>.
- Kim, H., Lee, S., Uysal, M., Kim, J., & Ahn, K. (2015). Nature-based tourism: Motivation and subjective well-being. *Journal of Travel & Tourism Marketing*, 32(sup1), S76-S96. <https://doi.org/10.1080/10548408.2014.997958>
- Laarman, J. G., and Durst, P. B. (1987) 'Nature Travel in the Tropics', *Journal of Forestry*, 85(5): 43–6. <https://doi.org/10.1177/0047287588026003>
- Lang, C.-T., and O'Leary, J. T. (1997) 'Motivation, Participation, and Preference: A Multi-Segmentation Approach of the Australian Nature Travel Market', *Journal of Travel and Tourism Marketing*, 6(3/4): 159–80. https://doi.org/10.1300/J073v06n03_10
- Lee, S., Lee, S., & Lee, G. (2013). Ecotourists' motivation and revisit intention: A case study of restored ecological parks in South Korea. *Asia Pacific Journal of Tourism Research*, 2013, Online published. <https://doi:10.1080/10941665.2013.852117>.
- Lindberg, K. (1991). Policies for maximizing nature tourism's ecological and economic benefits (pp. 1–37). International conservation financing project working paper, Washington, DC: World Resources Institute.

- Lucas, P. H. C. (1985). How protected areas can help meet society's evolving needs. In *National parks, conservation, and development. The role of protected areas in sustaining society. Proceedings of the World Congress on National Parks, Bali, Indonesia, 11-12 October 1982* (pp. 72-77). Smithsonian Institution Press.
- Luo, Y., and Deng, J. (2008), "The new environmental paradigm and nature-based tourism motivation", *Journal of Travel Research*, 46 (4), 392-40. <https://doi.org/10.1177/0047287507308331>
- Malaysia Tourism Promotion Board (MTPB). (2021). Retrieved from <https://www.tourism.gov.my/niche/diving>
- Malaysian National Parks Forest Reserves and Recreational Parks. (2021). Retrieved from www.malaysia-traveller.com
- Mansfeld, Y. (1992). From motivation to actual travel. *Annals of Tourism Research*, 19, 399–419. [https://doi.org/10.1016/0160-7383\(92\)90127-B](https://doi.org/10.1016/0160-7383(92)90127-B)
- Marzuki, A., Hussin, A. A., Mohamed, B., Othman, A. G., & Som, A. P. M. (2011). Assessment of nature-based tourism in South Kelantan, Malaysia. *Tourismos*, 6(1). <https://doi.org/10.26215/tourismos.v6i1.209>
- Marzuki, A., Rofe, M., & Hashim, M. N. A. (2014). Disputes on Nature-Based Tourism Development in Northern Peninsular Malaysia. *Tourism Analysis*, 19(4), 525–530. <https://doi.org/10.3727/108354214x14090817031314>
- Matsuo, B. (2021). *Every day is a journey, And the journey itself is home. Travel health, LLC.* <https://www.travelbughealth.com/bugs-blog/10-health-benefits-of-mountain-biking>
- Mehmetoglu, M. (2005). A case study of nature-based tourists: Specialists versus generalists. *Journal of Vacation Marketing*, 11(4), 357-369. <https://doi.org/10.1177/1356766705056634>
- Mehmetoglu, M. (2007), "Typologising nature-based tourists by activity—theoretical and practical implications", *Tourism Management*, 28 (3), 651-660. <https://doi.org/10.1016/j.tourman.2006.02.006>
- Mehmetoglu, M., & Normann, O. (2013). The link between travel motives and activities in nature-based tourism. *Tourism review*. <https://doi.org/10.1108/TR-02-2013-0004>
- Meng, F., Tepanon, Y., and Uysal, M. (2006), "Measuring tourist satisfaction by attribute and motivation: the case of a nature-based resort", *Journal of Vacation Marketing*, 14 (1), 41-56. <https://doi.org/10.1177/1356766707084218>
- Mirzaei, R. (2013). Modeling the Socioeconomic and Environmental Impacts of Nature-Based Tourism to the Host Communities and their Support for Tourism. Perceptions of Local Population: Mazandaran, North of Iran. Licentiate thesis. University of Giessen for the degree of Dr.rer.nat
- Mo, C.-M., Howard, D. R., & Havitz, M. E. (1993). Testing an international tourist role typology. *Annals of Tourism Research*, 20(2), 319–335. [https://doi.org/10.1016/0160-7383\(93\)90058-B](https://doi.org/10.1016/0160-7383(93)90058-B)
- Nair, B. B., & Sinha, S. (2020). COVID-19 and future travel decisions: How do the destination-choice-based motivators redefine tourist's choices? *Enlightening Tourism. A Pathway Journal* 10(2), 306-322.
- Nordin, M. R., & Jamal, S. A. (2021). Hiking Tourism in Malaysia: Origins, Benefits and Post Covid-19 Transformations. *International Journal of Academic Research in Business and Social Sciences* 11(13), 88-100.

- O'Neill, M. A., Riscinto-Kozub, K. A., & Van Hyfte, M. (2010). Defining visitor satisfaction in the context of camping oriented nature-based tourism—the driving force of quality!. *Journal of Vacation Marketing*, 16(2), 141-156. <https://doi.org/10.1177/1356766710364541>
- Orams, M. B. (1996). Using interpretation to manage nature-based tourism. *Journal of Sustainable tourism*, 4(2), 81-94. <https://doi.org/10.1080/09669589608667260>
- PATA. (2015). Nature based tourism. Retrieved from <https://sustain.pata.org/sustainable-tourism-online/parks-culture/nature-based-tourism/forms-of-nature-based-tourism/nature-based-tourism/>
- Palacio, V., and McCool, S. F. (1997), "Identifying ecotourists in Belize through benefit segmentation: a preliminary analysis", *Journal of Sustainable Tourism*, 5 (3), 234-243. <https://doi.org/10.1080/09669589708667288>
- Pearce, P. L. (1982). *The social psychology of tourist behaviour* (Vol. 3). Oxford: Pergamon Press.
- Pearce, P. L., & Caltabiano, M. L. (1983). Inferring travel motivation from travelers' experiences. *Journal of travel research*, 22(2), 16-20. <https://doi.org/10.1177/004728758302200203>
- Qiu, M., Sha, J., & Scott, N. (2021). Restoration of visitors through nature-based tourism: A systematic review, conceptual framework, and future research directions. *International Journal of Environmental Research and Public Health*, 18(5), 2299. <https://doi.org/10.3390/ijerph18052299>
- Raadik, J., Cottrell, S. P., Fredman, P., Ritter, P., and Newman, P. (2010), Understanding recreational experience preferences: application at Fulufjället National Park, Sweden, *Scandinavian Journal of Hospitality and Tourism*, 10 (3), 231-247. <https://doi.org/10.1080/15022250.2010.486264>
- Razak, N. A. (2018). From hunting to adventure with nature: Analysing the representation of natural tourism attractions in Malaysia (Dari memburu ke kembara alam: Analisis representasi tarikan pelancongan berasaskan alam semula jadi di Malaysia). *Journal of Business and Social Development*, 6(1), 15-28. <https://repo.uum.edu.my/id/eprint/27776>
- Remme, R. P., Frumkin, H., Guerry, A. D., King, A. C., Mandle, L., Sarabu, C., Han, B. (2021). An ecosystem service perspective on urban nature, physical activity, and health. *Proceedings of the National Academy of Sciences*, 118(22), e2018472118. <https://doi.org/10.1073/pnas.2018472118>
- Roult, R., Gaudette, M., Auger, D., & Adjizian, J. M. (2016). Site management and use of social media by tourism businesses: the case of Québec. *Czech Journal of Tourism*, 5(1), 21-34.
- Parks, S. (2021). The board of trustees of the Sabah Parks. Retrieved from <http://www.sabahparks.org.my/>
- Sarawak Forestry Corporation., (2021). National Parks. Retrieved from <https://sarawakforestry.com/national-parks/>
- Sia, A., Tam, W. W., Fogel, A., Kua, E. H., Khoo, K., & Ho, R. C. (2020). Nature-based activities improve the well-being of older adults. *Scientific Reports*, 10(1), 1-8. <https://doi.org/10.1038/s41598-020-74828-w>
- Swarbrooke, J. (1999). *Sustainable tourism management*. Cabi.
- Twohig-Bennett, C., & Jones, A. (2018). The health benefits of the great outdoors: A systematic review and meta-analysis of greenspace exposure and health outcomes. *Environmental Research*, 166, 628-637. <https://doi.org/10.1016/j.envres.2018.06.030>

- Tyrvainen, L., Uusitalo, M., Silvennoinen, H., & Hasu, E. (2014). Towards sustainable growth in nature-based tourism destinations: Clients' views of land use options in Finnish Lapland. *Landscape and Urban Planning*, 122, 1-15. <https://doi.org/10.1016/j.landurbplan.2013.10.003>
- Swarbrooke, J., Beard, C., Leckie, S., & Pomfret, G. (2003). *Adventure Tourism: The New Frontier*. New York: Routledge. <https://doi.org/10.4324/9780080469812>
- Swarbrooke, J. 1999. *The Development and Management of Visitor Attractions*. Oxford: Linacre House.
- Tyrvainen, L., Silvennoinen, H., Nousiainen, I., & Tahvanainen, L. (2001). Rural tourism in Finland: Tourists' expectation of landscape and environment. *Scandinavian Journal of Hospitality and Tourism*, 1(2), 133-149.
- UNWTO. (2020). Wildlife is our world heritage. Retrieved from <https://www.unwto.org/asia/unwto-chimelong-why-wildlife>
- Uysal, M., McDonald, C. D., & Martin, B. S. (1994). Australian visitors to U.S. national parks and natural areas. *International Journal of Contemporary Hospitality Management*, 6(3), 18-24. <https://doi:10.1108/09596119410059209>.
- Uysal, M., Perdue, R., & Sirgy, R. (2012). *Handbook of tourism and quality-of-life research: Enhancing the lives of tourists and residents of host communities*. Dodrecht: Springer.
- Valentine, P. S. (1993). Ecotourism and nature conservation. *Tourism Management*, 14(2), 107-115. [https://doi:10.1016/0261-5177\(93\)90043-k](https://doi:10.1016/0261-5177(93)90043-k).
- Veenhoven, R. (1991). Is happiness relative? *Social Indicators Research*, 24,1-34. <https://doi:10.1007/BF00292648>.
- Ward, D. (2014). *Berlitz Cruising & Cruise Ships 2015*: Berlitz Travel.
- Weaver, D. (Ed.) (2001), *The Encyclopedia of Ecotourism*, CABI Publishing, Wallingford.
- Weaver, D. B. (2005). Comprehensive and minimalist dimensions of ecotourism. *Annals of Tourism Research*, 32(2), 439-455. <https://doi:10.1016/j.annals.2004.08.003>
- Whelan, T. (1991). *Nature tourism: Managing for the environment*. Washington, D.C: Island Press.
- WHO. (2020). COVID-19 disrupting mental health services in most countries, WHO survey. Retrieved from <https://www.who.int/news/item/05-10-2020-covid-19-disrupting-mental-health-services-in-most-countries-who-survey>.
- Yacob, M. R., Radam, A., & Awang, K. W. (2008). *Economic Valuation: Marine Parks Ecotourism Malaysia*. Serdang: Universiti Putra Malaysia Press. <http://myagric.upm.edu.my/id/eprint/6824>
- Yannakis, A., & Gibson, H. (1992). Roles tourists play. *Annals of Tourism Research*, 19(2), 287-303. [https://doi.org/10.1016/0160-7383\(92\)90082-Z](https://doi.org/10.1016/0160-7383(92)90082-Z)