Francesca Bajada

Of Seabirds and Tourists in Lofoten and Vesterålen

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Supervisor: Jørund Aasetre (NTNU)
Co-supervisor: John Linnell (NINA)

Norwegian University of Science and Technology
Faculty of Natural Science
Department of Geography

NTNU – Trondheim
Norwegian University of
Science and Technology

NINA
Norwegian Institute for Nature Research

Abstract

Wildlife in its various forms, presents an opportunity for tourism and recreation such as bird-watching and whale-watching. The global interest for experiencing and interacting with nature is increasing. Seabirds are amongst the most visible components of the marine environment. They have provided humans with a number of benefits, ranging from food to inspiration for arts and scientific knowledge. The islands of Lofoten and Vesterålen contain fragile marine ecosystems that are inhabited by a diversity of seabirds and marine mammals. The local community has benefited from the scenic landscape and wildlife by utilising these resources for tourism purposes. One method of marketing, improving services and managing wildlife resources is to understand the relationship between humans and nature. My thesis presents a broad outlook on seabird tourism in Lofoten and Vesterålen and the cultural ecosystem services that stem from tourist's interactions with the natural environment. To understand wildlife encounters in Lofoten, I begin with basic questions in tourism research, which are the who, what, when and why, to create a tourist profile. I ask tourists about their motivations to visit Lofoten, their experience of the seabird tour, and their level of environmental concern. I also present an overview of the tourism product itself. My results indicate that seabird tourism addresses more than one type of tourist, from the casual birder to the general naturalist. Seabird tourists are highly motivated to visit Lofoten to be close to nature and to strengthen their kinship relations, and learn about nature. The experience of seabird tourism is regarded as educational and well organised, fulfilling their desires to view different species. The tourists are aware of environmental issues and consider the aesthetic, bequest and existence values of seabirds. Most of the bird islands would be inaccessible without tour operators, and thus they represent an important mediator for capturing nature's benefits.

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Dedication

I would like to express by deepest gratitude towards both John Linnell and Jørund Aasetre for their invaluable guidance in developing my thesis. I extend my gratefulness towards Bjørn Kaltenborn and Jørn Thomassen, two additional project leaders from NINA and Tycho Anker-Nilssen for his knowledge on seabirds in Lofoten. I would like the thank the whole team at NINA for giving me the opportunity to work with them on the TESL Project and carry out fieldwork in Lofoten-Vesterålen. It was most certainly an unforgettable experience. I wish to thank all the tour operators who participated in this study for their time and cooperation. Finally, a special thanks goes towards my parents, Karl and Christine, and my brothers, Julian and Steven, and my dearest friends in Trondheim, Mathias, Henrik and Ana, for their immense support throughout my Master degree.

"Though we travel the world over to find the beautiful,
we must carry it with us or we find it not."
Ralph Waldo Emerson.

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1 Introduction

Wildlife tourism provides an opportunity for people to interact with nature in a diverse number of ways. These interactions range from wildlife safaris in Africa, diving on coral reefs, whale watching, bird watching, visiting wildlife sanctuaries to game fishing and trophy hunting. Amongst all these activities, wild or non-domesticated animals commonly feature as a major part of the tourism experience (Higginbottom, 2004). Wildlife interactions are also dependent on the tour operator or business, the natural resource base, and the overall environmental setting. These related elements have consequences for visitors, the natural environment, the economy and the host community (Higginbottom, Northrope, & Green, 2001). Wildlife tourism is a significant source of economy for developed countries with specialized markets (especially in Europe and North America) as well as areas that are rich in biodiversity (e.g. Tanzania, Kenya, Costa Rica and Ecuador), and for developing rural economies (Fennell and Weaver, 1997; Goodwin et al., 1998). Wildlife tourism therefore has the potential to be one component of sustainable rural economic development.

The individual benefits from experiencing nature and its contribution to human well-being are also well documented in literature (e.g. Ulrich, 1979; Crompton, 1979; Kaplan, 1995; Daily et al., 1997; MA, 2005; Balmford & Bond, 2005; Moscardo, 2009). Such knowledge ascertains that organised tourism plays a special role in connecting people to the environment, restoring their mental and physical states, rekindling human relations and enhancing knowledge. The Millennium Ecosystem Assessment (2005) represents an attempt at holistically framing the interactions that exist between humans and nature. Tourism and the non-material benefits that stem from the ecosystems are both grouped under the label of cultural ecosystem services (CES). This perspective functions in a way that it links planning development with the impacts on human well-being, and serves as a reminder of the need for a holistic approach to managing natural resources. Nature's role should thus be regarded by decision-makers to allow people to reap the greatest number of benefits from nature and enhance their well-being (Willis, 2014).

1.1 Aim

Recreation tourism in outdoor environments and whale tourism are topics that have been well described in Scandinavia (e.g. Kaltenborn & Emmelin, 1993; Kaltenborn, 2000; Parsons & Rawles, 2003; Granquist & Nilsson, 2010; Robertsen, 2013; Mehmetoglu 2007). However,

smaller sectors of nature or wildlife centric tourism are largely understudied. The challenge of niche forms of tourism is to demonstrate that they are better (in terms of economic returns and/or sustainability) than the conventional forms of mass tourism or other sources of livelihoods (such as those based on resource harvest) they seek to replace. This normally requires an understanding of tourist profiles and their experience for the improvement of services (Moscardo, Woods & Greenwood, 2011). In fact, Tangeland (2011) emphasizes the need for empirical research on consumer perspectives of nature tourism. This leads me to my study on understanding the role of nature and its influence on tourism motivation and experiences. The aim of this project thus is to provide information on a poorly studied subject, that of seabird tourism.

1.2 Setting

Wildlife tourism in the form of watching (viewing) is growing on a global scale (Hoyt, 2000; Shackley, 2001; Manfredo, Pierce & Teel, 2002). Wildlife attractions in tourism often fall under one of three categories: either a sizeable congregation of large animals; a single iconic species, usually of a relatively large size (also referred to as charismatic megafauna); or an area of high biological diversity, where a number of different species occur (Higginbottom & Buckley, 2003). Birds tend to lure people, partly because they are relatively easy to sight and identify and partly because at certain periods of time they appear in large numbers. Countries such as Columbia, Ecuador, Venezuela, Peru and Costa Rica stand out because of the diversity of theirs birds and their distinctive characteristics. The wildlife watching needs of birdwatchers are increasingly being met by specialized tours (Valentine & Birtles, 2004).

Many remote oceanic islands that are rich in seabirds and other fauna are inaccessible without a boat. Seabird tour operators and businesses are therefore key providers for experiencing such islands and their wildlife. Far from the tropical zone, the Lofoten-Vesterålen Islands in the north of Norway, have the potential to provide specialized seabird tours. The archipelago has been labelled the ‘seabird capital of mainland Europe’ because it holds one of the highest bird diversities north of the Arctic Circle (Anker-Nilssen, 2006). The Island of Røst, on the tip of Lofoten, is perhaps the most significant of the islands, holding an estimated 10% of the 4.5 million pairs of seabirds breeding on the coasts of the Norwegian Sea (Anker-Nilssen & Lorentsen, 2004). Moreover, the scenic landscape carved out of ice and water, with jagged mountains, ridges and flat corridors, attracts a large number of tourists each year, mainly

between the months of June and July (Vester & Leaper, 203). This region thus provides an ideal setting to study seabird tourism.

1.3 Research goals

This project seeks to provide a broad outlook on seabird tourism and its significance, if any, in Lofoten and Vesterålen. The main objectives of this study are to:

1. Create a tourist profile
2. Analyse their motivations for visiting the area and going on a seabird tour
3. Analyse their experience
4. Explore their underlying environmental values

The tourist profile will include information on the socio-demographic characteristics of seabird tourists, to establish who they are, where they come from, and how and who they travel with. I will also seek to find out why these tourists travel to Lofoten and Vesterålen (their motives). This will provide a better understanding of what tourists expect to experience and what benefits they want to obtain in Lofoten-Vesterålen. The third objective is to analyse the experience of the product and its outcomes. This will in turn offer insights into what benefits tourists gained from the seabird tour. Together with the three former objectives, the final objective will help to determine the extent of eco-centric attitudes of seabird tourists. By exploring the socio-demography, motivation, experience and environmental values of the participants, I will be able to establish a tourist typology of people participating on seabird tours. Another goal is to find out whether self-declared birders, who are supposedly more knowledgeable about seabirds in general, would have different motives or experiences of the tour service compared to more general nature tourists.

1.4 Rationale

This study is primarily relevant for providing general information on a poorly studied tourism sector in Norway. Its relevance is strengthened by the fact that tourism in Norway is largely nature-based and nature-dependent, and in a wider context, nature is the branded image of Scandinavia (Leonard & Small, 2003). However, the idea of nature which is marked is fairly generalized with a main focus on scenario and landscape aesthetics rather than species and habitats. As a result, wildlife centric tours are rather limited, with whales and seabirds being

notable exceptions. Seabirds are very much studied in Norway with numerous studies focusing on the impacts of environmental change, pollution and climate change (e.g. SEAPOP, 2010; Anker-Nilssen, 2006). However, this is the first study on the appreciation of seabirds and their use in tourism. Knowledge on seabird tourist motivation and experience will be useful for improving products and maximizing service delivery. Moreover, by framing the investigation within a cultural ecosystem services context, the significance of seabird tourism and wildlife destinations and their contributions to human well-being could inform debates about future development pathways for Lofoten, particularly concerning tradeoffs between services and land uses (such as ongoing political discussions about opening for oil exploration in the region).

1.5 Overview of chapters

In chapter 2, I review literature to define the subject, and place the study within a wider perspective and to evaluate research methods. The chapter will include literature on the link between nature, tourism and human well-being and the role of cultural ecosystem services; methods for defining tourism and tourist typologies; methods used for analyzing and understanding tourist motivation and experience, and the product itself. Chapter 3 describes the methods used to collect and analyze data are described in this chapter. The chapter includes an outline of the research design and the study area, field methods, sample characteristics, and the approaches and measurements used for analyzing the data collected. Limitations of the study are also provided in this section. Chapter 4 provides an overview of the seabird tour operators and the tour products and services they deliver. In chapter 5 I present results from the tourist survey including tourist and travel profiles, distribution of data, tourist activities, seabird sightings, motivation, experience and environmental values. In chapter 6, a more in depth analysis of the results obtained is presented. This involves an analysis of preferences for different motives, experiences; differences and similarities between tourist environmental values and perceptions on environmental threats. Chapter 7 involves a discussion of the results obtained and a summary of the key findings.

2 Literature Review

2.1 Nature and human well-being

People experience nature in many personal ways, gaining a variety of benefits from interacting with the natural environment (Willis, 2015). It is well documented that natural environments promote physical, social and psychological well-being (Abraham, Sommerhalder & Able, 2010; White et al., 2013), mediate stress (Ulrich, 1979), restore cognitive ability (Kaplan & Kaplan, 1989) and bring people closer to nature (Hartig, Kaiser & Strumse, 2001). Natural resources can be regarded not only as physical, tangible goods, but also take the form of psychological benefits that enable people to function and improve their physical and mental well-being. This notion is a recurring theme in this study, enabling a better understanding as to why people seek to engage with nature and a deeper insight into tourist motivation to visit particular destinations and the activities they undertake.

2.1.1 The role of cultural ecosystem services

The benefits provided by ecosystems are collectively termed ecosystem services (Millenium Ecosystem Assessment, 2003). The MA (2005), provides one of the first attempts to develop a universal framework for conceptualizing ecosystem services (ES). It identifies four broad categories which are: provisioning services (products obtained from ecosystems); regulating services (which maintain ecosystem processes); cultural services (the non-material benefits that people gain from ecosystems); and supporting services (which maintain the functions of other services). The concept of ecosystem services provides a significant reframing of the relationship between humans and nature, and novel guidelines for policy-makers to make decisions for a desirable future (Costanza et al., 2014).

This study will focus on the cultural ecosystems services (CES) that nature provides. The concept has often been criticized for having a loose definition and being too complex for measuring (Klain & Chan, 2012; Van-Berkel and Verburg, 2014). Despite the critique, recent studies encourage the investigation of CES. Chan et al. (2012) claim that CES are the "contributions that natural resources make to non-material benefits" (p.9), including the experiences that arise from human-nature interactions. Diener et al. (2009) illustrate the link between such benefits with inspiration and cognitive development, relationship enhancement, improving self-esteem, and other components related to psychological well-being. Another benefit that arises from such interactions is the creation of identity (Fish & Church, 2014),

which ties in with both the concept of psychological well-being and that of post-modern consumerism (a concept which is discussed in more detail in section 3.7.1). As Willis (2015) argues, the CES concept is useful because it illustrates the way in which humans interact with the natural environment, the contribution of benefits from such interactions in particular the importance for psychological well-being. Willis further concludes that the CES framework can be used as a tool for holistic tourism management, by enabling a better understanding of the nexus between tourism, nature and well-being.

2.1.2 Marine ecosystem services

It is important to understand the broader ecological setting of seabirds, the marine environment and coastal systems in which they occur, and their contributions to human well-being. More than seventy percent of the Earth's surface is composed of marine environments, which are recognised for their contribution to maintaining global atmospheric conditions, providing fundamental resources (such as food, fossil fuel and minerals), and recreational opportunities (such as tourism) (MA, 2005; Palumbi et al., 2008). It is reported that more than one third of the world's population live in coastal areas (UNEP, 2006). However, marine ecosystems are experiencing an alarming rate of declining biodiversity, the consequences of which are yet largely unknown. From an ecosystem services perspective, the degradation of marine ecosystems and loss of marine biodiversity could consequently reduce the ocean's ability to provide goods and services for human well-being (Worm et al., 2006).

2.1.3 Seabirds and ecosystem services

Seabirds are amongst the most visible components of the marine environment (SEAPOP, 2010). They breed in high densities, covering a variety of spatial scales and ecosystems (Smith et al., 2011), and thus involve different cultural and geographical interactions. They are dependent on the marine environment for most of their life cycle and represent approximately 3.5% of the world's bird species. By being observed and used by humans for many years, they provide an abundance of information about human-nature and ecological interactions (Kadin et al. 2015). Seabirds contribute within all four categories of ecosystem services. Table 3.1 and Table 3.2 provide a list of past and present services provided by seabirds extracted from various literature.

Table 2.1 The ecosystem services provided by seabirds

Ecosystem services	Goods and Services	Benefit	Examples	Literature
Provisioning	Meat and eggs	Protein, health, survival	Sooty Shearwater chick harvest Titi Islands, New Zealand	Newman et al., 2009
			Egg collection in the Seychelles	Newman et al., 2009
			Harvesting of Crested Auklets and Common Murres by indigenous groups in Alaska	Denlinger & Wohl, 2001
			Egg collection of gulls by indigenous groups in Alaska	Denlinger & Wohl, 2001
			Harvesting and egg collection of Auks and Eiders by Native peoples in Canada	Denlinger & Wohl, 2001
			Egging of Common Mergansers, Åland Islands, Finland	Denlinger & Wohl, 2001
			Seabird harvesting and egg collecion in Greenland and Russia	Denlinger & Wohl, 2001
			Egg collection in the Taumotus, the Marquesas, Peru, Madagascar and Jamaica	Haynes, 1987; UN 2016
	Down feathers and skin	Insulation	Down feather collection in Iceland	Denlinger & Wohl, 2001
			Local people build shelters for eider ducks and collect their down when they leave the nests on Vega, Norway	UNESCO, 2016
	Feathers	Ornaments and millinary trade	Collected and traded by Native peoples in the Islands of northern Central Pacific	Spennemann, 1998
	Bones	Tools and ornaments	Collected and used by Native peoples in the Islands of northern Central Pacific	Spennemann, 1998
	Guano	Fertiliser	Guano harvest by the Andeans in South America and natives of the Islands of the Central Pacific .19th century 'white gold rush' in Peru.	Mendez, 1987; Skaggs, 1994; Collar et al., 2007;

Table 2.2 The ecosystem services provided by seabirds

Supporting & Regulating	Transportation of nutrients	Flow of energy and biomass	Biomass from marine food webs in the Gulf of California enters terrestrial food webs in island and coastal areas through colonies of seabirds	Polis & Hurd, 1996
	Burrowing	Habitat creation, soil formation	Wedge-tailed Shearwaters which nest on Rottnest Island, Western Australia are regarded as ecosystem engineers. They alter and provide new habitat through burrowing long tunnels (up to 5km) and displacing a significant amount of soil, modifying both its physical and chemical properties.	Bancroft, Roberts & Garkalis, 2008
	Seed dispersal	Habitat creation	Seeds and fruits are common in gull diets. Their physical ecology gives the them the ability to travel long-distances and thus they can be effective vectors for plant movement to and between islands.	Calvino-Cancela, 2011
Cultural	Navigation	Locate fishing areas, livelihood	Seabirds are used as visual guidance by native firsherman of Hawaii, Comoros, Madagascar and Tanzania	UN, 2016
	Tourism	Revenue	Half a million visitors per year to the Phillip Island Litte Penguin Colony, Australia, spending 35 million Australian dollars	Marsden Jacob Associates, 2008
			Tourist visits to an African Penguin colony in South Africa generates c. 2 million US dollars per year.	Lewis, Turpie & Ryan, 2012
			Nature-based tourism depends primarily on Yellow-eyed Penguin in New Zealand. It is estimated that a single breeding pair could be worth 60,000 dollars per year.	Tisdell, 2008
			Seabird reserves in the UK together generate 1.5 million dollars per year for local economies	RSPB, 2010
			Tourism in Galapagos estimated revenue of 62 million dollars per year (where seabirds are a major part of the attraction)	UN, 2016

Cultural	Eggs and tissue	Scientific knowledge	Monitoring of contaminants	Braune et al. 2005; Jorundsdottir et al. 2009
	Seabird populations	Scientific knowledge; fisheries management	Ecological indicators of marine ecosystems such as size or health of fish stocks and timings of ecological events	Durant et al. 2009
	Charisma	Inspiration for culture, arts and literature	Seabirds form part of the cultural identity of many coastal communities, inspiring a number of cultural works.	Kadin et al. (2015)
			Cultural festival, called *Lundefestivalen* on Røst	Kadin et al. (2015)
		Visual Media	Animated films such as Happy Feet and Surf's Up; Documentaries such as The March of the Penguins, and within the series The Blue Planet (BBC).	Kadin et al. (2015)

This overview shows that humans can obtain a number of benefits from seabirds. Importantly for the context of this study, seabirds provide cultural ecosystem services such as inspiration for arts, literature and visual media. Seabirds have symbolic meanings (Kadin et al., 2015), they have been used historically for navigation, traditionally as indicators of fish stocks, and in modern times to alert surfers of nearby sharks in Benguela (Kadin et al., 2015.). They contribute towards the acquisition of scientific knowledge and towards the developing fields of ethno-ornithology and economic ornithology (Whelan et al., 2015). In addition, they provide recreational benefits such as birdwatching (Kronenberg, 2014) and tourism (Tisdell & Wilson, 2012).

There is a growing international concern over the status of seabird populations because their numbers are deteriorating on a global scale, and several species are now on the brink of extinction (BirdLife International, 2012). Concern over declining seabird populations has equally been raised in Norway. In 2015, the Norwegian Institute for Nature Research (NINA) reported that over the last 25 years, the Norwegian populations of seabird species including the Black-backed Gull, Atlantic Puffin, Kittiwake, Common Guillemot and Northern Fulmar have decreased by more than fifty percent (Fauchald et al., 2015). In the report the authors conclude that the most likely cause of declining seabird populations is firstly increased predation in seabird colonies and secondly ecosystem changes that affect prey availability. The deterioration of the marine environment and declining seabird populations could have an effect on niche tourism, highlighting the need for management of marine ecosystems and sustaining the benefits and contributions they provide for human well-being.

2.2 Tourism

This section will present literature related to tourism research. In this study tourism and recreation are examined within an ecosystem services (ES) framework, in that tourism activities rely on functioning ecosystems for the provision of tourism products and services. Nested within the concept of ES, cultural ecosystem services (CES) are regarded as the psychological benefits that contribute to human well-being, understood from tourist motives, obtained through the choice of destination and the activities undertaken by the tourists, and translated into tourist experiences. I will open this subchapter with basic definitions of tourism and later discuss methods that are used for understanding tourism, in particular travel motivations and experiences and the resulting creation of tourist typologies.

2.2.1 Defining tourism

Understanding the meaning of tourism is important if it is to be applied within planning and natural resources management, and to totally avoid or minimise the environmental impacts associated with its development (Holden, 2008). However, defining tourism is a complex affair. In its broadest sense, tourism describes a movement of people, a sector of industry or economy and a system of human interactions and relationships (Chadwick, 1994). It can be used to describe target populations, defining their purpose of travel and the specific time dimension in which they do so (Hall & Page, 2002). It involves various stakeholder, such as governments, tourist industries, donor agents, local communities, NGOS and tourists themselves, all of whom apply different meanings and aspirations towards tourism (Holden, 2008).

In its earliest forms, Boorstin refers to tourism as 'going away' on holiday. He first made use of the term 'tourist' in 1961 to distinguish the traveller (someone who goes away for work or pilgrimage) from the tourist (who goes away for pleasure). Later, Burkart & Medlik (1981) refer to this movement as a journey to a destination occurring outside a person's usual place of residency or work. In this study a distinction is made between domestic tourists and foreign tourists. Domestic tourism would for example describe the movement of people of Norwegian residence within Norway for holiday purposes. Foreign tourists comprise international people travelling to Norway on holiday purposes. Mathieson and Wall (1982) add a behavioural dimension to the definition of tourism. They also claim that studying tourism involves understanding tourists as well as "the impacts on the economic, physical and social well-being of their hosts".

Cooper et al. (1993) and Holloway (1998) describe tourism as an amalgam of human feelings, emotions, natural and cultural attractions, suppliers of services, government policies and frameworks. Besides an activity that involves feelings, Bull (1991) includes in his definition the use of resources and the interaction with other people, the economy and the environment. The tourism industry *per sé*, refers to a mix of businesses and organizations that are linked by a common motive to provide services to tourists. Another way of looking at tourism is from the perspective of a tourist emphasizing the experiential dimension. Franklin (2003) claims that individuals construct their own meaning of tourism, and that tourism is "an attitude to the world or a way of seeing".

Thus tourism is not one specific product but a combination of several interacting factors (Holden, 2008). It is more than simply 'going on holiday' because it involves individual needs and ideas with dynamic, multiple and complex motivations (Hall & Page, 2002) and may be interpreted as something we seek to measure or experience. Even in its complexity a number of definitions exist to distinguish between different kinds of tourism. I will focus on defining wildlife tourism in the following section.

2.2.2 Tourism and nature's services

Nature-based tourism includes "tourism activities that occur in a natural environment" (Burton, 1998). Rinne and Saastamoinen (2005) suggest a neutral definition of nature-based tourism which is "visiting a place in which natural amenities and characteristics are the most important attractions". Iversen, Hem & Mehmetoglu (2015), also suggest that nature-based tourism is highly dependent on the use of natural resources. Valentine (1992) adds the element of recreation in his definition, stating that this form of tourism is concerned with direct enjoyment of nature. He proposes three types of activities which are related to nature-based tourism: activities that are (1) dependent on nature, (2) enhanced by nature, or (3) occur incidentally within a natural setting. Taking these definitions into account, seabird tourism can be considered as another segment of nature-based tourism, being heavily dependent on nature (the occurrence of seabirds and the marine environment); and taking place within coastal settings.

Nature-based tourism is also frequently interchanged with 'ecotourism' in the literature (Fennel, 2000; Mehmetoglu, 2005). Nature-oriented tourists are in fact, commonly referred to as 'ecotourists'; a tourist who visits a natural environment and behaves in a manner that has minimal impact on the the destination (Haukeland, Grue & Veisten, 2010). However, the latter term contains even more disjunctions in its definition and scholars are skeptical towards viewing the two terms being synonymous (Brandon, 1998; Goodwin, 1996). Mehmetoglu (2005) claims that a definitional approach towards nature-based tourism might be misleading, since it often assumes that nature-based tourists are one homogenous group. Contrary to the latter, many subgroups of nature or ecotourists exist, categorized by the type of nature experience, activities or tourists (Valentine, 1993; Mehmetoglu, 2005), and ranging from one extreme to another (Cohen, 1972). The next section will delve deeper into the concept of tourism segmentation as a tool for identifying different tourist needs and preferences.

Wildlife tourism can be regarded as a branch of several other overlapping tourism segments such as nature-based tourism, eco-tourism (Reynolds & Braithwaite, 2001) or marine tourism (Garrod & Wilson, 2003). However, wildlife tourists can be marked by their choices of specialist activities including whale-watching and bird-watching safaris. Duffus & Dearden (1990) claim that the desire to view certain species is driven by an image that has been created or developed by previous human associations. Duffus and Dearden (1990) distinguish between three types of wildlife-oriented recreation and attempt to classify varying qualities of experience. These are: consumptive (such as hunting and fishing), low consumptive (such as zoos and aquaria) and non-consumptive (wildlife observation and photography) recreation. The wildlife user can be described as an individual who engages in non-consumptive wildlife-interactions such as viewing, observing and photographing organisms. This behaviour is known to be satisfaction-oriented (Driver & Tocher, 1970; Manning, 1986).

The generic term, wildlife tourism, refers to both flora and fauna but can also be extended to include free-ranging and captive wildlife (Newsome, Dowling & Moore, 2005; UNEP 2006). The provision and exploitation of wildlife resources can bring about employment opportunities and wealth creation. Newsome et al. (2005) classify wildlife tourism into three experiential categories which are: (1) wildlife experience destinations; (2) general nature-based tourism tours; and (3) specialized tours. Semi-natural or captive animal encounters are excluded from the categories because the authors stress that the core component of wildlife tourism is viewing animals in the wild.

Specialized wildlife tours focus, in principle, on viewing a single species. Visitor activities are normally controlled by guided tours and viewing occurs from observation hides, vehicles or boats. Such wildlife experiences are generally confined to small groups. Newsome & Rodger (2013) describe such small-group activities as being advantageous because they allow for more ‘personal and private’ experiences. In addition, other studies have shown that certain species are becoming highly significant for their charismatic and photographic values (Dobson 2008; Lemelin, 2006). Tourists can benefit from experience and tour operators benefit from the commercialization of the species (Mau, 2008).

The division between concepts of nature-based tourism and wildlife tourism can be fuzzy but for the purposes of this thesis I regard wildlife tourism as a branch of nature-based tourism. It is difficult to place seabird tourism under one concept, but rather to consider it as a tourism

product that contains elements of both. Seabird tourism is thus a non-consumptive, specialized and guided wildlife tour that is boat-based. It normally involves small group activities and is highly dependent on wildlife being in place during the tourist seasons. It can also be contested whether or not it falls under the concept of eco-tourism, which is frequently interchanged with nature-based tourism in literature (Fennel, 2000; Mehmetoglu, 2005).

2.2.3 The wildlife tourist

Previous studies show that wildlife tourists are predominantly Western, affluent, older and well-educated (Ballantine & Eagles, 1994; Page & Dowling, 2002). Tour operators in the UK ascertain that clients tend to be retired professionals, aged 55 plus; single or widowers with high incomes, and a slight predominance of female travelers (WTO, 2002). However, demographic profiles can vary according to product, quality and price.

Curtin and Wilkes in 2005, provide a typology of British wildlife tour operators and define the characteristics of wildlife tourists by interpreting information from the market sector. They differentiate the generalist naturalist market from other tourism segments, describing its clients as having a general interest in nature, heritage and culture of a destination; they may not be experts or specialists, but their interests distinguish them from mass tourists. This group of tourists is further characterized by people who wish to explore interesting places, stay in comfortable accommodation, and are generally organized with their travel plans. Curtin and Wilkes (2008) argue that these features are similar to the 'ecotourists on tours' proposed by Kusler (1991) and the 'smooth ecotourist' proposed by Mowforth (1993). The appeal of certain species to generalist naturalists is associated with charisma and behaviour, described as an available 'wow' factor or 'ah' factor, as a subconscious reaction to animals.

The generalist market sector is also associated with Poon's 'new tourist' typology (1993), where this group of tourists is more environmentally aware and keen on gaining more knowledge on the environment, motivated to learn and seek new, challenging experiences far apart from expectations of mass travels. Curtin and Wilke describe the 'Birding' market, arguing that even the birdwatching market is not homogenous. Birders as tourists have been identified as being 'elite' or 'hard core', also labelled 'listers' or 'tickers' by Scott et al. (1999) or 'casual' and 'serious' by Cole and Scott (1999). The latter found that casual birders gave equal weighting to sites that provided opportunities to observe birds, and sites that

provided opportunities to see and experience other wildlife, and were also more likely to participate in historical and cultural activities than serious birdwatchers.

2.3 Tourist typologies

Methods that are used to define tourist types are commonly referred to as either segmentation, classification or clustering (Hvenegaard, 2002a; 2002b). The identification of distinct types of tourists is beneficial for planning, management and marketing (Smith & Smale, 1980; Taylor 1986). In terms of sustainability, it could be useful for matching tourist types and resource capabilities (Wall, 1993). Some typologies attempt to segment tourists according to their cultural and socio-demographic backgrounds (e.g. Mehmetoglu, 2005; Iversen, et al., 2015), the activities they partake (e.g. Eagles, 1992), as well as experiences and orientations towards nature (e.g. Haukeland, Grue & Veisten, 2010).

The typologies discussed below are useful for the context of seabird tourism research. The first typology belongs to Lindberg (1991, cited in Meric & Hunt, 1998), who proposed a four dimensional classification which is comprised of: (1) hard-core nature tourists, representing scientific researchers or members of tours designed for education; (2) dedicated nature tourists, who take trips purposely to visit protected areas, or to understand local, natural and cultural history; (3) mainstream nature tourists, who seek an unusual trip experience; (4) casual nature tourists, who consider nature as part of their broader trip. Weaver (2001) differentiates between 'hard core' and 'soft core' ecotourists. Hard core ecotourists demonstrate a stronger environmental commitment, a deeper interaction with nature, being more physically active and seeking more challenges and fewer personal experiences. Soft core ecotourists on the other hand, search for more comfort and services and less physical challenges. Their attitude towards the environment is regarded as more superficial. Ballantine and Eagles (1994) define ecotourists as people who respond (on a Likert scale) 'very important' to 'somewhat important' to learning about nature or 'very important' to 'somewhat important' to wilderness in their literature. These types of tourists also spend at least one third of their holiday on 'safari' or ecotourism activities. Boo (1990) also segmented nature tourists according to the importance they placed on protected areas for picking their travel destination (in terms of primary important, somewhat important or not important).

Mehmetoglu (2005) refers to a typology of two extreme ranges in nature-based tourism. In his empirical study he identifies differences between specialists and generalists. The former

category resembles Cohen's (1972) proposal of non-institutionalised tourists and the latter can be linked to institutionalised tourists. Institutionalised tourists represent ordinary mass tourists, or the organised individual that values familiarity, planning and safety. Whereas non-intitutionalised tourists, can represent explorers, tourists that arrange trips alone, avoid the beaten track, and seek comfortable accommodation, or drifters whom venture furthest away from the accustomed way of life, and value novelty, spontaneity and independence.

Dichotomous typologies have been applied by Duffus and Dearden (1990) in their study on wildlife recreationists and Mehmetoglu (2005) on his study on nature-based tourists in Norway. Mehmetoglu's research is particularly important, as he tries to examine nature tourists within an area that contains nature-based attractions. Specialists are described as individual travellers visiting a destination mainly for nature reasons, whereas generalists are more likely to partake in package tours (pre-organised trips). It is further assumed that specialised nature tourists are more skilled and knowledgeable (Higham, Lusseau and Hendry, 2008) and more dedicated towards sustainability issues (Lemelin, Fennell & Smale, 2008). Specialisation has also commonly been deduced in terms of levels of interest in activities, trip length, or environmental concerns. Moreover, a number of studies assume that tourists entering a particular site to be ecotourists (Wall, 1994).

Hvenegaard (2002a) on the other hand, highlights the need to classify tourists according to their travel motives, following a cognitive-normative approach (after Murphy, 1985). In his study, Hvenegaard confirms Murphy's assertion that there are strong links between visitor expectations, motivations and the structure of destination areas. According to Murphy (1985), typologies fall under two general categories, the interactional and the cognitive-normative. The interactional typology is based on interactions between tourists and the destination area (e.g. Cohen, 1972 and Perrault, Darden & Darden, 1977) whereas the cognitive-normative typology is based on travel motivations. The latter is a common approach applied to studies on specific outdoor groups. A theoretical background of tourism motivation will be provided in the section (2.5) that follows a critique on tourism segmentation and the use of values in tourism research.

2.3.1 Criticisms of using typologies to segment tourists

Although segmentation has been proven useful in some cases, some authors highlight concerns over tourist typologies. Hvenegaard (2002a) for example, describes typologies as

being tautological, meaning that the generalizations that are made are restricted to the data that created the typology. Moreover, typologies are relatively static, and are therefore limited for making predictions about tourist behaviour. Sharpley (1994) points out that there is a lack of methodological consistency within the creation of typologies, and the resulting tourist categories tend to reflect the researcher's viewpoint. Many typologies are simply theoretical in nature, and few have been applied and tested. To reduce the issues addressed above, this study will make use of tested frameworks, such as Crompton's typology of tourist motivators (1979), adopted by Mehmetoglu in 2007 in his study of nature-based tourism in Norway.

2.4 Using values in tourism research

The market cannot always provide us with information regarding the value society places on changes in the provision of ecosystem goods and services. Many environmental goods are public goods. Economic valuation tends to understate value because it cannot capture all the ways in which people benefit from nature. According to Brown (1984), the concept of value in resource allocation is preference-related. Preference, as he explains, is the setting given by an individual of one thing over another resulting from a consideration of 'betterness'. Brown introduces three realms of values. The first is the conceptual realm of values, including modes of behaviour, end-states and qualities that are held desirable. The second is the relational realm in which preference emerges from the interaction between the subject and object. This realm is unobservable, since it is a personal feeling. The third is the object realm, where value is expressed as the relative importance given to an object either by individuals or groups of people within a given setting, which is the result of a preference relationship.

Whilst some authors argue that personal values can provide an effective basis for marketing segmentation, because of their indirect impacts on preferences for products (Muller, 1991), others such as Crick-Furman and Prentice (2000) criticize this perspective on personal values. They argue that values are not as enduring as past studies advocate, they might not relate to present life domains of individuals. Moreover, true values are not so easy to capture. Survey responses depend greatly on how deeply an individual engages in self-reflection (Shrum, McCarty, & Loeffler, 1990). However, Crick-Furman & Prentice (2000) still suggest that since values guide actions, attitudes and judgments, they are suitable determinants of attitudes and behaviour. As Rokeach explains in 1973, an attitude is the result of the application of value to a specific object or situation.

In studies by Jurowski et al. (1996) and Silverberg, Backman & Backman, (1996) environmental attitudes are used to predict tourist preferences and behaviour. These studies indicate that people who participate in outdoor activities are more likely to be 'ecocentric', that is, they have high environmental values. So one could expect people who participate on wildlife tours (an outdoor activity involving wildlife interactions) to also have high environmental values. Although values may be useful for understanding behaviour and attitudes towards tourism participation, their use is still problematic since they are not an observable dimension of social reality but a researcher's construct (Hall & Page, 2002).

2.5 Motivation

Motives can be described as "a set of needs which predispose a person to participate in a touristic activity" (Pizam, Neumann & Reichel, 1979). Classical discussions of tourist motivation revolved around 'push factors' and 'pull factors' (Crompton, 1979). Push motives explained the desire to go on holiday whilst pull motives explained the choice of destination (Dann, 1977). However, contemporary literature suggests that consumer choices are affected by several internal and external motivators and determinants (Knowles, Diamantis & El-Mourhabi, 2001). Moreover, Howard and Seth (1968) state that the selection of a certain type of vacation or destination is a function of a particular combination of motives dominant in a particular hierarchy of motives at a particular moment in time.

2.5.1 Lifestyle and demography

Kotler (1994) argues that consumer decisions are largely influenced by personal characteristics. Age for example, affects consumption of products and services, and shapes feeling and perception of activities in which consumers engage (Knowles et al., 2001). Occupation, which is associated with education and income, also has a profound effect on consumer purchasing behaviour (Kotler, 1994). Kotler also notes that a person's lifestyle can be understood through analyzing engagement in activities, consumer interests and opinions. The consumer culture theory (CCT) also takes into account the cultural and symbolic dimension of consumer practices (Arnould & Thompson, 2005).

2.5.2 Socio-pyschological motives

Hills (1965) on the other hand, concludes in his study, that holidays are taken in response to a feeling of internal damage or depletion, as a means of self-replenishment. Hill's study indicates that socio-pyschological motives may be useful in explaining both initial arousal

and direct potential towards destination choice, differing from the traditional view that primary utility (initial decision to go on vacation) and consequent decision (choice of destination) are due to cultural pull factors.

The concept of a stable equilibrium or homeostatis is one that is frequently referred to in motivation studies. It implies that humans need to be in a mental state of equilibrium and when disequilibrium occurs (e.g. in the form of tension), a need arises to take action. The course of action taken is expected to satisfy the need and also restore equilibrium (Howard & Seth, 1968). In the same way Fodness (1994) advocates that motivation involves a 'dynamic process of internal psychological factors (needs, wants and goals) that generate an uncomfortable level of tension within individuals' minds and bodies'. Humans take actions to release tension and satisfy their needs. Crompton illustrates the role of disequilibrium and motivation to go on vacation (Figure 2.1). Through his data collection he identifies four major components: (1) a state of disequilibrium**,** (2) a break form routine, (3) behavioural alternatives (to stay home, travel for pleasure or travel for other reasons), and (4) the motives that determine the nature and destination of the pleasure vacation being either socio-psychological or cultural.

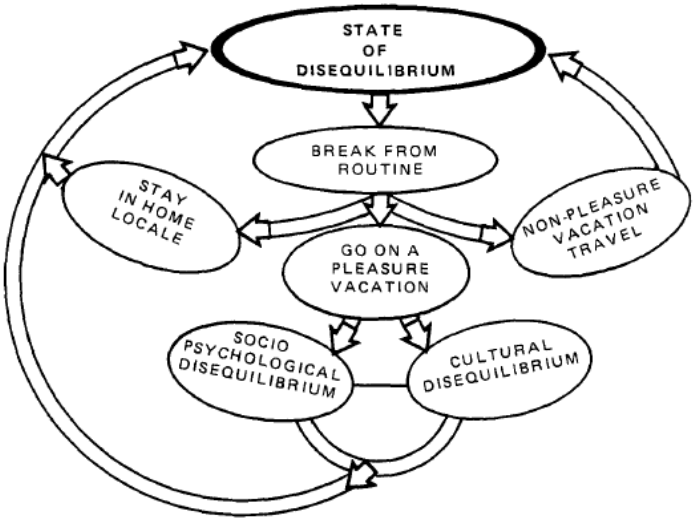


Figure 2.1 A conceptualisation of the role and relationships of respondents' motives (Crompton, 1979)

According to Crompton (1979), cultural motives are concerned with destination rather than socio-psychological status of the individual. His study reveals two primary cultural motives which are novelty (experiencing something new) and education (learning). Most of

Crompton's respondents preferred to visit a new destination for their vacation. This is because cultural disequilibrium requires a supply of new stimuli to restore homeostasis. However, there are some respondents who liked to return to previously visited destinations. He suggests this might be due to three factors. The first are socio-psychological motives. The second could be restricted knowledge of want-satisfying attributes in other destinations which reduces the risk of not finding the attributes to satisfy needs in a new destination. The third is caused by fear or anxiety of the unknown. So in line with Crompton's deductions, one could expect higher cultural motivation if tourists have never visited a destination before (such as Lofoten) and higher socio-psychological motivation if tourists have previously visited the destination.

Whilst some researchers claim that socio-psychological factors have the greatest influence on people's decisions to travel (such as Hill, 1965; and Fodness, 1994) others argue that cultural motives are the most influential factors (such as Gray, 1970; and Dann, 1977). Understanding tourism motivation is considered to be a crucial factor for developing tourism products that meet consumer wants and satisfy their needs (Meng, Tepanon & Uysal, 2008). However, it is not approached without difficulties given that tourism is a combination of experiences, involving a human consciousness of needs and wants, motives can be multiple, complex and dynamic. The reasons why people choose to travel are diverse (Holden, 2008) and therefore motivation needs to be studied from more than one angle in order to closely understand it. Thus, motivation remains one of the most methodologically complex areas in tourism research (Hvenegaard, 2002a).

In this study, I will follow Mehmetoglu's empirical approach (2007) to analyzing tourism motivation to travel to nature destinations. The latter adapted the socio-pyschological motives determined in Crompton's research (1979). In order to categorize seabird tourists according to their motives to visit Lofoten and Vesterålen, I create a set of motivational items, considered to be appropriate for seabird tourism and the destination in which the activities occur. The rationale behind this is based on the fact that Mehmetoglu's research is carried out in Norway, and thus the factors he proposes may be more easily adapted and relevant to the context of nature tourism in Lofoten-Vesterålen. Also as Parinello (1993) stresses, it is important to study tourist motivation within a narrower framework but along wider interdisciplinary lines of inquiry. Thus tourist experience and values attributed to the environment will also be factored in the analysis of seabird tourists.

2.6 Experience

Tourism can be interpreted as a form of consumerism, whereby tourists consume experiences provided by foreign environments. Sternberg (1997) states that "tourism's central productive activity is the creation of the touristic experience". Experiences are events that engage individuals in a personal way (Pine & Gilmore, 1998; 2002). Mowforth and Munt (1998) refer to Bourdieu's theory on habitus to explain why tourists participate in different activities, in that they carry cultural symbols and meanings. Relative to this concept is Boudrillard's theory on consumer society, in which consumer practices represent social activities where consumers produce meanings and exchange symbols. Consumers thus consume in response to the meaning of products they choose and the image they reflect. The consumer is not just a rational actor (as advocated by Schmitt, 1999), he is an emotional actor, and a social actor (Sheth, 1980) influenced by various conditions, situations, group behaviours and motivations.

In Holbrook and Hirschman's paper (1982), the authors criticize the scope and limits of traditional information processing models and produce a new paradigm centered on the hedonic components of consumer experience. Hedonic consumption is associated with 'multi-sensory' and 'emotive' aspects of experience with products and services. The authors also add symbolic associations and aesthetic criteria as components of experience. Emotions are believed to be directly linked to consumption because positive emotions have a tendency to impact customer loyalty (Frochot & Batat, 2013) and satisfaction (Mano and Oliver, 1993). Holbrook and Hirschman's articles were highly influential, and lead to the development of new vocabularies such as 'experiential marketing' and the 'experience economy'.

2.6.1 Post-modernity

The experiential dimension is interconnected with post-modernity (Tarssanen & Kylänen, 2005). It is associated with changes in social values (a process of dematerialization) and co-creation (consumer involvement in the creation of experience) (Boswijk, Thisjen & Peelen, 2007). Experiences function as a personal source of information that people can use and recount to share stories about their lives. This function is particularly important in the age of post-modernity, in which individuals need to create their own identity (Mehmetoglu & Engan, 2011).

In modern Western societies, consumers search for long-lasting memories, sensations and symbols to create personal experience (Frochot & Batat, 2013). Tourist behaviour has

changed significantly over time, influenced to a large extent by the third and fourth industrial revolutions of our time, and the advancement of information and communication technology (Frochot & Barat, 2013). The digital era has led to the emergence of new tourism consumer trends and behaviours that are described as paradoxical. Decrop (2008) identifies six postmodern paradoxes: the desire to be alone and together; masculine and feminine, nomadic and sedentary; real and virtual; kairos and kronos; and the quest for old and new (Table 2.3).

Table 2.3 Postmodern paradoxes of consumer behaviour (Decrop, 2008)

Paradoxes	Explanation
The desire to be alone and together	Information and communication tools enable consumers to stay connected with friends and co-workers, yet increase their isolation and dehumanisation of relations
Masculine and feminine	An erosion of boundaries between the values of sexes, the age of metrosexuality
Nomadic and sedentary	The postmodern consumer is faced with a paradox of wanting to move and stay, seeking a new destination but also search for a 'sense' of home
Kairos and kronos	Real time vs. measurable time
Real and virtual	Hyperreality, the attrition of boundaries between real and virtual worlds
The quest for new and old	The new consumer requires old nostalgic objects to be updated by new technologies

Tourism researchers have shifted from studying traditional segmentation variables such as social class, age, gender and income towards values and desires within a consumption context in order to understand the postmodern tourist. The effect of postmodern consumerism on the tourism industry is that it needs to offer customized products instead of mass tourism (Lopez-Bonilla & Lopez-Bonilla, 2008). The use of information and communication technology has also become a vital method for informing customers about services and destinations and for making reservations (Frochot & Batat, 2013). Understanding revolutionary postmodernism is fundamental to appreciate trends in consumer demand and behaviour, and for tourism actors involved in both small scale and large scale industries to develop new markets and products.

2.6.2 Experience economy

Whilst plenty of conceptual work on experience economy exists, there is a lack of empirical research in the area. One exception is Pine and Gilmore's (1998) operationalization of experience economy. Pine and Gilmore argue that in order for companies or destinations to maintain competitive advantage, they must produce experiences. The authors propose a model

comprised of four realms of experience (depicted in Figure 2.2), determined by the level or form of consumer participation and involvement.

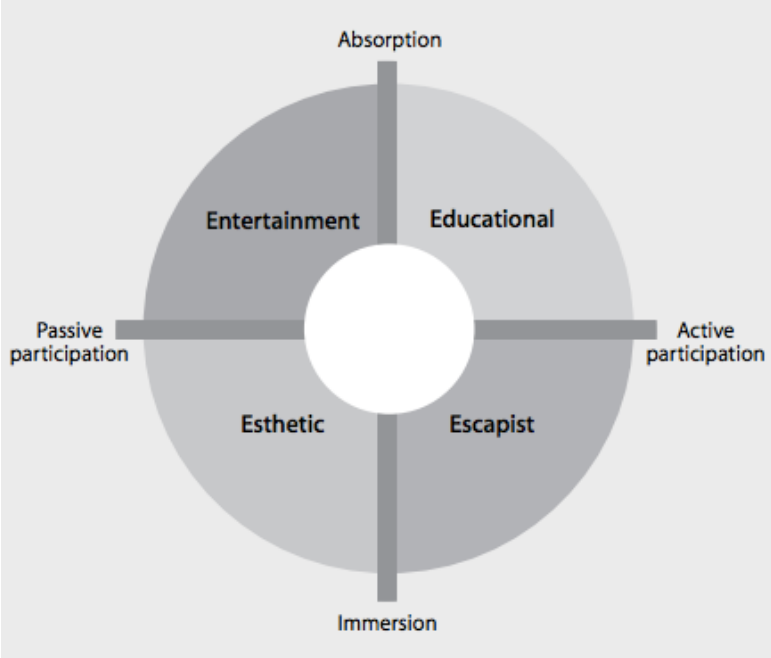


Figure 2.2 The four realms of experience (Pine & Gilmore, 1998)

On the axis of participation, passive participation in the service or destination, is characterized by the dimensions of entertainment and esthetics. Passive participation in an activity does not have direct influence on the performance of a service or destination. Active participation includes the dimensions of education and escapism, and will personally affect the performance of a service. The latter ties in with the concept of co-creating experiences. Along the second axis, absorption refers to the observance of an entertaining or educational factor provided through a destination or activity, whereas immersion within an environment refers to "becoming physically or virtually part of the experience" (Pine & Gilmore, 1998, p.31), and results in esthetic or escapist experiences. According to Pine and Gilmore the optimal tourist experience is yielded through a combination of all four realms.

Within educational experiences, a tourist absorbs events and actively participates through physical and mental interactions, increasing their knowledge and skills (Pine & Gilmore, 1998). Educational experiences are frequently measured by asking questions on how tourists felt about what they learnt or gained from a destination or activity. Prentice (2004) linked tourist's motives to travel for experiences that provide the means to self-educate and find inspiration. Within the esthetic dimension, tourists passively enjoy being in a destination

environment. They are generally influenced by a destination's appeal to their senses. Oh, Fiore and Jeoung (2007), claim that the esthetic experience is an important determinant of the overall satisfaction of a destination or activity. The entertainment dimension demands consumer attention. It is normally associated with observing activities or performances of others. This dimension is generally reflected as a measurement of 'fun' (Crick-Furman & Prentice, 2000). Finally, the escapist experience dimension requires immersion. The tourist affects the actual performance of a service or destination, depending on the way they interact with the environment. Escapism is associated with escaping from daily routine, which is recognized as a fundamental motive for taking a trip (Cohen, 1979; Prentice, 2004).

Mehmetoglu and Engan (2011), apply and test this four-dimensional framework in their study on the experience economy of tourists visiting a festival and a museum. They concluded that experiences need to be created and staged depending on the context. Contrary to Pine and Gilmore's study, overall satisfaction was not linked to a combination of all four dimensions, rather the study conducted by Mehmetoglu and Engan (2011) revealed a tendency for two dimensions to affect the overall level of satisfaction, depending on the activity or destination and the realms that it could ultimately offer. Research on the experience economy is largely criticized for being too conceptual, lacking empirical measurement. The concept of four realms of experience is nonetheless claimed to be a practical and easy method for evaluating destinations. Oh, Fiore and Jeoung (2007) highlight the need for the creation of general measurement scales of experience in order to operationalize Pine and Gilmore's model of experience economy.

2.7 The influence of previous visitation and participation

Additional research shows that motives and experience may differ for previous visitors (Lehto, O'Leary & Morrison, 2004). Most studies propose that repeat visitation is related to the satisfaction of the previous trip (e.g. Schmidhauser, 1976 and Oppermann, 1997). Gitelson and Crompton (1984), point out that marketing to persuade new tourists to visit a destination, may be inappropriate marketing for previous visitors. According to these authors, it is almost intuitively obvious that the motives which previously impelled first-timers to choose a destination are likely to differ the second time around. In their empirical study they reported that first-time visitors were more likely to try a variety of new cultural experiences, whilst return visitors were more likely to seek relaxation. Holloway and Robinson (1995) also claim that past experience and word-of-mouth recommendations reduce uncertainty and risk

perception, having a significant impact on tourist vacation decisions. One technique which is acknowledged to reduce uncertainty, and increase knowledge is to seek for an abundance of prior-information. Advance booking is also an indicator that individuals are searching for a sense of security. Market analysis also supports this idea that first-timers and repeaters behave differently (USTI, 1999). It has been reported that repeaters have a tendency to spend less time than first-times in the selected destination.

2.8 The product

Shaw and Williams (1994) claim that 'production is the method by which…businesses and industries are involved in the supply of tourism services and products', and also involves the how, where, why and when consumption takes places. In Smith's production model (1994), the supply of natural resources or the physical setting are labelled the *'physical plant'*. Smith argues that a strong physical plant is required to maintain the production process. The nature of the tourist product, the structure of the services provided, the consumer and their relationship to service provision are becoming increasingly popular research interests within tourism studies (Smith, 1994). The classical definition of a tourism product in marketing is "anything that can be offered to a market for attention, acquisition, use or consumption to satisfy a want or need" (Kotler, 1994). This definition is important because it emphasizes that a tourism product describes more than just a physical object but also includes services, persons, places, organizations and ideas. Medlik and Middleton (1973) conceptualize the term product, by describing it as a collection of activities, services and benefits that contribute to tourism experience. Jefferson and Lickorish (1988) expand on the latter in saying that a tourism product is a "collection of physical and service features together with symbolic associations which are expected to fulfill to wants and needs of the buyer… at a desired destination".

Smith in *The Tourism Product* (1994), distinguishes between five elements of the tourism product (Figure 2.3). The first element is called the physical plant, which represents the core basis of the product. This could be a natural resource, the conditions of the physical environment, including the weather, the site itself, or a man-made facility. Smith does not separate cultural from natural resources. The quality of the physical plant is a measure of user experience and accessibility. The second element is composed of services that make the physical plant useful for tourists. Hospitality, the third element, is the performance of services, the quality of which is measured upon the fulfillment of expectations and needs.

Smith also considers that human individuals have a freedom of choice. The fourth element revolves around the purpose of travel, travel budget, experience, knowledge and nature of activities. The final and fifth element is involvement, which represents the engagement of the tourist towards the product.

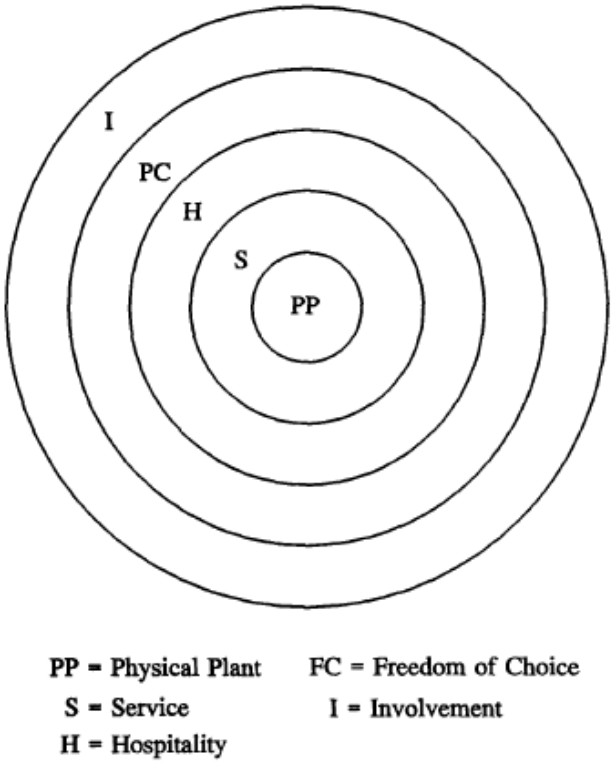


Figure 2.3 The generic tourism product (Smith, 1994)

Smith (1983) also highlights a number of issues related to supply such as the location of resources and access to resources, the quality and capacity of resources and the impacts of resource use on local environments and people. The definition of resources is also dynamic. Resources were commonly perceived to be tangible objects in nature (Pigram, 1983). This view changed in later literature wherein resources became perceived as functions rather than simple objects (De Groot, 1987). Functions refer to human-created attributes of the environment evaluated on the basis of values, and also on their ability to satisfy wants and needs (discussed in section 2), so resource functions are largely subjective (Hall & Page, 2002).

2.9 The product experience

Companies need to consider experience from the pre-consumption (decision-making) stage to the post-purchase (nostalgia) stage. Pine and Gilmore proposed five key experience design

principles (Table 2.4) that could assist companies in their role of producing the phenomenon. An example of the format of experience in the context of wildlife watching is given by Frochot and Batat (2013) in their book *Marketing and Designing the Tourist Experience*. Whilst every tourism experience is different, some common guiding principles are underlined.

Table 2.4 Key experience design principles (Pine & Gilmore, 1998)

Experience design	
Theming	Organize impressions consumers encounter
Harmonise impressions with positivity	Produce long-lasting impressions
Eliminate negative cues	Eliminate anything that diminishes experience quality
Mix in memorabilia	Offer items that visitors can purchase as a reminder of the experience
Engage all five senses	The more sense engaged, the more memorable

Before the purchase

Tourism products are intangible goods, that can only be appreciated on site. Thus it is important for operators to provide information about the experience that individuals could consumer through their service. This may be done through for example websites and social networks, by including real-time information, and consumer feedbacks. Creating emotions, stimulating senses, and developing storytelling about a product is important for eliciting motivation to live the experience.

Before the experience

Once the service is booked, customers should be prepared for their experience. Consumers could benefit from being provided with information about wildlife beforehand, to help them them see the global picture. For example, in Cairns, Australia, businesses give a presentation about coral reefs to enhance visitor knowledge about the ecosystem. This raises expectations of visitors, as they begin to place more meanings to what they are about to see. After the talk, tourists can purchase plastic identification cards to check which reef components they have experienced during their dive. It is usual for boat trip activities to make use of waiting time to display films to visitors about the destination and its ecosystems, prior to departure. Films and presentations give tourists a deeper context and therefore can enhance their experience.

During the experience

Good personality and knowledge presented by the tour guide are two essential characteristics for successful experience (Holloway, 1998; Weiler & Davis, 1993). Information provides fuller meaning and understanding of what is being viewed. This is particularly important for understanding animal behaviour, or the existence of certain flora (Frochot & Batat, 2013). Wildlife watching experiences can evoke strong emotions. These emotions are heightened according to the charisma of the species, rarity and reference to childhood memories. The guide can further enhance these feelings by emphasizing the beauty of natural elements. Films shown during a trip can also be used to give information to place the experience in a broader context. Indicating the best opportunities to take photos, and keeping consumers engaged by helping them spot wildlife can also help raise experience significantly. One more factor to consider is the element of surprise. Guides that have knowledge about where wildlife can be spotted, can refrain themselves from informing visitors about the wildlife whereabouts in order to surprise them when they encounter the species.

After the experience

Summarizing the experience at the end of the trip is advisable. In wildlife watching, this could be done listing elements of fauna and flora seen during the trip and highlighting the rarity of such sightings. Providing souvenirs such as photographs, postcards and memorabilia of the trip will increase feelings of nostalgia and aid in storytelling. Following up consumer experience after the trip is also ideal. This can be done simply by sending out emails and encouraging tourists to become members of a social network, encourage them to leave comments and ratings. This would indirectly help tourists create long-lasting memories and also spread their satisfaction to attract other potential consumers.

2.10 The link between tourism and CES

The Lofoten-Vesterålen destination has the potential to provide cultural ecosystem services (CES), transcending into social, psychological and intellectual benefits. In this study I will explore what benefits people seek from visiting the destination (their travel motives), and which benefits they obtain through seabird tourism (their experience of a wildlife product). This link is illustrated in the diagram below (Figure 2.4). We can take Crompton's theory (1979) of motives for pleasure vacations to understand the push and pull factors for the holiday destination. In the context of this study the push factors may symbolize a break from normal routine, and the major pull factors shall symbolize benefits. The seabird tour operator

(wildlife tourism) is a mediator between nature and cultural services, giving tourists the opportunity to interact with nature. Benefits can be measured in terms of the level of satisfaction of the tour experience. Understanding this link could be useful for tour providers to maximise benefits from their services, and for decision-makers to determine the best future scenarios of development, and trade-offs between land use and resource accessibility.

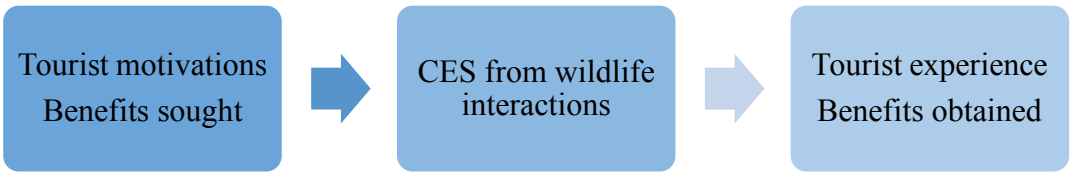


Figure 2.4 The link between tourist motivation, experience and CES

3 Methodology

3.1 Introduction

The aim of this research is to find out the who, what, when and why of seabird tourism. The main objectives are threefold. First is to find out who the tourists are, including their basic demography, to create a tourist profile. Second is to know more about the visitors' motivation to travel to Lofoten, their experience and satisfaction of the seabird tour, and their environmental values. A central question here is to better understand how tourists view the wider Lofoten landscape and the extent to which seabird viewing is a primary motivation for visiting Lofoten or is just part of a package. This is important to better understand the trade-offs and compatibilities between different landuses and activities within the wider ecosystem. The third scope is to probe into the structure of the seabird tourist industry and their methods for delivering services using case studies in Lofoten-Vesterålen. Finally, the information gathered could give better insight into the provision of wildlife resources as a recreational opportunity and commercial venture in coastal areas. This chapter will present the methodology used for the study, including a description of the research design and strategy, the case study selection and sampling method and lastly the methods used data analysis.

3.2 Research design

This study focuses on seabird tourism where individuals participate on boat-based tours for wildlife viewing in the Lofoten and Vesterålen islands. To conduct research on seabird tourism a combination of primary and secondary data collection, quantitative and qualitative methods and field observation were used. The sites chosen for the study cover three regions within the region, Røst, Lofoten Mainland and Andøya. Fieldwork and data collection took place during the peak tourist season (Kvamme Fabritius & Sandberg, 2012), parallel with the breeding time for seabirds (Anker-Nilssen, personal communication, February 2015), from mid-June till the end of July. The quantitative method involved a tourist survey, and the qualitative involved brief, semi-structured interviews with tour operators. Field observation was conducted by participating on the seabird tours.

3.3 Study area

The study takes place in the Lofoten-Vesterålen, situated in Nordland county, northern Norway (Figure 1.1). This area is chosen in particular since the project is embedded within a larger one, led by NINA, on The Ecosystem Services of Lofoten (TESL). Moreover, the

Lofoten islands are an important tourist destination in Norway. Kvamme-Fabritius and Sandberg (2010) estimate around 300,000 tourists visit Lofoten each year, including of both domestic and international tourists. The islands also have one of the highest bird diversities north of the Arctic Circle (Anker-Nilsen, 2006).

Information on the location and number of seabird tours being offered in the Lofoten-Vesterålen Archipelago was gathered through online research (see Chapter 5 for an overview of the seabird tours). The keywords used were: 'seabird tour Lofoten', 'seabird safari Lofoten' and 'seabird safari Røst'. Following the preliminary research, it was decided to contact as many tour operators as possible to take part in the survey. A total of eight tour operators agreed to participate in the study. The tour operators were granted anonymity, thus the company names will not be revealed in the study. The outcome covers three regions: Røst, the Lofoten Mainland and Andøya. The sites are split geographically, Røst being the outermost islands of Lofoten. The Lofoten Mainland includes Flakstad, Henningsvær and Stø, Andøya in the northernmost part of the Lofoten archipelago (Vesterålen), and includes Andenes and Bleik. The case studies are also divided on the basis of bird diversity, ranging from highest on Røst, to lesser on Andøya and Lofoten Mainland.

3.4 Data collection

3.4.1 Participant survey

Questionnaires are commonly used for collecting data on tourists in nature areas (Mehmetoglu, 2007). The survey method was chosen in order to cover more than one area in Lofoten, and to gain information on different tour businesses. A qualitative approach would have required more time at each site, and due to time and funding restrictions, the survey was thought to be the best approach. A participant survey was designed to form a socio-demographic profile of seabird tourists (such as age, gender and profession), their travel characteristics, travel motives, tour experience and satisfaction and environmental values (see Appendix 1). The survey was ten pages-long and took approximately fifteen minutes to fill out. The majority of questions were closed-ended. Moreover, the survey was translated from English into Norwegian, German and Italian to avoid issues of language barriers and increase participation.

The surveys were distributed by postal service to the eight tour operators, together with a set of instructions. The tour operators were further contacted by phone to clarify the method to administer the surveys, and also to remind them about the benefits of taking part in the study. They were contacted face-to-face and given further information and guidance during the field visit by myself and my supervisor John Linnell. During fieldwork I distributed questionnaires to tourists on the seabird tours that she attended. Weekly check-ups were undertaken to follow the progress of data collection. Following difficulty retrieving hand-filled questionnaires, an option to participate in an online survey was made available mid-July. In this way, tour operators were tasked with collecting email addresses of participants.

3.4.2 Interviews and field observation

Informal interviews with the tour owners were carried out during the fieldwork between mid-June and mid-July by myself and my supervisor John Linnell. The information that was sought from this method included reasons for either starting or running the business, the products and services they sell, the value of wildlife and competition in the region. I visited Røst, Flakstad, Henningsvær, Andenes, and Bleik, and Linnell visited Stø, Andenes and Røst. Besides interviewing the tour operators, Linnell and I participated on the seabird tours. This method was used to experience the product, and could take place if space was available on the boat or weather permitting.

3.4.3 Sample characteristics

The total number of tour operators involved in the study is eight. Two businesses operate on Røst (A and B), three in Henningsvær, Stø and Flakstad (C, D and E respectively), two businesses in Andenes, and one in Bleik (E, F and G respectively). A description of the setting, the Lofoten-Vesterålen Archipelago, and an overview of the seabird tours and their respective products and services are provided in Chapter 4. A total of 530 questionnaires were distributed amongst the tour operators. Of these 104 were completed and usable for the study. However, we cannot calculate a response rate as it was not known how many were actually distributed. Of the questionnaires collected, 51.9% were from Røst, 30.7% from Lofoten and 17.3% from Andøya. With 44.2 % of the respondents being domestic tourists and 55.7% being foreign, it is possible to compare the two groups.

3.4.4 Limitations

Despite efforts to communicate questionnaire administration with the tour operators, distribution was still challenging. One of the main issues with conducting this survey was the actual setting of seabird tours and another issue was lack of interest in administration. The tour operators were instructed to inform participants about the survey prior to boarding the boat, and to fill them out either during the trip or after the trip. It was advised for tours that operated on ferry or fishermen boats that questionnaires were handed out and filled during the trip, when tourists had some spare time on the way back to the harbour. For tours that operated on RIB boats it was advised that questionnaires be distributed after the tour since it was not practicable for tourists to fill in questionnaires on the boat. Retrieving the questionnaires using this method was difficult because tourists tend to scatter after the tour to different hotels, campsites or drove to other places in Lofoten. The number of surveys collected (104) are enough to create a general picture of the seabird tourists, however not enough replies were obtained to permit a fine scaled statistical analysis of factors explaining variation in the data.

3.5 Data Analysis

3.5.1 Approach

A combination of deductive and inductive approaches were used in this study. The latter approach is also known as grounded theory (Glaser & Strauss, 1967), a reversal of the positivist method. It is has proven useful for studying social phenomena for which little is known about (Goulding, 1998; Mehmetoglu, Dann & Larsen, 2001). However, this method is normally combined with qualitative methods, with the aim of fully understanding a few, rather than partial understanding of many (Veal, 1997). Since no previous research has been conducted on seabird tourism, this study mostly follows the inductive process. Motivation is one of the most methodologically complex research areas in tourist studies (Dann, Nash & Pearce, 1988), and the replicability of tourist studies is often limited due to the variety of contexts and settings in which the studies take place. For this reason, questions on motivation and experience were formed relative to the context of seabird tourism and the Lofoten-Vesterålen Archipelago. In this way, theory emerges from the data collected, rather than prior as in the deductive approach. The advantage of this method is that models of tourism motivation and experience can be developed for a specialized segment of tourism which is understudied in Norway.

3.5.2 Measurement

Data analysis was conducted using the SPSS software. Frequency tests were run to provide the general overview of results (presented in Chapter 5), and cross-tabs were used to compare results from the three different regions. Hvenegaard (2002a) stresses the need to classify nature tourists based on their travel motives. The travel-motivation method is described as a typological approach of the cognitive-normative character. To analyse motivation to visit Lofoten-Vesterålen, I created a model adapted from the theoretical frameworks of Crompton (1979), similarly adapted by Mehmetogu (2007). Crompton identified seven socio-psychological motives, and Mehmetoglu identified four main travel motivations illustrated in Table 3.1.

Table 3.1 Motivation factors

Factors	Crompton (1979)	Mehmetogu (2007)
1	*Relaxation:* Desire to restore mental and physical health from normal day-to-day stress	*Contrast to everyday life*: To gain new perspectives To get away from the crowd To get away from everyday life
2	*Novelty*: Desire to seek new and different experiences	*Novelty and learning*: To visit new places, To learn about new things, To gain experience/ knowledge
3	*Socialisation*: The desire to interact with new people	*Social contact*: To be with friends and relatives, To have social contact, To meet new people
4	*Prestige*: Desire for high standing in society	*Ego and status*: To have experiences to talk about To improve confidence To obtain a feeling of achievement
5	*Education*: Desire to gain knowledge for personal development	
6	*Enchancing kinship*: Desire to enhance family relationships away from normal routine situations	
7	*Regression*: Desire to engage in pleasure activities to reminisce and feel free from daily obligations	

The model was created by performing a factor analysis to determine whether any underlying dimensions existed that revealed a relationship between collated variables in terms of

meaningful dependent factors. The author used a principle component factor analysis with varimax rotation and tested for reliability by using to Cronbach's alpha. A Pearson's correlation test was also conducted to confirm the reliability of the model. A descriptive statistical analysis including mean, standard deviation, minimum and maximum, skewness and kurtosis, was carried out to evaluate which motivation components had the highest influence to visit Lofoten and Vesterålen.

Tourists were distinguished according to their level of specialization. In the context of this study, the author regards birders as specialists and non-birders as general naturalists. Cross-tabulation was used to find out whether birders were more likely to participate on more specialized seabird tours. Independent sample t-tests are useful for comparing two different groups against multiple independent variables. A series of independent sample t-tests, were performed to test for differences and relationships between birders and non-birders (independent variables) and their motivations (dependent variables) to visit the destination.

To analyze experience, I created a model of experience dimensions related to seabird tourism, which were adapted from Pine and Gilmore's realms of experience (1998). The four different realms include: education, escapism, (a)esthetics and entertainment. These findings were compared to these experience realms by reducing the items used to measure experience in the survey by referring to an empirical examination of the four realms of experience undertaken by Oh, Fiore and Jeoung (2007) and Mehmetoglu and Engen (2011). Cronbach's alpha was used to test the reliability of the model. The same procedure as for motivation is used including descriptive statistics and independent sample t-tests to analyze differences between birders and non-birders (independent variables). I also tested for differences in motivations and experiences between participants who previously visited Lofoten and Vesterålen and visitors against first-time visitors.

3.6 Limitations

3.6.1 Sampling

Apart from the general cautions needed when interpreting the results of a questionnaire study, our main sampling problem lies in the relatively low number of returns which weakens our statistical power in the analyses.

3.6.2 Rhetoric

The selection of items to measure motivation and experience might be regarded as superficial and include a source of researcher bias, since they were formulated according to the perceptions of the author. This problem is heightened due to the fact that the method of data collection relied on a participant survey. One way of avoiding such bias would have been to conduct interviews and transcribe motivational items. Moreover, the models used organize motivation and experience scales according to the average highest rankings, and thus individuality of the participants is disregarded.

3.6.3 Scales

Standardized measurement scales for the concepts of motivation and experiences have yet to be developed. The studies by Oh, Fiore and Jeoung (2007), Mehmetoglu (2007), and Mehmetoglu and Engan (2011) are preliminary studies that attempt to test the conceptual frameworks in an empirical manner. The former authors emphasise the need for further studies to test their assumptions and the applicability of their model in different destinations. They argue that the four realms of experience model also require further validations across different situations. However, generalization of the scales might be difficult to achieve, since measurement items are normally narrowed down according to the situation, particularly the activities in question.

4 Seabird Tours

4.1 Introduction

Most literature on tourist experience and motivation focuses primarily on the tourist, dismissing the product and service experience observed in the field. Carrying out fieldwork in Lofoten-Vesterålen and participating in the same activities as the tourists was an important addition to this study. In this way I could describe the different stages of experience.

4.2 The tourism product

If we refer back to Smith's model on the tourism product (1994) discussed in section 2.8, he identifies five elements of the tourism product, the first element, the core basis of the product is called the physical plant. According to Smith's concept, the physical plant of seabird tourism would include the seabird species, the environmental setting, and weather conditions. This chapter will thus begin with a description of the physical plant, the nature of wildlife resources in the case study areas. A discussion on the services and hospitality provided by the eight tour operators participated in the study will follow. The third, fourth and fifth elements, which conceptualise the experience of the product and services and the engagement with seabirds and nature is discussion in chapter 7.

4.3 The physical plant

The Lofoten-Vesterålen archipelago, is situated in Nordland county, northern Norway. The Lofoten-Barents' sea ecosystem functions as a major habitat for migratory bird, fish and mammal species. The islands have one of the highest bird diversities north of the Arctic Circle. Anker-Nilsen (2006), explains that this is largely due to the regular inflow of warm water from the Atlantic, which keeps the temperature around the Islands relatively constant; a dramatic landscape topography which provides a steep gradient of bird habitats; a high marine production zone and important spawning grounds for fish. The landscape is carved out of ice with jagged mountains, plateaus and systems of ridges and valleys. Kvamme-Fabritius and Sandberg (2010) estimate around 300,000 tourists visit Lofoten per year, inclusive of both domestic and international tourists.

Figure 4.1 shows the distribution of ten seabird species in Lofoten. The majority of bird species have been observed on the Røst archipelago. Røstlandet, the largest island, is very flat and dominated by wetlands, providing a suitable habitat for waders and waterfowl. Important

seabird colonies are found on the neighbouring islands of Vedøy, Storfjellet, Ellefsnyken, Trenyken and Hernyken, which can be described as steep, grass-covered islands (92 – 250m high). The islands are most famous for holding the largest colonies of Arctic Puffin, but the species have severely declined over the last 30 years. Røst also provides breeding grounds for the largest colonies in Norway of European Storm Petrel and Leach's Storm Petrel. Other breeding species include Razorbill, European Shag, Common Guillemot, Northern Fulmar and Kittiwake (Birdlife, 2016). As such, Røst is considered a globally Important Bird and Biodiversity Area (IBA).

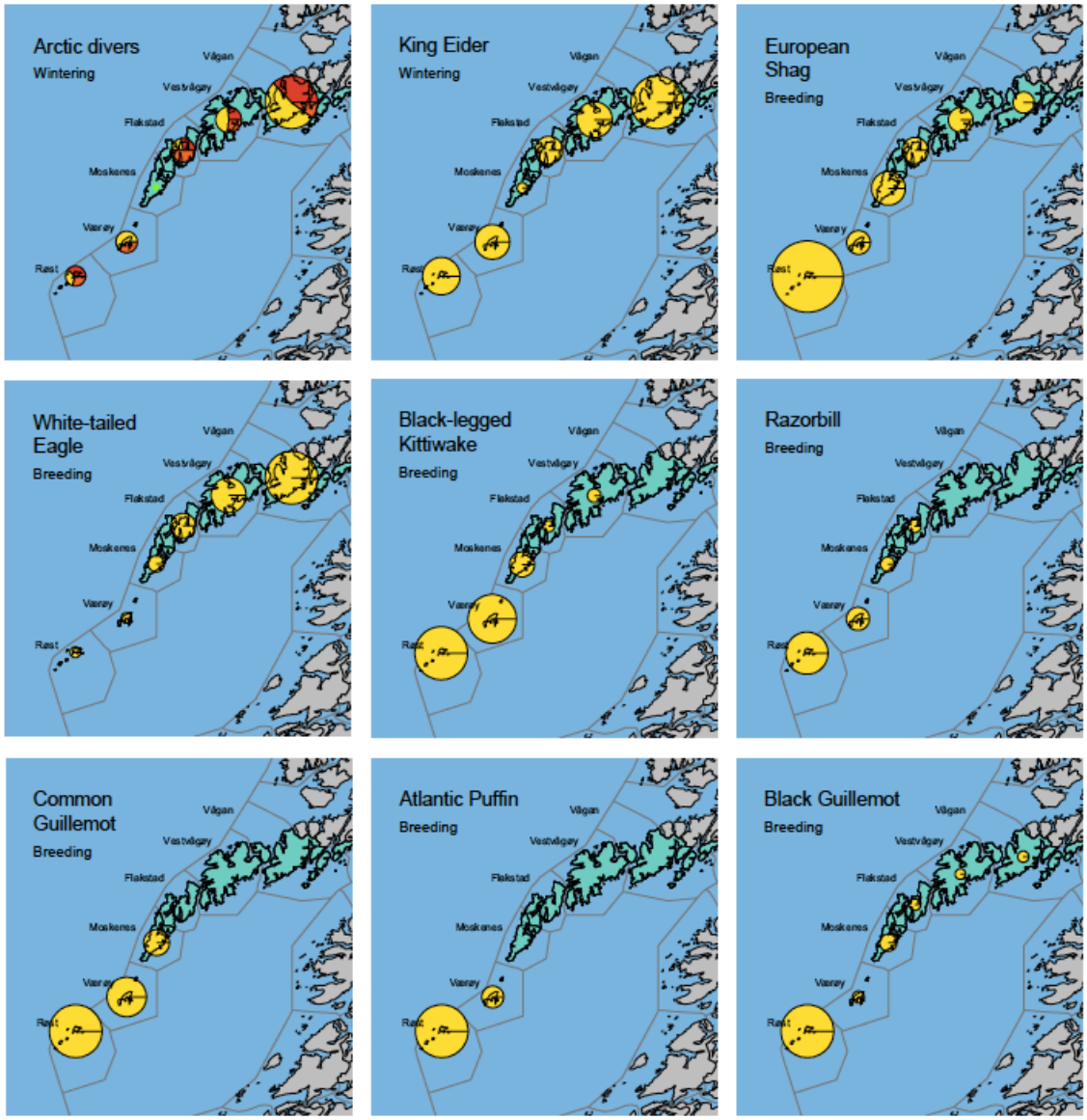


Figure 4.1 The wintering and breeding distribution of ten seabird species in the six outermost municipalities of Lofoten (Anker-Nilssen, 2006).

The White-tailed eagle, breeds in internationally important numbers throughout the Lofoten and Vesterålen although the largest breeding population is found in Vågan, on the Lofoten mainland. Andøya in Vesterålen holds smaller seabird colonies, located between Bleik and Fuglenykene near Nykvåg. The colonies include Shags, Kittiwakes, Puffins, Guillemots and Herring Gull (Systad & Strøm, 2012). Moreover, the Norwegian sea surrounding northwest of Andenes is a significant habitat for cetaceans. Sperm whales are present all year round, aggregating in the deep waters of a submarine canyon (Letteval et al., 2002), whilst the appearance of killer whales is associated with the presence of cod, squid, seals and pilot whales (Similä, Holst & Christensen, 1995). Humpback whales have also become regular winter visitors in recent years.

4.4 The service

As stated previously, a total of eight tour operators participated in the study. Each operator provides a different set of products, services and experiences, summarised in Table 4.1. The second element in Smith's model describes the services that make use of the physical plant and the third the hospitality services provided by the tour operators, referring to their performance of the service. The discussion provided below is based on online research, observation during fieldwork and also unstructured and informal interviews with tour operators and tourists conducted by both myself and my supervisor. I will describe the product design, as well as the format of the tourism experience. Specialised tours focus specifically on viewing seabirds, whilst whale and wildlife tours include seabirds within a packaged tour.

4.4.1 A comparison of services

Two tour operators, A and B, offer specialised seabird tours on Røst. Both Tour A and B are advertised in a popular hotel on Røst. Tourists may book tours either through the hotel or through directly contacting the tour operators via phone-call. Access to information on the internet is quite limited, the seabird tours are only briefly mentioned on two websites belonging to a hotel and rorbu accommodation business. The results from the survey also indicate that most people gained information on the seabird tours through word-of-mouth, and 'other' sources which likely refers to the hotel, and tourist information offices.

Tour A is run by a local from Røst, who inherited the business from his father. He helms the boat and provides the tour guiding service alone. Pre-tour briefing and information about the

seabirds beforehand is absent. Rather, tourists wait on the quay for the boat, and the tour guide provides all the information during the boat trip, which lasts up to four hours. The tour guide recounts stories and legends about Røst and information about seabirds is given in a historical context and cultural context rather than a scientific or factual manner.

Tour B is operated solely by a Norwegian. He owns one RIB boat, and has been running the tour business since 2009. He believes it is good to show people what to look for, to get to know more about the place and the biodiversity, for better knowledge and experience. As such, he holds a briefing before the tour. He takes tourists on a slightly different route from Tour A. He makes regular stops close to the islands and shows people certain seabird species, telling them what they should expect to see during the whole trip, and recounting a few cultural stories in between. The normal duration of the trip is three hours.

Tour C situated in Henningsvær is run by a company that was started up in 1995. The owner is Norwegian and started the business because of his interest in nature, especially in whales and white-tailed sea eagles. They used to run whale tours in the past but now the whales have moved up to Andenes with the herring, and so they also move their business up to Andenes in the winter. Tourists are gathered in their office prior to the guided tour, where they are given a briefing about the tour and safety on the boat. The tourists are provided with extra clothing to feel more comfortable on the tour. The tour duration is normally one hour and thirty minutes. During the tour they point out features in the landscape, tell a few historical stories about the area and approach seabirds and seals slowly and get close enough for people to experience them and take photos. They throw fish to attract white-tailed sea eagles. They have two boats, with one or two helmsmen and one tour guide. The tours that they advertise are nature-based, and seabirds are part of the package but not the only attraction advertised. They also offer other services such as snorkelling and diving activities. They have a website providing information on the tour packages, including prices and what you might expect to see on the tour. They run a regularly updated Facebook page, sharing videos and photos both as a reminder of the tour and also for product promotion.

Tour D is operated by a Norwegian in Stø, who bought the business from its previous owner in 2014. The company offers a wildlife-tour package including whales, seals and seabirds. The owner stressed that sperm whales are the main attraction. They use a ferry boat with a carrying capacity of 40 passengers, including 4 crew. During the tour, the guide

communicates information about whales, their behaviour, diet and general ecology. They include stories and legends connected with the local marine biodiversity. Tourists are given guidelines on how to watch and scan for different species of whales and birds. The company has an up-to-date- website and Facebook page. Information about the tours, prices, species, staff and boats is provided. The tour company also highlights its commitment to following whale-watching guidelines to reduce impacts on whales and promote responsible tourism.

Tour E is provided by a new company, set up by a birdwatcher residing in Flakstad. He founded the company in 2014, specialising in birdwatching tours around Lofoten. One of the tours is boat-based. He normally guides the tours himself but his brother also guides occasionally. The tour is operated on a fishing boat which leaves from Mørkved and has a carrying capacity of twelve people. The trip is designed to search for white-tailed eagle, terns, eiders, skuas, cormorants and divers. Puffins are not commonly spotted in the area. This company has an informative website, with details on each tour package. Moreover, the guide has a Facebook page where he frequently shares news about special bird species that are found in Lofoten and Vesterålen.

Tour F is owned by a local Norwegian and managed by a foreigner residing in Andenes. The tour operates on two large boats (one a former fishing boat, the other a passenger ferry) each with a carrying capacity of 100 people. They specialise in whale tours, and seabirds are just an incidental part of the package. The tour duration varies according to whale sightings, but can extend 6 hours. Besides guided tours, the company owns a large restaurant and museum to entertain tourists and a souvenir shop for memorabilia. They also offer tour packages that include viewing northern lights, husky tours and reindeer tours. There are three guides per tour, that are capable of speaking up to seven languages during the trip. The company has a website providing information about tour packages, prices and accommodation, as well as a Facebook page for promoting their services.

Tour G is owned by a foreigner, who has been running the company since 2005. Seabirds were his original focus, but the company extended to specialise in whales. They still run bird trips but mostly combine them with whale safaris. All trips begin with a thirty-minute presentation on either whales or seabirds, to help people identify them, locate them and know more about their ecology. The main focus on what birds the tourists will expect to see are white-tailed eagles, puffins and gannets. Their goal is to give tourists knowledge about what

they are going to see, and to help them remember. Tourists are given extra clothing and safety gear before heading to the boats. The tour is operated on two RIB boats, with a capacity of twelve people per boat including one tour guide and one or two crew. The tours are normally one hour and thirty minutes. After the tour, tourists are served warm food and given a debriefing to end their experience. They can buy souvenirs, mainly in the form of photographs. Photos can also be ordered on their website, and are promoted on their Facebook page. They collect email addresses to send out more information after the experience and also to gain feedback. Their website provides tourists with information about the whale and seabird tours, packages and prices.

Tour H occurs in Bleik and ownership is shared between five Norwegian locals. It specialises in Puffin safaris and is operated on a fishing boat with a capacity of twelve people including the guide and crew. Gannets are a secondary attraction. Besides seabird tours they also offer fishing trips. There is no pre-trip briefing; guiding and knowledge about seabirds is shared on the boat. The trip duration is around an hour and thirty minutes. They do not have an office so bookings are taken over the phone. They have a website which provides a little information about the seabird tour and other services and also set up a Facebook page where they share images of their trips as memorabilia.

4.5 Summary

All tours were boat-based, some specializing more than others on seabirds, or specifically on puffins and white-tailed eagles. In Stø and Andenes, whales are the main attraction. The experience designs and formats differ between each operator. The tours occurring from the Lofoten mainland and Andenes focus a lot more on providing customer experience, appearing to follow the experience design principles suggested by Pine and Gilmore (1998). They organise their impressions and aim to produce a long-lasting experience, mix in memorabilia and engage different senses. Tour C, D, E, F and G provide information before the tour purchase. Tour F and G provide knowledge about the species and what tourists should expect to experience before the tour. Education is a significant stated objective for most of the tour operators, although the actual information provided does not extend much beyond species identification and some basic natural history facts. Very little attention was directed towards aspects related to their conservation. Most tours apart from E, F and G, spend considerable time on explaining the local cultural significance of the seabirds.

Table 4.1 A comparison of tour products and experiences

		The Product							Pre-Purchase	Pre-Experience	Post-Experience	
Tour Operator	Site	Seabird tour	Whale tour	Other services	Type of boat	No. of boats	Max. No. of tourists per trip	Average duration	Info		Memorabilia	Info
A	Røst	✓			Passenger ferry	1	12	4 hours				
B	Røst	✓			RIB	1	12	3 hours		Safety briefing Protective clothing		
C	Henningsvær	✓		✓	RIB	2	12 per boat	2 hours	✓	Safety briefing Tour information Protective clothing Extra clothing	Music, food	
D	Stø	✓	✓		Fishing vessel	1	40	9 hours	✓	Safety Briefing Tour info		✓
E	Flakstad	✓		✓	Fishing vessel	1	12	3 hours	✓	Tour info and extra clothing	Food	
F	Andenes		✓	✓	Fishing vessel & passenger ferry	2	200	6 hours	✓	Museum tour	Souvenirs	

G	Andenes	✓	✓		RIB	2	12 per boat	2 hours	✓	Safety Briefing Educational briefing and video Protective clothing Extra clothing	Food, photos, souvenirs	✓
H	Bleik	✓		✓	Fishing Vessel	1	12	1 hour	✓		Food	

5 Survey Results

The results from the survey will be presented in this next chapter. The first section will provide an overview using basic frequency statistics. The following section will include a more in-depth analysis of the results obtained.

5.1 Tourist profile

The tourist profile defines who the seabird tourist is and describes how they found out about the seabird tour and also when they made the decision to participate on the tour. Respondents are divided between Norwegian (55.7%) and International (44.3%) nationalities (Table 1) for ease of comparison since representation of different countries is low. Most internationals respondents were from Germany (13), Sweden (12), Netherlands (7) and Italy (7). Figure 5.1 illustrates that most international respondents are between the ages 50-59 years and 60+, whilst the age distribution of Norwegian respondents is more even. Only a few respondents are within the ages 25-29 whilst most respondents under the age of 25 are Norwegian. The majority of respondents have professional occupations (Figure 5.2). The classification of occupation is based upon the Norwegian '*standard for yrkesklassifikering*' (Statistisk sentralbyrå, 1998).

Figure 5.1 Age and nationality distribution

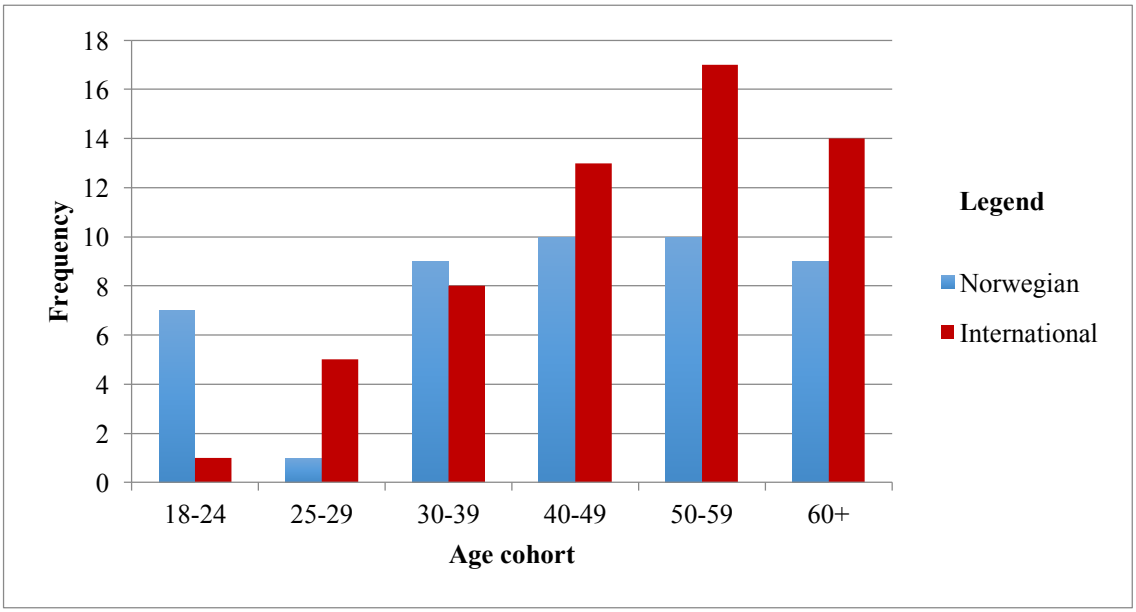
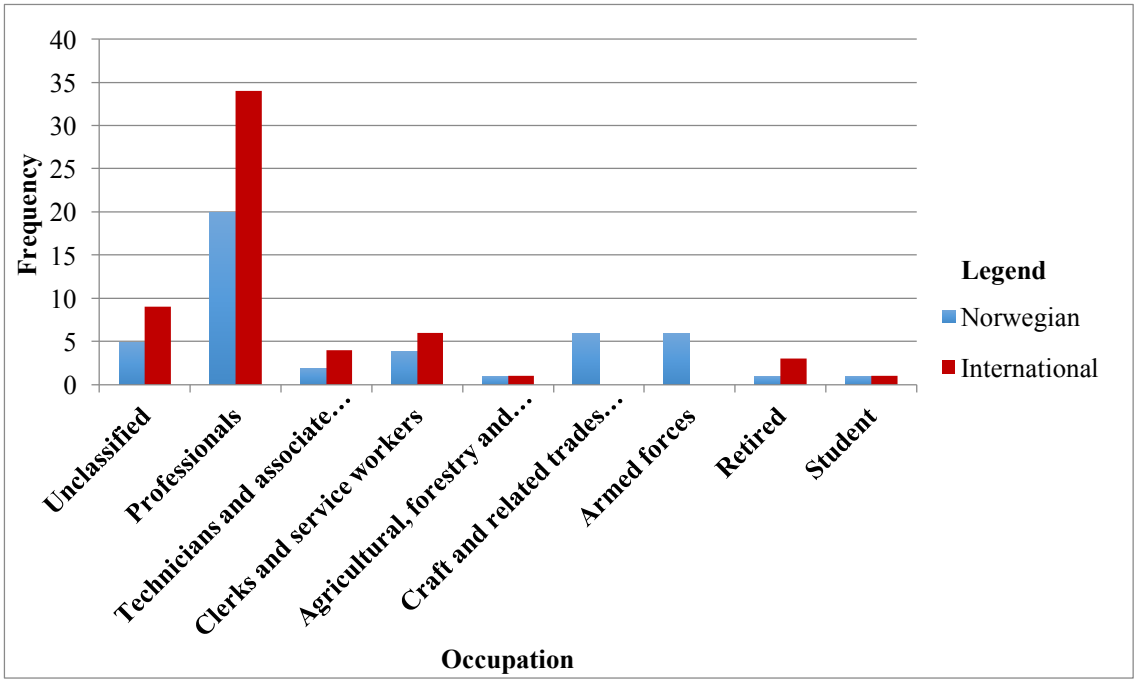


Figure 5.2 Occupation of respondent



Tourists were asked if they had ever visited Lofoten-Vesterålen before and a significant percent (42.3%) answered yes, whilst just over half had not visited Lofoten-Vesterålen before (57.7%). I also asked whether they had participated in a seabird tour before, and the majority had not (62.5%), but a portion of respondents (37.5%) had previously participated. When asked specifically whether they were birdwatchers or not, 30.8% of the respondents replied that they were, whereas the majority (69.2%) did not regard themselves as birdwatchers. Moreover, the majority of participants (94.2%) said that they would still visit Lofoten-Vesterålen even if they did not have the option of going on a seabird tour. In other words, the tourists did not go to Lofoten-Vesterålen specifically for the seabird activity.

Thirty-nine (37.5%) of the tourists had previously participated on an organized seabird tour (accounting for 37.5% of the respondents), whilst the remaining sixty-five respondents were participating for the first time in Lofoten-Vesterålen (62.5%). Most international respondents obtained information on the seabird tour from the internet or a tourist information office (Figure 5.3), whereas Norwegian respondents obtained information mostly through a friend. No international respondents participated on the seabird tour as part of an externally organized trip. The Pearson chi-square test (Table 5.1) confirms that there is a significant relationship between the source of tour information and nationality, which include through a friend (0.007), through the internet (0.009) and through a tourist information office (0.003) since the p-value is less than 0.005.

Figure 5.3 Source of tour information

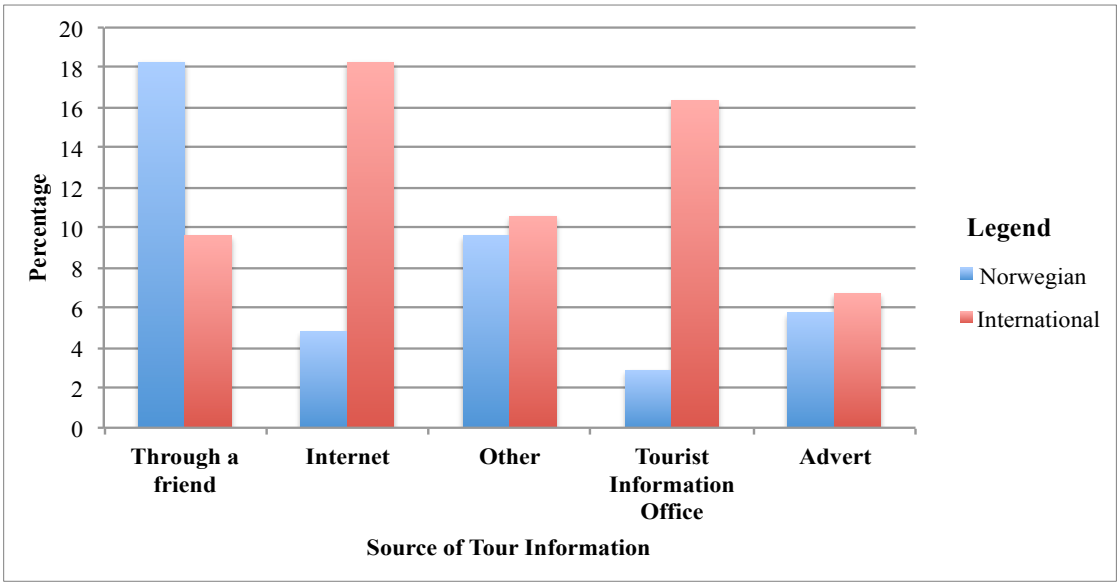


Table 5.1 Pearson chi-square test

Tour information source	Value	df	Asymp. Sig. (2-sided)
Through a friend	7.387	1	**0.007**
Internet	6.934	1	**0.009**
Other	1.249	1	0.264
Tourist information office	8.577	1	**0.003**
Advert	0.22	1	0.881

When compared by region, most tourists obtained information about tours on the Lofoten Mainland from the Internet whilst those who participated in Røst obtained most of their information from other sources, this is most likely through the hotel, or Karøya hostel (Figure 5.4). The relationship is significant for internet (0.004) and other (0.007) (Table 5.3). The majority of respondents made the decision to go on the seabird tour either at home before booking their trip (35 respondents) to Lofoten-Vesterålen or when they arrived in Lofoten-Vesterålen (43 respondents) (Figure 5.5). There was a significant difference between whether Norwegians or foreigners made the decision before leaving home (Table 5.4).

Figure 5.4 Source of information according to region

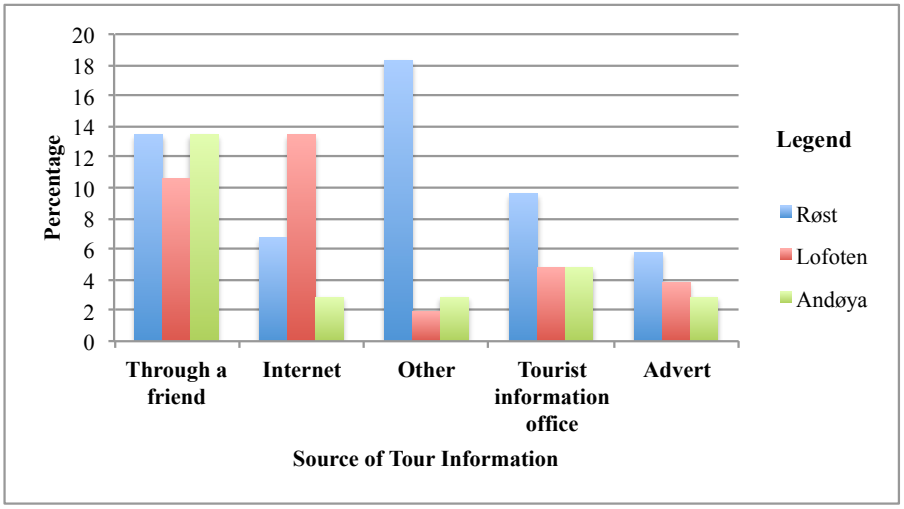


Table 5.2 Pearson chi-square test

Tour information source*Region	Value	df	Asymp. Sig. (2-sided)
Through a friend	1.06	2	0.588
Internet	**11.233**	**2**	**0.004**
Other	**9.981**	**2**	**0.007**
Tourist information office	1.132	2	0.568
Advert	0.381	2	0.827

Figure 5.5 Decision to go on tour

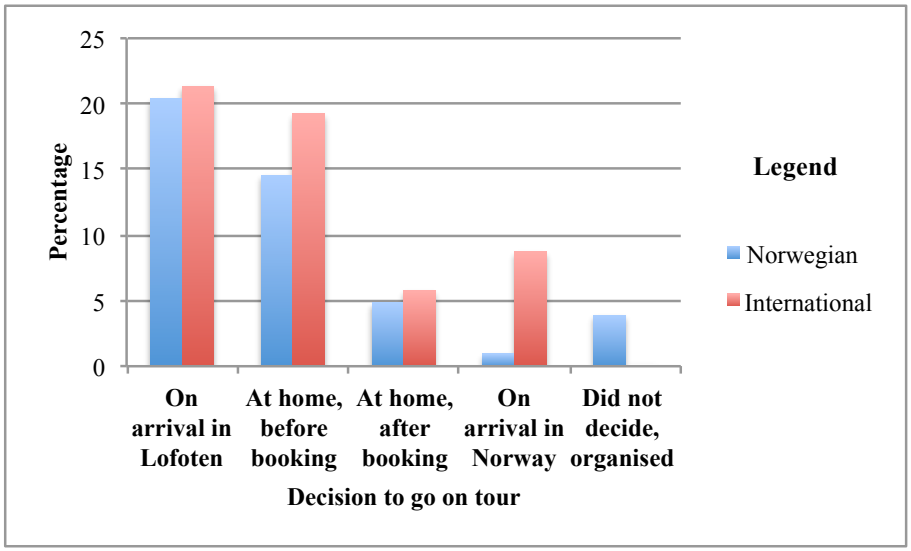


Table 5.3 Pearson chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.170[a]	4	.038

5.2 Travel profile

The travel profile describes tourist participation such as travel party, number of nights spent in the holiday destination and modes of transport. The respondents either travelled solo (42.3% of respondents) or with one other person from the same household (41.3% of respondents) shown in Figure 5.6. Only 17 respondents travelled with a party size larger than 2 (including themselves). Moreover, only 7 respondents travelled with children under the age of 16. The pie chart below (Figure 5.7) illustrates that respondents opted to stay in hotels (41.3%) and rorbuer/cabins[1] (33.7%). Some tourists opted to stay in tents (17.3%) and a few used caravans (9.6%). Only Norwegian tourists used a host family/couch surfing for accommodation (6.7%).

Figure 5.7 Travel party

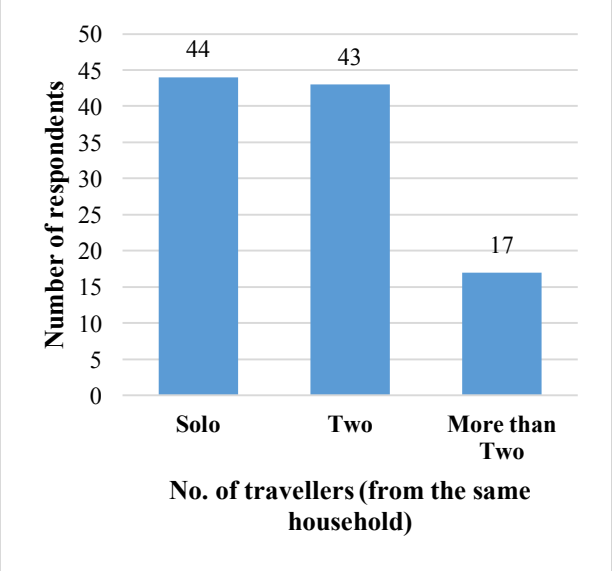
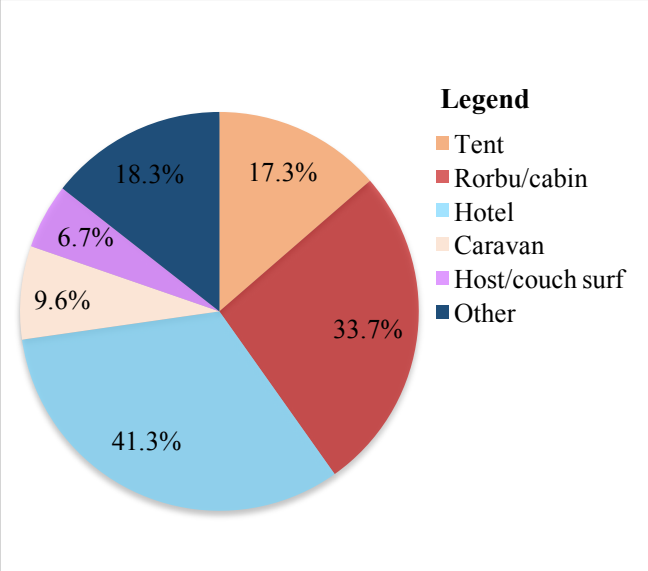


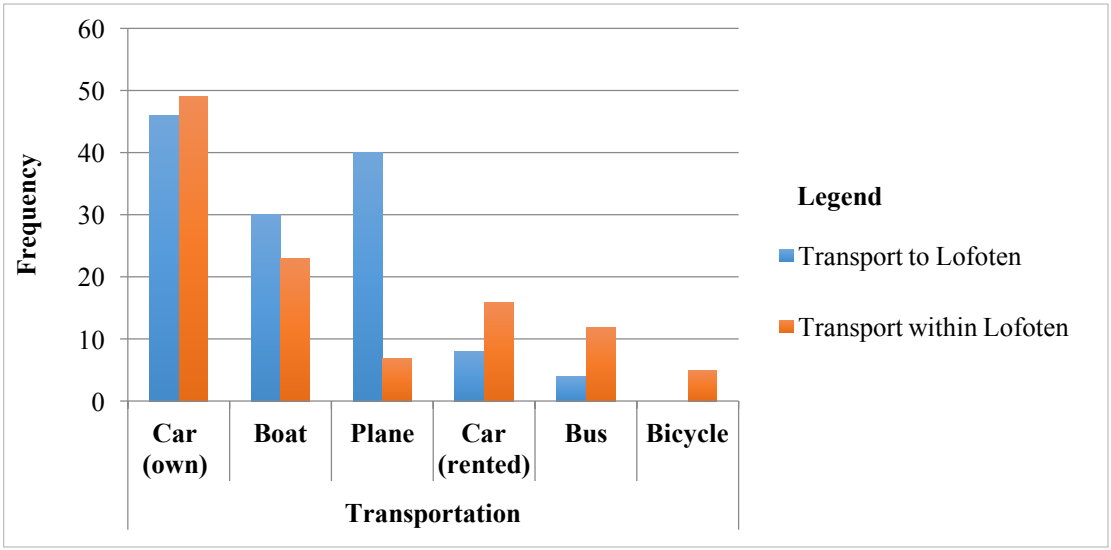
Figure 5.6 Accommodation



The average number of nights spent in Lofoten-Vesterålen by all the respondents was 7, and the average number of nights spent in Norway in total by International tourists was 14. The most popular mode of transportation was by tourists' own cars both to and within Lofoten (Figure 5.8). The majority of tourists travelled by plane or boat to get to Lofoten-Vesterålen. Transportation by boat is also a common mode of transportation.

[1] Rorbus are old fishermen's cabins that are typically found along the coastline in Lofoten and Vesterålen.

Figure 5.8 Transportation to and within Lofoten-Vesterålen



5.3 Distribution

The highest numbers of questionnaires were collected from the island of Røst (54) followed by Henningsvær (18) and Bleik (14) (Table 5.5). The total percentage of respondents by region is 51.9% for Røst, 30.7% for mainland Lofoten and 17.3% for Andøya. Tour operator names have been replaced with letters to respect the anonymity of the service providers and will be referred to as follows henceforth.

Table 5.4 Questionnaire distribution

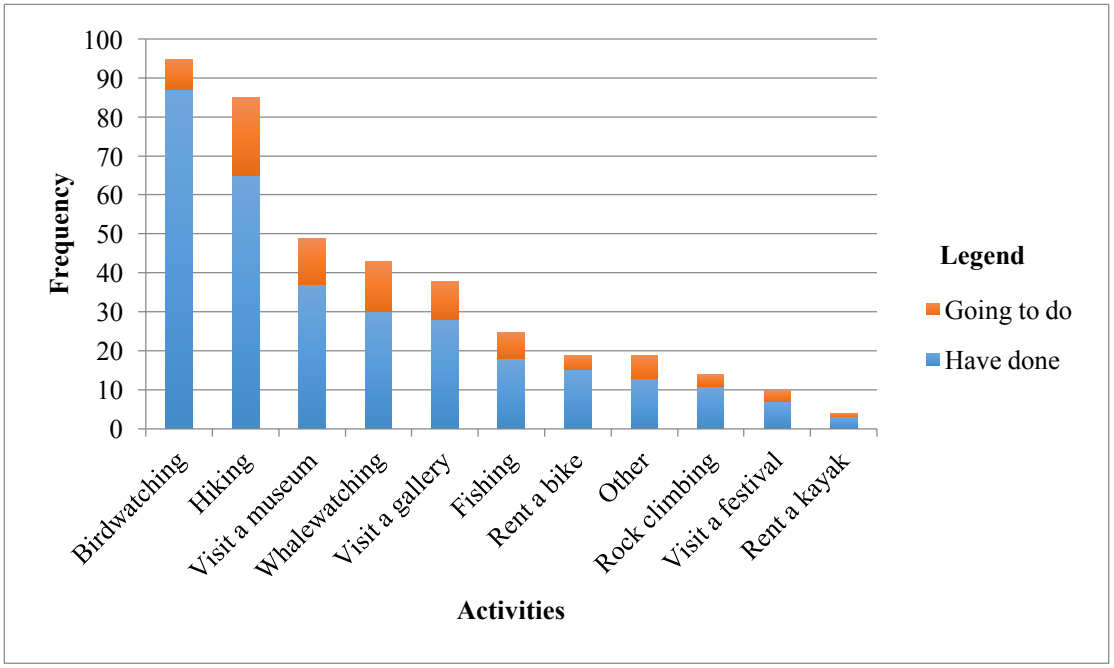
Region	Site	Tour Operator	Percent	Percent
Røst	Røst	A	16.3	51,9
		B	35.6	
Lofoten	Henningsvær	C	17.3	30,7
	Stø	D	6.7	
	Flakstad	H	6.7	
Andøya	Andenes	E	1.9	17,3
		F	1.9	
	Bleik	G	13.5	
	Total	8	104	100.0

5.4 Activities

Participants indicated from a predefined list, the activities they had done or would do whilst on holiday in Lofoten and Vesterålen (Figure 5.9). It is no surprise that the majority of respondents birdwatched (95); the second most popular activity was hiking (85), followed by visiting a museum (49) and whale-watching (43). Other activities listed by tourists include renting a boat, having culinary lessons, eating in restaurants, experiencing new places,

conducting research, photography, swimming, being in nature, making a road trip and cycling.

Figure 5.9 Activities

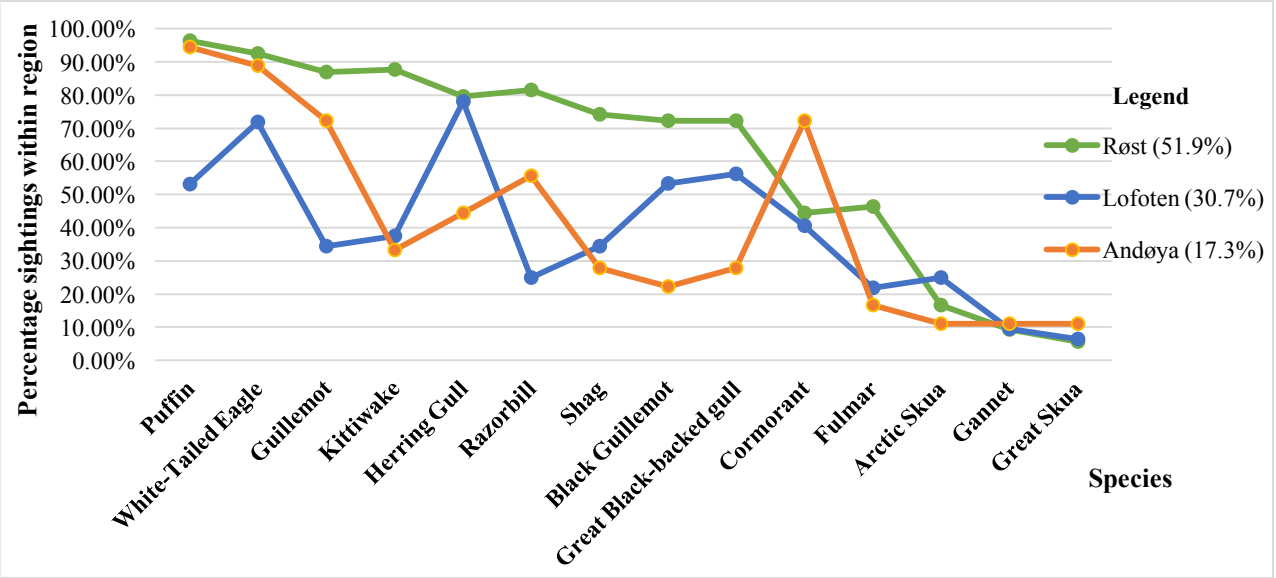


5.5 Seabird sightings

In this part of the survey chapter I will present information collected about the raw experience of the seabird tour. This includes which species of seabirds were seen during the trip, tourists' favourite species and their general experience during the tour.

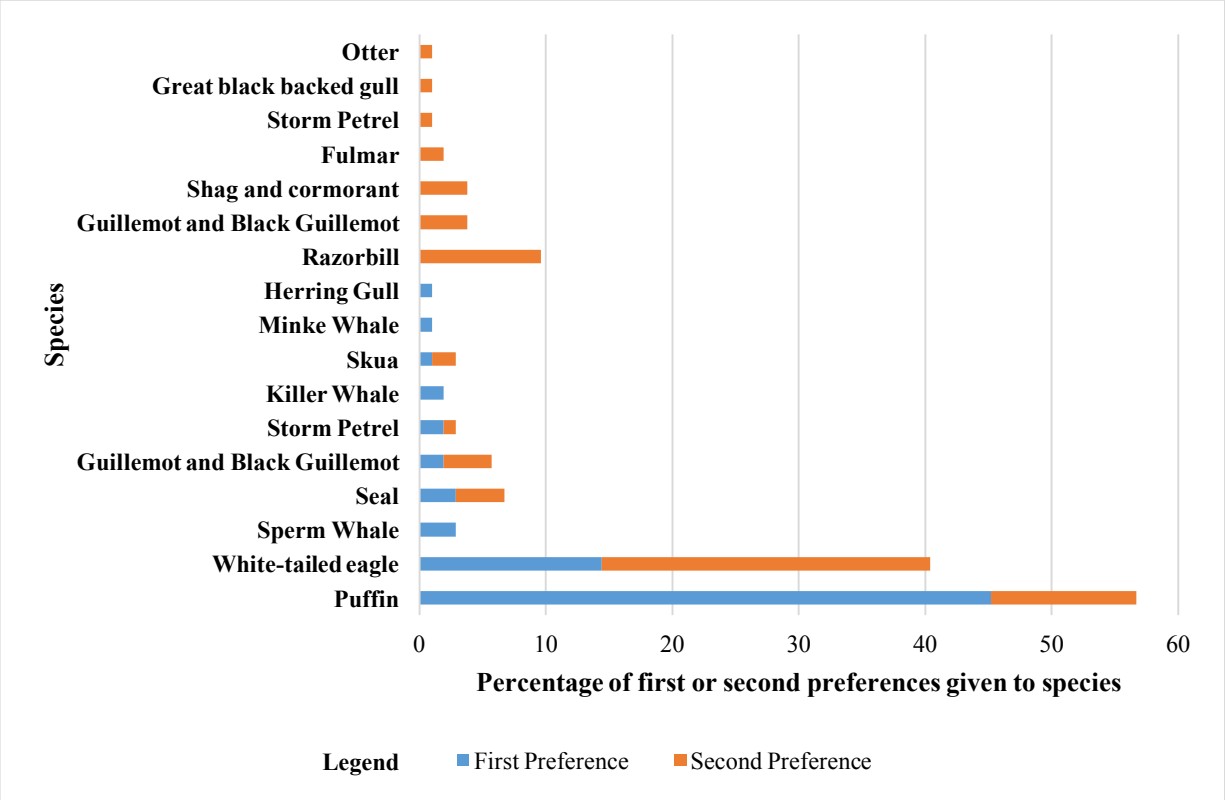
The graph below (Figure 5.10) illustrates the seabirds sighted by tourists in each site. The seabird sightings are calculated from of the total percentage of tourists per region. The Puffin was the most sighted species, spotted by the majority of tourists that participated on Røst and Andøya. It was seen least by tourists that participated on tours in Lofoten. This is probably because the largest population of Puffins is found on Røst (discussed in Chapter 4), a smaller population on Bleiksøya (Andøya) and are less likely to occur in Lofoten. White-tailed Eagle was sighted by the majority of participants in all three regions (over 70% of respondents). Unlike Puffins, White-tailed Eagles are present in good numbers in each site. Moreover, they are probably more easily sighted due to their larger size and slower flight speed. A higher number of species were sighted by tourists on Røst. A relatively high percentage of tourists saw Kittiwakes in both Lofoten and Røst, a higher percentage of people saw Cormorants in Andøya than any other region and Arctic Skua was sighted by a higher percentage of people in Lofoten than the two other regions.

Figure 5.10 Seabird sightings of respondents



When asked about their favourite species, most respondents stated Puffin as their first preference (45.2%), and White-tailed Eagle as second preference (14.4%). Cetaceans featured as favourite species when they were spotted during the tour. Razorbill were given second preference by 9.6% of the respondents. Few first or second preferences are given to other seabird species (Figure 5.11).

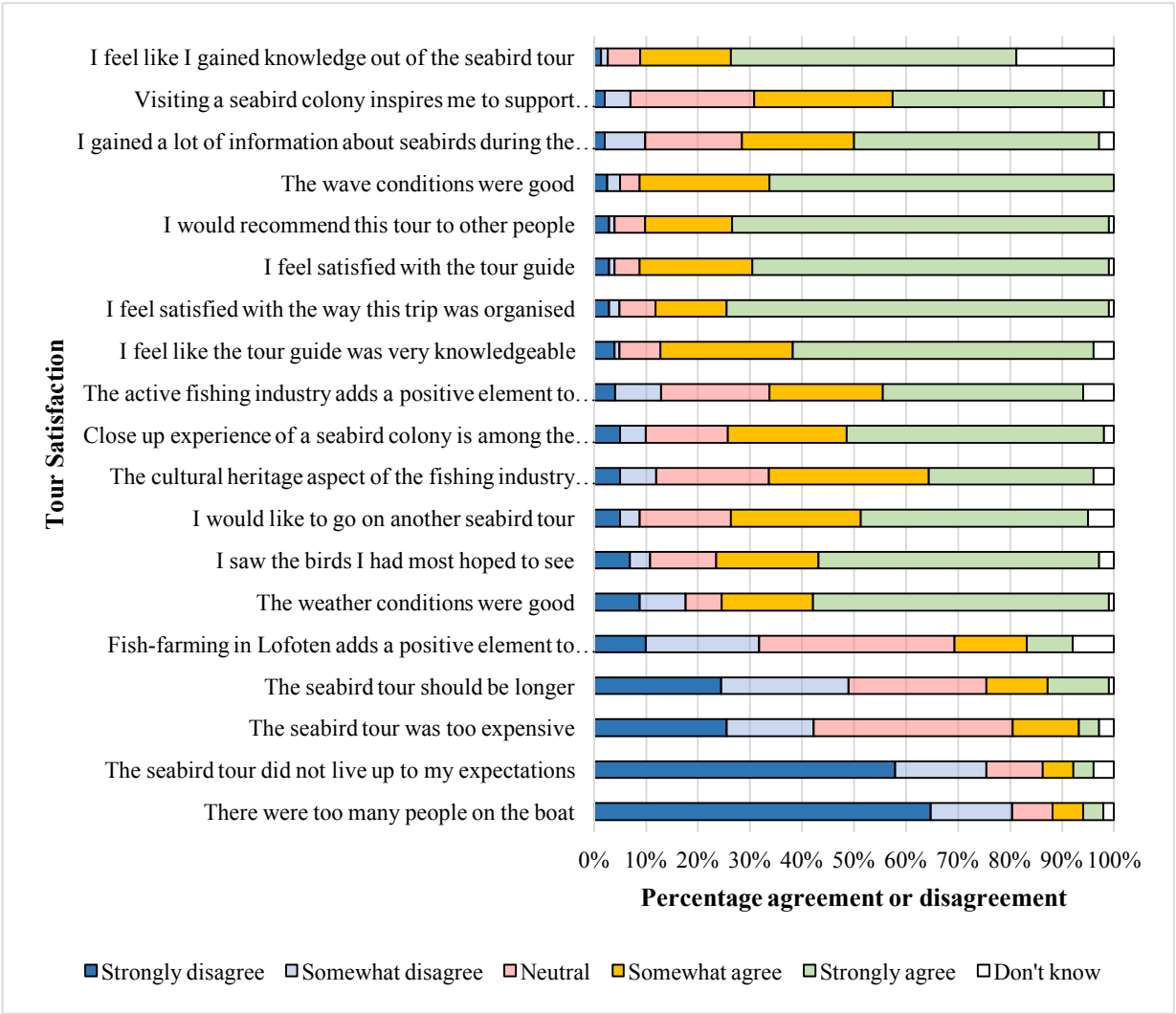
Figure 5.11 Species preferences



5.6 Experience and satisfaction

In order to assess tourists' experience and satisfaction, respondents were asked to rank on a scale of 1-5 the extent to which they agreed with each of the statements shown in Figure 5.12. The value 5 represents the highest end of the scale, meaning tourists were in great agreement with the statement, whilst 1 represents the lowest end of the scale, meaning tourists were in great disagreement with the statement.

Figure 5.12 Tour experience and satisfaction



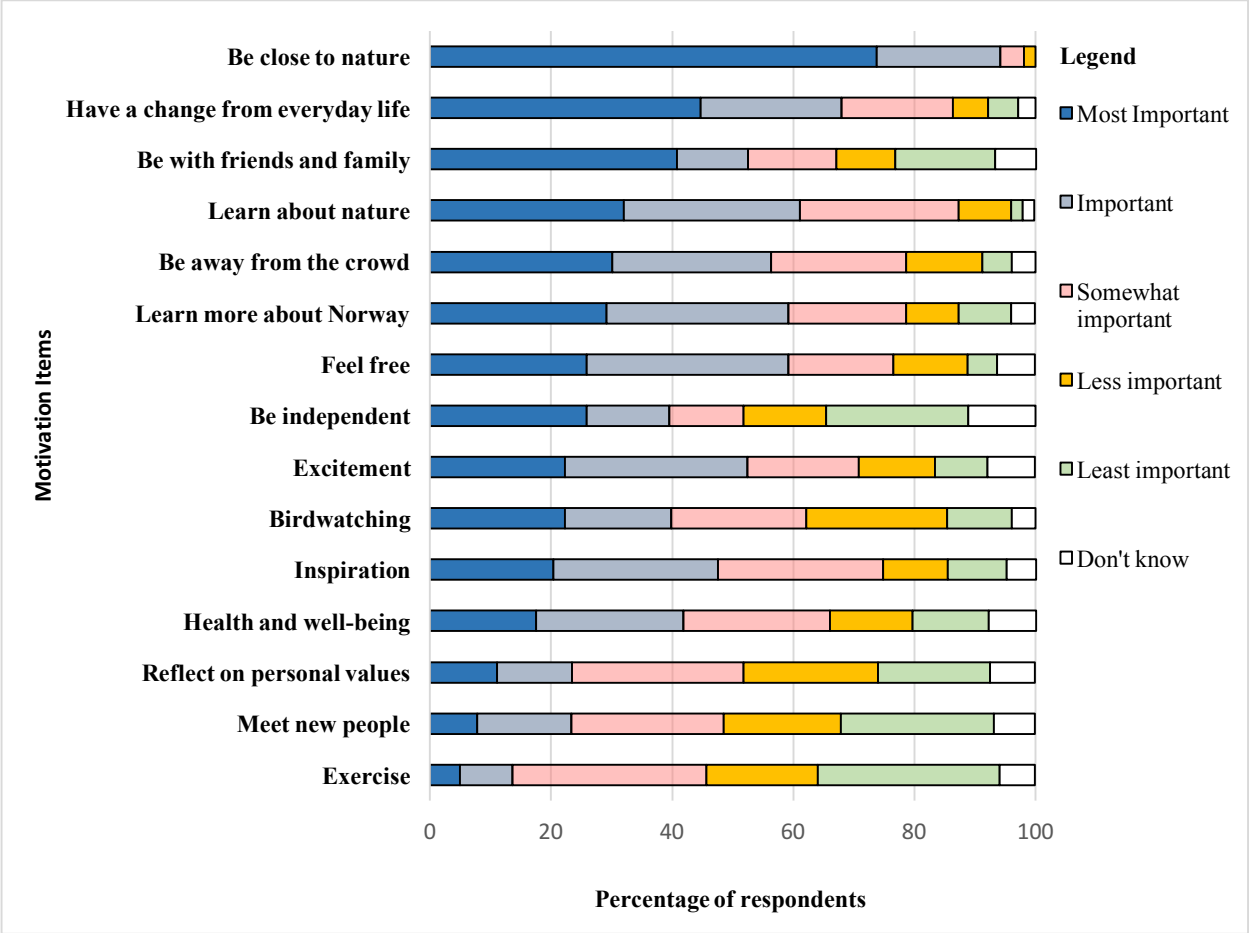
The results from the survey show that tourists were mostly satisfied with their tour experience as positive statements were given high rankings and negative statements were given the lowest. They agreed most highly that they would recommend the seabird tour to other people, they were satisfied with the organization of the trip, the tour guide and feel they gained a lot of knowledge. However, almost 19% of the respondents did not know if they gained a lot of

knowledge from the tour. The majority agreed that close up experience of seabirds was a beautiful phenomenon. Tourists also indicated that the fishing industry adds a positive element in Lofoten and the cultural heritage tied with fishing enriched their experience. I will illustrate and discuss in more detail differences in experience and satisfaction of tourists in Chapter 6 and 7.

5.7 Tourism motivations

The respondents were asked to reflect on why they chose to visit Lofoten-Vesterålen (Figure 5.13). They were given a set of fifteen motivation items, and needed to rank the importance of each item on a scale of 1-5, 1 representing the least important reason for visiting, and 5 representing the most important. They also had the option of choosing a category 'Don't Know'.

Figure 5.13 Motivation to visit Lofoten-Vesterålen



The strongest motivation for travelling to Lofoten-Vesterålen was to be close to nature, followed by the cultural motivation to learn about nature. To have a change from everyday

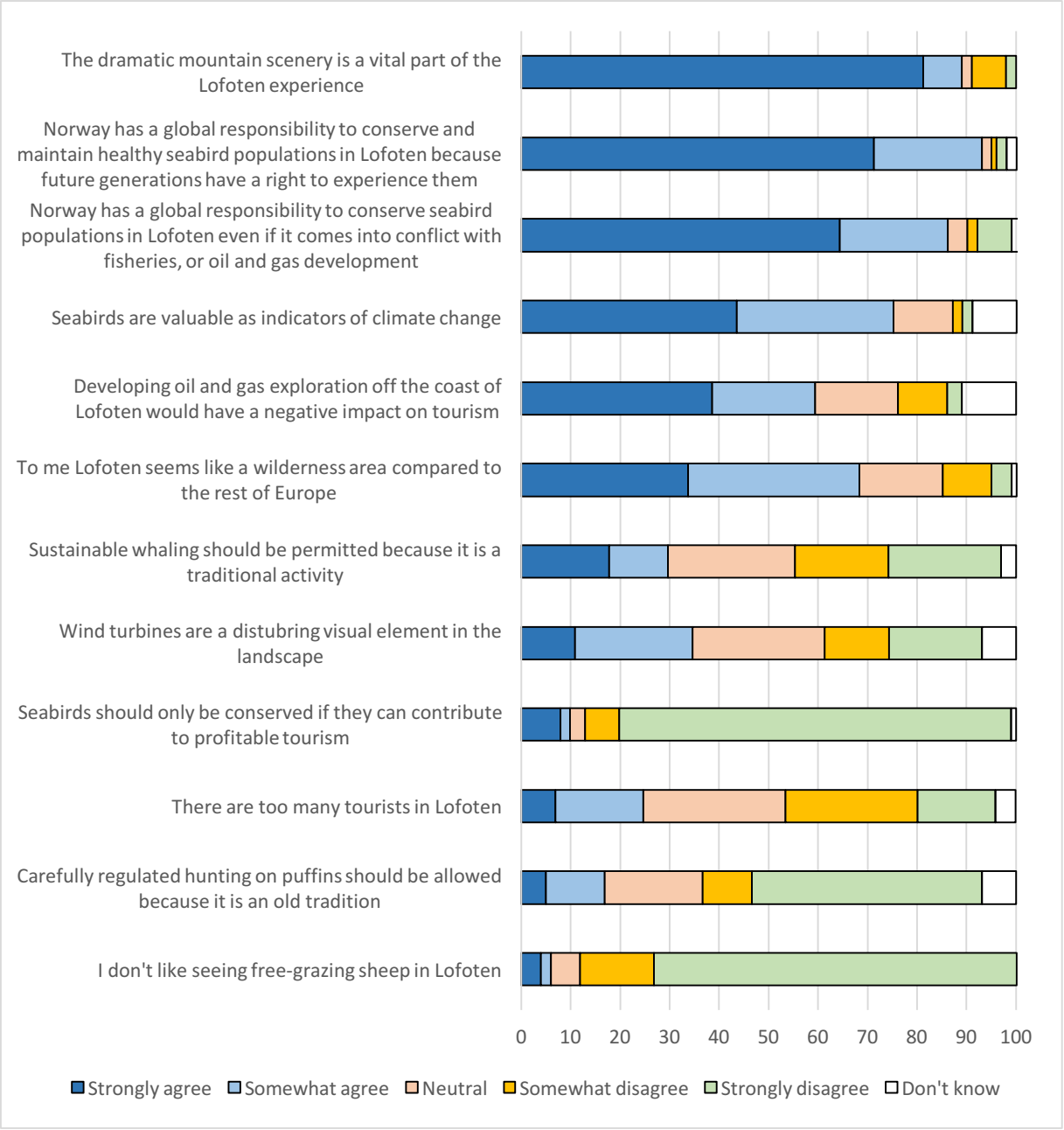
life, and to be with friends and family, away from the crowd and independent also feature as important motives for tourists to travel to the islands. Learning about nature and about Norway were given a slightly higher than median importance to travel. On the other end of the scale, exercise bares the least importance for tourists to travel to this destination and the tourists were not so interested in travelling to meet new people or for reflection on their personal values. Health and well-being as well as birdwatching were given a medium importance as a reason to travel.

5.8 Environmental values

Tourists were asked to indicate how strongly they agreed or disagreed to statements that reflected the value they give to Lofoten-Vesterålen and the seabirds themselves and their concerns over environmental threats. Figure 5.14 illustrates what tourists feel are an important part of their tourism experience. The dramatic scenery of Lofoten-Vesterålen is perceived as being the most important feature of their experience. They also find that Lofoten-Vesterålen seems like a wilderness area, and oil and gas exploration in Lofoten-Vesterålen would have a negative impact on the tourist industry. The respondents were neutral concerning statements that can be described as somewhat controversial, such as permitting sustainable whaling, including wind turbines in the landscape, the number of tourists and fish-farming in Lofoten-Vesterålen. Whilst the presence of free-grazing sheep did not seem to disrupt tourists' experiences in Lofoten.

Figure 5.14 also illustrates the values that the visitors attribute to seabirds in Norway. The survey respondents seem to strongly agree that Norway has a global responsibility to conserve and maintain healthy seabird populations because future generations also have a right to experience them, even if it comes into conflict with fisheries or oil and gas development. The latter can somewhat confirm that these respondents view oil and gas development in a negative manner, as they also felt it would have an impact on their experience in Lofoten-Vesterålen. They generally agree that seabirds are valuable as indicators of climate change. On the other hand, they did not agree with permitting regulated hunting on puffins or that seabirds should only be conserved if they contributed to profitable tourism.

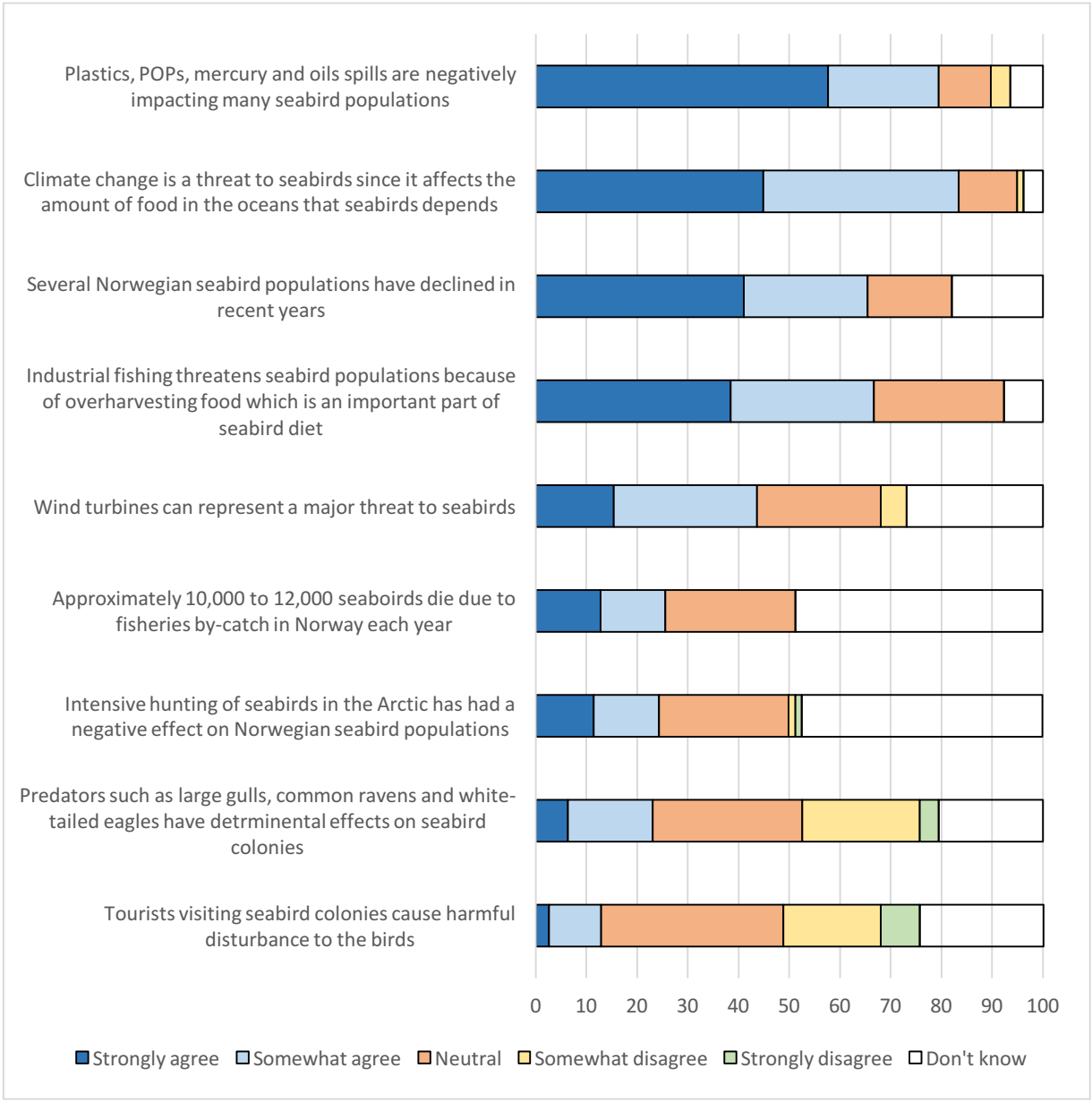
Figure 5.14 Environmental values



In the final ranking table, tourists were asked to indicate how strongly or weakly they agreed with statements that reflect their perceptions over environmental threats (Figure 5.15). It should be pointed out that most tourists answered the statement on the number of seabirds that die due to seabird by-catch figures, with 'Don't Know'. This is probably because it is too factual for them to be certain about their answer. However, the tourists were in general, aware that several seabirds in Norway have declined over recent years. They most strongly agree that plastic, POPS, mercury, oil spills and climate change are having negative impacts on seabird populations. Most tourists somewhat agree to the fact that wind turbines are a major threat to seabirds but they are largely neutral when asked whether they agree that tourism

disturbs seabird colonies, and whether larger predators such as gulls, ravens and White-tailed sea eagles have detrimental effects on seabird populations.

Figure 5.15 Perceptions on environmental threats

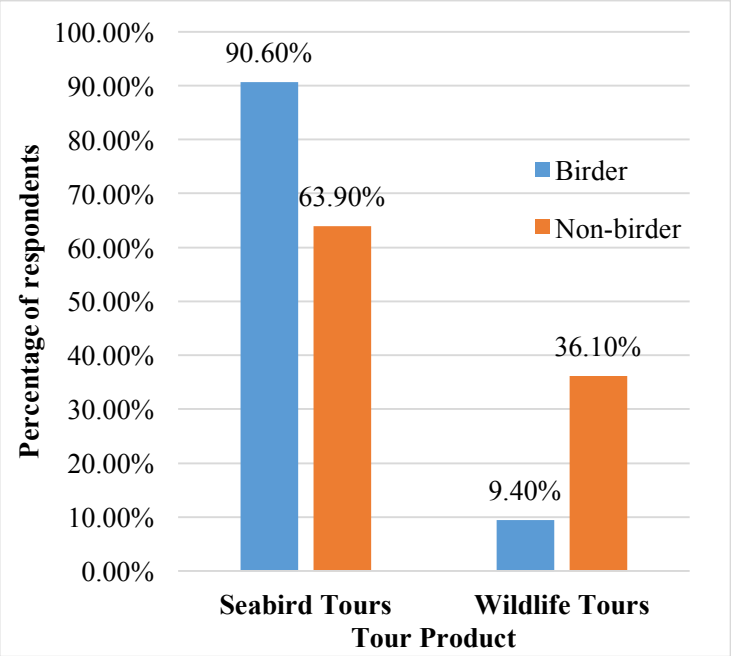


6 Analysis

6.1 Birders and non-birders

In the previous chapter (Chapter 5) results show that 30.8% of the respondents regard themselves as birders, whilst 69.2% of respondents are non-birders. A cross-tabulation analysis was carried out to find out if birders were more likely to participate in tours that specialised specifically on seabirds than in whale or broader wildlife tours (Figure 6.1).

Figure 6.1 Participation of birders vs. non-birders on seabird tours and general wildlife tours



The results in the table above, show that the majority of birders (90.6%) participated mostly on specialised tours rather than in tours that either specialised in whale tours or generalised wildlife safari tours (in which 9.4% of birders had participated). The difference is not so large amongst non-birders, so that 36.1% of these respondents participated in other wildlife tours. It needs to be noted however, that the higher percentage of both tourist categories taking part in specialised tours is also due to the fact that most surveys were collected from tour providers on Røst. The relationship was inspected using a chi-square test and since p-value is 0.05 criterion, it is accepted as significant.

The graph below (Figure 6.2) illustrates a difference between the sightings of certain bird species of birders and non-birders. A greater percentage of tourists, regarded as birders, sighted Puffins, Razorbills, Cormorants, Greater Black-Backed Gulls and Arctic Skua than within the percentage of sightings within the tourists regarded as non-birders. A series of chi-

square tests (Table 6.1) reveal a correlation between the tourist type and bird sightings. A possible reason for this is because birders have more knowledge about different seabirds, or are more capable of recognising different species such as Razorbill and Arctic Skua. This could further support the argument that birders are more specialised as they are more knowledgeable (with reference to Higham, Lussaeu & Hendry, 2008). White-tailed eagle was spotted almost equally between the two groups. The chi-square test confirms that there was no significant relationship between the tourist type and number of Eagles sighted.

Figure 6.2 Differences in seabird sightings amongst birders and non-birders

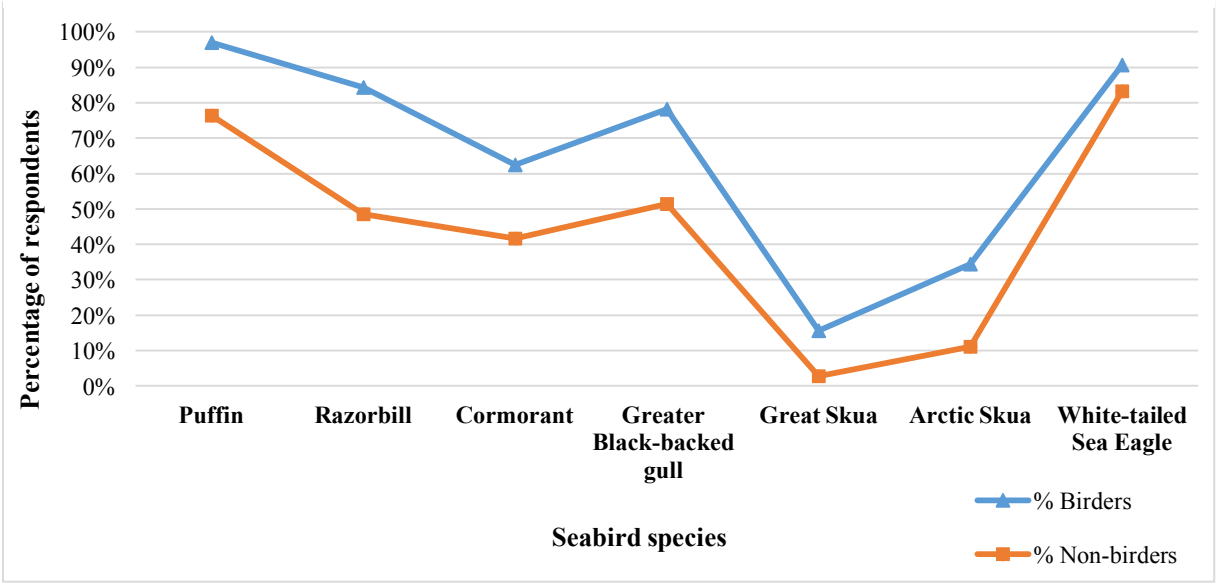


Table 6.1 Pearson chi-square tests

Species	Value	df	Asymp. Sign. (2-sided)
Puffin	6.496	1	0.011
Razorbill	11.77	1	0.001
Cormorant	3.852	1	0.05
Greater BB Gull	6.578	1	0.01
Great Skua	5.825	1	0.016
Arctic Skua	8.03	1	0.005
White-tailed Eagle	0.954	1	0.329

6.2 Travel motives

Whilst the main motive for travelling is to be close to nature, there are several other motives that can influence a tourist's decision to visit the destination. A principle component factor analysis with varimax rotation was conducted on thirteen motivational items, a method recommended by Mehmetoglu (2005) in his study on nature-based tourists. These items were analysed to determine any underlying dimensions, and to reveal any relationship between the

correlated variables with independent factors. The analysis of the trip motives resulted in four factors with eigen values of 1. The results revealed four possible main categories, presented in Table 6.2.

Table 6.2 Rotated component matrix for motivation factors

Motivation Factors	Rotated Component Matrix*			
Factor 1: Mental & Physical Well-being				
Be independent	.760			
Be away from the crowd	.721			
Feel free	.701			
Exercise	.614			
Health & well-being	.594			
Factor 2: Learning				
Learn about nature		.844		
Learn more about Norway		.760		
Excitement		.613		
Factor 3: Ego enhancement				
Meet new people			.808	
Inspiration			.797	
Reflect on personal values			.599	
Factor 4: Relationship enhancement				
Have a change from everyday life				.812
Be with friends and family				.698
No. of items	5	3	3	2
Cronbach Alpha	0.744	0.601	0.714	0.452*
Pearson Correlation Sig. (2-tailed) N				.303

*Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalisation
Rotation converged in 6 iterations

As shown in the previous table, Factor 1, is labelled mental and physical well-being and contains 5 items, factor 2 is learning containing 3 items, factor 3 is social contact and ego-enhancement also containing, factor 4 is relationship enhancement. Cronbach's alpha was used to test the reliability of the constituted factors. The results from the latter show that the alpha coefficients were relatively high for factors 1,2 and 3 all exceeding 0.60. The alpha coefficient for factor 4 was below the minimum acceptable standard (0.45), but a Pearson Correlation test (2-tailed significance) revealed a positive relationship between the variables (0.303 level of significance) for which literature deems acceptable.

Factor 1, 'physical and mental well-being', correlates with Crompton's component (1979), relaxation, which he described as being a desire to restore mental and physical health from day-to-day stress. Factor 2 is also similar to Crompton's component 'education' and Mehmetoglu's 'novelty and learning' factor, although excitement does not feature directly within neither Crompton's nor Mehmetoglu's motivational components. It can be argued however, that excitement is a result of experiencing something new, and in that way it relates to the 'novelty' component. Factor 3, which is 'ego enhancement', contains elements which are important for social and mental development. Meeting new people, getting inspired and reflecting on personal values are arguably important for the creation of identity in post-modern society (Mehmetoglu & Engan, 2011). The items within Factor 4, 'relationship enhancement', also fit well within Crompton's model, because he describes this component as enhancing kinship relationships away from normal routine situations.

A means and standard deviation analysis was performed in SPSS (Table 6.3). The analysis is used to show differences on scores based on a likert scale of 1 to 5, 1 being least important and 5 being most important. The results show that relationship enhancement (mean average 3.77 on the likert scale) was the most important motivation factor for the tourists. Learning placed second (with 3.63), followed by well-being (3.27). Ego enhancement was the least important motivation factor for visiting Lofoten and Vesterålen (2.84).

Table 6.3 Means and standard deviation of motivation factors

Motivation Factors	N	Mean	Std. Deviation
Relationship Enhancement	95	3.7684	1.10802
Learning	92	3.6268	.88928
Well Being	67	3.2687	.93909
Ego Enhancement	73	2.8402	1.00632

6.2.1 Motivation differences between birders and non-birders

An independent samples t-test was used to determine if there were any differences between motives for visiting Lofoten and Vesterålen between self-declared birders and non-birders. Table 6.4 shows that the only significant difference (0.042 level of significance) between the two groups was that relationship enhancement was more important for birders (mean 4.13 on the likert scale) than non-birders (mean 3.62).

Table 6.4 Means for motivations of birders and non-birders

Motivation factors	Birdwatcher or not	N	Mean	Std. Deviation	T-test for equality of means (Sig. 2-tailed)
Relationship Enhancement	Yes	28	4.1250	.94893	0.042
	No	67	3.6194	1.14180	
Well being	Yes	21	3.5333	.96402	0.120
	No	46	3.1478	.91256	
Ego Enhancement	Yes	26	2.9231	.73821	0.604
	No	47	2.7943	1.13264	
Learning	Yes	29	3.8276	.83865	0.143
	No	63	3.5344	.90308	

The same method was used to test differences in motivation depending on previous or first-time visitation of the destination. The results in Table 6.5 show that there is a significant difference (0.030 level of significance) over the motivation factor well-being. Tourists who previously visited Lofoten and Vesterålen placed less importance on physical and mental well-being as a motive to visit (2.98) than first-time visitors (3.48).

Table 6.5 Means for motivation of previous visitors and first-time visitors

Motivation factors	Previous visit to Lofoten	N	Mean	Std. Deviation	T-test for equality of means (Sig. 2-tailed)
Relationship Enhancement	Yes	39	3.8333	1.09625	0.636
	No	56	3.7232	1.12379	
Well being	Yes	29	2.9862	.97385	0.030
	No	38	3.4842	.86322	
Ego Enhancement	Yes	33	2.7576	1.02832	0.528
	No	40	2.9083	.99568	
Learning	Yes	39	3.4615	.91003	0.127
	No	53	3.7484	.86208	

6.3 Experience

The same procedure was used to analyze experience items. A principle component analysis was used to reduce fifteen experiential items (Table 6.6). By using eigen values of 1, five components were extracted. These include: knowledge and satisfaction (5 items); organization and satisfaction (3 items); entertainment (3 items); esthetics (3 items); and

arousal (2 items). A Cronbach's alpha test showed that the model is reliable as all the factors had an alpha coefficient greater than the 0.5 minimum criteria.

Table 6.6 Rotated component matrix for experience factors

Experience Factors	Rotated Component Matrix*				
Factor 1: Knowledge & Satisfaction					
I feel like I gained knowledge out of the seabird tour	.913				
I feel like the tour guide was very knowledgeable	.909				
I feel satisfied with the tour guide	.869				.
I gained a lot of information about seabirds during the tour	.749				
I would recommend this tour to other people	.747				
Factor 2: Organization & Satisfaction					
I feel satisfied with the way this trip was organized		.811			
The wave conditions were good		.806			
The weather conditions were good		.771			
Factor 3: Entertainment					
The cultural heritage aspect of the fishing industry enriches the experience of my visit			.905		
The active fishing industry adds a positive element to visiting Lofoten			.881		
Fish-farming in Lofoten adds a positive element to my visit			.451		
Factor 4: Esthetics					
Close up experience of a seabird colony is among the most beautiful natural phenomena I have encountered in Europe				.917	
Visiting a seabird colony inspires me to support environmental conservation				.882	
Factor 5: Arousal					
I would like to go on another seabird tour					.819
I saw the birds I had most hoped to see					.795
No. of items	5	3	3	2	2
Cronbach alpha	0.910	0.780	0.748	0.743	0.683

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

I attempted to reproduce Pine and Gilmore's (1999) experiential framework, using Mehmetoglu's example of its application. However, the items I used in my questionnaire differed considerably to the items described used by the latter. Knowledge and satisfaction correlated with Pine and Gilmore's educational realm. The experience of the organisation of an activity is not taken into account in Pine and Gilmore's model. It could be an important factor to consider, especially within the context of guided tours that occur in outdoor environments. Although the items within the entertainment component are related to absorbing popular activities that occur within Lofoten-Vesterålen, they were not directly related to seabird tourism, and in this way it could weaken the analysis of the model as a whole. Factor 4 was related to the esthetic dimension proposed by Pine and Gilmore, wherein tourists' enjoyment is influenced by a destination's appeal to their senses. In this context the passive observation of seabird colonies.

I could not use the escapist dimension in Pine and Gilmore's model because the items do not relate to this realm, and it has been used to describe the experience of activities such as diving, in which people control the performance of the service. However, another realm formulated by Oh, Fiore and Jeoung, termed Arousal, could be better suited. Arousal is a consequence of the overall experience, and it contains items which suggest that the tourist's motives to see particular bird species were fulfilled, and that they are eager for another seabird tour as a result of a good tour experience. The conceptualization of realms of experience might not be a strictly reproducible but it can still be usefully adapted for assessing which realm had the most influence on satisfaction of the seabird tour. The method of reducing fifteen items into five factors, also makes it is easier to examine and transmit information.

The following table (Table 6.7) shows the mean and standard deviation of each experience factor. Each reduced item was ranked on a scale of 1 to 5, 1 representing strong disagreement with the statement and 5 representing strong agreement. Knowledge scored the highest on the likert scale on average (4.58), followed by the organization of the tour (4.49). So the majority of tourists were satisfied with the knowledge they gained from the activity. Esthetics and arousal were equally ranked, with an average of 4.14 on the likert scale, and third to knowledge and organization. Entertainment scored the lowest experience factor (3.52), perhaps because this was related to fishing and cultural heritage, elements that occur in the destination. In other words, they are related to the experience of popular activities (fishing) in

the wider setting and not directly related to seabirds. Independent samples t-tests were also performed to test for differences between experience factors of birders and non-birders, previous participants and first-timers. No significant differences were found.

Table 6.7 Means and standard deviation for experience factors

Experience Factors	N	Mean	Std. Deviation
Knowledge & satisfaction	64	4.5844	.60611
Organization & satisfaction	78	4.4957	.77431
Esthetics	101	4.1485	1.18647
Arousal	74	4.1419	1.02209
Entertainment	90	3.5222	.93490

6.4 Environmental values and threats

Environmental values and perceptions over environmental threats were analyzed using a mean and standard deviation test. This test is used to simply show which statements rated the highest. The results displayed in Table 6.8 reveal that most tourists agreed most strongly that Norway has a responsibility to conserve seabird populations for future generations to experience (4.63), and even if it comes into conflict over the use of other resources (4.35). The scenery of Lofoten is also regarded as a very important part of the experience of the seabird tourists (4.59). The results in Table 6.9 show that tourists agree the most with the statement on biochemical pollution having a negative impact on seabird populations. However, tourists were neutral or in slight disagreement with statements over human impacts on seabirds (such as construction of wind turbines, hunting and tourism). The results from this table also demonstrate that tourists were not so able to answer factual statements with numbers of population decline (40 respondents out of 104 ranked the statement on the number of seabirds that die as a result of by-catch each year in Norway).

Table 6.8 Means and standard deviations for environmental values

Environmental Values	N	Mean	Std. Deviation
Norway has a global responsibility to conserve and maintain healthy seabird populations for future generations	99	4.63	.764
The dramatic mountain scenery is a vital part of the Lofoten experience	101	4.59	.971
Norway has a global responsibility to conserve seabird populations in Lofoten even if it comes into conflict with fisheries, or oil and gas development	99	4.35	1.137
Seabirds are valuable as indicators of climate change	92	4.24	.918
Developing oil and gas exploration off the coast of Lofoten would have a negative impact on tourism	90	3.92	1.173
To me Lofoten seems like a wilderness area compared to the rest of Europe	100	3.85	1.123
Wind turbines are a disturbing visual element in the landscape	94	2.95	1.298
Sustainable whaling should be permitted because it is a traditional activity	98	2.83	1.407
There are too many tourists in Lofoten	97	2.72	1.161
Carefully regulated hunting on puffins should be allowed because it is an old tradition	94	2.13	1.305
Seabirds should only be conserved if they can contribute to profitable tourism	100	1.51	1.185
I don't like seeing free-grazing sheep in Lofoten	101	1.49	.986

Table 6.9 Means and standard deviations for environmental threats

Environmental Threats	N	Mean	Std. Deviation
Plastics, POPs, mercury and oils spills are negatively impacting many seabird populations	73	4.42	.848
Climate change is a threat to seabirds since it affects the amount of food in the oceans that seabirds depends	75	4.32	.738
Several Norwegian seabird populations have declined in recent years	64	4.30	.790
Industrial fishing threatens seabird populations because of overharvesting food which is an important part of seabird diet	72	4.14	.827
Approximately 10,000 to 12,000 seabirds die due to fisheries by-catch in Norway each year	40	3.75	.840
Wind turbines can represent a major threat to seabirds	57	3.74	.877
Intensive hunting of seabirds in the Arctic has had a negative effect on Norwegian seabird populations	41	3.61	.945
Predators such as large gulls, common ravens and white-tailed eagles have detrimental effects on seabird colonies	62	2.98	1.016
Tourists visiting seabird colonies cause harmful disturbance to the birds	59	2.75	.939

7 Discussion

7.1 Towards a typology of seabird tourists

Tourists are certainly not a homogenous group, and even within the narrower segment of nature-based tourism, different groups of tourists have been recognised. The discovery of different groups partly relates to a classification of tourists along a specialisation continuum (Bryan, 1979; Ballantine & Eagles, 1994; Page & Dowling, 2002; Mehmetoglu, 2005). We can speculate that seabird tourists are specialists because the majority of participants stated that they visited Lofoten and Vesterålen to be close to nature, and they participated on tours that specialised on viewing specific wildlife species. Other findings that confirm that seabird tourists fit this profile is that they were made up of a relatively older age group; they travelled individually or as couples; they were highly skilled; and had relatively high concern for environmental protection (Lemellin, Fennell & Smale, 2008).

However, other results pertaining to the tourist's additional activities in Lofoten and Vesterålen, and their choices of accommodation, might suggest that such tourists fit the profile of general naturalists better than a specialist profile (with reference to Poon's 'tourist typology', 1993). The more specialised tourists are along the specialisation continuum, the more likely they are to make travel arrangements independently, and less likely to participate in package tours (Mehmetoglu, 2005). The respondents preferred to participate in wildlife viewing and cultural activities such as visiting galleries and museums, and showed less interest in more physically challenging activities such as cycling, kayaking and rock climbing. In addition, the most popular forms of accommodation, hotel and *rorbuer* could be described as 'more comfortable' than the less popular accommodation types such as campsites. These characteristics, could also place seabird tourists under the category of soft-core ecotourists (Weaver, 2001). They could also be considered casual nature tourists, because they consider nature as part of their broader trip, and the large majority stated that they would still visit Lofoten-Vesterålen even if the seabird tour was not an option.

Since the majority of respondents could be regarded as specialists, the dichotomous typology proposed by Mehmetoglu (2005) on nature-based tourists is not practical for segmenting seabird tourists, if the purpose of segmentation is to note differences between motives, level of interest and experiences. Rather, the seabird tourists could be segmented into two groups

based on their interest in birding. The participants who self-declared themselves as birders (30.8% of the respondents), can be profiled as casual birders (proposed by Cole & Scott, 1999) or novice birders (Hvenegaard, 2002) who reportedly show interest in visiting areas of historic and cultural significance and viewing other wildlife species unlike elite or hardcore birders (Scott et al., 1999) who are more likely to organise their own birding trips to maximise their chances of watching particular endemic or rare bird species (Scott & Thigpen, 2003).

The birders on the seabird tours can be distinguished from non-birders (69.2% of the respondents) because they spotted a higher number of different species than non-birders such as Puffin, Razorbill, Cormorant and Arctic Skua. Although White-tailed Eagles were equally spotted by birders and non-birders. We can speculate this is due to the fact that White-tailed eagles are well distributed in Lofoten-Vesterålen (they are not as concentrated on remote islands such as Puffins on Røst and Bleiksøya). Moreover, their size makes them easier to spot; and they are more widely marketed than other seabird species, and based on field observation they are frequently portrayed as iconic species and an image of Lofoten.

7.2 Tourist motivation

If we place tourist motives within the framework of cultural ecosystem services and link together Crompton's conceptual framework of tourist motives, relationship enhancement was the most important benefit sought in going on holiday to Lofoten-Vesterålen. Perhaps socialising in an environment which is different from daily life is an important factor for nature tourists (which is suggested in Crompton's description of enhancing kinship relations in a different environment away from day-to-day stress). Learning was also an important motive for visiting the destination. Relationship enhancement was significantly more important for birders than non-birders, a factor which has not been documented in previous literature. Familial commitment of birders has largely been ignored in previous literature (Pagenkopf & Kämpfer, 2015).

When tourists were segmented on the basis of previous or first-time visitation, the findings revealed that less importance was placed on the need to restore physical or mental well-being by previous visitors. This result is consistent with research that shows that motives may differ for previous visitors (Lehto, O'Leary & Morrison, 2004), and perhaps visiting the same place will not have the same restorative effects. On the other hand, this deduction opposes

Crompton's theory (1979), who advocates that tourists who have previously visited a destination have higher socio-pyschological motivations than first-time visitors.

Whilst some researchers suggest that socio-pyschological motives carry the highest influence (e.g. Hill, 1965; and Fodness, 1994), others argue that cultural motives are the most influential (e.g. Gray, 1970; and Dann, 1977). In my research, being close to nature was the strongest motive. It is difficult to place this motive under simply one of either category (socio-psychological or cultural). The notion of being close to nature can be both an intrinsic motive, constructed by social and cultural background, or an extrinsic pull factor of a destination that offers a scenic setting that is valued for viewing. Tourist's cultural background and lifestyles might encourage their motivation to be close to nature. Studies show that affluent Europeans who live in urbanised areas, place a higher value on viewing natural environments. Mehmetoglu (2007) also found that specialist tourists engaged in outdoor recreational activities in Norway, placed nature as the most important motive for visiting the destination.

I can summarize from my field observation that tourists travel to Lofoten mainly to experience the landscape, and that nature is an important element of attraction. Nostalgia and cultural values are also important features of Norwegian tourist's trips to Lofoten. Seabirds on the other hand, seem like a secondary attractant and are not the sole feature attracting tourists to Lofoten and Vesterålen.

7.3 Tourist experience

Within the five realms of experience that were formulated in this study, knowledge was the best experience realm for the seabird tourists. The high level of satisfaction of the tour might relate to this aspect. Learning was a strong motivation to visit Lofoten-Vesterålen and their needs were partly satisfied through the seabird tour, in that they felt they gained a lot of knowledge. The importance given to learning matches well with Ballentine and Eagle's (1994) segmentation of ecotourists. The latter is also reflected by the tourist's attitudes towards seabirds, the value of nature in Lofoten-Vesterålen and their relatively high concerns over environmental threats. Given that the tourists are higher skilled people, then we can speculate that they are more likely aware of environmental issues in the Arctic region. Aesthetics (the experience of viewing seabird colonies) was also an important factor, reflected in tourist's experiences and also in their evaluation of Lofoten-Vesterålen. The analysis of the

questionnaires shows that tourists are quite clearly visiting Lofoten-Vesterålen for the scenery. They indicated that the dramatic mountain landscape was a very important aspect of their experience of the destination. Viewing aesthetically pleasing scenery, particularly in natural environments, has important cognitive-restorative benefits for human beings (Berman, Jonides & Kaplan, 2008), and this could therefore imply that the landscape is an important feature for the provision of cultural ecosystem services in the destination. Experience is sensory and emotive. This also shows that the sensory and emotive aspects of the service (as suggested by Holbrook and Hirschman, 1982), are an important component of experience.

7.4 Species preferences

Puffin and White-tailed eagle were clearly the seabird tourists favourite species. They are also the most marketed species by the tour operators, featuring frequently on their social media and advertising materials. Both species arguably hold a certain charisma that draws people's attention. It can also be attributed to human familiarity with the species, a 'cuteness' factor and local symbolic meanings (Christie et al., 2006). Stokes (2007) identifies why people prefer some penguins more than others. He reveals that aesthetic appeal is determined by the amount of warm colour, so the brighter the red or yellow colouration on a species, the more attractive it was. Bright colours have also been associated with preferences for invertebrates by Kellert (1993). This might explain the higher appeal of Puffins. However, White-tailed eagles have very little colour in comparison, but their large size might make them appealing (Kellert, 1996; Ward et al., 1998). The influence of size on species preference is also evident with regards cetaceans. In fact, in this study when tourists watched cetaceans on the tour, they were more likely to place whales as their first or second favourite species. So preferences could be the result of a response to advertising, familiarity, charisma and/or size of a species.

7.5 The product

Wildlife tourism is comprised mainly of small enterprises, sometimes consisting of only one person. This was true for the seabird tourism industry towards the Southern tip of the Lofoten Archipelago, on Røst in particular. However, the size and scale of the industry beame apparently larger in Vesterålen. The whale-watching industry was considerably bigger, and employed a greater number of people. The tour operators were generally aware that their target market was within Europe, attracting mainly German, Italian and Scandinavian tourists. The seabird tour operators in Lofoten-Vesterålen offered a range of itineraries, from trips focusing on key species such as Puffins and White-tailed eagles, to more general wildlife and

scenery-based trips. The latter centred more on wildlife, where less emphasis was placed on seabirds, but more on wildlife and landscape scenery as a whole. The duration of the boats trips normally lasted a few hours.

The organisation generally differed between the tour companies, but a few similarities can be drawn upon. Ferry and fishing boat-based tours were generally less formal (with the exception of Tour F in Andøya. The tours operated on RIB boats provided more safety briefing, protective clothing and offered extra clothing to make the trip more comfortable. The methods of distributing information were also diverse amongst the tours. A pre-trip experience was offered by the tour operators in Andøya where Tour F gave a museum tour and Tour G showed a video and provided information about the general ecology of cetaceans and seabirds in the region. Some tours added a culinary aspect, either during the trip (Tour C and E on the Mainland Lofoten) or provided a traditional soup after a trip out at sea (Tour G in Andøya). In this way the tour providers seek to engage all five senses of consumers (one of the key experience design principles proposed by Pine & Gilmore, 1998).

Key factors for a successful wildlife tour experience are the guides themselves, in both expertise and social competence (Holloway, 1981; Weiler & Ham, 1993), as well as a bit of luck, exciting observations, and good weather conditions. On the whole the tourists were satisfied with their tour guides. The information provided by the tour guides is important, given the high demand for learning. Although some guides (particularly Tour A and H) related seabirds to the local culture, turning them seabirds into a subject for story-telling rather than scientific and factual knowledge. Nevertheless, the informality of the such seabird tours did not diminish the tourist's experience, probably because it was break from their daily professional lifestyles (Crompton, 1979). One observation on fieldwork was that there was a surprisingly low level of science involved in guiding despite the large amount of ongoing research and monitoring of seabirds in Norway.

Most of the tour operators in question, had attractive websites with access to information about the tours. Some operators made use of search engine optimization, and included a calender of events and references to online review platforms such as Tripadvisor, the latter becoming an increasingly important marketing tool (Pagenkopf & Kämpfer, 2015). Furthermore, the most popular social media platform was Facebook. The tours on Røst on the other hand, are harder to find on the internet, and mostly rely on word-of-mouth, local networking, and tour information centers to promote their tours.

7.6 Capturing the value of cultural ecosystem services

The cultural value of ecosystems is normally interpreted as non-consumptive and indirect, which is relatively based on aesthetic value. Wildlife can be perceived as the main natural capital of nature-based tourism industries, as beaches are to seaside resort industries. In the questionnaire, the respondents stated that close-up experience of the seabird colonies was amongst the most beautiful phenomena they had encountered, and that it inspires them to support environmental conservation. This shows that they value the existence of seabirds (existence value). Moreover, they indicated that they believe Norway has a responsibility to maintain seabird populations for future generations to experience (also known as option value or bequest value) (Chardonnet et al., 2002; Riddel & Shaw, 2003). As I discussed earlier, Puffins and White-tailed eagles hold a certain charisma that attracts tourists to participate on seabird tours. That being said, most of the bird islands would be inaccessible without the tour operators, and thus they are important for capturing the cultural value of seabirds and wildlife in Lofoten-Vesterålen which then translate into benefits and enhance people's well-being. The table below (7.1) provides a summary of tourist motivation, experiences, and values linking the ecosystem services approach to tourism research.

Table 7.1 A summary of the cultural ecosystem services (CES) sought in Lofoten-Vesterålen, and those captured by the seabird tours, and through the interactions of humans with seabirds and their surrounding habitat.

Motivation (CES sought from visiting the destination)	**Experience (CES obtained through the seabird tour)**	**Value of seabirds (attributed by tour industry and tourists)**
Be close to nature	Gain knowledge	Cultural
Strengthen relationships	Satisfaction	Economic
Improve physical and mental well-being	Aesthetic viewing	Bequest/Option
Ego enhancement	Arousal	Existence

7.7 Recommendations

I would suggest that further studies evaluate the extent to which people's well-being are enhanced through wildlife-viewing. An appropriate measurement scale needs to be developed in order to do so. I would also recommend a study on the economic value and profitability of seabird and wildlife tourism in Lofoten-Vesterålen to gain a more holistic perspective on the industry, and the information would fit well within debates about competiveness between

different forms of tourism and development strategies in the region. Another topic that would be useful to address is the issue of property rights. Wildlife often features as a common resource, but is it entirely a free-access resource? For an even more complete approach, it would be practical to study the sustainability of the seabird industry and the possible impacts on the marine environment and seabirds. Finally, it would be interesting to do more research on birdwatching opportunities in Lofoten-Vesterålen

7.8 Conclusion

Recreational specialization (introduced by Bryan in 1979), is a practical conceptualization for exploring differences amongst participants in their intensity of involvement within a particular activity (Scott & Thigpen, 2003); their motivations, preferences and expectations (Cole & Scott, 1999). Seabird tourism addresses more than one type of tourist group, from the casual birder to the general naturalist. Motives and experiences can vary, according to respective interests. Even though nature tourism is not primarily a rural development tool, in remote areas it may present an opportunity to develop what could be a valuable local resource, in the context where other alternatives are potentially more damaging such as oil development. It can be a strong tool for informing tourists about wildlife in Lofoten-Vesterålen. Tour operators can use flagship species to promote their tours, but they could also educate people about other seabird species and cetaceans that frequent Lofoten-Vesteralen. The value of wildlife, based on the people who participate in wildlife-associated recreational activities may constitute a motivation for humans to protect an ecosystem. Finally, virtual values such a high interest in being close to nature, existence and option values of seabirds should be taken into account when decisions over natural resources management and trade-offs between development scenarios are made over the Lofoten and Vesterålen islands.

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Appendix A

Questionnaire

Seabirds in Lofoten and Vesterålen – cultural and social values 2015

Responsible for this survey: Norwegian Institute for Nature Research (NINA)

About the survey

Dear Participant,

By filling in this questionnaire you will provide important information about your seabird tour experience in the Lofoten-Vesterålen region.

The research being carried out is part of a project run by NINA (the Norwegian Institute for Nature Research) with the goal of acquiring new knowledge about the environment in Lofoten-Vesterålen.

My name is Francesca Bajada. I am a student at the Norwegian University of Science and Technology (NTNU), completing a Masters degree in Natural Resources Management. I am researching cultural and social aspects of seabirds and seabird tourism in the Lofoten-Vesterålen region.

The questionnaire is completely anonymous and voluntary. No part of the information you provide can be traced directly back to you, and no contact information will be requested. It is important that only one adult (18+) from the same family household answers this questionnaire.

Your help is greatly appreciated and the results from this study can contribute to the future management of seabirds and environmental resources in Lofoten-Vesterålen.

Trondheim 10. June 2015

Francesca Bajada

Thank you for your time and answers !

Tour operator:

Seabird Survey

Travel Details

1. Have you participated in an organised seabird tour before? Yes ☐ No ☐

2. Would you call yourself a birdwatcher? Yes ☐ No ☐

3.i. Have you visitied Lofoten before? Yes ☐ No ☐

ii. If yes, how many times? ☐

4. How did you find out about this tour?

Internet ☐ Advert ☐ Tourist information office ☐ Through a friend ☐ Other ☐

5. Which of the following mode(s) of transport did you use? (*Mark **X** for all relevant items*)

	Plane	Boat	Bus	Car (own)	Car (rented)	Bicycle
Travel to Lofoten-Vesterålen?						
Travel within Lofoten-Vesterålen?						

6. How many nights will you spend in Lofoten/Vesterålen in total? ☐

7. How many nights will you spend in Norway in total? ☐

8.i. How many people in your household (including yourself) are you travelling with? ☐

8.ii. Of these, how many are children under 16 years old? ☐

9. How many people are you travelling with that are not from your household? ☐

10. What type(s) of accommodation have you used during your stay in Lofoten-Vesterålen?

Tent ☐ Rorbu/cabin ☐ Hotel ☐ Caravan ☐ Host/Couch Surfing ☐ Other ☐

Seabird motivation

11. Would you still visit Lofoten-Vesterålen if you did not have the option of going on a seabird tour? Yes ☐ No ☐ May be ☐ Don't know ☐

12. When did you decide to go on the seabird tour? *(Insert **X** next to the correct statement)*

At home, before booking my trip to Lofoten-Vesterålen	☐
At home, after booking my trip to Lofoten-Vesterålen	☐
When I arrived in Norway	☐
When I arrived in Lofoten-Vesterålen	☐
I did not decide, it was part of an organised trip	☐

13. How important are the following reasons for visiting Lofoten-Vesterålen?
(*From a scale of 1 to 5, where 1 represents the lowest degree of importance and 5 represents the highest. **Circle** the relevant number for each reason, or mark **X** to the right if you don't know).*

	Least important				Most important	Don't know
Be close to nature	1	2	3	4	5	
Learn about nature	1	2	3	4	5	
Have a change from everyday life	1	2	3	4	5	
Exercise	1	2	3	4	5	
Be with friends or family	1	2	3	4	5	
Be independent	1	2	3	4	5	
Excitement	1	2	3	4	5	
Reflection on my personal values	1	2	3	4	5	
Feel free	1	2	3	4	5	
Be away from the crowd	1	2	3	4	5	
Learn more about Norway	1	2	3	4	5	
My health and well-being	1	2	3	4	5	
Inspiration	1	2	3	4	5	
Meet new people	1	2	3	4	5	
Birdwatching	1	2	3	4	5	

14. Which of the following activities are you going to do or have you already done, during you stay in Lofoten-Vesterålen? *(Mark with **X**)*.

	Have done	Going to do
Rent a kayak		
Rent a bike		
Hiking		
Fishing		
Visit a museum		
Visit a gallery		
Visit a festival		
Birdwatching		
Whale-watching		
Rock climbing		
Surfing		
Other (Please specify) _____		

15. What is the name of the seabird tour company?

16. What type of vessel did you board? *(Mark with **X**)*.

Local tourist boat	☐
RIB (Rigid-Inflatable-Boat)	☐
Open speedboat	☐
Fishing vessel	☐
Other (specify):	☐

17. Approximately how many hours did you spend on the boat? ☐

18. Did you suffer from seasickness? Yes ☐ No ☐

Expectations

19a. Please mark the species that you saw on the trip.

Species name	Species image		Species name	Species image	
Puffin *Fratercula arctica*			**Great Skua** *Catharacta skua*		
Guillemot *Uria aalgae*			**Arctic Skua** *Stercorarius parasiticus*		
Razorbill *Alca torda*			**White-tailed Eagle** *Haliaeetus albicilla*		
Black Guillemot *Cepphus grylle*			**Sperm Whale** *Physeter macrocephalus*		
Cormorant *Phalacrocorax carbo*			**Humpback Whale** *Megaptera noveangliae*		
Shag *Phalacrocorax aristotelis*			**Minke Whale** *Balaenopra acutorostrata*		
Gannet *Morus bassanus*			**Pilot Whale** *Globicephala melas*		
Fulmar *Fulmarus glacialis*			**Orca/Killer Whale** *Orcinus orca*		
Herring Gull *Larus argentatus*			**Harbour Purpoise** *Phocoena phocoena*		
Great Black-Backed Gull *Larus marinus*			**Grey Seal** *Halichoerus grypus*		
Kittiwake *Rissa tridactyla*			**Common Seal** *Phoca vitulina*		
			Otter *Lutra lutra*		

19b. Favourite species. Please list the five species that gave you the greatest pleasure to see.

1. (Greatest pleasure) _____
2. _____
3. _____
4. _____
5. _____

20. Choose your level of agreement for the following statements *(mark **X** in the most relevant box)*. If you have participated in more than one seabird tour, please think about the last one you went on.

	Strongly disagree	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly agree**	**Don't know**
The weather conditions were good						
The wave conditions were good						
I feel satisfied with the way this trip was organized						
I saw the birds I had most hoped to see						
The seabird tour did not live up to my expectations						
There were too many people on the boat						
I would like to go on another seabird tour						
The seabird tour was too expensive						
The seabird tour should be longer						
I feel satisfied with the tour guide						
I would recommend this tour to other people						
I feel like I gained knowledge out of the seabird tour						
I feel the tourist guide was very knowledgeable						
I gained a lot of information about seabirds during the tour						

Environmental Values

21. How well do you agree with the following statements? *(Mark **X** within the relevant box).*

	Strongly disagree	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly Agree**	**Don't Know**
To me Lofoten/Vesterålen seems like a wilderness area compared to the rest of Europe						
The active fishing industry adds a positive element to visiting Lofoten-Vesterålen						
The cultural heritage aspect of the fishing industry enriches the experience of my visit						
The fish-farming in Lofoten/Vesterålen adds a positive element to my visit						
I don't like seeing presence of free-grazing sheep in Lofoten/Vesterålen						

	Strongly disagree	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly Agree**	**Don't Know**
Sustainable whaling should be permitted because it is a traditional activity in Lofoten/Vesterålen						
Wind turbines is a disturbing visual element in the landscape						
There are too many tourists in Lofoten/Vesterålen						
Developing oil and gas exploration off the coast of Lofoten/Vesterålen would have a negative impact on tourism						
The dramatic mountain scenery is a vital part of the Lofoten-Vesterålen experience						

22. How well do you agree with the following statements? *(Mark **X** in the most relevant box).*

Valuation of services	**Strongly disagree**	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly Agree**	**Don't Know**
Carefully regulated hunting on puffins should be allowed because it is an old tradition in this area						
Seabirds are valuable as indicators of climate change						
Norway has a global responsibility to conserve and maintain healthy seabird populations in Lofoten/Vesterålen because future generations have a right to experience them						
Norway has a global responsibility to conserve seabird populations in Lofoten/Vesterålen even if it comes into conflict with fisheries or oil and gas development						

Valuation of services	**Strongly disagree**	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly Agree**	**Don't Know**
Seabirds should only be conserved if they can contribute to profitable tourism						
Close up experience of a seabird colony is among the most beautiful natural phenomena I have encountered in Europe						
Visiting a seabird colony inspires me to support environmental conservation						

23. Many factors can threaten the health of our environment. How well do you agree with the following statements? (You're almost done!) *(Mark **X** in the most relevant box).*

Environmental threats	**Strongly disagree**	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly Agree**	**Don't Know**
Several Norwegian seabird populations have declined in recent years						
Climate change is a threat to seabirds since it affects the amount of food in the oceans that seabirds depend on.						
Industrial fishing threatens seabird populations because of overharvesting food which is an important part of seabird diet						
Intensive hunting of seabirds in the Arctic has had a negative effect on Norwegian seabird populations						
Predators such as large gulls, common ravens and white-tailed eagles have detrimental effects on seabird colonies						
Plastics, persistent organic pollutants, mercury and oil spills are negatively impacting many seabird populations						
Approximately 10,000 -12,000 seabirds die due to fisheries by-catch in Norway each year						
Tourists visiting seabird colonies cause harmful disturbance to the birds						
Wind turbines can represent a major threat to seabirds						

And now some basic details about who you are

24. Sex: Female ☐ Male ☐

25. Age: 18-24 ☐ 25-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60+ ☐

26.i. How many people live in your household? ☐

26.ii. Of whom are children under 18 years old? ☐

27. What is your highest level of education?

☐ Primary school
☐ Secondary / High school
☐ University / College
☐ Other, specify:

28. Profession	
29. Nationality	
30. Country of residence	

Thank you for your time and answers ☺

Appendix B

Bird List

English Name	**Latin Name**
Puffin	*Fratercula arctica*
Common Guillemot	*Uria aalgae*
Razorbill	*Alca torda*
Black Guillemot	*Cepphus grille*
Cormorant	*Phalacrocorax carbo*
Shag	*Phalacrocorax aristotelis*
Gannet	*Morus bassanus*
Fulmar	*Fulmarus glacialis*
Herring Gull	*Larus argentatus*
Great Black-backed Gull	*Larus marinus*
Kittiwake	*Rissa tridactyla*
Great Skua	*Catharacta skua*
Artic Skua	*Stercorarius parasiticus*
White-tailed sea eagle	*Haliaeetus albicilla*

Whale List

English Name	**Latin Name**
Sperm Whale	*Physeter macrocephalus*
Humpback Whale	*Megaptera noveangliae*
Minke Whale	*Balaenopra acutostrata*
Pilot Whale	*Globicephala melas*
Orca/Killer Whale	*Orcinus orca*
Harbour Pupoise	*Phocoena phocoena*