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The role of wildlife tourism in conservation in Norway

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Abstract

Nature-based tourism is a growing tendency in Norway and in the rest of the world. One of the sectors that seem to grow most rapidly is wildlife watching. Based on existing data from quantitative and qualitative research on nature-based tourism in Norway and worldwide, this study aims to analyze the role of wildlife tourism relying on non-captive/non-consumptive wildlife in Norway and its relation to conservation. The objective of this thesis is to investigate and contribute to an understanding of which role wildlife tourism plays in conservation (here translated to preservation of the species in its natural environment), how and whether it promotes it. To answer this questions, a questionnaire to a semi-structured interview was developed and four sub-questions were defined, which included getting an overview of the actions taken by wildlife tourism operators to promote conservation towards wildlife; what actions are taken by the conservation managers to promote sustainable wildlife tourism; identification of the contributions from the wildlife tour operators and conservation managers to species conservation; and identification of management or policy measures that can support wildlife tourism contribution to species preservation.

Wildlife tourism is often used to link wildlife management to promote conservation, it can contribute to the management of protected areas. Benefits include foreign exchange revenues, employment opportunities, improving awareness of conservation objectives and stimulation of economic activity. Type and impacts of wildlife tourism in the environment varies in magnitude and the type of tourist activity pursued.

Norwegian Wildlife tourism is small, localized and conservation oriented. Yet, tour operators and conservation management have different views over their roles and despite the decentralization of power in conservation management and policy, to counties and municipalities, operators feel that their views are not regarded in the decision-making process. Though they contribute to conservation with education of tourists, wildlife monitoring and research, they think there could be more specific guidelines of wildlife protection in order to alleviate the impact of their operations.

Key words: Wildlife tourism, conservation, nature-based tourism, Norway, actions, contributions, political measures

Abbreviations & translations

GDP.....	Global Developmental Index
NBT.....	Nature Based Tourism
Naturforvalter.....	Conservation manager
WTO	World Tourism Organization
WTTC	World Travel & tourism Council

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1.0 Introduction

This study reflects my research of what may be the role of wildlife tourism to conservation in Norway. It also highlights the current knowledge about the impacts and views on conservation management of wildlife, as well as the contributions from the tourism sector to wildlife conservation. With the literature in mind, I intend to explore the connection between conservation management and wildlife tourism.

As far as we can remember, humans have always had close contact with animals and our appreciation of wildlife dates back to times when we used to be linked with animals that lived around us. Wildlife tourism is an exciting venture with two goals: to foster wildlife conservation and natural area tourism development. Wildlife tourism comprises viewing of wild animals in their natural environment. Here, I'll use the distinction used in the literature, between consumptive and non-consumptive. While the former generally includes hunting and fishing, the latter focuses mainly on viewing. It is recognized that both form parts of a continuum on which there is often some overlap, but this study focuses on non-consumptive wildlife tourism.

The Travel & Tourism sector is expected to grow faster than the wider economy and many other industries over the next decade. According to the WTTC (2016) tourism is anticipated to support over 370 million jobs by 2026. Such strong growth will require effective coordination between public institutions and the private sector around the world. Innovation's Norway key figures from 2015 indicates that tourism accounts for 4,1% of the GDP, provides 1 in 15 jobs and tourism consumption amounted to more than NOK 151 billion for the first time in 2014.

Watching animals can be an exciting experience. People are inspired by seeing whales, spectacular bird life, bears or foxes. Seeing these and many other species in the wild is not just memorable but it also can motivate people to become more personally involved in conservation. Tourism today provides people with numerous opportunities to view animals that, in the past, they would have only read about and seen in pictures and on TV or, at best, in zoos and aquariums.

Wildlife tourism is largely defined as tourism take on to view or encounter wildlife (Newsome et al., 2004; Packer & Ballantine 2012). It also has been defined as an area of overlap between

nature-based tourism, ecotourism, consumptive use of wildlife, rural tourism, and human relations with animals (Reynolds & Braithwaite, 2001). It occurs in a range of settings including artificial environments where animals are captive (e.g., zoos, aquariums and wildlife centers) and natural habitats where animals are non-captive (e.g., ecotourism experiences, national parks). Higginbottom (2004) and Newsome et al., (2004) argue that the continuing development of both captive and non-captive wildlife tourism attractions help to secure long-term conservation of wildlife and their habitats. This research analyses the role of wildlife tourism in conservation in Norway and focus only in the non-captive wildlife tourism. Even though different types of wildlife encounters probable have different strengths and weaknesses, either for visitors, wildlife and the environment, the relative advantages and disadvantages of different methods to wildlife tourism are there to explore (Ballantyne et al., 2007).

Conservation and protection of the nature have always been central in nature development in Norway. Lately, tourism started to be seen for its economic value to the country. Meaning that some places which were closed for public and tourists before, are more available for visiting now. Norwegian sites are promoting nature destination on the global market to attract more tourists and by that increase the profit from tourism to the country (Destination Norway, 2012). Reynolds & Braithwaite (2001) argue that there are no reliable global measures of the economic impact of wildlife tourism but that it is the leading foreign exchange earner in several countries and according to Higginbottom (2004), attending wildlife tourist attractions is a prime tourist motivation. As tourism continues to grow and expand, it is inevitable that pressures on the environment and wildlife will increase. Without proper and effective management and protection, these pressures can destroy the very things that people value, and which are the key assets for tourism. These dangers arise because animal populations cannot cope, indefinitely, with increasing visitor numbers. If tourists are to enjoy high-quality wildlife watching without threatening the survival of the animals they watch or their habitats, wildlife watching practices need to be controlled and properly managed. This means setting firm limits (established through impact assessments) on the tourist numbers, on tourism development, and on how wildlife watching is conducted. This is done to minimize the disturbance tourism causes to wildlife. Achieving this while also ensuring the long-term sustainability and viability of the industry will require concerted action by both governments and the tourism industry.

1.1 Background for thesis

This thesis studies the role of wildlife tourism relying on non-captive wildlife in Norway and its relation to conservation. Here I'll use a definition of conservation proposed by the IUCN (1980) at the world conservation strategy, as it being the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations. Thus, conservation is positive, embracing preservation, maintenance, sustainable utilization, restoration, and enhancement of the natural environment.

The non-captive/non-consumptive market includes but is not restricted to nature guided tours to observe animals in its natural habitat, to photograph or bird watch, whale watch, lasting one or more days. Among the different niches within Norwegian nature-based tourism, wildlife tourism has received relatively little attention. This seems to be changing and there is a growing interest in experiencing wildlife in the open in Norway, which is exciting to actors operating there (Verdens Gang 2014). Wildlife watching in Norway, seems to be getting more common, and eagles, moose and whales are examples of animals that attract tourists' interest. The implications wildlife tourism has in species conservation makes this niche particularly interesting to research. To date, the most comprehensive survey of nature-based tourism providers in Norway was conducted by Stensland et al. (2014). In their study, they estimated the number of nature-based tourism businesses registered and operating in Norway to be between 2000 and 3000.

Per Margaryam & Stensland (2017) a significant proportion of companies (20-38%) surveyed have their activity in National Parks. And only 32% of the total operate in wildlife tourism related activities (including birdwatching, water and land safaris, and animal photography on the wild). Even though the available information regarding wildlife watching is limited in Norway, in terms of geographical coverage and accuracy, the evidence points to it being economically important on a global scale (Higginbottom 2004). Lundberg & Fredman (2012) proposes that all serious nature-based tourism operators need to actively consider sustainability principles related with, but not limited to, the physical environment. They state that disregarding this factor may threaten the foundations of the natural resources upon which the tourism supply depends and also threaten limits of acceptable change with respect to tourism demand, local communities and socio-cultural impacts.

1.2 Purpose and aim

The purpose of this study is to analyze how wildlife tourism can contribute to conservation of wildlife species in Norway focusing only on the non-captive/non-consumptive wildlife tourism market. The objective of this thesis is to investigate and contribute to an understanding of which role wildlife tourism plays in conservation (here translated to preservation of the species in its natural environment), how and whether it promotes it.

With almost 10% of Norway preserved, and with the growing tourism to the country, knowledge regarding tourism contribution to nature conservation is crucial. Thus, my findings could contribute to shed a light into future policies and management approaches related to wildlife tourism.

1.3 Research questions

Four sub-questions were defined:

The main research question is: “Can wildlife tourism promote the conservation of wildlife in Norway?” And the sub-questions are:

1. What actions are taken by the wildlife tourism operators to promote conservation of wildlife?
2. What actions are taken by the conservation managers to promote sustainable wildlife tourism?
3. What are the contributions from wildlife tourism stakeholders to species preservation?
4. What management or policy measures can support wildlife tourism contribution to species preservation?

1.4 Thesis outline

The organization of the thesis is as follows: In the next chapter, key concepts applied on this thesis and theories of wildlife tourism and nature conservation, including impacts and contributions of wildlife tourism to wildlife are presented.

The methodology for identifying the vital dimensions in the study and the data base for the analysis are introduced in the third chapter.

The fourth section presents the results of the data analysis, including qualitative analyses. My findings are discussed and concluded in the fifth chapter. On the sixth chapter, I draw a conclusion and identify the contributions of this study, as well as I propose future research in this area of study.

2.0 Theoretical background and key concepts

Developing an appropriate conceptual framework, which ensures that all key issues are included and that their inter-relationships are adequately recognized is crucial for the understanding of the role of wildlife tourism to conservation in this thesis. Firstly, as for tourism generally, this framework includes consideration of actions taken by wildlife tourism operators to promote conservation and actions taken by conservations managers to promote sustainable wildlife tourism. Many of the discussions in sections of this thesis revolve around the impact of wildlife tourism on wildlife and the contributions of wildlife tourism operators to wildlife conservation. Secondly, the framework allows the wildlife and operators to be examined in a manner that demonstrates the potentially positive or negative effects of the interaction and reflects the importance of these components of the system. Thirdly, it emphasizes what political measures can support wildlife tourism contribution to species preservation. Both the tourism and the wildlife component of the wildlife tourism experience are affected by the political measures of local and central governments.

2.1 Wildlife tourism

There is no agreed scientific definition on the concept of *Nature based tourism* (NBT), and to obtain consistency, I will use a definition which states that nature-based tourism is human activities occurring when visiting nature areas outside the person's ordinary place of residency. (Fredman et al., 2009; Fredman & Tyrväjnen 2011).

Most nature-based tourism is built around non-extractive use of resources both renewable and non-renewable. The connection between use and physical resources is less obvious but may embrace aspects of pollution, littering, noise, disturbance on wildlife and vegetation. Lundberg & Fredman (2012) argue that three types of nature-based experiences have been proposed: those dependent on the natural setting, those enhanced by the natural setting and those where the

natural setting has a subordinate role. A safari operator will be dependent on animals to succeed, while a backpacking trip may be boosted with such experiences, but not dependent.

Over the past decades the growth of non-consumptive uses of wildlife has expanded to the point where a larger proportion of people, with a concurrently large proportion of economic and, potentially, ecological impact, have engaged in non-consumptive recreational interaction with wild species than in traditional wildlife pursuits (Duffus & Dearden, 1990).

Wildlife tourism, a distinct category of nature-based tourism, does not by definition need to meet sustainability metrics. In fact, the popularity of wildlife viewing can produce negative impacts due to poorly managed visitation (Sims-Castley et al. 2005). Often claimed to generate massive economic benefits and to contribute significantly to nature conservation, thereby supporting biodiversity conservation, in its simple sense *wildlife tourism* is watching animals in their habitats. And as Parker & Ballantyne (2012) put it, it is based on encounters with non-domesticated animals, that can occur in a variety of surroundings, including animal's artificial environment or in captivity like aquariums and wildlife centers, or in the animal's natural environment where animals are non-captive like National Parks and protected areas. It includes activities historically classified as 'non-consumptive', such as viewing, photographing and feeding, as well as those that involve killing or capturing animals, particularly hunting and recreational fishing (Higginbottom 2004). Wildlife tourism can involve attractions at fixed sites, tours, experiences available in association with tourist accommodation, or it can occur as unguided encounters by independent travelers. However, according to Reynolds & Braithwaite (1999) there is a growing concern for conservation and the well-being of the environment and it has brought a closer relationship between the environment and tourism in the past decades. From the tourists' point of view, there is a rapidly increasing desire for interaction with the natural environment in a range of ways (Jenner & Smith, 1992). This general interest in nature and nature-based experiences is reflected in a growing demand to experience these. As opposed to those in captive or semi-captive situations an increasing value is being placed on animals in the wild (Gauthier, 1993).

The non-consumptive side of human relations with wildlife has, until recently, received much less attention than hunting and fishing. The experiencing of wildlife by tourists has become the business of wildlife tourism.

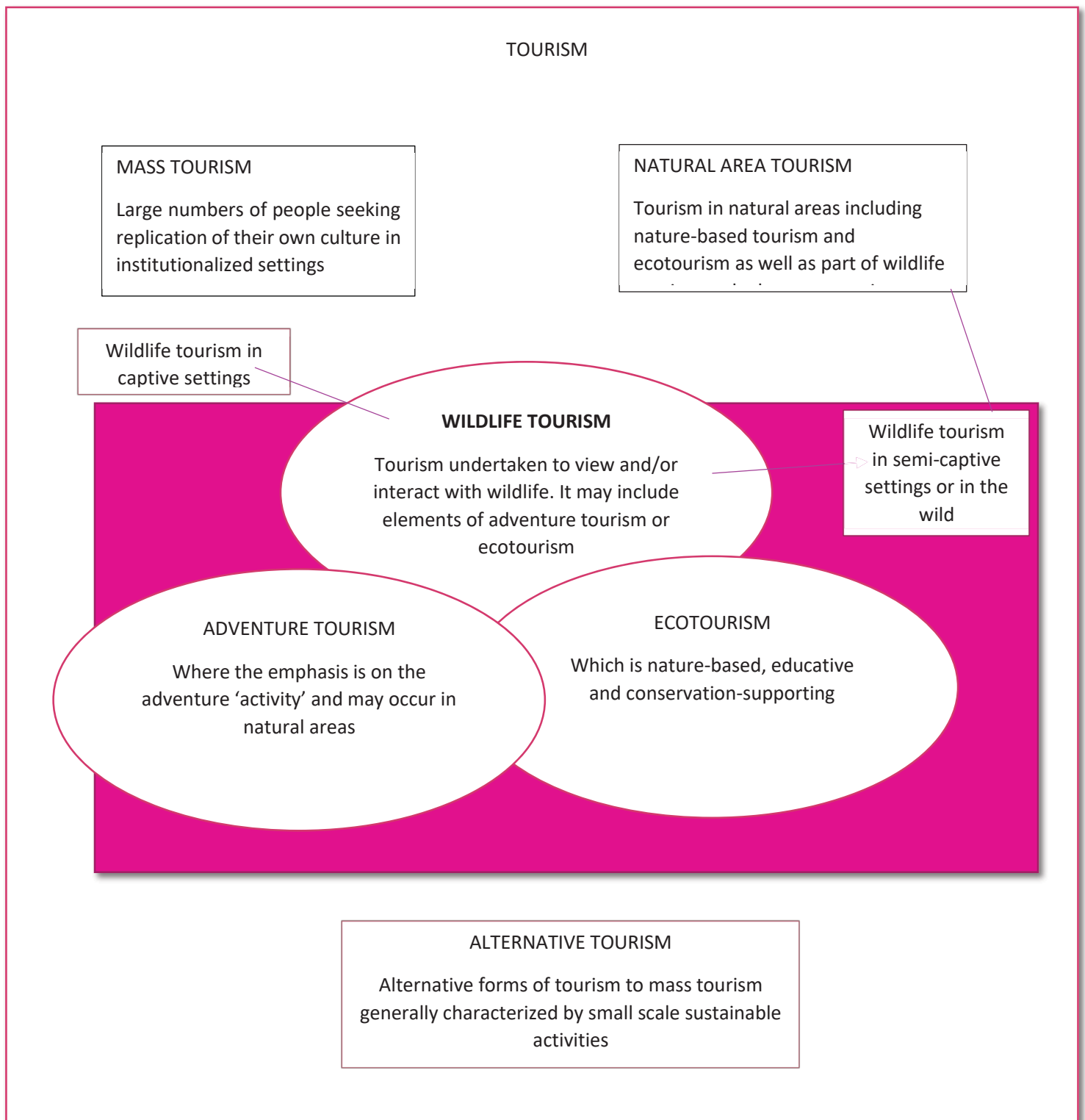


Figure 1. An overview of Wildlife tourism's position within tourism, adapted from Newsome et al., 2004

If we do a search on the internet we can see that this type of tourism has grown significantly in the past years and that it provides many examples of tourism companies that either market specific wildlife watching tours, or promote their products by highlighting wildlife watching as an optional activity that their clients can enjoy. Tourism is one of the largest business sectors in the global economy. In fact, each year an estimated 12 million wildlife tourist trips are taken around the world, and that number is growing by ten percent annually (Newsome & Rodger, 2013). If wildlife tourism is, in fact, beneficial to the animals, then the increase should be heralded as a key way to help conservation efforts. However, if wildlife tourism is harmful, as many think, then we need to find ways to either lessen those negative effects, or stymie the growth altogether.

As Roe (1997) puts it, wildlife tourism can contribute enormously to the management of protected areas. He says benefits include foreign exchange revenues, employment opportunities, improving awareness of conservation objectives and stimulation of economic activity. While protected areas are major destinations for wildlife tourist, private enterprise plays a significant role in the wildlife tourism sector. But, wildlife watching tourism can have adverse effects on wildlife: by causing changes in their behavior, changing their physiology, or damaging their habitats. Wildlife species are often particularly vulnerable to disturbance during their breeding periods and during the juvenile stages of their offspring. Any disruption of courtship and mating behaviors, or later on when offspring are being cared for, can reduce overall breeding success. This is a serious threat to population maintenance and survival. Tourists are often particularly keen to watch mother-offspring groups, and therefore great care is needed to limit and control any tourism around them. I'll present these impacts in more detail, further in this chapter.

2.2 Nature and wildlife conservation

Wildlife is one of the components of biodiversity. It is a general term that technically covers both flora and fauna, however this thesis will cover fauna only. In popular use, wildlife mostly refers to animals in the wild. Perhaps a classic image of wildlife for many people is a large mammal or a flock of wild birds, but the term is widely used to cover all types of animals, including all kinds of insects and marine life (Tapper, 2006).

2.3 Impacts of tourism on wildlife

Development of wildlife tourism can expose animals to a range of stimuli, many of which will be new to the wildlife. Effects of human presence may be not so obvious but several studies have demonstrated a direct relationship between the distances to which animals are approached during wildlife tours and the responses produced by them (Green & Higginbottom 2001, Ikuta & Blunstein 2003). Many tourists find physical contact or close interaction with wildlife very popular, hand-feeding being especially common in many areas. Under water sound attenuates in a different way than it does in air, often travelling greater distances. Cetaceans possibly will respond to boats and aircraft in several ways, including avoidance, unusual surfacing behavior or altering their swim speeds and social behaviors (Richardson et al. 1995).

Higginbottom (2004) defined key behaviors as those directly connected to survival or procreative success. According to her, they include foraging activity, parental behaviors, such as incubating eggs or provisioning and defending offspring, and the movement or migratory patterns of wildlife. Reports of disruption of parental behavior have been made in a number of species, as a response of human visitation. Green & Higginbottom (2001) have stated that there are several reports of parent birds abandoning nests in response to human visitation. There are also many reports of wildlife tourism interfering with the foraging behavior of various species, including lions and cheetahs in Africa (Sindiyo & Pertet 1984) and in North America bald eagles, ravens and woodpecker (Knight et al. 1991). Either the animals were distraught at key times, for example during prey capture, or they completely avoided preferred foraging sites when in the presence of tourists.

The probability of seeing wildlife is significant for non-consumptive wildlife tourism (Duffus & Dearden, 1990), and one mean of increasing this probability is by the provision of food. Hand-feeding can be very popular with tourists (Moore et al., 1997), because it gives visitors a chance to closely interact with wild animals. Animals that have developed a dependency on being fed and lost the ability to forage naturally can be disadvantaged by an abrupt termination of hand-feeding, resulting in potential behavioral problems and under-nourishment. It can increase incidence of collision with vehicles by encouraging wildlife to spend more time around roads and campsites to be hand-fed (Crome & Moore 1990, Skira & Smith 1991).

Habitat clearance is possibly the gravest conservation threat to the world's wildlife, and normally it has little to do with wildlife tourism. However, the construction of accommodation, camping

grounds, roads, parking spaces or picnic areas may help clear or modify the habitat for wildlife tourism. Habitat fragmentation carries problems of edge effects (Green & Catterall 1998), diminishes territories and home ranges, and may augment access by feral animals, including competitors or predators of native wildlife. Some habitats offer critical resources through lean periods such as drought or scarcity of a regular food sources but they may seem little used by wildlife.

Wildlife tourism can lead to increased death or injury of animals with varying effects on populations. Some forms of wildlife tourism involve animal collection. Shell and coral collection are probably among the most widespread examples of this. In some areas, including the marine parks off the Kenyan coast and the Galapagos Islands, shell and coral collection is reported as having a significant impact on reef ecosystems (Sindiyo & Pertet 1984).

Wildlife tourism has also the potential to increase road kill of terrestrial species by bringing more traffic into a wildlife-rich area; habituating animals to traffic and parked cars and thus making them less wary; and creating a positive attraction to vehicles because animals learn to associate them with food provision. Another impact of wildlife tourism is the increase of wildlife mortality through the introduction and/or spread of exotic diseases. One of the most serious threats to the persistence of endangered populations of apes involved in wildlife tourism appears to be the threat of disease transmission from humans (Butynski & Kalina 1998, Ferber 2000).

2.4 Contributions and Positive effects of wildlife tourism

In principle, wildlife tourism can have various positive effects on wildlife species and their habitats. However, we know much more about negative effects of wildlife tourism on wildlife; very little research has been conducted on positive effects. Green & Higginbottom (2001) and Higginbottom (2004) categorized the positive effects and states that they work through four main mechanisms:

- **Financial contributions** to conservation generally arise through government-administered user fees such as entrance fees, visitor levies, commercial operator licensing fees and hunting license fees. The first two are not applicable to Norway as here people are free to roam in protected areas by the right of public access. But in other regions of the world, at least in relation to wildlife tourism occurring in protected areas, this income is usually insufficient to even cover the costs of managing visitor impacts. In any case it

is generally viewed as a means of partially contributing to management costs, rather than as contributing positively to conservation beyond what would occur in the absence of wildlife tourism. According to Higginbottom (2004) currently in Australia, there has been a notable paucity of use of economic instruments to support sustainable management of natural resources. Further, there is evidence that visitors may be willing in some cases to pay more for wildlife experiences than they currently do, and thus raise additional revenue for conservation. There also seems to be scope for obtaining more funding for conservation and/or animal welfare from donations and sponsorships.

- Wildlife tourism can also have a positive effect on wildlife species and their habitats through **non-financial contributions**. Operators and tourists can contribute positively to conservation of wildlife and their habitats by participating in management activities, monitoring or research. A number of commercial wildlife tourism operators make such contributions by involving tourists in conservation-related research projects. However, there are no systematic or coordinated efforts in Norway to enhance such contributions.
- **Socio-economic incentives** for conservation arising from wildlife tourism can work through their effects on the private or public-sector organizations that operate wildlife tourism, or through their effects on the wider host community. One of the most important conservation benefits provided by wildlife tourism occurs when it provides an economic incentive for maintaining or restoring natural habitats. Usually as one component of nature-based tourism, wildlife tourism has been a part of the incentive for creation of a number of protected areas in many regions of the world and also for shifts towards more conservation oriented management practices by private landowners.
- Finally, through **education** associated with wildlife tourism, visitors can be educated to increase their awareness of conservation or animal welfare issues, and thus to behave in ways which have positive consequences for wildlife or their habitats. This contribution is generally believed to be the most important conservation benefit to wildlife.

Higginbottom (2004) argues that in wildlife tourism it is crucial not only to the conservation of the animals, but also to the sustainability of businesses concerned, that the net effects of tourism on wildlife are not negative. Further, she claims that the net effects of wildlife tourism on wildlife are a result of the balance between any negative impacts of the tourism-related activities on the animals and any, generally indirect, positive contributions to their conservation.

Many authors have claimed that wildlife watching, like nature-based tourism in general, can be good for conservation (International Association of Fish and Wildlife Agencies, 2002; National Watchable Wildlife Program, 2001; Higginbottom, 2004), especially because of associated economic incentives and education. Further, in policy statements and in popular terminology, wildlife watching is often seen as a form of ‘ecotourism’. According to some definitions of this term, this necessarily means that the tourism is associated with conservation-related education and other localized conservation benefits (Weaver, 2001). Promotion of the concept of ecotourism by governments and industry associations in more developed countries like Australia and the USA has helped provide impetus to a number of initiatives aiming (in part) to enhance the conservation benefits of wildlife watching, discussed later in this chapter. The present chapter draws heavily on a report by Higginbottom et al., (2001), which provides further details on some of the issues covered in this study that relate to wildlife watching.

2.4.1 Direct wildlife management and supporting research

Direct wildlife management associated with wildlife watching is nearly always *in situ*, and generally covers a wider range of activities, such as reintroduction of animals, control of exotic predators, patrolling for poachers, tree planting and weed control. Wildlife tourism operators involved in direct wildlife management (or associated research) include government agencies, nongovernment, not-for-profit organizations (usually with conservation goals) and commercial tourism operators. In addition to deliberately undertaking activities that assist conservation, wildlife tour operators in some cases are thought to contribute indirectly by acting as deterrents to the disturbance or killing of wildlife by people, simply by being present in an area.

In wildlife watching tourists as well as operators are sometimes involved in direct wildlife management or research. There seems to be a growing number of organizations, principally not-for-profit organizations, offering ‘conservation holidays’, and wildlife experiences are particularly popular (IRG, 1992; Preece and van Oosterzee, 1997; Ellis, 2003).

Conservation organizations are becoming progressively more involved in tourism, in recognition that this can provide a source of revenue as well as increase promotion of their goals.

Direct wildlife management often requires channeling some of the revenue raised from tourism into these activities, and thus overlaps with the next category dealing with use of tourism income for conservation, though in some cases the main cost is staff time. In some cases, the appeal of the tourism product to customers may be enhanced by the fact that the operator is actively involved in conservation and thus this also potentially becomes an economic incentive for involvement in conservation. There is often a strong overlap between these activities and the viability of the tourism enterprise, so that this mechanism could alternatively be seen as falling under the category of providing an economic incentive for conservation (Newsome et al., 2004). However, in many cases that incentive is incidental, since the organization concerned was motivated to contribute to conservation primarily for reasons relating to personal philosophy. Whether a wildlife watching operation is actively involved in conservation appears to be usually dependent on the individual operator already having a philosophy or objectives that support conservation (Higginbottom et al., 2001), in contrast to the more institutionalized approach of the larger zoos.

2.4.2 Use of income derived from wildlife tourism to fund conservation initiatives

There is a range of government charges on commercial nature-based tourism operators and tourists. This revenue is intended to contribute to the costs of management associated with tourism activities. Most of these fees relate to use of protected areas (where a large proportion of wildlife watching occurs). Less common is the practice of requiring permits (with associated fees) for tourism operators who offer close encounters with particular species of wildlife that are of conservation concern, even if outside protected areas.

However, revenues from parks around the world are generally not sufficient to offset fully their operating costs, let alone to provide net funding for conservation (Goodwin et al., 1998; Adams & Infield, 2002). There are a few notable exceptions. User fees at some parks or in some regions provide revenues that not only support their own operations but also provide funding for conservation measures (Lindberg et al., 1996).

Most of the cases reported in the literature where government charges relating to wildlife tourism have raised substantial funding for conservation involve large game hunting and one of the few

published cases involving wildlife watching is tourism based on mountain gorillas in east Africa. Income from tourism has been used to help pay for habitat conservation and anti-poaching measures that have apparently been crucial to conservation of this endangered species (McNeilage, 1996; Butynski and Kalina, 1998). Even in this case, however, effective conservation has also required input from non-tourism related funding sources (Adams & Infield, 2002; Buckley 2003). Some developed attractions based on wildlife watching provide significant revenue for conservation. Some wildlife-watching enterprises donate at least some of their profits to conservation initiatives, or provide opportunities for their guests to make financial contributions to conservation through donations or sponsorships. For example, Munn (1992) reports that 30-50% of North American and European tourists who visited Manu Biosphere Reserve (Peru) made donations of US\$50-\$100 annually to a local conservation group. However, the tourism industry tends to be understandably resistant to government moves to increase charges that may reduce their profits or visitor demand (Vaughan 2000). Further and according to Higginbottom (2004), it has been argued that a focus on tourism as a source of revenue for conservation may detract from the potential to raise such funding by other, more effective, means (Isaacs, 2000) and that income from tourism is notoriously variable over time and thus not a secure basis for funding (Vaughan, 2000).

2.4.3 Socio-economic incentives for conservation

Since wildlife watching is dependent directly on the existence of natural populations of wildlife, the ability to maintain this form of tourism can provide a vital incentive for operators and/or host communities who benefit from the tourism to conserve the wildlife and habitat on which it depends (Buckley, 2000). This is often considered the major conservation benefit associated with nature-based tourism (Buckley, 2003). This point is linked to a major debate on the commercial use of wildlife and privatization of wildlife resources that has been an important topic in wildlife management circles in recent decades (Freese, 1998). The idea is that by attributing a financial value to wildlife, people who benefit financially will be motivated to conserve the wildlife. A further benefit as perceived by governments is that it can alleviate pressure on the public purse for conservation funds. While a commercial orientation towards wildlife to aid conservation is generally accepted as appropriate in less-developed countries, its application in more-developed countries remains controversial, although it has received increased acceptance in recent years.

One consequence of this shift in conservation philosophy is promotion, support for, and growth of development of wildlife tourism on privately or communally owned land. Kenya is typical of many less-developed countries, especially in southern and eastern Africa, in adopting a policy direction designed to ensure that the benefits of wildlife to landowners create incentives to invest in wildlife conservation, and that landowners work in partnership with (rather than in opposition to) the government wildlife agency in this regard (Milner-Gulland and Mace, 1998).

Generally, it seems that landowners have an altruistic desire to support conservation; nevertheless, tourism provides them with the financial opportunity to act on this interest.

Introduction of wildlife tourism may also provide an economic incentive leading to conservation-oriented changes in wildlife management practices by local people. This is likely to be of most conservation significance in cases where the wildlife is hunted or taken for live trade for subsistence or commercial purposes. The idea is that by attributing a financial value to wildlife, people who benefit financially will be motivated to conserve the wildlife. A further benefit as perceived by governments is that it can alleviate pressure on the public purse for conservation funds. However there has been no convincing research confirming the validity of this assumption. A key obstacle at this stage seems to be lack of substantial marketplace awareness of such schemes and their significance. In addition to providing an incentive for conservation by private or community landowners, wildlife tourism may help motivate governments to acquire and manage land for conservation. Expected revenue from nature-based tourism has been reported to have provided an economic and political incentive for the creation of government owned protected areas in many countries (Young et al., 1996; Preece & van Oosterzee, 1997; Goodwin et al., 1998). In many cases, the principal attraction involved is wildlife (Isaacs, 2000; Higginbottom et al., 2001). In the USA, a major increase in participation in non-consumptive wildlife recreation is reported to have helped motivate interest in the protection of natural areas for the benefit of tourism (Vickerman, 1988).

2.4.4 Education of visitors about conservation

It is often stated in the literature that visitors, as part of their wildlife or nature-based tourism experience, can be educated to increase their conservation awareness and to behave in ways which have positive consequences for wildlife and/or their habitats (Duff, 1993). Ecotourism, a subset of natural area tourism that can be combined with elements of nature-based tourism and

adventure travel, is characterized by a number of other features, notably its educative element and conservation supporting practice (Newsome et al., 2004; Margaryam & Stensland, 2017). Ecotourism is nature-based tourism that involves education and interpretation of natural environments and is managed to be ecologically sustainable. Moreover, Newsome et al. (2004) argue that this definition recognizes that 'natural environment' includes cultural components and that 'ecologically sustainable' involves an appropriate return to the local community and long-term conservation resource. Higginbottom (2004) also argues that education of wildlife tourists have the added benefit that can result in changes in attitudes and/or increased knowledge that in turn may promote more responsible behavior towards wildlife and the natural environment, both in terms of minimizing negative effects in the area where tourism occurs and more broadly; subsequent involvement in wildlife conservation or research; increased donations of money towards conservation; increased political pressure on governments to achieve conservation objectives and/or more satisfied customers and therefore more successful businesses. However, the educative characteristic of ecotourism is a key element which distinguishes it from other forms of nature-based tourism (Dowling & Wood, 2003) and as environmental education and interpretation are important tools in creating an enjoyable and meaningful ecotourism experience (Newsome & Dowling, 2005), it tends to attract people who wish to interact with the environment in order to develop their knowledge, awareness and appreciation of it. Indeed, in comparison with ecotourism, wildlife tourism embraces all types of natural area tourism. It is partly adventure travel, is generally nature-based and involves ecotourism's key principles of being sustainable and educative as well as supporting conservation. Many wildlife and nature-based tourism operators, whether from the private or public sector, incorporate environmental interpretation and education components. For many not-for-profit organizations involved in wildlife tourism, raising public awareness of environmental issues is their primary purpose (Higginbottom et al., 2001). Government conservation agencies around the world also make varying levels of commitment to providing environmental interpretation, mainly in protected areas. For most commercial operators, commitment to education is a personal or business decision of the individual operator. A more informal type of education may occur simply by the existence of wildlife Tourism (Higginbottom, 2004). According to Higginbottom (2004), in a personal commentary D. Gschwind states that it has been observed that when tourism operators are present in a natural

area, this can lead to enhanced perception of the value of the natural environment in that area by the public. There is little published research on the effectiveness of wildlife interpretation (as opposed to environmental interpretation) in free-ranging settings, in contrast to the situation in zoos. Higginbottom (2004) refers that two Australian studies of visitors' responses in relation to sea turtle viewing at Mon Repos Conservation Park showed that exposure to interpretation resulted in attitudes indicating increased support for conservation of these turtles (Howard, 1999; Tisdell & Wilson, 2002). Other positive effects on conservation related attitudes have been noted for the dolphin interpretation program at Tangalooma, Australia (Orams, 1995). A number of key informants interviewed by Moscardo et al., (2001) and Higginbottom et al., (2001) felt that the quality of wildlife interpretation available in Australia needs to be improved in order to realize much of its educational potential, and this situation is probably common worldwide.

2.4.5 Political measures to support conservation

There is a number of situations in which wildlife-watching operators have lobbied for conservation of the natural resources on which they depend financially in opposition to actions that could destroy their livelihoods. Allegedly as a result of lobbying from Great Barrier Reef tourism operators, the Australian government allocated additional funds into research on the Crown-of-Thorns Starfish that is detrimentally affecting the Reef (Higginbottom, 2004). However, a number of authors (Buckley, 2000a; van Oosterzee, 2000) have noted that unlike other commercial interest groups that depend on natural resources, the tourism industry generally seems to lack awareness of its dependence on natural resources and could be doing much more to lobby for conservation. On the other hand, several recent initiatives in the USA that have involved integrating conservation and wildlife-watching tourism and recreation have been motivated primarily by conservation interests.

2.5 Impact management of wildlife tourism

As above explained wildlife tourism can have negative or positive impacts on animals that are the subject of, or otherwise affected by, such activities. It is vital to the ecological and economic sustainability of wildlife tourism that wildlife populations – the resources on which businesses depend – are not damaged, and it is desirable that their conservation or welfare be enhanced.

Management regimes that facilitate this are critical from environmental and industry perspectives. While the literature on management of nature-based recreation is substantial, efforts to understand and manage impacts associated with wildlife tourism are relatively new (Green & Higginbottom, 2001; Higginbottom et al., 2001; 2003; Manfredo, 2002).

Management of wildlife tourism will be most effective if it is applied across the system including wildlife species, natural areas where visited populations occur (e.g. National Parks), wildlife viewing sites within a protected area and individual tourism operations (Green & Higginbottom 2001). At international, national and regional scales, legislation, policy and various written (educational) guidelines are the principal tools used to manage impacts of tourism and other activities on wildlife. Most countries have legislation to 'protect' wildlife, which generally prohibits collecting, injuring, killing and sometimes handling, except under certain specified conditions (Higginbottom et al. 2003). Species that are listed as protected vary between jurisdictions but typically include most native mammals and birds. To varying extents, countries also usually have policies and legislation relating to animal welfare. In addition, governments often have policies or pieces of legislation that relate to specific issues encountered in wildlife tourism such as supplementary feeding or visitor interaction with particular species. Some industry organizations also have policies or codes of conduct that influence management practices. Various international initiatives and organizations involved in ecotourism (most notably (The International Ecotourism Society) are also influential in developing guidelines for operators and for tourists. For organizations that either operate or are legally responsible for the management of wildlife tourism activities at more localized scales, particularly at the level of individual viewing sites or protected areas, a wide range of additional management tools is available.

Wildlife tourism operators and protected-area managers often see management actions as comprising the full scope of management, and devise actions as the first step in planning. However, management actions should be designed to facilitate achievement of the designated standards that in turn support achievement of identified objectives.

As per Higginbottom et al. (2004) and Manfredo (2002) a choice of appropriate management actions involves two inter-related considerations: what to manage, and what techniques or approaches to employ (how to manage). The most appropriate management actions will depend on the particular circumstances applying to the species, activity and site in question. In deciding

what should be the object of management, the manager needs to simultaneously identify which elements of the system are most closely associated with the level of negative (or positive) impact, and which elements can be most readily manipulated in the prevailing circumstances (Manfredo, 2008). In most cases, where the goal of management is to minimize negative impacts, or maximize net positive impacts of tourism on wildlife, it is most effective to target management primarily at the people (visitors and/or operators) who are potentially creating impacts, rather than the wildlife that is the focus of the visitor experience.

In general, management to mitigate the negative impacts of a causal agent of disturbance involves manipulating one or more of the characteristics of the causal agent (Hulsman, 2003). Wildlife tourism activities and infrastructure should be carefully and creatively designed to incorporate features that will minimize negative impacts. Where it is expected that high numbers of visitors in the vicinity of wildlife may cause a problem, measures to manage their numbers, spatial distribution and location (in relation to the animals) and/or temporal distribution should be implemented. Where certain aspects of visitor behaviour may lead to detrimental impacts, measures to modify their behaviour – either directly or through modifying their expectations and attitudes – should be used (Packer & Ballantine, 2012). Management to enhance conservation benefits of wildlife tourism will most often focus on the attitudes and behaviour of operators and visitors, and may also include consideration of how to expose maximum numbers of visitors to education messages.

In assessing and comparing potential management actions, the operator or manager should compare (Green & Higginbottom, 2001; Higginbottom et al., 2001; 2003; 2004):

- effectiveness (probability of achieving the objectives)
- compatibility with other management objectives (those not related to impacts on wildlife, especially regarding visitors' sense of freedom and satisfaction with viewing experiences)
- the magnitude of negative impacts on wildlife that is considered acceptable
- acceptability to stakeholders
- availability of required labor and expertise
- financial and legal constraints

The magnitude of any negative effects that are considered acceptable should have been determined when setting standards. If even minor changes in wildlife populations or behavior are

considered unacceptable, then management actions will need to be more rigorous than if substantial changes are considered acceptable. For example, in the case of an endangered species at a sensitive stage of its life cycle, it may be advisable to prevent any tourist access through strict regulation of access.

After consideration of all these issues, the feasibility of management actions may be further constrained by stakeholder acceptability, legislation, availability of finances and/or expertise. In Except in the simplest cases, management actions should not be considered in isolation, but should be considered as a set comprising an overall strategy (Manfredo, 2002). Usually, a complementary mix of actions will be optimal, such as supporting regulation with education, economic instruments and industry self-regulation.

3. Nature based tourism and protection in Norway

Nature protection in Norway is traditionally based on formal protection by the means of the Nature Conservation Act. In Norwegian national parks, traditional use of natural resources, like grazing, fishing, hunting and picking berries and mushrooms, is allowed. As national parks are most often established in remote areas with declining populations and economic activities, the possibility for further economic development is crucial from a local perspective (Høvik & Hongslo, 20017). Nature-based tourism has been mentioned as an example of an activity that could be beneficial in such areas (Fredman and Tyrväinen 2010). Economic utilization of the national park status for the benefit of local communities is a declared policy goal of the Norwegian government (St. prp. No. 65 200203). Thus, how to balance conservation and use is brought to the fore by both central and local governments and industry. According to Fredman & Tyrväinen (2010), Odden (2008) identified in Norway, an increased participation in outdoor recreation activities between 1970 and 2004, but the demand became more specialized and diversified, especially among younger people.

My aim here is to describe how conservation of nature and wildlife tourism is handled in Norway.

3.1 Nature protection in Norway

Nature conservation in Norway is normally implemented by the means of the Nature Conservation Act of 2009. There are different levels of protection, from National Parks and

Nature Reserves to Protected Landscape Areas. The designation 'protected landscape' is the least restrictive form of conservation, and traditional agricultural and forestry production are allowed in these areas. The interests of local communities are subordinated to conservation interests, and the underlying idea is to protect the area from exploitation.

Establishing protected areas is a relatively new development in Norway compared with other countries. Norway's first national park celebrates its 55-year anniversary in the autumn of 2017, having been established in 1962.

By the end of 2009, 15,7 per cent, or 50 861 km², of Norway's mainland area were protected under the Norwegian Nature Conservation Act. National parks constituted more than 50 per cent of this area. The total number of protected areas was 2 612. There were 32 national parks (not counting Svalbard), 195 landscape conservation areas and 1 911 nature reserves. A large portion of the Norwegian protected areas are mountainous land. A number of other nature types, such as coastal and marine habitats, are not yet adequately represented. An area of only about 2 700 km² of Norway's marine waters is currently designated as protected under the Nature Conservation Act. Norway has an international responsibility to safeguard a representative selection of fjord and coastal areas of types that are not found anywhere else in the world. In comparison with the Norwegian mainland, much more of Svalbard's area is protected, including large marine areas. National parks and nature reserves in Svalbard are protected under the Svalbard Environmental Protection Act. 65 per cent of the area of the islands is protected, together with about 75 per cent of the territorial waters stretching as far out as to the 12-nautical-mile territorial limit.

3.2 Nature protection policy and Administration in Norway

Nature conservation policy in Norway used to be traditionally top-down oriented. Which areas should be candidates for protection, as well as the degree of protection and the content of the protection rules, were based on scientific and professional considerations. Landowners and other private stakeholders were left with a consultative role, given the opportunity to comment on the proposed conservation plan. They were normally not involved before the plan proposal is put forward (Krogh, 2004).

In 2009 Norway launched a comprehensive reform, including all national parks and large conservation areas (St. prp. 1 2009-2010; Høvik et al., 2015; Høvik & Hongslo, 2017). The

Ministry of Environment invited all affected municipalities to participate on conservation area boards, and the majority, 150 municipalities in 16 counties, accepted (Lundberg et al. 2013). By the end of 2014, the Ministry had appointed 37 boards (Norges nasjonalparker 2015). The most comprehensive change in composition of actors is the transfer of responsibility for the day-to-day management from the County Governor to these local conservation area boards. These boards include elected politicians from affected municipalities and counties (St. prp. 1 2009-2010).

Regarding powers, while municipalities commission the board members, the Ministry of Climate and Environment¹ formally appoints them (Nature Diversity Act of 2009). The boards have the power to compose and revise management plans, but the plans must be approved by the Norwegian Environment Agency (NEA; NEA 2015). In addition to the responsibility for the day-to-day management of the area, the boards have dispensing power. Board decisions may be appealed to the NEA (Nature Diversity Act §62). As formally appointed by and directly subordinated to the Ministry of Climate and Environment, the boards are primarily accountable to the state (Nature Diversity Act § 62), but because the members are elected politicians, the board is also indirectly accountable to the local people.

The Rio Summit of 1992 did, by agreeing on the Agenda 21 and the Convention on Biodiversity, emphasize participation from local stakeholders in nature conservation processes. In addition, the Norwegian Parliament has several times criticized the nature conservation administration, accusing them of neglecting local actors and interests. Emphasizing legitimacy, the Parliament has several times instructed the Ministry of Environment to consider the interests and opinions of local population and local industries (Reitan, 2004; Falleth, 2004).

Local and regional responsibility for the management of conservation areas has been a topic of discussion for decades. An acknowledgment of conservation's shortcomings (Castro et al. 2006) has resulted in a "new conservation paradigm" (IUCN 2003) that aimed at reconciling the interests of local communities. Tools such as resettlement of local people outside the protected areas, community-based management, and tourism development have been initiated (Bushell et al. 2007), aiming at increasing local livelihoods inside and around protected areas.

The Norwegian response to this has been to increase the focus on tourism development alongside a stronger focus on ensuring local participation. Until 2003 there was a ban on commercial tourism in protected areas in Norway. Then a policy called the Mountain Text (Fjellteksten) was

initiated with a twofold aim: first, to increase nature-based tourism, and second, to secure local economic growth. The Mountain Text shares the aim with the "new conservation paradigm" of reconciling local communities' interests, and has been initiated as a way to help legitimize conservation decisions. In Norway, national parks are established on uncultivated land, outside settlements. Thus, displacement of people has not occurred. But establishment of protected areas has proved controversial anyway (Bay-Larsen & Fedreheim 2008; Berntsen, 2011). Thus, there was also in Norway a need to introduce measures that might help improve the legitimacy of conservation decisions, as well as improving the understanding of protected areas' importance for securing biodiversity, and the possibilities of their increasing local livelihoods.

The current prevailing discourse related to protected areas is to combine conservation and use expressed through IUCN's New Conservation Paradigm. This implies conserving natural resources not only for securing biodiversity, but also for making commercial use of them for tourism.

As well as acting as resources for tourism, protected areas are also playgrounds for traditional recreational activities such as skiing, hiking, fishing, hunting, and harvesting, and new types of recreational activities such as kiting, climbing, surfing, and so on. Consequently, the protected areas are now playgrounds in which commercial and non-commercial interests, and organized and nonorganized groups have the same access rights, but with diverging impacts on ecological systems (Fedreheim, 2013). Further, these various user groups have diverging dependence on the resource as well, and different perceptions of what they gain from visiting the protected areas. The idea of value creation based on protected areas in the Mountain Text does not focus on economic values exclusively, but rather includes a focus on other values as well. Herein lies a clearly ambiguous aspect of the policy decision, in line with most of the policies in general due to the fact that they are political compromises. This is in line with a recent development in Norway focusing on the broad value creation stemming from the use of natural and cultural resources such as protected areas and cultural heritage, respectively (Haukeland & Brandtzæg 2009; Magnussen et al. 2011). As argued by Fedreheim (2013) when we talk about value creation we focus on economic, cultural, environmental, and social value creation. *Economic value creation* might then be related to the number of visitors, increased migration, increased employment, new establishments, and so on. *Cultural value creation* relates to the local identity and pride and how local communities mobilize to develop these areas. *Social value creation*

relates to local consciousness and commitment around protected areas. This might contribute to promote social values that are important in mobilizing and developing these areas.

Environmental value creation relates to the conservation values, and to secure the qualities of natural environments and landscapes in ways that contribute to varied and diverse surroundings and landscapes, good overall planning and management, less pollution, and biological diversity (Direktoratet for Naturforvaltning 2009).

Making use of Norway's protected areas will involve creation of cultural, social, economic, and environmental values; this is reflected in the policy decision.

Generally, the responsibility for the important decisions related to who owns the resources, who has the rights, and who is responsible for managing them have been lifted to the national level, reflecting that these decisions are a national responsibility and national strategic choices. At the same time, municipalities and landowners have claimed that they own these resources and thus should benefit from extracting them. With an increase in international tourism, and in particular nature-based tourism, Norway's *green gold* (here translated to protected areas) has also had a boost in attention (Fedreheim, 2013). Thus, Norway now works, as discussed above, on increasing the use of these areas for tourism. This includes establishing guidelines and rules regulating the use and commercialization of protected areas. Consequently, Norway's fjords, mountains, cultural landscapes, wetlands, rivers, and so on are now valued as potential revenue for Norway, and as important contributors to economic as well as social, cultural, and environmental value creation, mainly acting as a significant resource for tourism development (Fedreheim, 2013).

4.0 Methodology

In order to address the research questions, a qualitative research method was employed over the duration of this study. My research question is best addressed using literature review and semi-structured phone interviews of stakeholders involved. The interviews were conducted between the 20th and the 29th of June.

4.1 Choice of Informants

The data acquired in this thesis was obtained through qualitative methods: qualitative semi-structured interviews, internet searches, and literature review. During the thesis project,

qualitative interviews were conducted with 9 persons from nature conservation and tourism areas: 6 tourism operators, 3 conservation managers (Naturforvalter) (see details of interviewees in table 1). I had set up to interview between 6 and 10 tour operators and 4 and 6 conservation managers from diverse areas of Norway, but it was not possible to interview all informants' due to language barriers or to the fact that it was high season for tourism and many were unable to commit to an interview due to time constraints.

The data collected from these interviews generated a broad knowledge of the types of activities undertaken in areas where informants operate, as well as the main factors promoting or hindering nature-based business activities, wildlife tourism in particular.

The Internet searches were undertaken in order to obtain information and contacts of wildlife tourism operators as well as information about conservation managers in national parks. The criteria to choose these operators was that they provide at least *one* product containing non-captive wildlife tourism. It included but it was not limited to: nature guided tours to observe animals in its natural habitat, to photograph or bird watching, whale watching, lasting one or more days. Nature managers (naturforvalter) were chosen among nature protected areas and national parks (Dovrefjell, Rondane, Setesdal Vestei and Reheimen, Jotunheimen) but interviews were only possible with the Dovrefjell and Jotunheimen national parks due to time constraints of informants. The criteria to choose the above-mentioned parks was that the area provided wildlife that already is being used from wildlife tourism businesses.

Informant	Rolle	Location	Wildlife tourism products/activities	Wildlife species
A	Conservation Manager	Jotunheimen National Park	Conservation management	Golden eagles, gyrfalcons, rough-legged buzzard, snow buntings and wheatears; elk, red deer, reindeer and roe deer and wild Reindeer. Both pine martens and red foxes are resident in the national park, and wolverines and lynx pass through occasionally.
B	Conservation manager	Jotunheimen National Park	Conservation management	
C	Conservation manager	Dovrefjell National Park	Conservation management	
D	Tour guide	Dombås, Dovrefjell	Musk-ox Safaris and Bird watching	Rough-legged buzzards, long-tailed skuas and short-eared owls; scaups, tufted ducks, common scoters, velvet scoters, long-tailed ducks, ringed plovers, Temminck's stints, dunlins, red-necked phalaropes and great

E	Tour guide	Oppdal, Dovrefjell	Musk-ox Safaris	snipes; Musk-ox and wild Reindeer
F	General manager	Andenes	Bird and whale watching	White tailed eagles, gannets, puffins, auks, guillemots, seagulls and cormorants. Sperm whales, Orcas (Killer whale), long-finned pilot whale.
G	Founder manager /tour guide	Andenes	Whale watching	Sperm whales, Orcas (Killer whale), long-finned pilot whale.
H	Tour guide	Stø	Whale watching	Sperm Whales
I	General manager	Bødo	Whale watching	

Table 1. Overview of informants

4.2 Data Collection and documentation

The data was stored in Excel files, and the information obtained covered the following: name of business, type of business, specific offerings, name of contact persons, location, and contact information including web page, phone number, and e-mail. A separate file was produced summarizing the findings. All these files are stored on a web server, and are thus available upon request. Since these data were gathered through the use of public channels, they are not restricted.

A questionnaire was developed for telephone interviews (see appendix 2). This followed a semi-structured format with simple open questions relating to actions the operators take to promote preservation of species, the impact they want to achieve with these actions, whether conservation laws have an impact in their business/work and what type of measures can promote political pressure and influence wildlife conservation. The questionnaire was piloted and revised, before establishing a final format for use.

All interviews were conducted by telephone/Skype and were recorded. My interview protocol was a list of questions that was asked to all interviewees, but the semi-structured nature of these interviews enabled me for deviations and follow-up questions and conversations as well. Some interviewees followed up with e-mails for clarifications and for providing other data.

The interviews lasted between 15 and 20 minutes each and, during the interviews, I conveyed that the participants' views were valuable and useful (Marshall & Rossman, 2006). The sound was good and despite a few cuts, I could hear my informants without further technical problems. All interviews were transcribed to facilitate analysis and stored in a web server.

4.3 Data analysis and interpretation

A thematic analysis of the qualitative semi-structured interviews was my starting point. Here the goal was to reduce the data to a manageable size. The entire text was checked and reviewed making a selection of quotes and a summary was made for each sub-topic with answers from all informants. To achieve that, I analyzed each question separately and that made possible to set up a profile matrix to get a quick overview of the data.

Here the data was placed into the main category of *actions*, *contributions* and *measures* that develop from the sub-questions to the main problem. Furthermore, subcategories were formed in separate tables to keep the best possible overview of the findings. The coding used was both deductive and inductive coding.

In addition to the thematic analysis that has been carried out, longer and shorter quotes have been drawn to support the findings. These quotes are drawn into the presentation of the results from the interview.

5.0 Result

In this chapter, the results of the data collection will be reviewed. The results are divided into themes based on the interview guide (Appendix 2) and topics the informants themselves brought up in the interviews.

5.1 Wildlife tourism actors

The informants were asked to talk about their organization/company and their role in their area of operation as well as their main activities that were related to wildlife tourism/conservation.

Some also talked about other major actors and new opportunities for wildlife tourism development in their region, which gave a good picture of how the tourism industry was built. In this section, the actors and the informants considered to be more important for wildlife tourism conservation and development in the areas studied are presented.

5.2.1 Tourism actors' actions to promote conservation

All the operators state that they have a personal interest in educating the tourists, as one operator argues "*we try to explain how the ecosystem works, how the management in Norway works...how the system is put together in an interesting way*" (D).

It is very important for all informants to operate their business in what they consider to be a responsible way. Most of them have a program to minimize the impact their operations have on the wildlife and nature. For example, operator G states that *“we established our own Whale Watching Guidelines in close cooperation with Whale and Dolphin Conservation Society (WDCS) and are proud to follow internationally acknowledged whale watching guidelines”*. He also (G) states that their actions to preserve nature, in his case whales, arose the need to create said intern guidelines. *“...we make guidelines for responsible whale watching... and we have respect to whales and we are working together with the whale conservation companies and we cooperate with researchers...”*

Another operator gives an example of their actions towards conservation:

“For example, 16 years ago we installed hydrophones that are like, underwater microphones, that means that we don’t have to sail all over the sea to find the whales but you will find the whales as soon as you hear the sound, so it’s more environmentally friendly because you use much less fuel and it’s better for the whales because you make much less noise with the boat”

(H). As well as having intern guidelines for the protection of whales, operator F also states that they *“... are trying to eliminate plastic from our shops, now we replaced the bags that we give the people with paper bags, and I’m talking to my suppliers and I’m telling that if we don’t remove most of the plastic until next year then I’m going to find another one”* .

Whether it raises awareness in tourists, tour guide G says that the *“people who are visiting us they have such a big respect for whales and are telling how the situation is for whales in Norway and we are against whaling, we tell people that whaling is legal, Norway hunts 700 whales every year, but our company is against whaling, and we are telling real facts about whaling thus, I have seen so many stories that are not true, also from an nature perspective they have been taking their things, so we are always telling facts, and we are telling that we are against whaling and we want to have perfectly areas for whales and our whale watching areas, that’s our agenda.”* Operator H for example says that in his perception it depends from person to person: *“it varies from person to person and from groups to groups. Some people would like to do this only if it’s sustainable and if it has awareness for the environment and for the animals, other people maybe because their own kind of background and that, they just want to do it.”*

5.2.2 Conservation managers actions to promote the development of WT

When asked about their tasks, a conservation manager says that “... *mainly my job is as a bureaucrat and answering... people wanting to do different things, for instance use a snow mobile to take provisions to their pet inside the protected areas, and so on. And of course, planning, and trying to manage the tourism in the areas.*” (C). Basically, conservation managers tasks are mainly administrative, giving permissions to activities that are not allowed in the national parks, like motorized vehicles when they are necessary for the tourists and some journalists when they want to film and photograph by using helicopter and drones.

“we spend most of our time indoor preparing cases. Then we also work more strategic in management planning and we also...now a couple of year we have been working on pretty much on visitor management. In the winter, we sort of do different things within national parks for visitors and for maintenance of this kind of matters...” (B)

Informant C states that his department doesn't have any program, or initiative that actively supports the development of wildlife tourism, or any type of tourism. At least not directly as he states they “*had a trial with a local management, where the management were more directly coupled to local authorities than the model we have now, and then it was... the managing authority was called Dovrefjellråd, Dovrefjell counsel, and then they had programs for benefit of tourism, and so on, including wildlife tourism, but with the model we have today it's very clear order from the department of climate and environment that boards shall not engage directly in any sorts of commercial activities. Or programs directly benefiting... we are just allowed to work through management of areas, and demarking of paths, and so on and... and not directly to benefit such business...*”

He continues saying that “*it is very few activities that are directly related to wildlife in Norwegian conservation management, or management of protected areas, because wildlife is managed according to the ordinary laws for wildlife also in the protected areas. And by the same institutions that manage wildlife outside the protected areas. So, our direct connection with wildlife management is... is not there, in fact... what we are doing is that we manage areas, and of course the wildlife is one of the purposes of the conservation of the protected areas... what we are doing is that we try to protect the areas in benefit of wildlife, mainly.*”

Although he states for example that they do have some education courses they lack capacity to have annual courses for the guides. *“In Dovrefjell we have the muskoxen. And that is very strongly affecting tourism and we have, not many, but about... seven, eight, guide firms, guiding tourists to see muskoxen. But very many people do come and try to see them without guides. And to educate them in how to behave in a responsible matter, to educate them about other topics in the protected areas and so on, and in fact... it’s a one-day course. Which was supposed to be held each year, but... we have not the capacity to held it each year. It’s every second, approximately... we are two managers with responsibility for an area of 4500 km and a lot of... of cases to handle. So, it’s just impossible.”*

However, when asked about specific actions to protect nature, a conservation manager (A) says that they *“... use information. We try to be around in different gatherings they have..., summer festivals, for random skiers for instances, we try to avoid camping along the paths where we have wild reindeer, we try to use a little bit of social media as well but not too much, we should use it more”*. He continues with an example: *“... we had a special situation on the west side. It was really humid and it was raining higher so it closed the...so the wild reindeer couldn’t get access to the path. So we did a combined information team in social media in cooperation with the people within Mountaineering community, and it actually helped quite a bit. We got a lot of likes and shares on social media, and I think we reached the people we wanted to reach. And people avoided that area this winter because of the information. But this was a special case, this is a popular place to go, so we can’t abandon. We tried to sort of... kind encouraged them to show awareness to not disturb the reindeer, we haven’t done any measurements to the results but the feedback from that was good.”*

5.3 Contributions to wildlife conservation

Type	Definition	Examples
Education	Provides education about conservation related issues.	"we make guidelines for responsible whale watching"; "we are working with fishing villages understanding of whales"; "We have a personal interest in try to educate the tourists, we try to explain (...) how the ecosystem works, how the management in Norway works, how the system is put together, in an interesting way"

Research	Conducts or helps on the research on other aspects of the wildlife or natural environment.	"we are helping the Norwegian Orca Conservation Society"; "right now we have one person working in our boat from the Norwegian Orca Conservation society survey"
Wildlife management	Breeds native wildlife in captivity, reintroduces native wildlife back into the environment, controls feral animals or rehabilitates and/or rescues native wildlife.	"What we are doing is that we try to protect the areas in benefit of wildlife"
Habitat Management	Establishes new habitat protection reserves or improves existing habitat through revegetation, etc.	"We work through management of areas, and demarking of paths, and so on ..."
Monitoring	Monitoring of native wildlife.	"we write down statistics every day and then we deliver to the people who do the management in the national parks";
Organization member	Operator is a member or affiliate of a conservation-related organization.	"we are members of the Conservation Society"

Table. 2 Breakdown of types of contributions to conservation claimed by wildlife tourism operators/conservation managers n=9

5.3.1 From the tourism industry

None of the informants mentioned financial contributions to the wildlife tourism conservation, but all other types of contribution (with the exception of wildlife and habitat management, that are exclusive of conservation management) were mentioned during the interviews (table 2). The big emphasis is given to Education, Research and Monitoring.

Some operators say they have to monitor wildlife in order to get permission to operate within the national park as operator D describes *"that's what we have to do to get their agreement to organize our tours in the national park"*.

When asked about what their contribution tour guide G states that one of their major contribution to preservation of whales is *"we are helping Norwegian orca survey... so right now we have one person working in our boat from that Norwegian orca survey conservation society, so they can find more information about orcas and when they are swimming and what they are doing and also we help them collect ideal pictures of orcas and also other whales."*

Most informants stated education as their main contribution and the second is to act responsible towards a common good. They intend to educate their clients and visitors to raise awareness to

conservation issues, in particular to the wildlife and natural surroundings within their area of operation.

“We have a guided tour in our exhibition where we take them for an hour there we can, of course talk about the environment concern and then we have a small... a part of the exhibition about the threat to the environment and there you can of course tell the people about... for example the plastic dust damage to the environmental and how they should be a bit more aware. Because a lot of people actually they don’t know what’s going on. Maybe because they don’t want to do it or they haven’t come across that. That’s the first one, I want to educate the people.” (H)

Again, most operators aim to be able to show their clients and tourists in general, that they can do a nature based activity with the minimum possible disturbance to the animals.

All informants indicated they wish there was more education as they feel there is a lot of people that don’t know anything about sustainability, as they feel many tourists don’t care about actions that affect greatly the environment. *“... more education not just from us, because we try to do our best, but you know we only have the people here for something like a half a day per day. There should be maybe, more education from government or from the regions or from the municipalities and maybe in schools as well. A bit more at least” (H)*

5.3.2 From conservation management

Contributions from conservation management range from helping research, wildlife and habitat management, monitoring and education. According to one conservation manager (C) *“We want to give the guides the background to tell their guests about the muskoxen, or other animals and plants, and also to educate them in the regulations for the protected areas, that are behaving as we want them to behave.” “...the main challenge is that approximately between 10 000 to 12 000 people are coming to see the musk-oxen every year, in a very limited area, ... and only about one third of them are using guides. These people are much more difficult to control and are... heh... are probably doing much more harm to... to wildlife”.*

Creating an education plan for the tourists that come alone *“would be very difficult, because they are just coming there... mainly on day trips. So you can’t make any... we are trying to inform*

them by Internet, by signposts... where they do start, and so on... but it's difficult to have... education programs for people who are just visiting the area for a day."

In his opinion, tour companies could help preserve these species *"by one thing is by teaching their customers about the species. The other is, of course, that they assure that the customers are behaving responsibly when they are guiding them. That, of course, is so important, and that's what they are doing. And I know that they... if a customer starts to do a thing they don't... should, the guides usually tell them "stop" and say "ok, if don't listen to me you are... you're on a guided tour anymore, then I don't take the responsibility for you"."*

There *"the guides have to be certified by us to be allowed to guide people in a nature park. The trouble is that we have some people... some Norwegian, but mainly foreign firms, that just come and guide without any... without permission, and without our knowledge, and some... some of them are behave... do not behave good."*

5.4 Effectiveness of their actions

Regarding the effectiveness of their methods, operator H also states that the hydrophones for example are 99.2% effective in spotting whales. *"That's because we can hear them when they are under the water even thou you don't see them. Before we didn't see them so we continue to sail and sail, you know that's not good for the environment...The main goal with the hydrophones is of course to shorten the trips but also to be more environmentally friendly, when you use hydrophones you use much less fuel and we find the whales much quicker and you don't create a lot of noise because when you are using the hydrophones you just sail at one or two knots and sailing at one or two knots you don't produce a lot of noise."*

On the effectiveness of their actions informant G states that *"because of our example, what we do with whales, other companies also have started to respect, we have been changing the area, for example in stø, where we are in winter, they know that we have respect for whales, and we have our guidelines, so other boats when they saw us working, so they also started to do that, so we have a 20 years of experience from whale watching that's why we are serious actors and new actors in whale watching they can look at us... and always we help researchers to find out what's going on with whales, because it's been so many changes in the nature, and the global*

warming, and whales have changed their feeding behavior, and that we tell researchers and we have researchers with us, and also to find out why they changed their behavior, and also one important thing for us when we are working with fishing villages understanding of whales is growing when fisherman know that we are there and we tell whales are more like colleges, we are not fighting with the whales, so it's more of a cooperation, to get more understanding about whales is important. We have whale safari in the summer that means a lot of people from Europe will be visiting our villages and in the same time we can tell small scale fisherman about responsible fishing, that helps fisherman to sell their products to Europe, and also when have whale safari we have accommodation, we have services that's in summer, that's very good in winter when we have foreign fisherman, so they have accommodation, they can get more foreign fisherman to work in our village. It's good for the economy, because if money talks, there is some economy that helps to survive, so it's good, so many things have changed since last 10-15 years, fisherman nowadays, they are thinking in a totally different way from what they taught 15 years ago. For example, when we need help to find whales, we always have a big network of fisherman and researchers, and when fishermen see a whale they call us, and when we are in whale watching weekends we tell fisherman how the weather is where we have seen herring.”

However not all informants had information about the effectiveness of their actions. For example, operator (I) states that “...the passengers, we meet them just for a couple of hours and then we never see them again, so we haven't interviewed them, or... been given any feedback from them, but we have been given feedback from Hurtigruten, which is our main customer. So, we get some indirect feedback from them. That's not direct though.” But despite the lack of information, his perception that their action is indeed effective regarding conservation of animals: “... of course we could be more active, could give more information about different species. We could do that, but... I mean we do this oral. We talk with passengers and our guests every day, so... so far that has been... I would think it's... it works! I think it works!” (I)

5.5. Opportunities for development of sustainable Wildlife Tourism

When asked about if there are more opportunities for the development of wildlife tourism businesses in their region, all informants agreed to it but to various extent. For example, Conservation manager B, says “Yes there are more opportunities I guess but we don't have a

tradition of using guides, especially on the wildlife. The wildlife is a bit scattered and people don't tend to spend money on hiring a guide. It is a Nordic thing, I think it is a bit like of the mentality here that the people should...are taught to make it themselves, by themselves, do the hiking or wherever, they want to do that by themselves, it is part of the mentality here."

He continues explaining that it would be different for international tourists. *"For certainly it would have improved the experience, I mean it would have been a totally different experience of Norway and the wildlife and the national park if they could have a guide to tell them to the local stories and show the wildlife, it's a bit scattered the wildlife here, so you don't often see them while you are doing a sort of a traditional walk but if you know the local conditions you would be able to find the wildlife as well...at least the mammals..."*

Despite agreeing with the possibility of more tourism opportunities another conservation manager (C) says *"Well... it's not much. Because we have mountain fox, which is very strictly protected. But of course, it should be possible to have one or two visiting dens. Like they have in Sweden, where if fact they see that the predation from eagles and red foxes in the mountain tops has reduced in the... for the visiting dens, because it seems that eagle and red foxes are more scared from the people than the mountain foxes is. But in principle it's not allowed to stay near a mountain fox den for observation and... and photographing, for instance, and that is... some of the muskox guides want to... to get one or two mountain fox dens to take people there. But that is not our responsibility, that's the directorate for nature conservation...they are directly responsible for the mountain fox, so it's they who have to say yes to that sort of activity. But of course, the...Not we, so we can't say to the guides that ok, this den you can make use for photographing and show people. That's up to the directorate. For the mountain fox. But you know it's one of those specially protected Norwegian species, so very few species with their own regulations for just that species...the red list don't give any form of implications for a species on the red list. You have to have a special regulation for that species..."*

Informant D also states that the potential for new wildlife tourism business is high, and that is the main reason he was recruited by his company: *"I think there is much more potential in the area, that's why I am hired in this company, to try to develop it, try to use all these possibilities, especially photography its one of the biggest hobbies in the world and people come from all over*

to do pictures if encounters wildlife, bird watching is also a huge interest these days, and there's many rare birds in the area that we can try to make profit in a good way “

5.6 Political measures to promote conservation

The majority of the informants say they feel impotent regarding the politics towards preservation. Many feels that they are unwanted and that the management could work with them to achieve their goals. Many also feel that compared with the European standards Norway have some strict legislation but *“for instance the right of free access is kind of special Norwegian thing, whereas some motorized vehicles we have some strict rulings. In some cases when you have like problems with the wild reindeer it would be nice to have some more strict rulings regarding the right of free access, but then again if we ban people from experience the national parks, I think we sort of lose our legitimacy, so in some cases it would be nice to have a little bit of more ruling...But I think our main problem is actually the lack of resources, we have hardly any rangers who could guide people, who could inform people, who could follow up on the law, make sure people behave the way they should be.” (A)*

A conservation manager says that *“we have a board of members of all politicians and they could turn upwards in the system, we could influence them. I wish I could spend more time using the media, getting the public aware of the values and positive sides but also something when wrong things happen... well with two persons handling the all national parks so it's kind of resource thing... so we try to be a bit out there, we try to meet guides users ...yes it's a resource thing. We try to use...to have a good relationship with tourism so we get the information We have to be a bit smarter I guess when we have a small amount of resources.” (A)*

Another informant feels that the management could use tour operators as a resource in the field. He states that they already have to collect data and help monitor wildlife, if they could be more involved in management, it would be beneficial for both tourism and nature conservation: *“ to raise awareness.... to give them knowledge about our position in the management system our potential to be used in the management system, because like it is known with statistics we write down every day in our safaris, we could have been helping much more, we could have done much more, but they don't use us as good as they can.” (D)*

And he continues stating that *“the only way I have to pressure the government is to show the government that we generate a lot of income for the whole region, ... we have shown a lot of*

people that this activity that we are doing is quite sustainable and it generates a lot of places of work, because it is not just a wild safari, we have like 25/30 employees in the summer and 10/15 in the winter. If you think about all the induction we create around the industry with for example the hotels the transportation and other activities because people are coming here to do safari and of course restaurants and what's so ever. So, by showing what we generate maybe they should try to concentrate their effort this area towards sustainable development and then promote it in a different way so people know it is sustainable."

For another informant "whaling is the problem for us" Tour guide G states. "Norwegian laws aren't enough to protect the nature so... nature is not important if you don't use it or if you don't make money, so that's the problem in Norway, for example, they hunt predators, wolfs, bears and whales and that is not good for business, not good for whale watching. I'd like that whaling could be history as soon as possible, so for me is that we need to stop whaling we can have, for example, 10-15 fisherman who are whalers, and they could have all their income in fishing."

And informant H complements "here in Norway we don't have a lot of laws about this kind of activities they just tell you wat you need to have in order for the boat to be safe, so they look at the technical part, the boat has to have the life jackets and the rockets and the flyers and this kind of thing so they don't look the for example the impact of this activity has on the environment or if it is sustainable or not at the moment it is not the main laws. It is more on the side of safety and of course you must have engines with low emissions but that are for cars as well not just for boats. (H)

A conservation manager points out that they feel limited by the absence of laws regarding certification of guides for example: "We are limited in one special way, and that is that we are not allowed to... we can't have a mandatory certification, for instance, for the guides that says that they have to have that and that education, and follow so and so courses, and so on. It's just that we must say 'to be a guide you must have... to... document that you have the necessary knowledge, and one way to get that is to attend our courses'. But we can't say to another guide who is documenting good knowledge that 'sorry, you haven't our courses so you are not allowed to guide'. So it's... we are very weak in what we can... expect from the guides, in fact."

When asked about any change he would like to see made regarding laws and policies, he says that "... in Norway it's almost only to be doctor and to drive a car you need a certificate,

everything else is based on self-control, and it's heard when something goes wrong you get trouble with the authorities... For instance, building a housing for instance, there are no official controls, you have to have a control system of... yourself, it's only if the house do fall down you can get trouble..." He also compares with the Netherlands saying that "... a dutch friend of mine says 'in Norway, you have many, many regulations, but you don't do anything to ensure that thry are followed. In Holland we have fewer regulation, but we are ensuring that people are following regulations'. So the problem is... there is many laws that are good, they are protecting the environment, but there is no follow up, plus the lack of resources and often not even the formal system to follow it up" (C)

"...(we) should have national guidelines approved by the government and the parliament and they should put into place and you should have more control when you are at the sea so the guidelines are respected." (F)

I don't feel that we are in any position at all to do anything. If changes are made not happy about, then... I don't think we have anything to stand up with. We tried, during the hearing for the original set of regulations to emphasise that these... what you're banning now, that will result in a lot of people losing their job. And in a small community, where a job is a very good thing. Where you already struggle with people moving away, just to... just because there are no jobs. That could be one thing. But I... I don't think, I don't feel that at the end of the line, I don't feel that we are empowered to do... we can just ask to regard this, but I don't feel we have any power. (E)

The next testimony is long but rather relevant to illustrate what the tourism operators feel about laws and policies and how management deal with these issues (D). This is a partial text from a email sent to clarifications regarding this matters:

"There are some cases going on now in the Dovrefjell-Sunndalsfjella nationalpark where we have all our musk-ox business. As you maybe know - Norway have a national responsibility to take care of the wild reindeers (the Bern convention). The reindeers are very shy, and they do not like human activities in their area. At the moment, there are mainly five things in Dovrefjell that attracts people; The musk ox, the mountain "Snøhetta", the cabins belonging to the DNT

(the norwegian tourist association), hunting (grouse + reindeer), and the pointing-dog-competitions. NINA (norsk institutt for naturforskning) has made several reports about reindeers and human interaction. One specific thing they have been looking at is how the reindeers react on human-presence. By counting how many people who use the paths every day - combined with the GPS-tracking of the reindeers, they have found that if 30 persons use the path every day, the reindeers will hesitate to cross, and if 200 persons use the path every day, the reindeer will not cross at all. This is the numbers the management-people use to find and deal with potential threats for the reindeers. In Dovrefjell there are about 10 000 people every year who come to see the musk ox, and 3000 of them are joining the guided safaris. In Norway, we also have the "allemannsretten", that gives private people the right to go where they want when they want (in 99% if all situations). That means the management-system cannot control these peoples, but they can control organized activities. By the way they are handling the management, it seems like they think that they can control 30% of the distribution on the reindeers by controlling the guided activities. That is not correct. Olav Strand (senior professor, NINA) is the main person behind many of the reports NINA has produced about reindeers, and when I talked to him on the phone this spring he told me that the reports have not discussed group-dynamic on the people on the paths, topography and behavior of the people. The reindeers will run away just as fast if they bump in to one or 200 persons, none looks more active after reindeers than the guides - we use binoculars all day and compete about finding the reindeers first, and we tell each other when we find them. When they are discovered, then we always do our best not to scare them. Olav Strand said that everyone who look for musk ox should join the guided groups, because that would be better for the reindeers. That is the opposite from what the management say. The biggest problem for the reindeers in our eyes is the DNT-cabin, Reinheim. People who go there must pass the most critical "Crosspoint" for the reindeers, and stops them from crossing the valley "Stroplsjødalen". Lots of people walk in and out that valley every day on the way to/from Reinheim, in all times of the day. DNT has another cabin 4km away from Reinheim, called Snøheim. That is a better option regarding the reindeers, because you can take the bus to that place, and then you don't scare the reindeers in the same way. Is it necessary to have two large cabins this close to each other? DNT does also pack-and sell products in the same way as commercial companies, even when it is forbidden for all the other organized companies during

wintertime. That is something we call "konkurransesvidning", and is not legal. The problem is that no one dares to attack DNT - they have very good lawyers.

One thing is the management for the reindeers, but the reindeers is actually having a good time in the mountains at the moment. People say that "they are getting more and more disturbed". That is not true when you look at the historical point of view. It has not been more quiet in Dovrefjell in almost a 100 years. The reindeerpopulation is healthy, and they have increased the "wanted population number" because they grew to many. The quotas for hunting has never been bigger, and the slaughter-weight has stabilized, which most likely means that the ideal number of reindeers is reached. Still the management-system wants to decrease the organized activities in the area - one of the only things that keeps people living in that area."

6.0 Discussion

For the purpose of this study informants were chosen from a diversity of roles such as conservation managers, tour operators managers and guides with more than 15 years of experience in the Norwegian tourism industry. While this sample is not representative of the Norwegian tourism industry and conservation management, it represents the views of the informants that work in this area of study. During the duration of this thesis I identified 3 main factors from wildlife tourism that could contribute to conservation.

- Actions taken towards conservation
- Contributions from wildlife tourism and tourism in general
- And political measures to enforce conservation and the development of sustainable wildlife tourism.

Wildlife tourism, a distinct category of nature-based tourism, does not by definition need to meet sustainability metrics. In fact, the popularity of wildlife viewing can produce negative impacts due to poorly managed visitation (Sims-Castley et al. 2005). Often claimed to generate massive economic benefits and to contribute significantly to nature conservation, thereby supporting biodiversity conservation, in its simple sense *wildlife tourism* is watching animals in their habitats.

It was very important for all informants to operate their business in what they consider to be a responsible way. Most of them have a program to minimize the impact their operations have on the wildlife and nature. The connection between use and physical resources is less obvious but may embrace aspects of pollution, littering, noise, disturbance on wildlife and vegetation. Lundberg & Fredman (2012) argue that three types of nature-based experiences have been proposed: those dependent on the natural setting, those enhanced by the natural setting and those where the natural setting has a subordinate role. In this line of thinking, almost all operators have an education program for tourists; Actually, they emphasize this aspect of their business and don't want to be linked to any negative aspect of wildlife tourism, eg whaling. Some use advanced technology to reduce their impact on wildlife, such as Hydrophones, thus reducing the volume in the water while sailing, and reducing the time of the tour as well, as they can locate the whales with more precision. The majority helps with research and wildlife monitoring, and some are also part of a society of protection of wildlife. In fact, as some put it, monitoring wildlife is a pre-requisite to acquire licenses to work on national parks.

As Roe (1997) puts it, wildlife tourism can contribute enormously to the management of protected areas. He says benefits include foreign exchange revenues, employment opportunities, improving awareness of conservation objectives and stimulation of economic activity. While protected areas are major destinations for wildlife tourist, private enterprise plays a significant role in the wildlife tourism sector. But, wildlife watching tourism can have adverse effects on wildlife: by causing changes in their behavior, changing their physiology, or damaging their habitats. Which in the majority of the cases here were avoided to a minimum.

Wildlife is one of the components of biodiversity. It is a general term that technically covers both flora and fauna, however this thesis will cover fauna only. In popular use, wildlife mostly refers to animals in the wild. Perhaps a classic image of wildlife for many people is a large mammal or a flock of wild birds, but the term is widely used to cover all types of animals, including all kinds of insects and marine life (Tapper, 2006).

In principle, wildlife tourism can have various positive effects on wildlife species and their habitats. However, we know much more about negative effects of wildlife tourism on wildlife; very little research has been conducted on positive effects.

Direct wildlife management associated with wildlife watching is nearly always *in situ*, and generally covers a wider range of activities, such as reintroduction of animals, control of exotic

predators, patrolling for poachers, tree planting and weed control. Wildlife tourism operators involved in direct wildlife management (or associated research) include government agencies, nongovernment, not-for-profit organizations (usually with conservation goals) and commercial tourism operators. In addition to deliberately undertaking activities that assist conservation, wildlife tour operators in some cases are thought to contribute indirectly by acting as deterrents to the disturbance or killing of wildlife by people, simply by being present in an area.

Since wildlife watching is dependent directly on the existence of natural populations of wildlife, the ability to maintain this form of tourism can provide a vital incentive for operators and/or host communities who benefit from the tourism to conserve the wildlife and habitat on which it depends (Buckley, 2000). This is often considered the major conservation benefit associated with nature-based tourism (Buckley, 2003).

It is often stated in the literature that visitors, as part of their wildlife or nature-based tourism experience, can be educated to increase their conservation awareness and to behave in ways which have positive consequences for wildlife and/or their habitats (Duff, 1993).

Many wildlife and nature-based tourism operators interviewed, whether from the private or public sector, incorporate environmental interpretation and education components. For many not-for-profit organizations involved in wildlife tourism, raising public awareness of environmental issues is their primary purpose. As stated above, all operators have a degree of education programs to visitors/tourists, including natural parks. For most commercial operators, commitment to education is a personal or business decision of the individual operator. A more informal type of education may occur simply by the existence of wildlife Tourism (Higginbottom, 2004).

There is a number of situations in which wildlife-watching operators have lobbied for conservation of the natural resources on which they depend financially. That is not the case here in Norway, as many of the operators feel powerless, regarding the introduction of new laws and policies. On the other hand, conservation managers feel overwhelmed with tasks they cannot accomplish due to lack of human resources. They also feel that there should be a certification for guiding in national parks and protected areas.

A number of authors (Buckley, 2000a; van Oosterzee, 2000) have noted that unlike other commercial interest groups that depend on natural resources, the tourism industry generally seems to lack awareness of its dependence on natural resources and could be doing much more to

lobby for conservation. That is exactly what I noticed in this study. Many of the operators feel that they are not heard and therefore there is no need to try and change anything.

Nature protection in Norway is traditionally based on formal protection by the means of the Nature Conservation Act. In Norwegian national parks, traditional use of natural resources, like grazing, fishing, hunting and picking berries and mushrooms, is allowed. As national parks are most often established in remote areas with declining populations and economic activities, the possibility for further economic development is crucial from a local perspective (Høvik & Hongslo, 20017). Nature-based tourism has been mentioned as an example of an activity that could be beneficial in such areas (Fredman and Tyrväinen 2010). Economic utilization of the national park status for the benefit of local communities is a declared policy goal of the Norwegian government (St. prp. No. 65 200203). Thus, how to balance conservation and use is brought to the fore by both central and local governments and industry. However, it could be beneficial for both tourism and wildlife protection if conservation management could make use of the skills tour guides have in order to enhance conservation goals.

Conservation management in Norway, could consider:

1. Work in close relation with tour operators in order to exploit in depth their skills and as a way to combat the lack of personal;
2. Particular attention should be paid to the conservation and management of endangered species as the red fox or the wild reindeer, as the number of tourists tend to increase and a way to control damages is to encourage group participation, as tour guides are more prepared to educate tourists and may serve as a barrier to big impacts on the environment;

7.0 Conclusion

My thesis started with a research question: Can wildlife tourism promote the conservation of wildlife in Norway?”

To answer this question qualitative interviews were conducted with 9 persons from nature conservation and tourism areas: 6 tourism operators, 3 conservation managers (Naturforvalter)

The data collected from these interviews generated a broad knowledge of the types of activities undertaken in areas where informants operate, as well as the main factors promoting or hindering nature-based business activities, wildlife tourism in particular.

Many wildlife and nature-based tourism operators interviewed, whether from the private or public sector, incorporate environmental interpretation and education components. For many not-for-profit organizations involved in wildlife tourism, raising public awareness of environmental issues is their primary purpose. The majority of the informants said they feel impotent regarding the politics towards preservation. Many feel that they are unwanted and that the management could work with them to achieve their goals.

Norwegian Wildlife tourism is small, localized and conservation oriented. Yet, tour operators and conservation management have different views over their roles and despite the decentralization of power in conservation management and policy, to counties and municipalities, operators feel that their views are not regarded in the decision-making process. Though they contribute to conservation with education of tourists, wildlife monitoring and research, they think there could be more specific guidelines of wildlife protection in order to alleviate the impact of their operations.

Ultimately, wildlife tourism is here to stay - the good and the bad. Potential problems could arise, especially in terms of the impact on wildlife, but this growth is also an opportunity to promote conservation efforts. Additionally, a focus on education, coupled with serious efforts to limit the impact on wildlife, should help guide these ventures in the right direction.

8.0 Limitations and advice on future research

Because this study was conducted in one semester for a master thesis, it was not possible to research all the relevant factors regarding wildlife tourism. Informants were chosen from a diversity of roles such as conservation managers, tour operators managers and guides with more than 15 years of experience in the Norwegian tourism industry. While this sample is not representative of the Norwegian tourism industry and conservation management, it represents the views of the informants that work in this area of study. During the thesis project, qualitative interviews were conducted with 9 persons from nature conservation and tourism areas: 6 tourism operators, 3 conservation managers. Due to the size of this sample this thesis is not representative of the situation of wildlife tourism in Norway, moreover, its scope is very limited to the views of my informants.

Future research on wildlife tourism and nature preservation could be pertinent to study the impacts this type of tourism has on nature and animals in Norway, whether it creates awareness towards conservation and what role can stakeholder in this type of tourism, to name a few.

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Appendix 1

Email to WT businesses:

Request to a phone interview about the role of Wildlife Tourism in conservation

I am a student at Faculty of Environmental Sciences and Natural Resource Management (MINA) from the University of Life Sciences (NMBU) in Ås and I am writing a master thesis about the role of wildlife tourism in conservation in Norway, focusing on the non-captive market.

I would like to phone interview a company representative in order to collect data on the subject. I ask less than 20 min of your time. I will use the information given in the interview and publish it but you may choose to remain anonymous

Your company was chosen because it offers at least one safari tour that involves non-consumptive wildlife tourism.

I'm looking to schedule the interview for the next two weeks (between the 20th to the 30th of June) and would like to know your availability during this period.

Enquiries about this study may be addressed to: Silvia Gomes - student: silvigom@nmbu.no and phone number [+47 417 20 784](tel:+4741720784) or to Peter Fredman - Supervisor: peter.fredman@nmbu.no

With best regards,

Sílvia Gomes

Mobile: [+47 417 20 784](tel:+4741720784)

E-mail: silvigom@nmbu.no

Email to conservation management:

Request to a phone interview about the Role of Wildlife Tourism in conservation

I am a student at Faculty of Environmental Sciences and Natural Resource Management (MINA) from the University of Life Sciences (NMBU) in Ås and I am writing a master thesis about the Role of Wildlife Tourism in conservation in Norway, focusing on the non-captive market.

I would like to phone interview a nature manager (naturforvalter) in order to collect data on the subject. I ask less than 20 min of your time. I will use the information given in the interview and publish it but you may choose to remain anonymous.

I'm looking to schedule the interview for the next two weeks (between the 20th to the 30th of June) and would like to know your availability during this period.

Enquiries about this study may be addressed to: Silvia Gomes - student: silvigom@nmbu.no and phone number [+47 417 20 784](tel:+4741720784) or to Peter Fredman - Supervisor: peter.fredman@nmbu.no

With best regards,

Sílvia Gomes

Mobile: [+47 417 20 784](tel:+4741720784)

E-mail: silvigom@nmbu.no

Appendix 2

Interview guide

Introduce myself and the thesis theme. Clarify to the interviewee that this study regards non-captive wildlife tourism and that I only want them to talk about this product.

Explain how the organization has been chosen to be interviewed.

Explain the interviewee about its right to anonymity.

Interview guide - Operators

1. Can you tell me about your wildlife related activities?
 - Background information only/ice breaker - Main activities that are wildlife tourism and conservation related.
2. Does your company have programs or other initiatives that actively support the conservation of wildlife?
 - Ask to refer specific actions they take towards conservation of the species they “sell”,
 - Whether and how it raises awareness towards conservation
3. Why not? (no benefit for the business, lack of resources?) What impact do you want to achieve with these actions?
 - When did you start these actions?
4. Do you have any data on their effectiveness or results (contributions)?
 - If not, what is your perception about the contributions from your actions?
 - What are the contributions (results) from your actions to preserve wildlife?
5. Are there opportunities for more wildlife tourism activities in your region? If so what? (including locations, species, types).
 - Which other actions could wildlife tourism companies do to contribute to species conservation?
6. Does laws and policies have any positive/negative impact in your business?
 - Are there any changes you would like to see made to the laws/policies that would help/promote sustainable wildlife tourism businesses? (policies, strategies, funding?)
7. What actions can the wildlife tourism industry take to promote political pressure or in other ways influence wildlife conservation?

Interview guide – Conservation managers

1. Can you tell me about your activities?

- Background information only/ice breaker- Main activities that are wildlife tourism and conservation related.
 - What does your department see as the roles of public and private sectors in wildlife tourism?
2. Does your Department have programs or initiatives that actively support the development of wildlife tourism?
 - If so, explain including documentation e.g. strategies, policies, plans, research; staff allocated;
 - Whether and how it raises awareness towards conservation, etc.
 3. Why not – (no benefit for the wildlife, lack of resources?)/What impact do you want to achieve with these actions? What are these actions or measures your department take to balance persistence of wild population and tourism?
 4. Do you have any data on their effectiveness or results (contributions)?
 - If not, what is your perception about the contributions from your actions?
 - What are the contributions (results) from your actions to preserve wildlife?
 5. Are there opportunities for (more) wildlife tourism activities in your region? If so what? (including locations, species, types)
 - Which other actions could wildlife tourism companies do to contribute to species conservation?
 6. Do laws and policies have any positive/negative impact in your work?
 - Do you feel empowered/limited/restricted by conservation laws?
 - Are there any changes you would like to see made the laws/policies that would help/promote sustainable wildlife tourism businesses? (policies, strategies, funding?)
 7. What actions can conservation manager use to promote political pressure and influence the development of sustainable wildlife tourism business?



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