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The wildlife watching tourist guide: A case study on the role of wildlife watching guides in Norway

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Nature-based Tourism

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Summary

This paper examines the roles of wildlife watching guides focused on large carnivoran mammals and large cloven-hoofed mammals in Norway. Moreover, it examines the components of the roles and potential differences between the two groups. The problem question that the thesis aims to answer is:

> *Which components are included in the role of the guide at Norwegian wildlife watching tourism activities based on large land-based mammals, and are there any differences between guiding activities based on large cloven-hoofed mammals and activities based on large carnivoran mammals?*

A qualitative research method was conducted using semi-structured in-depth interviews to answer these research questions. Ten different guides were interviewed, with five guides focused on each group of mammals.

The results showed that some guides did not have an encounter with their target species as their primary objective but instead tried to find signs and tracks that they could show the participants. Moreover, the findings also indicated that wildlife watching guides need to be able to manage conflicts between themselves and participants and conflicts between the group and people outside of the group. Furthermore, the findings showed little importance and relevance for Cohen's (1985) interactional component for wildlife watching guides. Another surprising discovery was the lack of interpretation skills and encouragement for conservation of the target species among the guides.

The practical implications of these findings indicate that there could be a need for more guide training for Norwegian wildlife-watching guides to ensure high-quality guiding and interpretation. In addition, certifications for guides are also a possibility that should be considered.

Keywords: Wildlife watching tourism, tour guide, wildlife watching tourist guides, wildlife tourism, carnivoran mammals, cloven-hoofed mammals

Sammendrag

Denne oppgaven undersøker rollene til viltkikkingsturisme guider som fokuserer på store rovdyr og store klovdyr i Norge. Videre undersøker den komponentene i rollen til guiden og mulige forskjeller mellom de to gruppene. Forskningsspørsmålet som oppgaven tar sikte på å besvare er:

> *Hvilke komponenter inngår i rollen til guiden ved norske viltkikkings aktiviteter basert på store landbaserte pattedyr, og er det noen forskjeller mellom guidede aktiviteter som baserer seg på store klovdyr og aktiviteter som er basert på store rovdyr?*

For å besvare disse spørsmålene ble det benyttet en kvalitativ forskningsmetode med bruk av semistrukturerte dybdeintervjuer. Totalt ble ti forskjellige guider intervjuet hvorav det var fem guider med fokus på hver gruppe av pattedyr.

Resultatene viste at noen guider ikke hadde et møte med fokus arten som hovedmål, men i stedet prøvde å finne spor og sportegn som de kunne vise deltakerne. Videre indikerte funnene at viltkikkingsturisme guider må kunne håndtere konflikter mellom seg selv og deltakerne i gruppen og konflikter mellom gruppen og personer utenfor gruppen. Videre viste funnene liten betydning og relevans for Cohens (1985) interaksjons komponent for viltkikkingsturisme guider. En annen overraskende oppdagelse var mangelen på ferdigheter i interpretasjon og oppfordringer til bevaring av fokus arten blant guidene.

De praktiske implikasjonene av disse funnene tyder på at det kan være behov for mer guideopplæring for norske viltkikking guider, for å kunne sikre høy kvalitet på guidingen og interpretasjonen. Sertifiseringer for guider er også en mulighet som bør vurderes.

Nøkkelord: Viltkikkingsturisme, turist guide, viltkikkingsturisme guide, viltturisme, rovdyr, klovdyr

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1 Introduction

Tourist guides are considered important actors in the tourism industry, as they contribute to the immersion and co-creation of experiences for the tourists (Hansen & Mossberg, 2017; Weiler & Black, 2015). Moreover, guides can play an important role in wildlife tourism and wildlife watching tourism activities, as studies have suggested that guiding and the use of interpretation can contribute to visitor satisfaction, conservational attitudes, and behavior among participants (Nikoline Hambro Dybsand & Stensland, 2021; Sam H. Ham & Weiler, 2002). Moreover, wildlife watching tourist guides are considered essential to wildlife watching tours, as they contribute to sustainable use and management and provide good wildlife encounters for the tourists (Curtin, 2010).

Wildlife watching tourism is a non-consumptive form of wildlife tourism, a niche within nature-based tourism which is tourism activities outside one's neighborhood (Fredman et al., 2009; Lima & Green, 2017). Wildlife tourism entails activities where tourists observe or otherwise engage with wildlife in either a consumptive or non-consumptive way, either in captivity or in their natural habitat (Higginbottom, 2004; Lima & Green, 2017). However, wildlife watching tourism is primarily focused on activities where the participants watch the wildlife in their natural areas (Tapper, 2006). The popularity of wildlife watching tourism has grown worldwide in both demands for wildlife watching experiences and the revenue it produces (Ayazlar, 2017). For example, in the United States, wildlife watching tourism generated a revenue of 32 billion U.S dollars in 2012 (Maccoll & Tribe, 2017). Moreover, whale-watching activities in Europe produced revenue of approximately 143 million euros in 2008 (Ayazlar, 2017).

There are many studies on the role of the tourist guide, but a limited amount of research on the role of the wildlife watching tourist guide. Commercial wildlife and wildlife watching tourism activities usually involves a tourist guide (also referred to as a tour guide). Eric Cohen conducted one of the earlier studies on the tourist guides role in 1985. Cohen's research on the dynamics, structure, and origin of the modern tour guide resulted in a framework for the role of the tourist guide (Cohen, 1985). His research suggests that the antecedents of the contemporary tour guide originated from the mentors and pathfinders during the Grand Tour in the 17th and 18th centuries (ibid). Furthermore, the framework Cohen presented in his research provided the basis for further research on the components

of the role of the nature-based and the wildlife-watching tourist guides (Dybsand & Fredman, In Press; Weiler & Davis, 1993).

The different adaptations of Cohen's (1985) framework indicate that the role of a tourist guide varies depending on what type of activity they are guiding. These observations make it relevant to examine further the role of wildlife watching tourist guides to examine whether different types of mammals affect the role of the guide. Moreover, Dybsand and Fredman's (in press) framework is relatively new, making it interesting to examine its accuracy and relevance for Norwegian wildlife watching tourist guides.

1.1 Purpose and aim

This study examined which components that are included in the role of wildlife watching tourist guides and potential differences in the role of wildlife watching tourist guides focused on different types of mammals in Norway. The types of mammals chosen are large cloven-hoofed mammals and large carnivoran mammals. The thesis will answer the following problem definition:

> *Which components are included in the role of the guide at Norwegian wildlife watching tourism activities based on large land-based mammals, and are there any differences between guiding activities based on large cloven-hoofed mammals and activities based on large carnivoran mammals?*

2 Theory

This chapter presents the current state of nature-based tourism, wildlife tourism, and wildlife watching tourism in Norway. Moreover, it shows the definitions referred to when these terms are mentioned throughout the thesis. Furthermore, this chapter presents the theoretical frameworks that served as a starting point for the interview guide and provides a context for the study's findings.

2.1 Nature-based tourism

Tourism is a valuable industry for Norway. In 2019, tourism generated 186 billion Norwegian kroner, equating to 4.2 percent of the gross domestic product in Norway (Innovasjon Norge, 2020). Furthermore, seven percent of all employees in Norway work in the tourism industry. Nature-based tourism is a popular form of tourism in Norway. There are several definitions of nature-based tourism, one of which is "activities that are directly dependent on nature" (Mehmetoglu, 2007, p. 26). It can also be defined as "human activities occurring when visiting nature areas outside the person's ordinary neighborhood" (Fredman et al., 2009, p. 62). The latter definition is the one that is referred to throughout the thesis due to its broad applications. One study on NBT companies estimates that there are around 2000 to 3500 nature-based tourism companies in Norway (Stensland et al., 2018). Furthermore, they estimate that they produce a total turnover of between 4.6 billion and 8.1 billion Norwegian kroner. However, the extended effect on the Norwegian economy is likely even higher. In 2017 one survey revealed that nature-based activities equated to approximately forty-seven percent of Norway's thirty most popular tourism activities in Norway among Norwegian holiday tourists (Innovasjon Norge, 2018). Experiencing nature was also the most popular activity for international travelers visiting Norway. Furthermore, nature-based activities totaled about fifty percent of the thirty most popular activities among the international visitors (ibid).

2.2 Wildlife tourism and wildlife watching tourism

Wildlife tourism is a branch of nature-based tourism that focuses on consumptive and non-consumptive encounters with wild animals (Lima & Green, 2017). It can be defined as

"Tourism based on encounters with non-domesticated animals. These encounters can occur in either the animal's natural environment or in captivity. It includes activities historically classified as 'non-consumptive' such as viewing, photography, and feeding, as well as those that involve killing and capturing animals, particularly hunting and recreational hunting" (Higginbottom, 2004, p. 2).

Another definition of wildlife tourism, is "an area of overlap between nature-based tourism, ecotourism, consumptive use of wildlife, rural tourism, and human relations with animals" (Reynolds & Braithwaite, 2001, p. 32). However, this thesis used Higginbottom's (2004) definition of wildlife tourism due to its clarity and specificity.

Wildlife watching tourism is a non-consumptive form of wildlife tourism (Lima & Green, 2017). Karen Higginbottom defined wildlife watching tourism as "viewing or otherwise interacting with free-ranging animals" (Higginbottom, 2004, p. 3). Another study defined it as "tourism that is undertaken to view and / or encounter wildlife in a natural setting" (Tapper, 2006, p. 10). The latter definition of wildlife watching tourism is the one that is referred to in this thesis due to it being the most accurate description of the activities that the informants in this study provided.

2.3 The roles of the wildlife watching tourism guide

Erik Cohen initially categorized and defined the different roles of a tourist guide in 1985. He systemized the role of the guide into a framework consisting of four different components: instrumental, social, interactional, and communicative (Cohen, 1985). Weiler and Davis (1993) later expanded upon this framework to create a framework for the role of the nature-based tourism guide. They considered Cohen`s original framework to be exclusively focused on providing for the needs of the tourist both individually and as a group. Moreover, they argued that the nature-based tourist guide also has some responsibility to the local environment and therefore needs to consider their environmental impact (ibid). As a result, Weiler and Davis (1993) research discovered two additional components required by a nature-based tourist guide: the 'motivator' and the 'environmental interpreter.' This expansion of Cohen's framework was later adapted by Dybsand and Fredman (in press) to create a framework and model specifically for the role of wildlife watching tourism guides. Their research revealed that wildlife-watching tourism guides commonly executed specific

roles. As a result, they added two more components to Weiler and Davis's extension of Cohen's work, which they labeled as the 'encounter component' and the 'uncertainty component' (ibid).

Dybsand and Fredman's (in press) encounter and uncertainty components completed the wildlife watching tourism guide framework (see figure 1). Their framework consists of eight components, which are classified into four different categories (Dybsand & Fredman, In Press). Furthermore, the components are classified as being either outer-directed or inner-directed. The meaning is that the needs of the different components under each classification must be met either by resources external to the group or resources found within the group (Cohen, 1985; Dybsand & Fredman, In Press; Weiler & Davis, 1993).

The categories are tour management, experience management, resource management, and wildlife management (Dybsand & Fredman, In Press). Tour management is primarily focused on the group and includes the instrumental component which is outer-directed, and the social component, which is inner-directed (Weiler & Davis, 1993). The instrumental component involves choosing the spatiotemporal direction, and managing the tour safely and efficiently, providing access to geographically and socially organized territories (Cohen, 1985). The social component includes the objectives of maintaining the group's morale (through entertaining and pleasant behavior), social integration, animation (i.e., convincing the participants to partake in activities offered by other touristic facilities they encountered during the tour), and tension management within the group (ibid).

Experience management primarily focuses on the group's individuals (Weiler & Davis, 1993). It includes the outer-directed interactional component, which is also referred to as 'group leader'. The interactional component includes organizing (providing facilities and services to the group) and representing the group to the environment as an intermediary (Cohen, 1985). Furthermore, experience management also involves the communicative component, which is inner-directed. The communicative component is about teaching and is often considered one of the essential roles of a guide (Cohen, 1985; Weiler & Davis, 1993). As the teacher, the guide is supposed to give correct information, interpret information for the participants and choose what objects to show to the participants (Cohen, 1985).

Resource management involves the outer-directed motivational component and the inner-directed environmental interpreter component (Dybsand & Fredman, In Press; Weiler & Davis, 1993). The role of being the motivator is attempting to inspire the participants to behave in an environmentally friendly way when they are on-site (Weiler & Davis, 1993). The environmental interpreter component is focused on trying to promote long-term environmentally friendly attitudes and behavior (ibid).

Wildlife management consists of the encounter component and the uncertainty component (Dybsand & Fredman, In Press). The encounter component is outer-directed and encompasses the guide's role during a wildlife meeting (ibid). During an encounter, the guide should amplify the participant's experience of the wildlife by using equipment, staging, interpreting, and managing the participant's behavior during the encounter (Dybsand & Fredman, In Press). The uncertainty component is inner-directed and deals with the uncertainty that comes from trying to find a wild animal (ibid). Since there are no guarantees of seeing animals in the wild the guide needs to deal with the uncertainty that entails for the group (Dybsand & Fredman, In Press). Dybsand and Fredman's research suggest that the wildlife watching tourism guide handles the uncertainty by drawing the participant's focus to other parts of their environment, offering different experiences besides the main attraction, learning about the animal's last known whereabouts, and adjusting the participant's expectations (ibid).

Another study which focused on wildlife watching tourist guides relates to this framework. They suggested that wildlife watching tourist guides require certain field interpretation skills which relate to Cohen's (1985) instrumental component and the element of choosing the direction of the tour (Curtin, 2010). These field skills provide a better a better understanding of how wildlife watching guides choose direction than Cohen's (1985) framework. These field interpretation skills use interpretation in two different ways, first as a way of interpretating (I.e., understanding in this case) the habitat, sightings, sounds, and the ability to identify them and know what species they belong to (Curtin, 2010). The second way is through interpretation of information about habitats, behavior and identification to the participants, which relates to the encounter component (Curtin, 2010; Dybsand & Fredman, In Press).

	Outer-directed (needs achieved by external resources)	**Inner-directed** (needs achieved by internal resources)
Tour Management (focus on group) Based on Cohens framework	*The instrumental Component or 'organizer'*	*The social component or 'entertainer'*
Experience Management (focus on individual) Based on Cohens framework	*The interactional component or 'group leader'*	*The communicative component or 'teacher'*
Resource management (focus on environment) Based on Weiler and Davis extension	*The motivational component or 'motivator'*	*The environmental Interpretation component or 'environmental interpreter'*
Wildlife management (focus on wildlife) Based on Dybsand and Fredman's extension	*The encounter component*	*The uncertainty component*

Figure 1. The role of the wildlife watching tourism guide (Adapted from Cohen (1985), Weiler and Davis (1993), and Dybsand and Fredman (in press)).

2.4 Interpretation using the TORE model

Interpretation is an important element in the role of the tourist guide as highlighted in the three frameworks of the guides role (Cohen, 1985; Dybsand & Fredman, In Press; Weiler & Davis, 1993). Interpretations can be defined as "a mission-based approach to communication aimed at provoking in audiences the discovery of personal meaning and the forging of personal connections with things, places, people, and concepts"(Ham, 2013). In three out of the four categories in the wildlife watching tourism guide model interpretation was included as an aspect of the guides role, which highlights the importance of interpretation in wildlife watching tourism. However, these models did not address the how to of interpretation. Therefore, this paper utilized the TORE model to provide a theoretical framework in order

to analyze how wildlife watching tourism guides interpretates information to the participants.

The acronym TORE stands for theme, organized, relevant and enjoyable, and the TORE model is a framework for how to interpret successfully (Ham, 2013). The model was formulated by Sam Ham (2013) and adapted from his original EROT model. The models consist of the same elements; however, the order of the elements is emphasized differently. It represents the elements that are considered important for successful interpretation (Ham, 2013). In order for interpretation to have a theme, there needs to be a critical point that the interpreter would like to convey to the participants (e.g., the importance of a species to the functioning of an ecosystem). Organized interpretation is when the interpreter communicates in a way that does not require a lot of energy and effort in which to pay attention. For interpretation to be regarded as relevant it needs to be perceived as meaningful and personal to participants. Lastly, interpretation must be enjoyable for the participants, i.e., the quality of being gratifying to follow. These elements make up the interpretative approach to communication that is commonly referred to by the acronym TORE (ibid).

According to Ham (2013), interpreters aim for three typical outcomes. Firstly, most interpreters usually aim to at least provide a strong experience for the visitors. This is commonly done through inspiring the participants to reflect and make new connections to the object of interpretation (Ham, 2013). The second outcome of interpretation is to make them appreciate and care for the object of interpretation. The third outcome is to promote correct behavior. All three of these elements are relevant for wildlife watching tourism guides. Firstly, there are many commercial wildlife watching tourism businesses and providing strong experiences is likely to be beneficial. Secondly, wildlife watching tourism does is in some cases harm both the physical environment and wildlife, which in many cases is caused by the tourist's behavior (Dybsand & Fredman, In Press). Using interpretation to cause a more caring attitude and modifying behaviors could therefore be benefitable for sustainable wildlife watching tourism operators.

3 Case area

The case area of this study is all the land areas belonging to the kingdom of Norway. However, the informants only represent three different regions in Norway (as shown in figure 2): northern Norway, eastern Norway, and central-Norway.

3.1 Wildlife watching tourism in Norway

The wildlife in Norway is varied due to its length and large topographical differences, and contains both artic and non-artic species (Thuesen et al., 2022). There are approximately 90 different mammals in Norway, both on land and in the water (Heintz et al., 2021). Some of these mammals as well as many birds are popular among wildlife watching tourists and birdwatchers, with some of the more popular species being whales (physeter macrocephalus), sea eagles (haliaeetus albicilla), muskox (ovibos moschatus), moose (alces alces), beaver (castor fiber), seal (phoca vitulina) and walruses (odobenus rosmarus) (Innovasjon Norge, 2022). There are also four large predator species (large carnivoran mammals) in Norway, wolves (canis lupus), bears (ursus arctos), wolverines (gulo gulo) and lynx (lynx lynx), all of which are regionally endangered species in Norway (Regjeringen, 2021). However, there is little wildlife watching tourism focused on large carnivoran mammals, which became evident during the research on potential informants for this study.

The origin of wildlife tourism in Norway dates back to early 19th century when wealthy British gentlemen came to hunt, fish, and shoot in the Scandinavian countries (Sillanpää, 2007). Contemporary wildlife tourism in Norway is still largely consumptive, with fishing and hunting tourism activities being more commonly provided than wildlife watching activities (Stensland et al., 2018). Approximately 73 percent of nature-based tourism firms in Norway in 2018 offered either hunting or fishing activities, as compared to 24 percent offering wildlife safaris and 22 percent offering birdwatching (ibid). Furthermore, about twelve percent of the nature-based tourism firms in the study offered wildlife safaris on land areas and ten percent of the firms provided safaris on water (Stensland et al., 2018). Another study also found similar results among international travelers visiting Norway who reported higher participation in fishing activities than wildlife watching activities (Dybedal et al., 2020). However, wildlife watching tourism does have an unrealized potential for future growth in Norway and the rest of Scandinavia (Haukeland et al., 2021). Another study

discovered that experiencing wildlife was among the fifteen most popular activities to do in Norway among both Norwegian and international tourists in 2017 (Norge, 2018). The same study found that almost 50 percent of the Norwegian tourists and more than 60 percent of the international tourists participated in activities where they experience wildlife (ibid).

The greater supply of birdwatching activities compared to other wildlife watching activities among Norwegian nature-based tourism firms might be because Norway is among the top ten best birding destinations worldwide, with Varanger being an especially famous area for bird watchers (Innovasjon Norge, 2015).

3.2 Map over informant's locations

Figure 2. Map over informant's locations (target species in each area described in arrows). (Produced from Norgeskart (2022)).

3.3 Nordland - northern Norway

Nordland is the southernmost county in northern Norway and consists of 41 municipalities across 35 000 square kilometers (Thorsnæs, 2022). Northern Norway is commonly known for its beautiful nature, northern lights, and the midnight sun. There are several popular wildlife watching activities in northern Norway, such as moose safaris, whale safaris, eagle safaris, king crab safaris and bird watching (Innovasjon Norge, 2022). The informant from Nordland in this study offered moose safaris.

3.4 Trøndelag - central Norway

Trøndelag is a county in central Norway which consist of 50 municipalities which covers a total are of 39 000 square kilometers (Haugen, 2022). Wildlife watching tourism in Trøndelag consists of some popular forms of wildlife watching tourism such as moose safaris, musk ox safaris and eagle safaris (Innovasjon Norge, 2022; Visit Trondheim, 2021). The informants operating in Trøndelag focused on bears and muskoxen.

3.5 Innlandet - eastern Norway

Innlandet is the eastern most county in Norway and consists of 34 municipalities across 49 000 square kilometers (Haugen, 2022). Some of the species targeted by wildlife watching organizations in Innlandet are moose, bears, and wolves. The informants from Innlandet focused on bears, wolves and moose.

3.6 Relevant species

The reason why large carnivoran mammals were chosen for this research is because they are charismatic and rare species in the Norwegian fauna. Furthermore, they are predators which makes them different and unique compared to plant eating mammals. There are also a lot of myths and conflicts surrounding them which also makes them different from other species in Norway. Large cloven-hoofed mammals were selected because they are charismatic, and they are also natural to compare to carnivoran mammals due to their size, and since they too are land-based.

There are multiple species that belong to the large carnivoran mammals and species which belong to the large cloven-hoofed mammals. Species belonging to the true deer family

is the most common cloven-hoofed mammals in Norway. The true deer species in Norway consists of moose, deer (cervus elaphus), roe deer (apreolus capreolus), fallow deer (dama dama) and reindeer (rangifer tarandus) (Langvatn, 2021). Besides these species muskox is another cloven-hoofed mammal that exists in the Norwegian fauna (Østbye, 2022). The large carnivoran mammals existing in the Norway is the brown bear, wolves, lynx and wolverines (Regjeringen, 2021). However, not all these species where targeted for wildlife watching activities. The preliminary research for this study revealed that muskox and moose were the most common target species among large cloven-hoofed mammals followed by reindeer and deer which were less common. Among the remaining cloven-hoofed mammals there were no findings of them being a target species for wildlife watching tourism activities. Among the large carnivoran species in the Norwegian fauna; bears and wolves were the most common target species, whereas wolverines on lynx's were not found to be targeted.

There are large differences between the populations of the between the cloven-hoofed mammal species. There are approximately 107 400 moose (Eldegard et al., 2021c), 25 000 mainland wild reindeer (Eldegard et al., 2021h), 200 muskoxen (Eldegard et al., 2021g), 42 541 deer (Eldegard et al., 2021e) and 33 280 roe deer (Eldegard et al., 2021b). Moreover, there are large differences between the populations of the largen cloven-hoofed mammal species and the large carnivoran mammal species. The carnivoran mammal species populations are relatively small, with 148 bears (Eldegard et al., 2021a), 458 wolves in Norway and Sweden combined (Eldegard et al., 2021i), around 332 to 486 adult wolverines (Eldegard et al., 2021f), and around 326 to 460 lynxes (Eldegard et al., 2021d).

4 Methodology

This chapter presents the scientific research method that was applied for this thesis. Furthermore, it explains the strategy and approach for the data collection, data analysis, data credibility, choice of informants and ethical considerations.

4.1 Research method

The purpose of this study was to answer the problem definition, and as a result the research method which was deemed as most appropriate to answer this question was applied. There are three primary research methods: quantitative, qualitative, and mixed methods (Brunt et al., 2017; Creswell & Creswell, 2013). Each research method contains different forms of data collection (ibid). Quantitative research methods involve numbers and close-ended questions and answers (Creswell & Creswell, 2013). The purpose of quantitative research methods is to test theories by applying statistical analyses to data collected from many participants (ibid). Qualitative research methods use words and open-ended questions and answers (Creswell & Creswell, 2013). The aim of qualitative research methods is to gain deeper insight into individuals or groups meanings or experiences on a certain topic (ibid). Mixed methods use both quantitative and qualitative research methods in their data collection (Brunt et al., 2017; Creswell & Creswell, 2013).

Qualitative methods provide abundant information about the informant's views, experiences, behaviors, as well as providing open-ended answers to open-ended questions (Creswell & Creswell, 2013). Furthermore, qualitative research methods are often considered inductive and generally seeks to form theories rather than testing them (Brunt et al., 2017). The research question for this thesis was explorative and inductive and required personal and in-depth information from the informants' experiences as a guide to be answered. Moreover, it requires open-ended questions and answers to discover what the role of wildlife watching tourism guides in Norway is. Therefore, a qualitative research method was the most appropriate method.

4.2 Research approach

Qualitative research consists of several different research designs such case studies, grounded theory, narrative, phenomenology, and ethnography (Creswell & Creswell, 2013).

Grounded theory is a research design where the researchers develop a theory based on the participants views (ibid). Narrative research studies the life stories and situations of the participants, and phenomenological research studies the participants experience of a specific phenomenon, while ethnographic research studies different forms of patterns such as behaviors (Creswell & Creswell, 2013). The research approach selected for this study is case studies, which can be defined as:

> *"An intensive study of a single unit for the purpose of understanding a larger class of (similar) units" (Gerring, 2004)*.

Case studies are often used to examine specific contemporary cases such as individuals, attractions, businesses, or activities (Brunt et al., 2017; Creswell & Creswell, 2013). Some researchers also consider case studies as especially relevant for tourism studies (Nunkoo & Nunkoo, 2018).The purpose behind using case study as a research approach for this thesis is because it aims to have an in-depth understanding of the roles of wildlife watching tourist guides in Norway.

4.3 Data collection

There are multiple methods of data collection used in qualitative research methods, yet this thesis utilized interviews for data collection (Creswell & Creswell, 2013). Such as qualitative observation, qualitative interviews, qualitative documents, qualitative digital materials, and audiovisual material (ibid). The purpose of using interviews as a method of data collection is to gather information, views, experiences, and the subjective meaning of the experiences of the participant (Creswell & Creswell, 2013; Seidman, 2006). Interviews are done either as focus group interviews where the interviewer questions multiple participants simultaneously or as in depth-interviews where the researcher interviews the participants one on one (Brunt et al., 2017; Creswell & Creswell, 2013). There are numerous advantages of using in-depth interviews as a means of data collection. In-depth interviews allow informants to provide abundant information about their experiences, views, and opinions on a specific subject (Brunt et al., 2017; Creswell & Creswell, 2013). Furthermore, it allows for abundant information from relatively few interviewees (Brunt et al., 2017). Moreover, it also allows for the researcher to inquire deeper information that the participants share in great depth (ibid).

There are three different structures that can be applied when conducting in-depth interviews: structured, semi-structured, unstructured interviews (Brunt et al., 2017). Structured interviews are interviews where the questions are pre-established with no deviations or follow-up questions (Gill et al., 2008). Semi-structured interviews also contain some pre-established questions, but deviations and follow-up questions are allowed (ibid). Unstructured interviews contain no pre-established questions and are relatively unorganized (P. Gill et al., 2008). For this thesis, semi-structured interviews were conducted due to their applicability to answering the research question. This selection was due to the fact that semi-structured interviews uses pre-selected key questions while at the same time allowing for deviations and follow-up questions. This is particularly important for following up on unexpected information that the researcher is unaware of.

Prior to conducting the interviews, an interview guide was created containing key questions based on the theoretical frameworks discussed in the theory chapter. The questions were formulated to both target specific literature and to allow the interviewee to tell whatever they wanted about the subject.

4.4 Choice of informants

This study aims to examine and compare the role of the guide in wildlife watching activities focused on large cloven-hoofed mammals and large carnivoran mammals. As a result, informants who offered safaris, trips, tracking, or tours focused on the specified group of animals within the case area were selected. Ideally, all participants would be looking for specified animals instead of tracks and signs. However, a limited number of firms in the case area offered activities where they actively looked for large carnivoran mammals. There were in total ten participants in the study, five of which focused on wildlife watching safaris with large cloven-hoofed mammals as the target species. The other five participants consisted of activities which focused on large carnivoran mammals. Out of which two firms actively looking for the predators through safaris, one actively listening for the animals on a safari based on sounds, and two firms focused on tours where finding tracks and signs of the animals was the main goal.

The informants were initially contacted through email and, in some cases, through their website. Approximately seventy potential informants were contacted, and out of those,

eleven replied and were willing to participate. The data collection was done remotely through digital interviews using phone, skype, teams, and zoom depending on the preference of the interviewee. The interviews were recorded and later transcribed. The recordings and the transcriptions of the interviews were stored online on the university's password protected OneDrive server. The recordings were deleted after the completion of the transcripts. The interviews lasted from forty minutes at the shortest to one hour and 50 minutes at the longest. However, most of the interviews ranged from about one hour and ten minutes to one hour and thirty minutes.

4.4.1 **Target species of participants focused on cloven-hoofed mammals.**

Target species	Informant 1	Informant 2	Informant 3	Informant 4	Informant 5
Moose	**X**		**X**		**X**
Muskox		**X**		**X**	

4.4.2 **Target species of participants focused on large predators.**

Target species	Informant 6	Informant 7	Informant 8	Informant 9	Informant 10
Bear	**X**		**X**		**X**
Wolf		**X**		**X**	

4.5 Data analysis

The analysis of the transcribed in-depth interviews was conducted using coding, which can be defined as *"a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data"* (Saldaña, 2012, p.3). There were several different types of coding applied to the analysis: descriptive codes, provisional codes, simultaneous coding, primary codes, and sub codes (Saldaña, 2012). Descriptive codes are labeling the topic of the content using one word or a few words (ibid). Provisional coding uses pre-established codes that are chosen prior to the analysis based on what the researcher expects to find during coding (Saldaña, 2012). Simultaneous coding is when two or more codes are applied to the same or overlapping data

(ibid). Subcodes are codes that are assigned to a primary code which then functions like a category for the subcodes (Saldaña, 2012).

The first step of the coding process was to establish the provisional codes, which were based on relevant theories and expected findings. Furthermore, some of the provisional codes were turned into primary and sub codes. The second step of the coding process was analyzing the data and codifying it using descriptive, provisional, simultaneous, and subcodes. Moreover, only the data that was considered relevant to the research problem were codified. After completion of the coding the process, all the data belonging each individual code were compared to all the data belonging to the same code among the informants focusing the same types of mammals. Lastly, the two groups of informants were compared to each other.

4.6 Assessment of data credibility

Validity and reliability are commonly used as measurements to assess the credibility of the research data (Creswell & Creswell, 2013). Validity refers to the accuracy of the findings produced by the research and involves whether the findings accurately describe the actual phenomena it is referring to (ibid). Creswell and Creswell (2013) suggested that qualitative researchers should use multiple procedures to check the validity of their research. They suggested eight different techniques to check for validity: triangulation, member checking, detailed description of the findings, clarification of potential biases, showing findings contrary to themes, using a peer debriefer, spending longer time in the field and using an external auditor (Creswell & Creswell, 2013).

To increase the validity of this research three of these methods were used, including detailed description of the findings, clarification of potential biases and showcasing findings that were contrary to themes. The practical applications of these methods for this study involves an attempt to give a highly detailed description of the findings in the results chapter and emphasizing findings that were not supportive of emerging themes and patterns. Furthermore, a reflection on potential biases which could potentially affect the research are discussed. One of the concerning potential biases for this research is the confirmation bias regarding prior research and whether it could affect the interpretation of the findings. Confirmation bias can be described as *"seeking or interpreting of evidence in ways that are*

partial to existing beliefs, expectations, or a hypothesis in hand" (Nickerson, 1998). Using prior research and theoretical frameworks presented in this paper, there is a possibility of subconsciously wanting to confirm or possible deviate from their findings, which was considered as a potential bias. Furthermore, using research produced from other researchers from the same university or associated with the university could potentially cause an unconscious confirmation bias towards the findings of their research. These reflections were considered throughout the thesis in attempt to avoid these potential biases.

Reliability refers to the consistency of the findings and whether future researchers could replicate the study and produce the same results (Creswell & Creswell, 2013; Silverman, 2015). There are several procedures to increase the reliability of qualitative research (Creswell & Creswell, 2013). Some researchers suggests four different ways to increase the reliability of the research: checking the transcriptions for errors and mistakes, making sure that the definition of a code remains the same, cross checking codes with other researchers, and for collaborative research, the qualitative analysts should communicate with each other and share the analysis through documented meetings (Creswell & Creswell, 2013; Gibbs, 2007).

For this study the following procedures were applied to increase the reliability of the research:

- Transcripts were checked for errors and corrected.

- The coded data was reviewed and checked to ensure that the data consistently referred to the same definition of the code, and if the data accurately matched its designated code.

4.7 Ethical considerations

Qualitative research has several goals to ensure that the research is ethical, such as confidentiality, protection, mutual trust and voluntariness (Silverman, 2015). Moreover, these goals are achieved by using ethical guidelines and ethical responsible research practice (ibid). There are also ethical mistakes or pitfalls that should be avoided (Silverman, 2015). These pitfalls are deception, exploitation, researching vulnerable informants, not

maintaining the informant's anonymity (I.e., if they want to be anonymous), not revealing their identity when that is agreed, associating with informant we do not approve of, and using unethical bargains (ibid)

To ensure that the research was ethical, the ethical guideline of informed consent was applied, which implied that potential informants were given an information and consent letter, which told them about the research project and their rights if they agreed to join (Silverman, 2015). Another measure taken to ensure ethical research and to avoid potential ethical pitfalls was maintaining the participants anonymity. All the participants are anonymized to protect them from harm and to allow them to speak freely without the fear of being recognized. Moreover, this decision was considered as being especially relevant since large predators (carnivoran mammals) are a controversial topic in Norway with strong opposing feelings on both sides of the conflict.

5 Results

Results will be presented in themes based on the interview protocol and the data analysis. 'They' will be used as the pronoun for all interviews to keep them anonymous. The results were largely categorized based on the theories presented in the theory chapter. However, some of the subheadings contains elements which also are relevant for other main headings due to the similarity of the content.

5.1 Information about the guides

5.1.1 Table 3: Information about the guides

Informant number	Type of mammals	Target species	Target experience	Activity area	Experience as a guide	Scope of wildlife watching activities	Referred to as
1	Cloven-hoofed	Moose	Encounter	Eastern-Norway	8 years	Medium to small	Cloven-hoofed mammal guide 1
2	Cloven-hoofed	Muskox	Encounter	Central-Norway	3 years	Large	Cloven-hoofed mammal guide 2
3	Cloven-hoofed	Moose	Encounter	Central-Norway	7 years	Medium to small	Cloven-hoofed mammal guide 3
4	Cloven-hoofed	Muskox	Encounter	Central-Norway	9 years	Large	Cloven-hoofed mammal guide 4
5	Cloven-hoofed	Moose	Encounter	Northern-Norway	9 years	Small	Cloven-hoofed mammal guide 5
6	Carnivoran	Bear	Encounter / tracks	Eastern-Norway	29 years	Medium to large	Carnivoran mammal guide 1
7	Carnivoran	Wolf	Tracks	Eastern-Norway	5 years	Small	Carnivoran mammal guide 2
8	Carnivoran	Bear	Tracks	Central-Norway	12 years	Medium to small	Carnivoran mammal guide 3
9	Carnivoran	Wolf	Sounds	Eastern-Norway	2 years	Small	Carnivoran mammal guide 4
10	Carnivoran	Bear	Encounter / tracks	Central-Norway	12 years	Medium to small	Carnivoran mammal guide 5

Notes: Scope of wildlife watching tourism refers to the estimated amount of guided wildlife watching activities the informant offers during a year. Large > 100, medium > 30, small < 30).

5.1.2 About the guides and their businesses

The informants were asked to provide general information about their business, which may put some perspective on their role as a guide. Two informants worked as full-time guides at companies that offered more than one guided activity. The two companies specialized in wildlife viewing and musk ox safaris. However, they also offered trips based on other species in the area. Three informants worked part-time as seasonal-based guides next to another job. They combined guiding with other jobs, such as writing books or nature management. The remaining five informants worked as seasonal wildlife watching guides as a part of their job, such as working at a visitor center or a bike rental and guiding business. Seven of the participants worked with other guides, and three of them worked alone. For example, one of the companies targeting muskoxen had two full-time guides and multiple seasonal guides. Nine out of ten informants reported that they started guiding during the last twelve years, with the latest starting two years ago. The informants used different forms of transportation during the tour. Three out of ten participants used cars and walking as a part of their wildlife-watching activity. For example, one of the guides targeting moose drove from one stop to another, getting out of the car and walking to different viewpoints to look for the animals. Among the other guides, one used bicycle and would bike around looking for moose and then stop if they spotted one. Five of the guides walked almost exclusively during their tours. However, three of them used snowshoes during the winter. For example, one of the guides targeting bears would walk fixed routes with some deviations to follow tracks or signs. Many of the informants offered other forms of guided activities besides wildlife watching. In total, nine guides offered other guided activities such as northern lights tours, hiking trips, fishing trips, Viking tours, and more. Furthermore, out of those informants, four offered other types of wildlife watching activities, such as reindeer safaris, eagle safaris, and bird watching.

The scope of the different informant's wildlife watching activities varied. Two informants offered wildlife watching activities all year, one informant offered them for seven months during a year, four provided activities through the summer, and three offered during winter. However, the number of activities within those periods varied significantly between the informants. Some would offer activities almost every day, others would offer them once a month, and one of the participants would offer them once yearly. The guides targeting muskoxen were the informants with the most wildlife watching activities during a year.

The informants had diverse backgrounds and training, some relevant for wildlife watching guiding. For example, some guides had degrees in nature management, ecology, and outfield management, and some had experience working as nature guides or national park management. In addition, some of the guides had on-the-job training under other guides, and some were self-taught. The guides which had on-the-job training had learned from other guides and how they guided their tours. However, some of this training was very minimal and lasted just a few tours. Moreover, most of the guides reported deciding to start guiding on their own or with friends without any prior guide training or experience, and without any relevant degree's.

5.2 Target attraction

"I never know what the greatest experience of the tour will be. It varies because sometimes there has been little bear activity" (Carnivoran mammal guide 3).

Among many guides, the main goal was to see the focal species, but for some, seeing tracks and signs of the target animal was the primary goal. However, if the opportunity was there, most of them would still try to see the target species, even if it was not the tour's goal. This approach was prevalent among the guides focused on carnivoran mammals. The tracks and signs they would show the participants varied and included animal tracks, bear dens, prey carcasses, anthills destroyed by bears, wolf dens, marking trees, animals feces and urine, and hair/fur. The primary reason for not having an encounter with the target species as a goal was mainly the difficulty of finding them. As one of the guides reported: "One can only facilitate the things you can control yourselves. We cannot plan to find a moose carcass or see a wolf. Everything except finding the wolf tracks is a pure bonus" (Carnivoran mammal guide 2). Carnivoran mammal guide three mainly focused on finding tracks and considered seeing a bear as a bonus. Another guide explained, "The probability of seeing a bear is small, but we will always see signs of them and tell many stories" (Carnivoran mammal guide 1). Carnivoran mammal guide five also had signs and tracks as their target experience. However, carnivoran mammal guide 4 had a little higher ambition where they considered that hearing wolves howling was the target experience.

Amongst the guides focused on cloven-hoofed mammals, the main attraction was to see the focal species. However, many guides would still try to create a complete experience even if they did not experience the main attraction.

5.3 Tour management

5.3.1 Direction

> *"I have a lot of knowledge about moose, but finding them is not necessarily easy. However, it is clear that when a client arrives and asks to see the animals, it's important to find them. So, I have searched a lot to find nice areas where the likelihood of finding animals is high, and so far, I have found an area which I use a lot and where I have, since 2016, had one hundred percent success. We see animals every single time. It is clear that I have had to use quite a bit of time getting to know the area and find the right spots to observe from as well as the right time during the evening and also the right time during the summer" (Cloven- hoofed mammal guide 1).*

The guides had various approaches to selecting the direction of the tour, depending on where they believed they would encounter their target species or tracks and signs from the target species. Many guides also used more than one approach to choosing the direction. Some guides used predetermined routes to find their target species. For example, cloven-hoofed mammal guides 1 and 3 had predetermined routes where they brought the participants. The routes were based on their knowledge of what types of nature the moose prefer and firsthand moose experiences in those areas.

Several guides also used the seasonality of the target species and previous experience as a part of their approach to finding their chosen animal. For example, cloven-hoofed mammal guide 2 would partially base their choice on which direction to look for muskoxen on knowing where muskoxen tend to be at that time of year. Another guide revealed that the direction they go in is based on knowledge about where the muskoxen tend to be during which season and about where different groups of animals often move. As the guide said:

"With a few years of experience, then you have a bit of expectation of where they can be, and if it is not there, then maybe it has gone there, so seeing the movement patterns and behavior patterns. Also, they use the terrain very differently, and when you have started to that learn too, there is a reason why you get over 99% success on the trips" (cloven-hoofed mammal guide 4).

Cloven-hoofed mammal guide 2 would also use other methods such as talking to other guides prior to and during the tour. Furthermore, they also used the last known whereabouts of the muskoxen from the day before. Cloven-hoofed mammal guide 4 revealed that during the winter, they occasionally trace muskox tracks to find the animals. Cloven-hoofed mammal guide 5 had a different approach; they used some tracks close to their business where they would usually see moose. If that did not work, they would drive to different spots where they knew the animals often were and look there.

Furthermore, they would also follow tracks if they discovered fresh enough tracks. They generally knew if there were any moose in the area as they would see them almost daily. However, if they had not seen any animals recently, they would research and ask people they knew around the village if they had seen any recently. Carnivoran mammal guide 1 also chose direction based on knowledge and finding the right spots in advance. Furthermore, the guide also revealed that they partially chose direction based on where potential prey could be found. Again, the guide used this knowledge to find the right spots in advance. Furthermore, the guide revealed:

"It is about knowing where the moose migrates, and you know where the moose migrates based on looking at the moose tracks because they usually use the same routes during summer except that they prefer a slightly different vegetation then. Where you know there is a small pine forest, then you know there is a probability that there are moose there. If some trees are chopped down, and there is pine bark on the ground, then you know there are moose around, and close by to the areas where there are moose, there will also be predators. Another thing about predators is that they have specific routes, they walk in circles, so if you can find their cycles" (carnivoran mammal guide 1).

The guide further revealed they followed specific routes where they would drop by certain attractions such as bear dens or moose carcasses. They also brought an Alaskan malamute to help find bears or other predators; moreover, they would follow bear tracks and occasionally wolf tracks when they came across them. Another guide would search for wolf tracks a few days in advance and then bring the participants to those tracks and follow them. Carnivoran mammal guide 3 chose an area where they knew there were many bears based on their experience. Moreover, within the main area, they would visit places where they knew there were signs of bears. Carnivoran mammal guide 4 set up camps in areas they knew there were wolves and did not consider the direction of the tour as important. Carnivoran mammal guide 5 said the following about how they chose the areas to bring the participants:

> *"It is the areas where I know there has been a certain level of activity recently, where I have done some research in advance or where I have heard rumors about in the village. And if I don't know if there have been any bears in any areas recently, then I bring the participants to the area where historically there has been the most activity, and that is the area with the marking tree" (carnivoran mammal guide 5).*

The informant also occasionally knew the whereabouts of signs of bears in advance, which he later went with the group. Furthermore, they also occasionally brought a dog to search for bears and bear tracks.

5.3.1.1 Access

Multiple guides reported giving the participants access to the animals, even though the animals were in land areas accessible to everyone. All the areas that the guides used during their tours are available to the public due to the right of public access. However, in some areas, there were seasonal limitations to movement regulated by law, and the guides had to navigate within those areas. Otherwise, the only restriction to access was a few toll roads on occasion, which the guides usually paid for. However, some of the guides revealed that they, to some degree, provided access to the animals and other objects of interest even though anyone could travel there on their own. As one of the guides stated: “I try to be the person that makes the tour because if they had walked the tour alone, they probably would not see or hear anything.” Another informant stated that the likelihood of seeing muskox on their

tours was 99 percent as opposed to 30 percent for people who went by themselves. Multiple guides also reported that they would occasionally move in challenging terrain, where they would provide a safe route for the participants. Furthermore, multiple guides also revealed that their tours started at locations with a complex network of roads that were not easy to navigate. Therefore, some guides would pick up the participants and drive them to the starting point for the tour.

5.3.2 Safety

The guides reported taking several actions to maintain the participant's safety and comfort. Some of those actions were regarding maintaining a safe distance from the animals, which was especially relevant for the guides who focused on large cloven-hoofed mammals. Maintaining a safe distance was especially important among the guides focused on muskox. As one of them revealed:

> *"They know that a muskox can choose to attack at sixty kilometers per hour, and has killed people before, so to meet a muskox is exciting for many. Some people get scared and do not dare walk as close as we do, but we have a security distance of two hundred meters, so we do not walk closer than that" (Cloven-hoofed mammal guide 4)*

Furthermore, the guide also tried to make sure that the muskox could see them approaching so that they get startled. The other muskox guide also stressed the importance of keeping a safe distance, and they too operated with a minimum safety distance of 150 to 200 meters. Furthermore, the guide also stressed that they ensured all the participants confirmed that they understood this rule.

The informants focused on moose also considered close encounters as potentially dangerous. However, they had not experienced close encounters on any of their tours. As one of the guides stated:

> "*We have not had any encounters where the moose was familiar. I do not think that will happen because of the way we travel. We are too exposed, and the animals discover us too early for them to feel like we are a threat. So, they have control over*

the situation, the animals. At least that is what I think" (Cloven-hoofed mammal guide 1).

The guides focused on wolves reported that they were not concerned with keeping distance as a safety measure. When asked whether it was safe to have close encounters with wolves, one of the guides stated: *"Let me tell you about the hypothetical encounter in a situation where we might encounter a wolf cub on a great frozen lake. They might be curios enough to approach us and discover what we are. I would have a very relaxed approach to that. I would not see it as dangerous at all" (Carnivoran mammal guide 2)*. However, they did not think any close encounters would happen. The same opinions was also held by the other guide targeting wolves. The guides focused on bears were slightly more careful, as addressed in this example:

"If the bear realizes you are a human, it runs away. That is normal, but there can be situations where it is not safe, and then you should not seek them out. There can be situations where the bear is injured. After a hunt last year in Sweden, there was a wounded bear that came running into Norway. I am not sure I would bring the participants to that area then" (Carnivoran mammal guide 3).

The guides considered bears to be generally harmless, but they stressed that we should respect them and avoid potentially dangerous situations. For example, another guide communicated that they considered it safe to approach bears until a certain level and that one should not fear them. However, they also considered it essential to respect the bears and their boundaries. Another guide shared the same view: *"Scandinavian brown bears are very scared of you and very harmless, but you should show them respect" (Carnivoran mammal guide 3)*. Both guides were also careful not to leave behind any food waste that could attract bears and cause them to associate humans with food.

The guides also reported taking precautionary actions in case something happened. Such as bringing along extra clothes, first aid kits, extra food, reporting their whereabouts to third parties, and informing the participants about what to bring and what to wear. As one guide stated:

"In the invitation, we write that you have to be in good enough shape that you are able to walk in the forest for a few kilometers. Beyond that, I bring a rather good first aid kit in case something happens and also a phone in case it should be necessary" (Carnivoran mammal guide 2).

Among the guides offering tours during winter, bringing extra clothes was considered necessary. Furthermore, they also would inform the participants in advance on what clothes to wear and what equipment or food they should bring. Some of the guides would also bring extra clothes during summer tours. As one guide stated*: "I always have some old jackets and anoraks, and stuff like that back in the car, but sometimes they do not always want to use my old clothes. So, if they get cold, they jump in the car" (Cloven- hoofed mammal guide 1)*

Some guides described controlling the participant's movements during the hiking part of the tour. However, some guides did not believe they needed to manage the participant's behavior as they naturally followed the guide. One guide revealed: *"It has never been necessary to point something out because they have been sentient enough for things to go by themselves" (Carnivoran mammal guide 2)*. Cloven-hoofed mammal guide 4 revealed that he had control and that the participants naturally followed him. Another guide stated: "*No, it is not like someone suddenly decides to take off in one direction. That would have been extremely peculiar" (cloven-hoofed mammal guide 3*). when asked if they controlled the participant's movement. Other guides were stricter and actively managed the participant's movements. As one guide stated: *"I tell them everything about where they must walk and not walk, but it is not a big problem in this area" (Carnivoran mammal guide 1)*. The guide further revealed that there were areas with dangerous terrain where this was important. Another guide required the participants to walk behind them and never lose them out of sight during the hike.

5.3.3 Tension/conflict management

A part of the guide's role was to manage the groups, which occasionally involved managing conflicts or tension between the participants in the group, participants and the guide, and the group and people outside the group. Most of the guides rarely reported tension or conflicts with the participants. As one guide stated: *"It can happen, usually if someone wants to push the limits by walking closer than what is allowed. Pretending like they have not been told or*

pretending like they did not understand, or simply does not care and do it anyway" (cloven-hoofed mammal guide 4). The guide further revealed that instances like that could cause tension and discussions within the group and between themselves and the participant.
Moreover, the guide revealed that they managed those situations by being direct and strict with the participant who did not follow the rules. Another guide revealed that there had been instances where a participant had been annoyed at the guide due to a misunderstanding and instances where there had been tension between participants due to some participants struggling to keep up with the group. One guide had also experienced slight tension between themselves and one participant, as well as tension within the group. However, the guide reported dealing with the situation by using humor. Among the participants focused on carnivoran mammals, there had been several instances of tension and conflict with third parties. For example, one guide encountered hunters who did not like that there were predators in the area and people came to see them, so they decided to destroy the bear den, which the guide used to show to the participants. Other guides had experienced being shouted at and having arguments with people who were against predators and predator tourism.

5.3.4 Social cohesiveness

A part of the guide's role was to promote social cohesiveness within the group. The guides revealed various ways to create social cohesiveness, such as having group discussions with the participants, joking with the group, and bonding over meals, barbecues, and campfires. As one guide explained:

> *"I try and communicate with multiple people almost simultaneously. So, you can have a very open dialogue in the car, for example, or in another place where we are not a disturbance. Then you can have an open dialogue that allows them to start communicating between themselves and not just directly with me. I think that is quite important" (cloven-hoofed mammal guide 1).*

A few guides also stated that the groups usually were in the same company and knew each other in advance. Therefore, they felt there was no need to try to develop social cohesiveness within the group.

5.3.5 Animation

A few guides recommended places and activities in the local areas to the participants. One of the guides even included a free ticket to a forest museum as a part of their tour package and encouraged everyone to go there before the tour. Another guide would bring the participants to go shopping at a supermarket after more extended tours, which lasted more than a day. When asked about other attractions in the area that they told the participants about, another guide stated, *"I tell them all kinds of stuff, other things they can do in the area when the tour is done so that they have a good stay here after our tours. Like recommendations to accommodation and all kinds of things" (cloven-hoofed mammal guide 4).*

5.4 Experience management

5.4.1 Representation

> *"If I meet local people, I ask them if they had a nice trip or if they experience anything, or if they saw anything interesting which they can help us with. Most people think it is fun to help us and contribute (cloven-hoofed mammal guide 4*).

Most of the guides explained that they communicated with locals or other hikers occasionally during the tours. Often the guides would ask them if they had seen the target animals, as one guide stated: *"It happens that they sometimes tell us that: now there are two moose over there, you should stop there today, and yesterday we saw four reindeers crossing road over there, maybe they are still close by (Cloven-hoofed mammal 1)*. Some guides would ask if they had seen anything else that were interesting or if they had any stories, they would like to share would the group. One guide would ask hunters to tell them a little bit about their prey if they had any.

The majority of the guides reported that their encounters with the locals were positive and brief. However, three of the carnivoran mammal guides had also experienced negative encounters with locals due to their dislike of large predators.

5.5 Wildlife management

5.5.1 Encounter

> *"With regards to moose they can just stand still and just watch you, it varies a little, but often you have a lot of time. With predators it very quick, so I walk in the front and give them a sign to be quiet, and everyone comes to the front as quickly as they can and enjoy the moment we have. So, with moose we have a lot more time, but as I said with predators it just very short moments" (Carnivoran mammal guide 1).*

A lot of the informants discussed using interpretation to manage the participants behavior during the tour and especially when it came to managing their behavior during animal encounters. Many of the informants discussed instructing the participants beforehand on how to behave during the wildlife encounter. As one informant stated *"I instruct them to not talk at all when we are outside the vehicle, and not to make any noise in any other way. They shouldn't have to stumble with equipment and step on branches and those kinds of things. They should move slowly" (Cloven- hoofed mammal guide 1).* Or as another informant revealed that prior to meeting the musk ox they informed the participant of how they were going to approach, what they should do, and how much distance they should keep between themselves and the musk ox. Many of the carnivoran mammal guides informed the participants on how they should behave during an encounter with the target species. However, that was more a case of what to do if they encounter the animals as opposed to planning for an encounter. As one guide informed: *"We start the trip with some instruction, getting familiar with tracks and signs, talking about encountering bears and what one should do, and how it can be and stuff like that. A little bit of general knowledge" (Carnivoran mammal guide 3)*. Another guide did not feel it was necessary to tell the participant how they should behave. The guide stated that: *"They adopt the way we behave very easily when we are so close. If we speak slower or calmer, they do it to. If we walk more carefully, avoid stepping on branches they do it as well" (Carnivoran mammal guide 4).* One of the other carnivoran mammal guides had a very relaxed approach where they would just stop and enjoy the view if they encountered their target animal.

Many of the cloven-hoofed mammal guides would also use the encounter to interpret information about the animal's they were seeing such as gender, age, behavior, and antlers. One guide would also use it as an opportunity to talk about interesting and unique facts about

muskoxen. The carnivoran mammal guides, however, would not try to interpret anything during the encounters.

5.5.2 Encounter enhancement

The informants discussed taking actions and using different tool and techniques to enhance the participants encounter with the wildlife.

A common theme among the guides were using different tools or actions to enhance the participants encounter with the target animals. The guides reported several different approaches to achieve this with one of them being the use of different forms of equipment.

Most of the guides brought equipment with them during the trip for the participants. With equipment such as binoculars and/or telescopes being brought often. Some of the guides reported two different uses for these types of equipment, both to find the target animals as well as allowing the participants to see them in greater detail. One of the guides revealed the importance of binoculars and telescopes had for their tours:

> *"We are nothing without binoculars, so I bring my own binoculars and we have binoculars which people can lend or borrow. We also bring a telescope which we set up and everyone can see through. It is the same thing with all our guides when it comes to muskoxen, everyone brings a telescope. I do not like not having a telescope, but it happens that one suddenly has to many clients one day and multiple guides on tour, and that one guide does not get a telescope. I do not like that, because telescopes bring that security when it is difficult and a long way to walk. It is that security you have, when you at least have the telescope" (cloven-hoofed mammal guide 2).*

Another informant communicated how they used binoculars to actively look for moose. The guide revealed that: *"I try to imprint patience a lot when we are sitting at the first viewpoint. We bring binoculars, and I tell them how they should use the binoculars to find animals, that they always scan the landscape slowly forwards and backwards many times" (cloven-hoofed mammal guide 1)*. The same informant also revealed that the participants sometimes also were the first to spot the animal. Cloven-hoofed mammal guide 4 discussed how they used telescopes to give the participants a better view: *"I set up a*

telescope so they can properly see them and the nice thing about staying 200 meters away is that we get to see the muskox when it has a natural behavior. If we move closer there is a large chance that it changes behavior because we are there" (cloven-hoofed mammal guide 4). Some of the guides focused on carnivoran mammals would also bring telescopes or binoculars. As one of them revealed: *"We have big telescopes which we put on a tripod and then you can see the animals quiet well" (carnivoran mammal guide 2).* Carnivoran mammal guide 3 also reported using binoculars to see if they could see the target animals. However, carnivoran mammal guide 4 did not use binoculars as their activities occurred when it is dark during the evening and night.

Some of the guides also reported using adapters for their telescopes so that the participants could film or take pictures with their phones or cameras. As one guide stated:

> *"The nice thing about seeing the muskox from 200 meters is that it's a nice distance. They can take pictures with their phone through the telescope so that they have a memory from the trip and such, they can document in social media that they have seen muskox, that is important" (Cloven-hoofed mammal 4)*.

Another guide stated that: "*I have an adapter for my telescope which you can put your phone onto. Then people start filming, and it is clear that enthuse them and then time passes" (cloven-hoofed mammal guide 1)*. Furthermore, the same guide also revealed that the participants would take their turns using the adapter.

An element some guides discussed using to enhance the experience was lighting and the spot they brought the participants. When asked about whether they take any actions to enhance the experience of the animals one informant said:

> *"I think it is very important to use the evening, late evening. So that atmosphere during the evening, seeing animals during the sun set, that evocative part. The animals can often seem bigger than they really are and sometimes they stand out even more in the landscape due to the light conditions and such. The places we go are also pretty important, especially if we are lucky with the light. It does not happen*

every day, but sometimes we get really wonderful light" (cloven-hoofed mammal guide 1).

Another guide would accommodate specific demands from the customers who ordered private tours, such as different lighting. One guide had a unique approach where they would only offer their tours during the winter when there was a full moon. The guide stated when asked what they do to enhance the experience of the animals that:

"There are some small means that makes a big difference on the experience. Our wolf howling safaris are always on full moon weekends during the winter. Then it is possible to create an expectation and feeling that you are left with something after the tour regardless of what happens" (carnivoran mammal guide 4).

The guide further revealed: *"We do not do it because the wolf howls more in relation to the full moon, but because they are often left with a feeling that they believed they heard something. There is a lot of magic around such moments" (carnivoran mammal guide 4)*. However, the majority of the guides did not use lighting as a way to enhance the participant's experience.

5.5.3 Secondary attractions

All the guides reported including other attractions besides the main attraction. These attractions were included to provide an even better experience for the participants. Furthermore, for some guides it was also a way to manage the uncertainty of not seeing their main attraction, by having other attractions as a backup.

Apart from the attractions mentioned in the this chapter there were a few guides who mentioned showing participants other attractions such as cultural monuments, geological phenomenon's, sculptures, nature, mountains, and terrain formations.

"We make a nice campfire, where we serve them real boiled coffee. That is an important part of the trip. We present ourselves and the area which we are in, and the nature, At the same time we as we sit there, we serve them bacon moose heart and some snacks which are very local" (Carnivoran mammal guide 4).

Many of the guides provided different experiences, beside the main attraction. Some of those were related to food and drinks. For example, all the informants focused on large carnivoran mammals offered food and/or drinks to the participants. Some of them also offered local food and/or drinks to the participants and three of them also had barbecues as a part of their experience. Furthermore, two guides would encourage their participants to taste ants. One of the muskox guides would bring cinnamon rolls as a surprise for the participants, as they reported: "*We have half an hour lunch with no stress, we bring coffee, tea, and cinnamon rolls which we treat them with. We don't tell them about it in advance, so it is a real bonus, and it makes them very happy" (Cloven- hoofed mammal guide 4)*. Another informant would also bring food and drinks to the participant which that enjoyed during a short break. Many of the informants which brought food or drinks as well as those who did not bring anything also recommended that the participants brought their own lunch for the trip as well.

> *"It is in an area which is used by a tribe of wild reindeer, and especially reindeer bulls that walk there during the summer. And they often ask if it's possible to see reindeer during the tour and they find it incredible exciting to see a wild reindeer, so we do spend some time on that" (Carnivoran mammal guide 5).*

Another type of attractions that most of the informants would show the participants were different animals and birds besides the target species. As one guide stated: *"There are a lot other exciting animals that you can see. If you can't see a bear, then you get to see hare and a lot of moose, and a large amount of forest birds which are out and playing this time of year (Carnivoran mammal guide 5)*". Another informant would try to show the participants different birds in the area, and especially if the clients had an interest in birds. The guide communicated that:

> "*Sometimes I have clients who are very interested in birds for example and they really appreciate that I can tell the which birds they are seeing, and some of them know what birds they are seeing, and maybe they are looking for a certain bird that lives in this area. So its really important, it has become a bonus in relation to seeing the moose" (Cloven- hoofed mammal guide 1).*

Another informant reported that they would look out for eagles, wolves, moose in addition to their focal species. Some of the informants also reported using other birds and animals as a way of entertaining the participants in case they did not encounter their focal species.

Some guides discussed using pictures and game cameras as a way to enhance the participant's experience. Carnivoran mammal guide 3 revealed that they stopped by a game camera and showed the participants pictures of the bears. The guide communicated that: *"We never make the same stops, with the exception of checking the game camera, which is natural to drop by and check out. There we take out the memory card, read it, and then we can see if there has been any bears or animals there" (carnivoran mammal guide 3*). The guide also revealed that they would also sometimes show pictures of bears and tracks before they started to hike. Furthermore, the guide stated: *"There are a lot of bears on that camera. We do not facilitate; we do not feed them. There is a stick that they use to show other animals that they are in the area by scratching themselves on it and making marks" (carnivoran mammal guide 3)*. Carnivoran mammal guide 4 also revealed that they bought the participants to a game camera to show them pictures of bears.

5.5.4 Expectations

All the guides focused on large cloven-hoofed mammals tried to manage the participants expectations of seeing the focal species. Even the guides with the largest success rate, with around 99 percent success informed the participants in advance that they could not guarantee that they would see the animals. As cloven-hoofed mammal guide 3 stated:

> *"It is important that we clarify things in advance. That there is such and such chance of finding them. That we have 99 percent hits, but today we might not find them because they walked such and such. Or its too steep, or that its outside the areas we are allowed to go during the winter because there is a chance there is reindeer grazing there and we cannot go there. So, we try to clarify as good as possible in advance" (cloven-hoofed mammal guide 3)*.

Carnivoran mammal guide 1 also declared that they could not guarantee anything: *"There is a clear expectation of seeing the animal, but they realize at least after my introduction that this is nature, that it's a large are and that I cannot guarantee anything" (carnivoran mammal guide 1)*. Most of the informants focused on large carnivoran mammals revealed that they told the participants that there was a very little chance of seeing the target species. Another guide stated that: "*It is very common that they expect to see a bear before we start the trip, that is why the first thing we inform them about is that they can't expect that" (carnivoran mammal guide 5)*. The same message was highlighted by another guide who expressed:

> "*I try to explain that there is a very little chance of seeing a bear when I tell them what the trip is about. We don't go out to see a bear. They must not be disappointed if we don't see a bear, then they can't join or go on a trip like that, and I explain that to them. So, it is just a bonus if we see a bear*" *(Carnivoran mammal guide 3)*.

One guide had a more optimistic approach: "We *write that we hope to hear wolf howls. That's the goal. Their expectations are high, but the way we talk about its to tell them it's not facts, that we can't guarantee anything" (carnivoran mammal guide 4)*. Another guide experienced that the participant's did not expect to see any wolves, but they did expect to see wolf tracks (which was the purpose of the tour). However, they would inform the participants that they could not guarantee them that they would find any tracks.

5.6 Resource management

5.6.1 On tour behavior

The guides carefully managed the participants behavior so that they did not damage vegetation or cultural monuments, disturb wildlife and leave behind litter. Most guides managed the participants behavior in such a way as to minimize their disturbance to the wildlife (as discussed under the chapter on wildlife management). As one guide explained*: "They are a part of a group, so I have to control where they walk and what they do. I also give them information in advance and such. There are rules and you cannot walk over and pet them, that is not in question" (cloven-hoofed mammal guide 3)*. Other guides explained that in some areas where there was reindeer lichen, they tried to avoid stepping on it since

they did not want to degrade the reindeer food. One guide also discussed making sure that the participants did not ruin cultural monuments. As one of them explained:

> *"I give them guidance on what they should and should not do. Like with rock cairns, trapping pits and other signs of earlier settlements, they are cultural monuments, so I tell them about it and let them know that they cannot do anything with or change such old cultural monuments. That without you knowing it, you have actually ruined cultural monument which has been there for a thousand years" (cloven-hoofed mammal guide 4).*

5.6.1.1 Littering

> *"We always inform them about it at the start and especially when it comes to food and food waste when it comes to bears. Because we do not want the bears to get used to that if they follow human tracks, they will find leftover food. So, we are conscious about that. And littering beyond that is common courtesy, so I do not make a point about unless I actually see someone doing it. Then I will of course let them know" (Carnivoran mammal guide 5).*
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Another common element was instructing the participants that there should be no traces left after them, and all littering and that no food waste should be left behind. As one informant number stated *"I talk about that everything should be brought back with you and traceless movement, leftovers should be brought back with you. Sometimes people eat a banana and think they can leave the peel, but I tell them they have to bring it back" (Cloven- hoofed mammal guide 4).* Other guides had the same view: "*If they can carry it with them out, they can carry back with them. It must be traceless traveling" (Carnivoran mammal guide 1).* For some of the guides focused on bears it was important to avoid leaving food waste behind, with one of them saying that:

> "*It's important not to leave any food at the site, I am very thorough with that rule. We have waste disposal for food waste and regular trash, and we bring that when we are done with the trip. If they throw food there it might become interesting for the bear to search for food and that would be unnatural behavior" (Carnivoran mammal guide 3).*

5.6.2 Attitude and long-term behavior

> *"I tell them that today you are joining me on a tour, and I want you to have an enjoyable experience of Norwegian nature, but I also tell them that this is something we have to preserve for the future. It is not a given that this will exist forever, so think about that during the tour that if you have a great experience today, then this is something we need to preserve" (Cloven-hoofed mammal guide 1).*

Some of the guides used interpretation to try to affect the participants environmental attitudes and, in some cases, their long-term behavior as well. A common theme among many of the guides were how they tried to explain how human behavior affects nature and wildlife, and what we can do to reduce our impact. Explaining ecology and how ecosystems works and how everything connects to each other were one of the teachings the guides used to promote that kind of understanding in the participants. For example, one guide would tell the participants how deforestation would affect the moose and their migration routes. Another guide explained that them:

> *"How everything fits together in an ecosystem. That is always important for me and people like it, they respond very well to that type of information. They do not expect to learn such things during a tour like this and it creates reflections and contemplations" (cloven-hoofed mammal guide 4).*

Another guide would tell the participants about negative effects on wildlife from roads and cabins, as well as the effects of hikers in the area. Other guides would try to affect the participants attitudes towards climate change and nature conservation. As one of the guides revealed:

> "*I am very interested in the climate changes that we have, so that is something I often talk about. There I front a little bit more of a standpoint and talk all the changes that has happened so fast and what I think each of us can contribute with to help the situation" (Carnivoran mammal guide 5).*

Other guides focused more on nature conservation. As one of the guides explained: *"It is very important for me to talk about nature conservation and ecology, and about wind turbines which we are very much against and all that" (Carnivoran mammal guide 1)*. A few of the guides would also focus on how teaching the participants how they should behave during future encounters with wildlife. As one guide stated:

> *"I try to explain that the rule is that that you should never disturb wild animals more than strictly necessary. That is a rule of thumb. That with birds that are nesting and other animals which has dens and cubs, you need to keep a safe distance. You should move too close so that you disturb them" (Carnivoran mammal guide 2).*

Surprisingly, out of all the guides only a few of the carnivoran mammal guides were interested in promoting conservational attitudes towards the target species. However, one carnivoran mammal guide explained that they sometimes managed to change the participants attitude towards the target species in a positive way. Some guides also promoted long-term conservational behavior towards wildlife by informing the participants on how they should and should not behave in certain situations. A few guides would also try to engage the participants to reflect on their experiences and what they learned during the tour.

5.7 Interpretation

All the guides explained using interpretation as a part of their guiding. The guides reported using interpretation in numerous ways and situations. which is presented here.

5.7.1 Theme

> *"An important point is to get them to understand that it is not dangerous to travel in nature even if there are large predators there. I have a lot of personal experiences that people considers as life threatening encounters with bears, which I can confirm that no its fine. It's not a problem as long as you know what you are doing. That is something which I am eager to communicate, so that people do not walk around and feel unsafe because there are predators" (Carnivoran mammal guide 5).*

Some of the guides appeared to have an overarching message that they would like to convey to the participants. A common theme among the carnivoran mammal guides and especially

the ones focused on bears was that they felt a need to clear up false myths about the animals. As one of them stated:

> *"The most important thing for me to convey about bears and there are not that many animals in Norway which there are so many myths around. Myths that have no roots in reality, whatsoever. So, to dispel some myths, dispelling the myth that if it eats meat then it never eats grass anymore. Dispelling the myth that its extremely dangerous to walk if there is a she-bear with her cubs because they always attack, because it is not. The probability is extremely low because she is always watchful. So, the most important thing to convey is completely neutral factual knowledge, which might dispel quite a few myths that bears are dangerous and such and such" (Carnivoran mammal guide 3)*

Carnivoran mammal guide 1 wanted to be an ambassador for the animals as well as clear up misinformation and myths about large predators. As they said: "*There is so much misinformation around predators and such. A lot of wrong fears and myths and such, so it's very nice to provide fact-based guiding*" *(Carnivoran mammal guide 1)*. Another informant found it important to communicate that: "*We are just borrowing nature; we give it back in a little bit better condition than when we arrived. We spend a lot of time trying to convey that we must take care of it in both direct and indirect ways (Carnivoran mammal guide 4*). Furthermore, the same informant found it important to let people know that it is easy and accessible to go hiking in nature, and that they do not need to buy any special equipment to do that.

One informant who focused on cloven-hoofed mammals found it important to promote their values about strengthening and developing the local communities. As the informant told when questioned about what they consider to be important to communicate the participant's: "*For me it is to promote the local values that we stand for. Our mission is to strengthen and develop the local communities. That is why we exist, so it is important for me to get that across when I am guiding (Cloven- hoofed mammal guide 3)*. The same informant also found it important to teach the participants about ecosystems and what kind of effects human activities has on ecosystems and how that affects moose. Another guide tried to convey the message that we need to take care of nature and the environment, and that we

should not take it for granted that it will always be the way it is now. A similar view was expressed by another guide which conveyed that:

> *"We are there on natures premise, we should not destroy, disturb, or deteriorate the life of the species we seek out in any way. We can watch them and experience them without causing them suffering. We are the visitors and that is important" (Cloven-hoofed mammal guide 4).*

Another guide found it important to convey what their local community is like and their values. As they said: "*It is important to convey how we live here in the north, because it is very dispersed settlements and a lot of nature compared to what our guests are used to. So, it is about conveying the good values of living like we do here" (Cloven- hoofed mammal guide 3).*

5.7.2 Easy to follow

The guides discussed using a variety of different approaches in order to make the communication easy to follow and understand for the participants. One technique used by most of the guide was to demonstrate what they were talking about it as they were talking about it. As one of the guides explained:

> *"I usually pick up vegetation which moose eats, put it in my hand and demonstrate and explain. In the summer a moose eats 40 to 50 kg of this green substance right here. So, I stand there in front of them, and sometimes I pick up a salix caprea twig with leaves on it, and then I tell them the moose does not have upper teeth, so it needs to rasp with its lower jaw and then I demonstrate how it does that" (Cloven-hoofed mammal guide 1).*

The guide further revealed they would continuously try and use whatever they found around them to demonstrate things during the tour. Another technique some of them used was to communicate in an uncomplicated way without using any professional terms. As one guide stated: *"You must be clear and avoid using difficult terms and use more popularized scientific expressions. Avoiding using difficult expressions which only professionals understand when one is talking to a group. You simply must talk in an understandable way" (Carnivoran mammal guide 4).*

Some of the other elements the guides mentioned using were storytelling, dramatizing, talking for shorter periods at a time, maintaining eye contact, personal engagement, speaking loudly, and paying attention to the participants to see if they were still paying attention.

5.7.3 Relevance

> *"They have their own experiences and I have my own experiences, and we try to share them. And also, for example I had a group from Meråker, in which I did some preparations and research in advance on bear activity in the area that they were from. Then I could tell them that a bear that was in Meråker in 2015 dropped by here the year before and I had pictures of it as well. I think they appreciated that, because they felt more connected to their own area" (Carnivoran mammal guide 5).*

Some guides discussed ways in which they tried to make their communication personal and meaningful for the participants. For example, a few guides would ask the participants about topics they were interested in and would then try talk about those topics during the tour. As one guide stated: "*When one is communicating it is important to ask them what they are interested in and perhaps talk little about that topic" (Carnivoran mammal guide* 3). Others would share personal experiences with them and ask them to share some of their own experiences as well. Furthermore, some of the guides did not attempt to make the communication personal or meaningful for the participants. However, one of those guides reported that the experience itself often felt meaningful and personal to the participants without they having to do anything. Furthermore, the guide explained that:

> *"It does become very meaningful and personal, and for many it becomes very emotional. Even tough many of them have never seen a wolf or been in the area before, there comes some emotions into the picture when they have seen and followed this wolf pack. When they know that there is cubs with parents, and such, and how vulnerable these tough animals are too humans, and how easy they suffer. It costs humans to exterminate a whole pack. So, many times it does get emotional and personal" (Carnivoran mammal guide 3).*

5.7.4 Entertainment

> *"I try to break the ice immediately and joke a little bit with them. Mess with some of them in a careful way, so that you generate some laughter, and try single out those who enjoy showing off a little, and using a little sarcasm. Then you manage to soften the stiffness that can be there the first few minutes with some laughter and joking around. And also lying in an obvious way so that they know I lie, and asking questions and engaging them, so that one gets to know each other during the trip" (Cloven-hoofed mammal guide 4).*

Most of the informants discussed different actions they took in order to keep the participants entertained and motivated. A common theme among many of the guides were using humor to entertain the informants. As one of them stated. *"It is not a stiff company, so it is always nice to bring in some humor of different sorts. And when its comes to wolves and tracks then it is about being professional and also to get some laughter going too" (Carnivoran mammal guide 2)*. As another guide communicated: *"Its important to bring in some humor once in a while so that they get to laugh and such, that's important" (Carnivoran mammal guide 1).* Other guides also made similar statements about how they tried to use humor to keep a light tone for the tour. As the guide stated: *"One thing is the humor in this, we can not have a serious tour. I think it is very important to keep a light tone" (Cloven- hoofed mammal guide 1).* Another element many of the informants used entertain and engage the participants were storytelling. As one of the guides revealed:

> *"I tell them about some stories from my home and what it is like to have moose almost just outside the house. They find that funny, and they laugh and think it is funny to hear those stories. I do have quiet a bit of stories and its good to supplement whit those stories during the tour" (cloven-hoofed mammal guide 1).*

Another guide responded that they thought storytelling was the one of the most important qualities of a guide. Carnivoran mammal guide 3 revealed that: *"Sometimes there can be little bear activity, so you can do other fun stuff, like sharing fun stories, theories, and experiences".* One of the carnivoran mammal guides would tell them stories to get them to feel excited. The informant stated that: "*I tell them about what we are going to do, what we can expect it to be like and I feed them with some stories of course in order to get them*

really excited and also make them feel safe" (Carnivoran mammal guide 1). Cloven-hoofed mammal guide 3 stated they used stories to entertain the participants as well to keep their attention, as well as having stops where they told stories.

Stopping and taking breaks was another common theme among some of the informants, as a way top keep the participant motivated and engaged. When asked about how they maintained the participants motivation if they had yet encounter target species after a while, one guide stated that: *"It is very important to take a break, with some coffee and dissolve the situation. We can talk when we stand there and drink around the twig stove, so we can reflect about what has happened so far" (cloven-hoofed mammal guide 1).* Another guide provided a similar answer to the question:

> "*We keep stopping, and I tell stories. We have a lot of stops. If you see someone getting tired or something so you have to make a stop and then you have to tell stories, so the person catches their breath and then you keep going again. It is a part of the guides job to read the group" (carnivoran mammal guide 1).*

Interacting with the participant through questions and dialogue were also reported among some informants to engage and motivate the participants. As one of the guides stated: *"I do that all the time either through direct questions to an individual or open questions to the group, or discussion or anything" (cloven-hoofed mammal guide 4)*. Another guide stated that he always tried engaging the participants in a dialogue, as opposed to the guide doing most of the talking. Carnivoran mammal guide 5 revealed that they would encourage the participant to talk about their own experiences with bears to engage and motivate them.

6 Discussion

This chapter discusses the findings of the study and its implications in relations to the theoretical frameworks that are presented in the theory chapter.

6.1 Target experience

The findings revealed that not all the wildlife watching guides had encounters with their target species as their main objective, as some of the guides settled with hearing them or finding signs and tracks from the target mammals.

Most studies on wildlife watching tourism usually considers that the purpose of wildlife watching activities is to view or encounter the target species (Curtin, 2010; Dybsand & Fredman, 2020; Higginbottom, 2004; Lima & Green, 2017). Furthermore, most definitions of wildlife watching tourism often involve wording that implies direct contact with the wildlife such as encountering or viewing of the wildlife (Higginbottom, 2004; Lima & Green, 2017; Tapper, 2006). However, some studies recognize that wildlife watching tourism activities does not always encounter and view their target species, which as a result opens the possibility that wildlife watching tourism could be more than just viewing the target species (Dybsand, 2020; Dybsand & Fredman, In Press; Margaryan & Wall-Reinius, 2017).

The research findings in this case study revealed that guides focused on large cloven-hoofed mammals' goal was to view the target species, but the guides focused on large carnivoran mammals did not necessarily have viewing the target species as their main objective. This is mainly due to carnivoran mammals being more difficult to find and generally has smaller and more scattered populations. Furthermore, the guides focused on large carnivoran mammals targeted seeing signs and tracks or hearing the target species as their main objective. These findings are not congruent with most definitions or studies on wildlife watching tourism, thus it raises the question if such activities can be classified as wildlife watching tourism or if the current definitions of wildlife watching tourism needs to be broadened. However, research on how wildlife watching tourist guides manages the absence of the target species reveal that these activities are very similar to wildlife watching tourism.

6.2 The instrumental component

The results revealed that an important aspect of the guides role was finding the direction and maintaining control over the participants (responsibility for safety and efficiency), however the guides did not provide access to private land areas or social territories.

Dybsand and Fredman's (in press) theoretical framework presented in the theory chapter argues that the wildlife watching tourist guide are responsible for choosing the direction of the tour, provide access to non-public areas and managing the safety and efficiency. Other studies also highlight the importance for the wildlife watching tourist guides to find the direction of the tour, as a mean to finding the target species (Curtin, 2010; Dybsand & Fredman, 2020). One study on tour leaders in wildlife watching tourism found that the tour guides needed certain field interpretation skills to find the animals, by possessing skills such as habitat awareness, the ability to hear and spot wildlife, and being able to identify which species it is (Curtin, 2010). Another study on muskox safaris in Dovrefjell found that the participants considered that the guides increased the likelihood of finding and seeing the target species (Dybsand & Fredman, 2020). One study also found that guides sometimes would have to navigate difficult terrain and choose a suitable path for the participants (Dybsand & Fredman, 2020). Another case study found that the participants in one case area who encountered the target species (polar bears) often rated their experience higher in their review than those who did not encounter the target species (Dybsand, 2020). However, there were no significant difference in the other case area in the same study. The implications of which suggests that the guides ability to find the target species is an important aspect of the wildlife watching tourist guides roles due to their impact on the quality of the participants experience.

Cohen (1985) discussed in his original framework that guides should choose a safe route and control the participants behavior as a way to ensure the safety and efficacy of the tour. Another study on bird watching discovered that the three top reasons as to why people went on a tour as opposed to going themselves was because of safety, access and finding rare birds (Green & Jones, 2010). Findings from the study on musk ox safaris in Dovrefjell also that some participants decided to join guided tours due to safety concerns (Dybsand, 2021).

The findings in this study the support the previously mentioned studies regarding the importance of the wildlife watching guide as a pathfinder. They highlighted that the guides chose the direction of the tour as the means to find the target attraction, and in some cases that also included navigating difficult terrain. Furthermore, the findings also support the claims by the participants in the muskox study in Dovrefjell that the likelihood of seeing/finding the target species greatly increase by having a guide (Dybsand & Fredman, 2020). Since wildlife tends to move from one area to another, there is a larger need for tracking and navigation skills required to find the animals as opposed tourism to location bound attractions. Thus, having a guide with the skills and the knowledge to find the animals and/or signs of them is likely to increase the chances of encountering them. The findings were also in agreement with Dybsand and Fredman's (in press) framework regarding the guides responsibility for the safe and efficient behavior of the group. Besides maintaining distance, (encounter component) the guides took precautionary actions to ensure their safety. Furthermore, the guides usually followed safe routes and some guides also managed the participants movements which are congruent with Cohen's (1985) original framework. However, the importance and applications of those elements varied between guides as some did not consider them as necessary as others.

The findings were not congruent with Cohen's (1985) framework regarding the guides providing access to non-public spaces or social organized territories as all the areas the guide visited were available to the public and there were no socially organized territories. However, that is due the law of right of public access which is applicable in the entire case area. Therefore, it is not necessary for the Norwegian wildlife watching tourist guide to provide access to non-public land. However, in other countries the wildlife watching tourist guides might be required to provide access to private land due to different laws and regulations.

6.3 The social component

The findings revealed that the guides tried to maintain the participants morale, and many guides also tried to integrate the group, however, tension management and animation were less common.

According to Cohen (1985) the tourist guide is responsible for managing tension and conflicts between the participants as a part of the guides social component. Other studies have found that tension within the group could lead to arguments between the participants (Tsaur & Lin, 2014). Some studies also discovered that there were incidents when there are conflicts between the guide and members of the group (Caber et al., 2019), as well as conflict with other tourists (Ramthun, 1995).

The findings revealed that a few guides had experienced conflicts or tensions between members of the group on a rare occasion which the guides managed. However, there were also instances of tension and conflict between the guide and the participant. Furthermore, some of the carnivoran mammal guides had experienced tension or conflicts with people outside the group. These findings are support Cohen's (1985) framework. However, they suggest that the tour guide also need to manage conflicts between themselves and participants, as well as with third parties. The last element was especially relevant for guides focused on large carnivoran mammals in Norway.

Cohen (1985) considered that guides use animation to convince participants to partake in other tourist activities. However, there is little research on guides functioning as animators. However, one study found that one safari operator would encourage the participants to buy their souvenir's after their tours (Dybsand & Fredman, 2020). The findings in this study were not in support with Cohen's (1985) idea of tourist guides as animators. However, the reason for that could be that the tours were undertaken in nature areas where there are not many touristic facilities available. However, some of the guides would still recommend activities the participants could do after the tour. This finding could indicate that Cohen's (1985) idea of tourist guides as animators should include encouragement to partake in activities after the tour for the wildlife watching tourist guides.

Cohen (1985) considered the guides to be responsible for maintaining the groups morale and promoters of social cohesion. The findings in this study revealed that most guides used humor and other elements to maintain and increase the participants morale. Furthermore, most of the guides considered that other elements besides the ones mentioned by Cohen (1985) as important, such as storytelling, taking breaks with or without food, and having conversations. Moreover, the findings in this study revealed many guides also tried

to promote social cohesion within the group, by encouraging dialogue between participants and having group discussions.

6.4 The interactional component

Findings revealed that the guide acted as an intermediary between the participants and their environment, but rarely as a provider of services and facilities.

The interactional component consists of the elements of representation and organization (Cohen, 1985; Dybsand & Fredman, In Press). Other studies have also found tour guides as mediators between the participants and the environment, and to host communities (Weiler & Black, 2015). One case study on visitor perceptions of role of tour guide in Kakum national park found that the interaction component was perceived as an important component the guides role (Agyeman & Antwi-Bosiako, 2022). However, it was still considered as less important than four out of the six components (ibid).

The findings in this study were partially support the elements of the interactional component. The guides did reveal that they acted as mediators between the participants and to other people, nature and wildlife. However, mediating between the group and nature, and the group and wildlife are also covered in the uncertainty and the motivational component. Furthermore, most of the guides provided services such as food and drinks, and medical equipment, however, the guides did not usually require meditation with third parties to provide those services. Moreover, any mediation with host communities was a rare occurrence for most of the guides. Thus, findings question the importance of the interactional component for Norwegian wildlife watching tourist guides.

6.5 The communicative component

The results found that both the carnivoran and cloven-hoofed mammal guides selected what to show the participants, presented factual information and used interpretation.

The communicative component consists of selecting what to show the participants, giving correct information, interpretation, and fabrication (Cohen, 1985). Two case studies on visitor perceptions of the tour guides role in nature-based tourism found that the

communicative was considered as the least important (Agyeman & Antwi-Bosiako, 2022; Randall & Rollins, 2009). However, some studies on wildlife watching tourism may indicate that this component is more relevant for wildlife watching guides. For example, the are many studies on the benefits of interpretation in relation wildlife tourism (Dybsand & Fredman, 2020; Margaryan & Wall-Reinius, 2017; Sam H. Ham & Weiler, 2002) . Furthermore, some studies indicate that finding things to show the participants beyond the main attraction is common in wildlife watching tourism (Dybsand, 2021; Margaryan & Wall-Reinius, 2017). Giving the participants the correct and factual knowledge is also considered a foundation for successful interpretation (Ham, 2013).

The findings supported three of the four elements in the communicative component, with the exception being fabrication. All the guides used interpretation and presented factual information to the participants through interpretation. Moreover, all the guides chose what objects to show the participants during the tour. Furthermore, many guides attempted to apply multiple elements of the TORE approach to interpretation. However, there were no indications of any clear strategy behind the implementation of the elements, and any use of all the elements appeared coincidental. Moreover, most of the participants used few of the suggested techniques for making the communication relevant and enjoyable (Ham, 2013). Selecting what objects to show the participants was especially important among the carnivoran mammal guides which rarely encountered their target species.

6.6 The motivational component

Guides focused on cloven-hoofed and carnivoran mammals ensured environmentally friendly behavior from participants by motivating them to pick up their litter, not disturbing wildlife, and not damaging vegetation or cultural monuments.

The motivational component ensures that participants behave in an environmentally friendly and responsible way on-site. Other studies have also demonstrated that tour guides can contribute to on-site environmentally friendly behavior from the tourists (Jamaliah et al., 2021). A case study from Tanzania discovered that the performance of the interpretive tour guides influenced the participants environmentally friendly behavior during the tour (Jamaliah et al., 2021). Another study found similar, but less conclusive results revealing that tour guides could affect environmental friendly behavior through interpretation (Poudel

& Nyaupane, 2013). A different case study from British Columbia, Canada found that the participants considered the motivational component as the single most important component for tour guides in nature areas (Randall & Rollins, 2009). The findings in this study supports the motivational component by revealing that the guides encouraged the participants to act in an environmentally friendly ways during the tour. Furthermore, there were no major differences between the carnivoran and cloven-hoofed mammal guides.

6.7 The environmental interpretation component

Many of the guides targeting both cloven-hoofed and carnivoran mammals tried to affect the participants attitudes and behavior towards to environmental issues such as nature conservation, climate change, wildlife, and ecological issues.

The environmental interpretation component was created by Weiler and Davis (1993) who considered that the nature-based tourist guides should promote long-term environmental responsible behavior and attitudes. One study on muskox safaris in Dovrefjell found that short wildlife watching activities had a significant correlation with intentions to undertake environmental friendly behaviors (Nikoline Hambro Dybsand & Stensland, 2021). Another study indicated that using high quality thematic interpretation that is used strategically and delivered in a creative way could potentially lead to long-term environmental friendly behavior and attitudes among the participants (Sam H. Ham & Weiler, 2002). Another study found that the experience of epiphanies among participants had the largest impact on their environmentally friendly attitudes and actions (Miller et al., 2020). Thus, they suggested that guides should try to make the participants reflect on their what they learned and experienced during the wildlife watching tour to create emotional connections which can cause epiphanies (ibid). These suggestions are congruent with Ham's (2013) idea that interpretation should be thought provoking which he considered interpretations highest purpose. Furthermore, he considered interpretation as a mission-based approach to communication through using TORE as means to cause the participants to build personal connections and meaning with the objects of interpretation (Ham, 2013).

The findings did reveal that many guides used interpretation to try and affect the participants attitude towards environmental issues, and to a lesser extent pro-environmental behavior as well. However, even though many participants used thematic interpretation, it

was arguably not strategically packed or delivered in a creative way as per Ham and Weiler (2002). Furthermore, few of the participants appeared to have a mission based and planned approach to interpretation as per Ham's (2013) definition. For example, none of the participants purposely implemented all elements of the TORE model as a strategy for interpretation. However, many of them implemented the elements without any overarching plans or conscious intentions behind it. Furthermore, relatively few guides encouraged the participants to reflect over the experience and what they learned during the tour. Moreover, among those who encouraged reflection it was quite open and not specifically related to their theme. These results may well reflect a lack of training and understanding in interpretation, which could be explained by the guides lack of training and certifications in professional guiding. Moreover, there were some interesting findings such as multiple guides had themes and goals of the interpretation were not related to the target species, but to other subjects such as local value creation, climate change or less consumption. Another interesting find was that some carnivoran mammal guides and all of the cloven-hoofed mammal guides did not try to promote positive or conservational attitudes towards their target species, but rather a more neutral fact-based view which the participants could interpret as they liked. However, that may be since large predators are debated topic in some regions in Norway. Furthermore, many of the carnivoran mammal guides stated that they tried to be careful not to trigger anyone.

6.8 The encounter component

The findings revealed that most guides managed the participants behavior in relation to the wildlife as well as using other elements to enhance the encounter with the wildlife.

Dybsand and Fredman (in press) encounter component consists of managing participant behavior during wildlife encounter, and using equipment, staging and interpretating to improve the participants experience of the encounter. Other studies have found that some wildlife watching tourist guides brought equipment such as binoculars and telescopes to enhance the participant's experience (Dybsand, 2021).

The results revealed that most of the guides did manage the participants behavior during an encounter with the target species. Furthermore, it revealed that there were differences in the way the guides managed this based on what the target species was. The

cloven-hoofed mammal guides tried to maintain a safe distance and did not try to hide their approach. However, the carnivoran mammals were less concerned with distance, and usually tried to avoid the animals becoming aware of them. There are several plausible reasons for these differences. One reason is that large predators such as wolves and bears are more scared of humans than musk ox and wolves. Another possibility is that the carnivoran mammal guides rarely encountered large predators and therefore did not consider it important to keep their distance. It could also be the guides perception of the animals as a threat, where the cloven-hoofed mammal guides revealed they experienced their target species as more dangerous than the carnivoran mammal guides. Furthermore, it could also be combination of all of them.

Findings also revealed that multiple guides used equipment to enhance the experience such as binoculars, telescopes and adapters for the telescopes which allowed the participants to take pictures through the telescopes. However, they were most commonly used by the cloven-hoofed mammal guides. Some carnivoran mammal guides would use binoculars to search for the animals, but only one of them reported using it during an encounter. The difference between the two groups could be due to several different factors. For example, operated most of the cloven-hoofed mammal guides in open terrain where they could see the target species from afar. Whereas the carnivoran mammal guides operated more closed terrain with more trees and vegetation. Furthermore, would the encounters with cloven-hoofed mammals generally last longer than the encounter with the large carnivoran mammals which would allow for greater use of equipment during the encounter.

The findings were partially supported Dybsand and Fredman`s (in press) element that wildlife watching guides should use staging during encounter with the target species. The research revealed that some of the cloven-hoofed mammal guides would use staging to enhance the encounters. However, only one of the carnivoran mammal guides used staging. One reason for that could be because chances of encountering a carnivoran mammal were small and the encounters were usually very short. Therefore, it would likely be challenging to stage such an uncertain encounter which would have small probability of success.

Furthermore, the findings were partially supportive with Dybsand and Fredman's (in press) claim that wildlife watching guides should use interpretation during the wildlife

encounter. The findings revealed that most of the cloven-hoofed mammal guides used interpretation during the encounters as a way to make the experience more enjoyable for the participants. However, the carnivoran mammal guides did not use interpretation. Thus, it could be argued that interpretation is not necessary in all forms of wildlife encounters, and especially during shorter encounters which may only last a few seconds. Moreover, it is likely that interpretation during encounter with animals that are easily scared by humans might cause them to run away sooner than they otherwise would have done.

6.9 The uncertainty component

The findings revealed that the guides dealt with the uncertainty of encountering their target attraction through managing the participants expectations, guaranteeing secondary attractions, learning about the animals whereabouts and showing the participants other attractions as well.

Dybsand and Fredman (in press) developed the uncertainty component which deals with the uncertainty of encountering the target animals. It consists of managing the participants expectations, giving secondary experiences, learning about the target species last known whereabouts (Dybsand & Fredman, In Press). The framework is largely based on a case study on muskox safaris in Dovrefjell which discovered that the guides applied the aforementioned elements as a way to deal with the uncertainty of whether or not they would encounter the target species (Dybsand & Fredman, 2020). However, other case studies have found similar results, with one case study on Wildlife watching tourism entrepreneurs in Sweden which discovered that wildlife watching tourism companies used somewhat similar strategies to mitigate the uncertainty (Margaryan & Wall-Reinius, 2017). With some of the strategies being shifting participants focus away from the target species, managing participant expectations, having secondary attractions (ibid).

The findings supported all the elements of Dybsand and Fredman's encounter component to a certain degree. The results found that all the guides tried to manage the participants expectations, provide other experience besides the main attraction and redirecting their attention. However, some of the guides did not try to discover the animal's latest known whereabouts. The findings also discovered than one participant used staging through doing tours on full moon weekends for both as a way to stage the encounter and as

way to deal with uncertainty. This finding could indicate that it is possible to use staging as a way to deal with uncertainty and not just enhancing the encounter.

7 Conclusion

The findings in this study contributes with potentially new discoveries to the existing field of knowledge about wildlife watching tourism and the roles of wildlife watching tourist guides. One important finding was that not all wildlife watching tourist guides pursued encounters with the target species as their main objective, as some guides had finding tracks and signs from the target species as their main target. Moreover, it was also revealed that some guides main objective was to hear the target species as opposed to viewing them. These findings emphasized a major difference between the cloven-hoofed mammal guides and the carnivoran mammal guides. Furthermore, these findings question what can be considered as wildlife watching tourism and whether current definitions are too limiting. The findings were generally supportive of Cohen's (1985) original framework and the extensions made by Weiler and Davis (1993) and Dybsand and Fredman (in press). However, there were some differences between the findings and those frameworks. Another important finding was that some guides needed to manage more than just conflict between participants, but also between themselves and participants, as well as between their group and third parties. These findings suggest that Cohen's (1985) idea of tension management may need to be expanded to include tension management between the guide and the participants, and between the tour group and third parties. Another surprising finding which was especially prevalent among the cloven-hoofed mammal guides was the lack of encouragement and focus on protection and conservation of the target species. This finding was contrary to many studies on wildlife watching tourism which often consider those types of tourism as promoters of conservational attitudes towards wildlife (Curtin, 2010). Moreover, conservational attitudes are also often a common end goal of interpretation. Thus, this finding may challenge some assumptions that wildlife watching tourism needs to have conservational goals. Another relevant finding was the lack of relevance for the interactional component, where some elements where already covered in greater detail by the uncertainty component and the motivational component. This finding could indicate that the interactional component is not as relevant for Norwegian wildlife watching guides, and that mediation could be included in another component.

The findings revealed a lack of both theoretical and practical training among most of the guides. The lack of training was especially evident when it came to the use of interpretation, where there was little evidence of any clear plans or strategies for the

interpretation. Moreover, the lack of emphasis on promoting conservational and environmentally friendly attitudes could also originate from a lack of training. The practical implications of these findings indicate that there could be a need for more guide training for Norwegian wildlife-watching guides, to ensure high quality guiding, interpretation, and promotion of conservational attitudes. Protected areas could also mandate guide training and certification for tour operators within the protected area. In nature areas which are not protected local governance and tourist management could provide or offer guide training and certification.

7.1 Limitations and suggestions for further research

The conclusions from this study are not generalizable and only reflects a limited amount of wildlife watching guides in Norway. Furthermore, the study only represents two different forms of land-based mammals and four different species, with each species only targeted by two or three guides. To provide more generalizable and certain results, future studies should apply both qualitative and quantitative methods, contain higher number of informants, have multiple and more distinct case areas, and more species with larger quantities of guides focused on each species.

Despite the limitation of this study some findings provided interesting insights which could be relevant for other researcher to explore further. Suggestions for further research include researching the wildlife watching guides role during land-based, water-based and air-based (birdwatching) wildlife watching activities in order to examine if there are potential differences in the guides role. Furthermore, the findings suggest that the guides role during tension and conflict management needs to be reexamined. This finding could also be relevant to explore for other forms of tourist guides as well. Moreover, the results also indicate that the components and their elements in Cohen's (1985) original framework needs to be reexamined for future adaptations.

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9 Attachments

9.1 Attachment 1: Interview guide

Introduction

Can you tell me a little bit about yourself and your work?

- How long have you been working there?

Can you tell me a little bit about the firm that you work for?

- What kind of activities do you provide?
- Which animal(s) are you most focused on?
- How long have you been providing tours to see those animals?
- Do you experience the animals as difficult or easy to find?

The guide's role

What does your role as a guide involve?

Which functions do you have as a guide?

- Which ones are the most important?

What do you feel it important to communicate to the participants?

In what way do you focus on the participants experience?

Wildlife-watching

Can you tell me a little bit about the tour?

- How long does it usually last?
- Do you use any means of transportation?

How do you choose where to bring the participants?

- Do you look for and follow any tracks?

Encounter

Can you tell me about a typical meeting with the animals?

- Can you tell me about what you do if you encounter the animals, you look for?
- How close do you get to the animals?
- Is it safe for you to approach the animals or the animals to approach you?
- Do you do anything to enhance the experience of the animals?

- Do you need to do anything to make sure the participants do not disturb or bother the animals?

How do you feel about sharing those experiences with the participants?

Expectations

How do you experience the participants expectations of seeing the animals?

- How do you relate to their expectations?
- Do you do anything to manage or influence thei expectations?
- Do you tell them about the probability of encountering the animals?

Do you do anything to maintain the participants motivation if it takes awhile before you see the animals that you are looking for?

- What do you do if you do not see any animals?

Conservation

What do you tell the participants about the animals they want to see?

- Do you tell them anything about the population situation and what challenges they are experiencing?
- Do you tell them about how they can contribute positively to the conservation of the animals?
- Do you tell them anything about how they can avoid doing anything that is harmful to the animals?

Do you experience that the animals are disturbed by your activities?

Do you actively try to affect the participants attitudes to the animals or the environment they live in?

Do you provide examples on how their behavior can affect the animals and other wildlife in both positive and negative ways?

Attractions

Do you offer any food or beverages during the tour?

Are there any other attractions in the area that you show to the participants?

- Do you look for any other wildlife in the area as well?

Access

Are the areas where you find the animals accessible?

Is the terrain easy or challenging?

Is it easy or difficult to get to the start of the tour?

Do you have any rules or regulations the participants need to relate to?

Do you have to do anything to maintain the participants safety?

- If so, what do you do?

Representation

Do you sometimes meet locals or other people during the tour?

Does the group learn anything about what it is like to live in the area?

Do you tell the participant anything about the area you are in and those who live there?

Group management

Do you manage how the participants behave during the tour?

- Do you have rules about littering or where the participants are allowed to walk?

Do you take any actions to create cohesion between the participants and to create a good atmosphere?

Do you do anything to engage and motivate the participants?

Does it happen that conflicts or tension arises in the group?

- How do you handle tension or conflicts?

Can you tell me about an instance where it was difficult to lead a group?

Communication/interpretation

What do you consider as important when you communicate with the group?

Do you do anything special to make it easy to follow what you are communicating to the participants?

Do you try to make the communications meaningful and personal for the participants?

Do you use any method to make what you are communicating more entertaining for the participants?

Do you do anything to sustain the participants attention?

Do you use any methods or techniques when you are telling stories?

Do you try to encourage the participants to imagine what it is like to live in the animal's world?

Do you encourage the participants to reflect about what you discussed during the tour?

Do you give the participants resources or information to follow up their interest after the tour ends?

Is there something more you would like to tell me that I haven't asked about or something that you want to expand upon?

9.2 Attachment 2: Information for particicpants

Are you interested in taking part in the research project: The guide's role in wildlife watching tourism?

Purpose of the project

You are invited to participate in a research project where the main purpose is to investigate how the tourist guide leads a wildlife tourism activity and what the role of the guide consists of. Furthermore, it will also be investigated whether there are differences in how guides lead wildlife tourism activities that look at large carnivoran mammals and wildlife tourism activities that look at large cloven-hoofed mammals. The scope of the study is equivalent to a master's thesis of 30 ECTS. The number of participants in studies will be approximately ten people. The study uses a qualitative research method in the form of interviews.

Which institution is responsible for the research project?

Norwegian university of life sciences is responsible for the project

Why are you being asked to participate?

The reason why you are asked to participate is because you have relevant knowledge and experience in leading / guiding wildlife watching activities.

What does participation involve for you?

Participation in the project to means being interviewed by me about your experiences, knowledge and approaches as a guide. The interview is an in-depth interview and is part of the data collection. The scope of the interview will be around an hour but can possibly be longer. The information that is collected is your experiences, knowledge and opinions. Audio recordings will be made of the meeting which will then be transcribed. Both the audio recording and the transcribed text will be deleted at the end of the project. All personal information will be anonymized.

Participation is voluntary

Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data

We will only use your personal data for the purpose(s) specified here and we will process your personal data in accordance with data protection legislation (the GDPR).

The signatory and my supervisor at NMBU Hilde Nikoline Hambro Dybsand will have access to the information. The data will be stored on NMBU's OneDrive server. I will replace your name and contact information with a code that is stored on a separate name list separate from other data. Participants will not be recognized in the publication.

What will happen to your personal data at the end of the research project?

The planned end date of the project is June 2022. The information is anonymized and when completed all personal data will be deleted.

Your rights

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?

We will process your personal data based on your consent.

Based on an agreement with Norwegian university of life sciences, Data Protection Services has assessed that the processing of personal data in this project meets requirements in data protection legislation.

Where can I find out more?

If you have questions about the study, or want to exercise your rights, please contact:

• Mattis Jørgen Torp Steinberg Email: msteinbe@nmbu.no. Tel: 90240499

• NMBU by Hilde Nikoline Hambro Dybsand. Email: hilde.nikoline.hambro.dybsand@nmbu.no. Tel: +4767231425

• Our privacy representative: Hanne Pernille Gulbrandsen. Email: personvernombud@nmbu.no Tel: 402 81 558

If you have questions related to NSD's assessment of the project, you can contact:

• NSD - Norwegian Center for Research Data AS by email (personverntjenester@nsd.no) or by phone: 55 58 21 17.

With best regards

Yours sincerely,

Project Leader	**Student**
(Researcher/supervisor)	
Hilde Nikoline Hambro Dybsand	Mattis Jørgen Torp Steinberg
Project Manager	Student
(Researcher / supervisor)	

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