SUSTAINABLE TOURISM DEVELOPMENT IN A NORWEGIAN NATIONAL PARK AREA – Exploring Social Aspects

Bærekraftig reiselivsutvikling i et norsk nasjonalparkområde – en undersøkelse av sosiale aspekter

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Philosophiae Doctor (PhD) Thesis

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Preface

This PhD project was generously funded by the Department of Ecology and Natural Resource Management (INA) in the Norwegian University of Life Sciences (UMB). The dissertation is also linked to the SUSTOUR project, "Sustainable tourism development in mountain park areas" (186891/110), which is sponsored by the Research Council of Norway under the NATURNAER program. Financial support for the wider project has also been provided by the Norwegian Farmers' Union (Norges Bondelag) and Nasjonalparkriket (Regionrådet for Nord-Gudbrandsdal).

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A demanding PhD study may easily put extra stress on a marital relationship, but my wife Gro's compassionate understanding of this lingering task and her infinite care prevented any such outcome. I also express my gratitude to both my son, Vegard, who at his young age helped me to comprehend the values of the irreplaceable Norwegian mountain nature, and to my daughter, Yngvild, who demonstrated in a convincing way that fresh and genuine insights about the world can be gained through the pleasures of travel and tourism.

Now that this work is coming to an end, I have very mixed feelings about it. On one hand, it is a relief to finish a task that has taken several years to complete, but on the other hand, this project has been a wonderful professional challenge which is hard to let go. It has indeed been a pleasure to work with so many supportive, skilled and professionally-committed colleagues and partners! My source of comfort is that similar research activities will continue in the PROTOUR project and hopefully beyond the life of that assignment as well.

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Summary

Vast areas have been subject to an active nature protection policy in Norway over the past decades. Sixteen per cent of the land mass on the mainland is now protected in one way or another, and national parks take up the greatest share of the protected land. In many regions throughout the world, national parks offer excellent opportunities for outdoor recreation and tourism activities. The social values of contact with nature and opportunities for nature-based activities are considered to be a key element of Norwegian /North European culture and tradition. Nature-based tourism is a rapidly growing sector of the tourism industry in many parts of the world. National parks have played a major part in this growth in many countries, because they tend to be associated with relatively pristine nature and beautiful scenery and they attract visitors seeking nature-based experiences.

This PhD project explores the social dimension of sustainable tourism development in Norwegian national parks. The study reflects the paradigmatic shift in national park management policy, where the traditional view of protecting nature *from* human use is gradually being replaced by a vision of safeguarding both nature conservation *and* recreation/tourism interests. The increasing emphasis on the interests of visitors and local communities related to tourism activities suggests that social values are moving to the forefront of discourses on sustainable tourism development in national parks.

The political backdrop for this new integrated management philosophy is rooted in the assumption that nature-based tourism in and around Norwegian national parks (which are typically located in remote mountain regions), represents promising opportunities for rural areas that are affected by the marginalisation of traditional industries, such as agriculture and forestry. Increasing visitation and more nature-based tourism products can potentially generate local jobs and income, and tourism therefore represents a way of stemming the outmigration of the resident populations. The integration of broader social interests in the emerging management regime has also arisen from criticisms of the traditional, expert-driven, segregated and top-down national park management strategies. The inclusion of local, experience-based knowledge, the involvement of community stakeholder interests and the anchoring of management processes and solutions at the local level are now being given political attention.

In examining the social preconditions for sustainable tourism development in national parks, this PhD project analyses tourism interests in various ways: Visitor desires and concerns and the viewpoints of local tourism entrepreneurs are taken into consideration, as well as the views of other rural interests with a stake in the utilisation of national parks.

Nasjonalparkriket ("The National Park Realm") was chosen as the case study area for the empirical study. This mountainous region is situated in the northern part of Oppland County in Norway. It comprises six municipalities with very high land coverage of protected areas, including six national parks.

Visitors' Nature Orientations were examined through two surveys to achieve a detailed understanding of their main types of nature appreciation. The findings illustrate tourists' nature-related motives, values and attitudes and also their behavioural preferences in a nature setting. German, Dutch and Danish motor tourists visiting Norway were surveyed when leaving the country by ferry and four vital dimensions of Nature Orientations were identified: *Inspiration, Recreation, Challenge* and *Sightseeing. Inspiration* represents existential values and a strong emotional connectedness with landscape and nature; *Recreation* signifies the desire for tranquillity, peacefulness and physical relaxation in natural surroundings; *Challenge* represents the desire for demanding physical exercise and risk taking, and *Sightseeing* refers to interests in seeing sights and the appreciation of comfort aspects. An additional *visitor survey* among actual visitors in *Nasjonalparkriket*, supported these findings but the *Sightseeing* dimension was re-labelled *Comfort* due to the relative importance of the comfort aspect in the fourth dimension.

Tourism facilities (and visitors' 'quests' for such facilities) in and around national parks can potentially match the different Nature Orientations, and the border survey showed that each of the four identified principal Quest for Facilities dimensions related to distinct nature interests: The Nature Orientations *Challenge* and *Sightseeing* supported the expressed wishes for extension and upgrading of "Tracks & signposts" within national parks. The desire for more grand scale "Infrastructure & services" was upheld by Nature Orientations *Challenge* and *Sightseeing* but was contested by *Recreation*. Moreover, "Food & accommodation" products mainly located outside parks were found to be particularly appealing to the Nature

Orientation *Sightseeing*. The expansion of "Tours & interpretation" services and facilities in natural surroundings was supported by the *Inspiration* or *Sightseeing* orientations.

Tourists who seek pleasures in natural surroundings tend to express great concern for the environment. In the survey among actual visitors in *Nasjonalparkriket*, respondents generally expressed a very low degree of acceptance for negative ecological impacts resulting from tourism activities and installations in the national parks. The Nature Orientation dimension *Inspiration* was associated with a particularly great concern for the wild reindeer habitat, raptor nesting and attrition on vegetation. On the other hand, both *Comfort (Sightseeing)* and *Challenge* orientations showed less environmental concern compared to visitors in general. The Quest for Facilities dimensions "Infrastructure & service" and "Food & accommodation" (i.e. tourism product interests upheld by *Comfort (Sightseeing)* and *Challenge* according to the border survey) fell into the latter domain, and were also (in relative terms) related to a higher degree of acceptance of negative ecological impacts.

Tourists' Nature Orientations, Quest for Facilities and views on potential nature destruction (as revealed in the two surveys) represent important knowledge for managers who are looking to develop national parks into viable tourism attractions. In addition, local tourism entrepreneurs need to be aware of their guests' interests and concerns if they want to succeed. Local tourism stakeholders are often totally dependent on the natural resources contained in the protected areas. National park management policies and regulations represent opportunities and constraints for tourism activities, and thus have a direct influence on the prospects for tourism expansion. *Qualitative interviews* with local tourism stakeholders in *Rondane* and *Jotunheimen* national parks (within *Nasjonalparkriket*) revealed that, despite their general support for national parks status, they felt that the management planning processes and outcomes left a lot to be desired.

First, the tourism representatives reported only minor involvement in the national park planning processes, and that they had very little input into the final planning arrangements. Second, they felt that management rules and regulations restricted opportunities for tourism-related business operations within the parks. Third, respondents perceived a lack of competence among managers concerning business management and tourism development issues. In *Rondane* National Park, doubts were expressed about the necessity of the measures implemented to protect the wild reindeer, and the scientific evidence supporting these

measures. In *Jotunheimen* National Park, respondents thought that sustainable tourism development should be more explicitly included in management visions and goals for the national park, and they called for a visitor strategy to be implemented. They also expressed a desire to be involved in the co-management of the park. Considerable investment in communication and relationship-building is likely to be required in these two parks to foster durable social links and trustworthy planning partnerships between responsible managers and local tourism stakeholders.

Similar opinions were identified among local tourism stakeholders in a *focus group* study in the two national parks mentioned above. The traditional rural users (i.e. local landowners, farmers, etc.) of the national parks are social interests defining the freedom of action with respect to existing tourism activities and also new tourism industry initiatives. When exploring the opinions of both groups (i.e. local tourism entrepreneurs and traditional rural users) about tourism in the protected areas, there were few direct clashes of interest. However, contradictory views were evident amongst groups when discussing the need for genuine tourism growth in the area. The local tourism entrepreneurs demonstrated an 'openness to change' in order to sustain their businesses and the local community, whereas the traditional rural user interests had a more sceptical attitude and were afraid that new developments could change the character of their countryside and undermine rural lifestyles and the integrity of their local community. Viable directions for tourism development should therefore be negotiated between the two stakeholder interests.

The main contribution of this dissertation is to highlight social preconditions for sustainable tourism development in a Norwegian national park setting. Both 'outsider' and 'insider' social perspectives (i.e. visitor and local stakeholder interests), are equally taken into consideration. Existing opportunities and constraints are discussed and issues of crucial importance for tourism advancement in the national parks are identified.

Sammendrag

Store naturområder er blitt vernet av norske myndigheter i de siste tiårene. 16 prosent av landarealene på Norges fastland er nå vernet i en eller annen form, og nasjonalparkene utgjør den største andelen av disse verneområdene. I mange land er nasjonalparkene svært godt tilrettelagte for rekreasjons- og turistaktiviteter. De sosiale verdiene som er knyttet til befolkningens nærhet til natur og mulighetene for naturbaserte aktiviteter og opplevelser blir ofte ansett som et kjerneelement i norsk/skandinavisk kultur og tradisjon. Naturbasert turisme er en raskt voksende sektor i mange deler av verden, og nasjonalparkene blir gjerne assosiert med godt bevart, verdifull natur og vakre landskaper, som tiltrekker seg et økende antall besøkende i mange land.

I dette PhD-prosjektet rettes søkelyset mot den sosiale dimensjonen ved bærekraftig reiselivsutvikling i norske nasjonalparker. Studien reflekterer det pågående paradigmatiske skiftet i nasjonalparkpolitikken, der det klassiske naturvernet *mot* menneskelig bruk og påvirkning gradvis blir erstattet av forestillinger om at naturforvaltning i denne typen områder bør handle om å ivareta *både* naturhensyn *og* reiselivsinteresser. Den voksende oppmerksomheten omkring de besøkendes behov og den økende vektleggingen av lokalsamfunnsinteressene som er relatert til turistaktivitetene indikerer at de sosiale aspektene gradvis får større betydning i diskusjoner om bærekraftig reiselivsutvikling i nasjonalparkene.

Det generelle politiske bakteppet for denne nyere, sosialt integrerte forvaltningsfilosofien er knyttet til en antakelse om at norske nasjonalparker, som gjerne er lokalisert i relativt perifere fjellregioner, representerer næringsmuligheter for bygdesamfunn som er blitt marginalisert i økonomisk henseende som følge av tilbakegang i tradisjonelle næringer som jordbruk og skogbruk. Mer besøk i nasjonalparkene og tilpassede naturbaserte reiselivstilbud kan potensielt skape arbeidsplasser lokalt og tilføre lokalsamfunnene nye inntekter. Utvikling av reiselivet fremstår derfor som et egnet redskap for å motvirke utflytting fra disse områdene. Innlemmingen av bredere sosiale interesser i det nye forvaltningsregimet kan også ses på som et svar på kritikken av den dominerende naturvitenskapelige, ekspertpregede og *top-down*-orienterte forvaltningstradisjonen. Inkludering av både lokal og erfaringsbasert kunnskap,

involvering av lokalsamfunnsinteresser og sikring av lokalt forankrede forvaltningsprosesser og -beslutninger blir nå i stadig større grad viet politisk oppmerksomhet.

I denne studien av sosiale aspekter ved bærekraftig reiselivsutvikling i nasjonalparker rettes søkelyset både mot de besøkendes tilretteleggingsønsker og mot deres omtanke for naturmiljøet. I tillegg analyseres synspunktene på reiselivsutvikling i nasjonalparkene blant lokale reiselivsentreprenører og andre lokale brukerinteresser. *Nasjonalparkriket* i Nord-Gudbrandsdalen ble valgt som case for den empiriske undersøkelsen. Denne fjellregionen ligger i den nordlige delen av Oppland fylke, og omfatter seks kommuner med seks nasjonalparker, der en svært stor andel av arealet består av vernede landområder.

Gjennom to surveyundersøkelser ble turistenes såkalte naturorienteringer belyst. Resultatene illustrerer turistenes naturrelaterte motiver, verdier og holdninger samt deres atferdspreferanser i et naturmiljø. Tyske, nederlandske og danske bilturister ble i den første surveyundersøkelsen bedt om å besvare et spørreskjema ved utreise fra Norge med ferge, og fire typer av naturorienteringer ble identifisert i denne grenseundersøkelsen: *Inspirasjon*, *Rekreasjon*, *Utfordring* og *Sightseeing*. *Inspirasjon* representerer eksistensielle verdier og en sterk emosjonell tilknytning til natur og landskaper. *Rekreasjon* står for ønsker om stillhet, ro og fysisk avkobling i naturomgivelser. *Utfordring* gjenspeiler ønsker om fysisk krevende aktiviteter og en viss risikoorientering. *Sightseeing* reflekterer interessen for å se attraksjoner og understreker betydningen av komfort på reisen. Den andre surveyundersøkelsen, en spørreundersøkelse blant faktisk besøkende i *Nasjonalparkriket*, bekreftet disse funnene, men her ble *Sightseeing* omskrevet til *Komfort* pga den sterke betydningen av komfortaspektene på den fjerde dimensjonen.

De besøkendes uttrykte ønsker om tilrettelegginger av fasiliteter i og rundt nasjonalparkene kan i utgangspunktet tenkes å være knyttet til de ulike naturorienteringene.

Grenseundersøkelsen blant de utenlandske bilturistene viste at hver av de fire identifiserte typene av fasilitetsønsker var relatert til hver av de fire typene av naturinteresser:

Naturorienteringene *Utfordring* og *Sightseeing* understøttet ønskene om å utvide og oppgradere "Stier & skilter" inne i nasjonalparkene. Ønskene om mer storskala "Infrastruktur

& service" ble opprettholdt av naturorienteringene *Utfordring* og *Sightseeing*, men var i liten grad relatert til *Rekreasjon*. Tilrettelagte turistprodukter innen "Mat & overnatting" utenfor nasjonalparkenes grenser hadde først og fremst appell til naturorienteringen *Sightseeing*, mens "Organiserte turer & formidling" i naturomgivelser var relatert til naturorienteringene *Inspirasjon* og *Sightseeing*.

Turister som søker seg til naturområder er gjerne opptatt av vern av naturmiljøet. I undersøkelsen blant besøkende i *Nasjonalparkriket* uttrykte respondentene generelt sett lav grad av aksept for negative økologiske konsekvenser som følge av turistaktiviteter og turistmessig infrastruktur i nasjonalparkene. Naturorienteringsdimensjonen *Inspirasjon* var forbundet med en spesielt restriktiv holdning til negativ påvirkning av villreinhabitatet, rovfuglenes redebygging og slitasje på vegetasjonen. På den andre siden viste både orienteringene knyttet til *Komfort* (*Sightseeing*) og *Utfordring* større grad av aksept for negative økologiske virkninger. De som ønsket "Infrastruktur og service" og "Mat & overnatting" (dvs. fasilitetsønsker opprettholdt av *Komfort* /*Sightseeing* og *Utfordring* i følge grenseundersøkelsen) falt inn i den siste kategorien, der det var en relativt sett høy grad av aksept for negative økologiske virkninger.

Turisters naturorienteringer, fasilitetsønsker og oppfatninger av potensielle naturødeleggelser, slik det ble avdekket i de to surveyundersøkelsene, er viktig kunnskap for forvaltningsmyndigheter som ønsker å utvikle nasjonalparkene til bærekraftige turismeattraksjoner. I tillegg må lokale reiselivsentreprenører ha kjennskap til gjestenes interesser og innsikt i deres miljøengasjement dersom de skal kunne overleve. De lokale næringsaktørene er dessuten helt avhengige av naturressursene som finnes inne i nasjonalparkene. Forvaltningspolitikk og -reguleringer representerer muligheter og begrensninger for turismeaktiviteter og har dermed direkte betydning for utviklingen av reiselivet i nasjonalparkene. Kvalitative intervjuer med lokale reiselivsaktører i Rondane og Jotunheimen nasjonalparker (som begge er lokalisert innenfor *Nasjonalparkriket*) viste at disse entreprenørene så fundamentale mangler ved både forvaltningsplanprosesser og - bestemmelser, til tross for at de generelt støttet nasjonalparkstatusen for disse fjellområdene:

For det første rapporterte aktørene om bare minimal, reell involvering i nasjonalparkenes forvaltningsplanprosesser, og de uttrykte at de hadde hatt liten innflytelse på de endelige vedtakene som ble fattet. For det andre opplevde de at reguleringene begrenset mulighetene for turistaktiviteter inne i nasjonalparkene. For det tredje pekte de på at forvaltningen mangler kompetanse både på forretningsvirksomhet og reiselivsutvikling. I Rondane ble det uttrykt tvil om nødvendigheten av de strenge tiltakene for å beskytte villreinen og det vitenskapelige grunnlaget for disse initiativene. I Jotunheimen mente de lokale reiselivsaktørene at bærekraftig reiselivsutvikling burde bli eksplisitt inkludert i forvaltningens visjoner og målsettinger for nasjonalparken, og de ønsket iverksetting av en besøksstrategi for dette verneområdet. De ville også gjerne bli delaktige i forvaltningen av parken. Betydelige investeringer i kommunikasjon og relasjonsbygging er trolig påkrevd i disse to parkene for å utvikle tillitsfulle og varige sosiale bånd mellom forvaltningsmyndighetene og de lokale reiselivsaktørene.

Liknende synspunkter ble identifisert blant lokale reiselivsentreprenører i en fokusgruppeundersøkelse i de to nevnte nasjonalparkene. De tradisjonelle bruksinteressene (dvs. lokale grunneiere, bønder etc.) i nasjonalparkene er sosiale interesser som kan tenkes å sette rammer for reiselivsaktivitetene og dermed også påvirke nye initiativ i reiselivsnæringen. Analysene av alle fokusgruppene (dvs. både blant de lokale reiselivsaktørene og de tradisjonelle brukerinteressene i de to parkene) viste at det var få eksisterende konflikter mellom de ulike interessene. Men ulike synspunkter kom til uttrykk når behovet for fortsatt vekst i turismen i området ble diskutert. De lokale reiselivsaktørene viste en "åpenhet for forandring" for å videreutvikle reiselivet og livskraften i lokalsamfunnet, mens de tradisjonelle brukerinteressene hadde en mer skeptisk holdning og var engstelige for at rask reiselivsvekst kunne endre områdets karakter og underminere lokal livsstil og bygdesamfunnets integritet. Bærekraftige løsninger for videre reiselivsutvikling i området bør derfor framforhandles mellom disse ulike lokale brukerinteressene.

Det viktigste bidraget i dette PhD-prosjektet har vært å analysere de sosiale forutsetningene for bærekraftig reiselivsutvikling i norske nasjonalparker. De sosiale aspektene er belyst gjennom både "utenfra"- og "innenfra"-perspektiver, dvs. at interessene til så vel besøkende turister som lokale næringsutøvere er inkludert i denne avhandlingen.

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List of papers

- **Paper 1**. Haukeland, J. V., Grue, B., & Veisten, K. (2010). Turning national parks into tourist attractions: Nature orientation and quest for facilities. Manuscript published in Scandinavian *Journal of Hospitality and Tourism*, 10(3), 248–271.
- **Paper 2**. Haukeland, J. V., Grue, B., Veisten, K., & Vistad, O. I. Visitors' acceptance of negative ecological impacts in national parks: Comparing explanatory power from psychographic scales in a Norwegian mountain setting. Manuscript submitted to *Journal of Sustainable Tourism*.
- **Paper 3.** Haukeland, J. V. (2011). Tourism stakeholders' perceptions of national park management in Norway. Manuscript published in *Journal of Sustainable Tourism*, 19(2), 133–153.
- **Paper 4.** Haukeland, J. V., Daugstad, K., & Vistad, O. I. (2011). Harmony or Conflict? A focus group study on traditional use and tourism development in and around *Rondane* and *Jotunheimen* national parks in Norway. Manuscript accepted for publication in *Scandinavian Journal of Hospitality and Tourism*.

Synopsis

1 The notion of sustainable tourism

1.1 Nature-based tourism, tourism in national parks and significant research

Tourists often seek close contact with nature during their holidays, and many of them direct their gaze towards appealing, and often dramatic, landscapes. An essential element of contemporary tourism is thus access to natural resources and the experience, or utilisation, of natural assets. However, despite the fact that 'nature-based tourism' plays an important role in modern societies (and is a seemingly simple concept to grasp) there is no formal, universally accepted, definition of the term (Fredman, Wall Reinus, & Lundberg, 2009; Fredman & Tyrväinen, 2010). For example Valentine (1992) defines nature-based tourism in a relatively loose way as tourism "primarily concerned with the direct enjoyment of some relatively undisturbed phenomenon of nature" (p. 108), which points to a type of tourism that is based on the existence of a fairly intact environment. As noted by Goodwin (1996, p. 287), "Nature, or nature-based, tourism encompasses all forms of tourism ... which use natural resources in a wild or undeveloped form – including species, habitat, landscape, scenery and salt and fresh-water sceneries".

The lack of an accepted definition (Arnegger, Woltering, & Job, 2010) makes it difficult to accurately measure the extent of nature-based tourism as a social phenomenon, and statistical estimates vary significantly. For example, the World Tourism Organisation (UNWTO) calculates that approximately 10-20 per cent of all international travel is related to nature (Fredman, Wall Reinus & Lundberg, 2009), whereas authors such as Filion, Foley and Jacquemot (1994) and Mehmetoglu (2007) claim that this segment accounts for as much as 40 to 60 per cent of all international tourism. The relative magnitude of nature-based tourism varies internationally, and is particularly significant in Scandinavia/ Norway, where the image of tourism is largely built on natural assets and nature-related recreational activities (Gössling & Hultman, 2006, p. 4). In Norway, Haukeland & Rideng (1999) reported that 'experiencing unique landscapes' was of 'very high importance' among two thirds of foreign motor tourists.

Since the Romantic period in the nineteenth century, the countryside and natural/wild environments have been increasingly appreciated by urban visitors and it is likely that its

appeal will intensify in the post-industrial era (Aitchison, MacLeod, & Shaw, 2000, p. 71). Nature-based tourism is growing rapidly (Shafer & Choi, 2006; Hiwasaki, 2006; Arnegger et al., 2010; Newsome, Moore, & Dowling, 2002), and at a greater pace than tourism in general (Mehmetouglu, 2007). International tourism grew by an average rate of 4.3 per cent per year during the 1990s but during the same period, the nature-based segment increased by between 10 and 30 per cent (Nyaupane, Morais, & Graefe, 2004).

The growing tourist interest in nature experiences also affects visitation to national parks and other protected areas. Several international surveys indicate that the term 'national park' (and related designations like 'world heritage site') has a significant influence on the perceived attractiveness of an area; that it is a 'stamp of quality', and that this effect is especially salient among foreign tourists visiting a country (Fredman, 2004; Teigland & Holden, 1996; Lindberg & Dellaert, 2003; Jacobsen, 2005). The national park label is important in tourism promotion and marketing (Reinus & Fredman, 2007) and Eagles (2001) highlights the significant brand identity of national parks and world heritage sites. National parks are thus presented as the 'the most beautiful nature the country has to offer' (see Outdoors.fi, 2011) or the 'treasures' of a country's natural reserves (see Metsähallitus, 2011).

Tourist visitation in national parks is becoming increasingly popular in most countries (Wray Espiner, & Perkins, 2010; Eagles & McCool, 2001) and those with reliable visitor statistics like New Zealand (Department of Conservation, 2011) and Finland (Puhakka, 2008) report rapidly growing numbers of people who come to enjoy protected landscapes and nature. Norway, and also Sweden, cf. Fredman & Sandell, (2009, p. 206), is probably an exception to this general trend, as tourism is still of a relatively modest scale in most national parks (Gundersen, Andersen, Kaltenborn, Vistad, & Wold, 2011). The strong international appeal of national parks illustrates that nature-based tourists place high value on an intact natural environment (Newsome et. al., 2002), i.e. an attractive, clean and uncongested milieu (Inskeep, 1991) and a (perceived) intact biodiversity (Buckley, 1999). Observed environmental harm is found to be a common source of complaint among tourists in natural areas (Buckley & Pannell, 1990) and the literature suggests that interest in experiencing nature is often linked to an ecological interest (Teisl & O'Brian, 2003; Wurzinger & Johansson, 2006). It is therefore understandable that both tourists and the associated industry based on these visitor interests will often support the idea of conserving natural areas (Wall Reinius, 2009, p.12; Buckley, 1999; Eagles & McCool, 2001, p. 24). A strong interest in

nature preservation may therefore go hand in hand with a view of national parks as appealing tourism attractions. It is important to note here, however, that many individuals can also acquire contentment from the simple knowledge that a natural resource (i.e. a national park) exists, or is being maintained intact for its own sake – a valuation that has been described as "existence value" (Pigram, 1990). Eagles & McCool (2001, p. 12) have termed this the 'meaning of life' that a natural resource provides.

The creation of the national parks was, from the very beginning, to a large extent justified by the parks' social functions (Hall & Frost, 2009, p. 308) – namely to fulfil the needs of human beings in search of unique and serene nature experiences and outstanding landscapes. There is no doubt that nature-based tourism was an important driving force in the early designation of national parks (Vistad, 1999, p. 191; Hiwasaki, 2006), which thus served both conservation and recreation purposes (Sharpley & Sharpley, 1997). From the 1960s onwards, there was a shift in management priorities, and ecological protection rose to the forefront as the principal objective of national parks (Eagles & McCool, 2001, p. 22). More recently, however, the human dimension has been reintegrated into the park idea (Hall & Frost, 2009, p. 308), raising once again the profile and importance of tourism in protected areas. Due to its magnitude and its perceived economic potential, tourism has become a key issue in park management, and thus "emphasized as a means of reconciling the interests of local communities with those of conservation" (Zachrisson, 2009, p. 11).

With the increasing importance of the social dimensions of park management, research on the human dimension of tourism developments in national parks has also become more pertinent. Exploring visitor desires to experience nature and their concern for the environment as well as the effects of park-based tourism on local stakeholders, stand out as vital components of this research agenda. In line with this outlook, the PhD study at hand seeks to explore national park visitors' quest for facilities in and around national parks (cf. Paper 1) and their attitudes towards nature protection issues (cf. Paper 2). Local tourism stakeholder interests are highly dependent on the management of natural resources in the national parks; thus their views on the current park management regime with regard to tourism development are explored in particular (cf. Paper 3). Finally, traditional local users (i.e. landowners, farmers and other local people dependent on the natural resources for other reasons than benefits from tourism) represent long-established social interests in the national parks and their opinions

about tourism development are also analyzed in addition to local tourism stakeholders (cf. Paper 4).

The inclusion of both visitor and local user interests in this PhD study illustrates the vital social preconditions for tourism developments in the national parks. Assessing the relationship between nature preservation and the growing social interests in nature based tourism in protected areas (the 'protection vs. use' dilemma) leads to the core of the notion of sustainable tourism development of the national parks.

1.2 Sustainable tourism

The concept of *sustainability* has been around for at least three decades and has received enormous attention among policy makers and researchers. It is therefore feasible to say that this notion has become a political issue of significant international importance (Butler, Hall, & Jenkins, 1998). The International Union for the Conservation of Nature and Natural Resources (IUCN) published the World Conservation Strategy (WCS) in March 1980 (IUCN, 1980). The aim was to develop a strategy for the conservation of the earth's living resources in the face of major environmental threats such as degradation and destructions of ecosystems. The IUCN-report therefore emphasised the ecological aspects of natural areas (i.e. the maintenance of ecological processes and life-supporting systems, the preservation of genetic diversity etc.), but importantly, it also recognised these functions as meeting societal needs such as scientific requirements or economic necessities. Society's dependence on a well-managed human use of the biosphere is thus clearly ingrained in this early interpretation of the notion of sustainability.

The concept of sustainable development was firmly established on the international policy agenda by the World Commission on Environment and Development (otherwise known as the Bruntland Report (WCED, 1987)). One of the key elements of the report was a strong belief in holistic planning and strategy-making – the need to protect both human heritage and biodiversity, and to sustain productivity over the long term for the sake of future generations. The United Nations Conference on Environment and Development, or the *Earth Summit* (United Nations General Assembly, 1992) in Rio de Janeiro, adopted environment and sustainability as the principal theme, and the recommendations were later taken up by the European Union in the *Gothenburg Declaration* (The Commission of the European

Communities, 2001). This relatively recent way of integrated thinking is underpinned by the notion that environment, economy and society are inextricably interlinked, and the 2005 United Nations *World Summit* noted that this requires the reconciliation of "economic development, social development and environmental protection – as interdependent and mutually reinforcing pillars" (United Nations General Assembly, 2005, p. 12).

Sustainable tourism is a sub-set of the term 'tourism' and the term 'sustainable development'. The key difference between the two concepts is one of scale, according to Hall (2008), who maintains that sustainable tourism refers to "the level of the tourism industry and consequent social, environment and economic effects, whereas sustainable development operates at a broader scale that incorporates all aspects of human interaction with the Earth's environment" (p. 27). In an influential contribution from the early 1990's, Inskeep argued that sustainable tourism planning should happen as an 'integrated system' with a focus on long-term (10-15-20 years) community involvement in planning and development processes (Inskeep, 1991). Comprehensive reviews of sustainable tourism issues have since been produced (Spenceley, 2005) that take into account the "triple bottom line" of sustainability (Elkington, 1997).

The notion of sustainable tourism is manifold in the sense that it contains a multiplicity of dimensions, interdisciplinary aspects and interpretations. Sustainable tourism indicators represent a means of operationalising the concept (Blackstock, White, McCrum, Scott, & Hunter, 2008), and developing, implementing and interpreting indicators (Ko, 2005; McCool, Moisey, & Nickerson, 2001) often involves engaging with various stakeholders (Manning, 1999a; Miller, 2001; Twining-Ward & Butler, 2002). Despite attempts to 'define' the concept, various social interests and scientific experts (Miller, 2001) still tend to ascribe different meanings and ambitions to the concept. This helps to explain the widespread application (and often misuse) of the term (Butler, 1999). Butler (1999) maintains that there will probably never be a commonly recognized and accepted definition of sustainable tourism that will be applied under all circumstances. Despite this complexity, most professionals tend to share a common understanding of the key elements of sustainable tourism, which is associated with certain core values, developments paths or dimensions of importance.

1.3 Sustainable tourism as an adaptive paradigm

Hunter (1997) argues that an adaptive method should be applied in sustainable tourism planning because too rigid a framework could preclude a fruitful and flexible way of handling the specifics of individual circumstances. He therefore proposes a redefinition of sustainable tourism in terms of an over-arching paradigm which incorporates a range of approaches to the tourism/ environment system within destination areas. A sustainable development spectrum is presented (representing varying degrees of sustainability) and an adaptable approach is recommended. In practice, the sustainability positions range from 'very weak', 'weak', 'strong' and 'very strong', depending on whether the viewpoint is based on an anthropocentric (utilitarian) or a bioethical (eco-centric) perspective respectively (Hunter, 1997). The four sustainability positions are dependent on the relative importance of tourism development and the protection of the natural resources in a particular area. Sustainable tourism development, therefore, should not be seen as a narrowly-defined concept which is reliant on a search for balance, because in reality, trade-off decisions favouring certain aspects of development or protection happen all the time. What is of crucial importance is that any decision-making related to tourism development is both informed and transparent. Sustainable tourism must thus be regarded as an adaptive paradigm, capable of addressing widely differing situations (Gezici, 2006). It can be conceived as a transition, journey or path, rather than an end point or an achievable goal (Farrell & Twining-Ward, 2004).

Recent studies in sustainable tourism have called for a more adaptive, interdisciplinary and holistic approach to management and associated research (Farrell & Twining-Ward, 2004). Integrated and participatory approaches are requested within this paradigm, and the 'reductionist' idea that management actions can be accurately controlled and predicted (with tools such as carrying capacity models, environmental impact assessments, etc.), is not recommended (Farrell & Twining-Ward, 2004). Tensions between various interest groups are unavoidable when dealing with the issue of sustainable tourism, but social conflict can also be productive in the formulation of new ideas or strategies for dealing with problems (Hall & McArthur, 1998). The decision-making model should thus be inductive (rather than rational-deductive). It should begin with issues which, by definition, involve conflict and not consensus, and should develop programs and policies from these emerging issues that that are acceptable to the affected parties (Shafer & Choi, 2006).

Within this adaptive approach, any carrying capacity limits must be flexible enough to cope with changes brought about by new science knowledge, locality, seasonality, tourist behaviour, and local preferences. Planning must be a continual process, and planning documents must be reviewed regularly, for adaptive management accumulates knowledge progressively through social learning (Farrell & Twining-Ward, 2004; Berkes, 2009). Interdisciplinary cooperation thus becomes imperative, and as the American biologist Edward O. Wilson (1998) notes: Most real world problems lie in the intersection of biology, social science, environmental policy and ethics. The integration of these perspectives is necessary when and where nature and social systems are linked together. Although there are analytical problems associated with the concept of sustainability, it represents "a platform on which different stakeholders can interact, negotiate, and reflect on their interactions' consequences for the environment" (Saarinen 2006, p. 1124). From a community-based perspective, the negotiation process between various stakeholder interests is inherent in the concept of sustainability. Limits to growth are seen as relative, or socially constructed, and people's well-being and the protection of the resource base both need to be addressed (Saarinen, 2006). New models of collaborative, adaptive management for protected areas will thus need to take into account multiple values and goals (Kaltenborn, Vistad, & Stanaitis, 2002).

The concept of sustainable tourism is ingrained in both nature protection policies and general tourism planning. Hall notes that issues of coordination, collaboration and partnerships are at the forefront of much tourism research examining resource management or destination development issues (Hall, 2000). Tourism management is cutting across administrative boundaries and fields of expertise and, seemingly, become connected with almost everything else (Hall, 2008). The role of the government in tourism has also undergone a shift - from a traditional public administration model to stakeholder partnerships and networks, and from the rational planning model to the political decision making model. According to Bryson (1988), the blurring of the boundaries between public and private sectors has been an important consequence of this. Successful sustainable tourism policies now depend heavily on collaboration between relevant public agencies and private interests (Berry & Ladkin, 1997; Klemm, 1992; Darrow, 1995). The term 'partnership' has thus been frequently used in discourses related to resource conservation and sustainable development, and to broader economic, social and environment issues (Long & Arnold, 1995). In line with this inclusive and extensive approach, the PhD dissertation at hand attempts to address some important social aspects of sustainable tourism development.

2 Political backdrop

In order to illuminate the societal context for the PhD project, the following section presents essential ideas behind the national park system, both in a global and a national context, and relevant aspects of national park legislation and management policies. The current PhD-study reflects the paradigmatic shift in national park policy, where the traditional conservation of nature *against* human use is gradually being replaced by the vision of safeguarding both nature *and* tourism interests.

2.1 The development of the national park system in a global context

National parks represent the most widespread type of legally protected area in the world. From the outset, the designation of national parks was an American invention and so was the formulation of the national park concept. From the very start (when Yellowstone National Park was established as the first of its kind in North America in 1872), the dual roles of preserving the natural resources while providing outstanding nature experiences for visitors was evident (Hall & Frost, 2009). The relative importance of the two functions has, however, varied through the history of the national parks, between countries and also between individual parks within the same national boundaries.

As noted earlier, in the mid 20th century, the rationale behind national park designation changed. From the 1960s onwards, many parks were established that excluded social user interests. Such decisions were in line with the 1969 World Conservation Union (IUCN) definition of "national park" as a "relatively large area not materially altered by human exploitation and occupation, and where the highest competent authority in the country has taken steps to prevent or eliminate exploitation or occupation in the whole area" (McNeely, Harrison, & Dingwall, 1994, p. 6). In the 1960s, ecology was also established as a separate scientific discipline (Haaland, Kaltenborn, & Vistad, 2003, p. 17), incorporating concepts such as 'endangered species' and 'ecological planning' (Eagles & McCool, 2001, p. 9). From this decade and onwards, the protection of ecological systems came to dominate the ideas behind the designation of national parks.

The rapid expansion of national parks constitutes one of the largest planned changes of land use in recent decades (Secretariat of the Convention on Biological Diversity, 2006). The establishment of protected areas are seen as "a key tool to counter the continuing loss of

ecosystems and species" (GreenFacts, 2011, chapter 4.5). In line with this view, IUCN's general standard for classifying protected areas (into six principal categories) is based on ecological criteria and management objectives (McNeely et al., 94). In this classification system, national parks represent category II, where the primary objective is to protect natural biodiversity, the underlying ecological structure and supporting environmental processes, *and* also to promote education and recreation (IUCN, 2011). Objectives other than nature protection are now included to ensure visitors' inspirational, educational, cultural and recreational experiences at a level which do not produce 'significant biological or ecological degradation' (IUCN, 2011). It is also noted that the needs of indigenous people and local communities should be taken into consideration, and there is an explicit mention of the fact that national parks should contribute to local economies through tourism (IUCN, 2011).

During recent decades, supplementary objectives have thus been incorporated into the management plans for national parks, and various stakeholders are now seen as legitimate social interests in national parks. These more flexible adaptations to the strict management goals are believed to have speeded up the process of protection (McNeely et al., 1994) and protected areas had reached about 12.2 per cent coverage of the Earth's land surface in 2008 (UNEP-WCMC, 2010). In the twenty-first century, social and recreational objectives have increasingly been included in nature conservation policies (Wall Reinius, 2009) and this outlook is reflected in the present PhD research, with its focus on exploring social preconditions for sustainable tourism development in Norwegian national parks.

2.2 The national park system in Norway

Legally, protected areas comprise about 16 per cent of the total land area in Norway (Miljøstatus i Norge, 2011a). 9.3 per cent of this is classified as national parks, and there are 33 national parks on the mainland (Miljøstatus i Norge, 2011b). The process of protecting land has accelerated in recent years, as only 4.1 per cent of the country had achieved some form of protected status in 2002 (Miljøstatus i Norge, 2002).

The first national park in Norway, *Rondane* National Park, was established in 1962. The original nature preservation legislation¹ from 1970 (The Nature Conservation Act) stated that

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¹ Norway's first nature preservation law was established in 1910 (Brox, 2010)

the designation of national parks should safeguard "large areas of natural habitat that are undisturbed or largely undisturbed, distinctive or beautiful" (Regjeringen.no, 2011a, section 3). In the current legislation, The Nature Diversity Act from 2009, it is expressed in a similar way (Regjeringen.no 2011b, section 35): "Large areas of natural habitat that contain distinctive or representative ecosystems or landscapes and where there is no major infrastructure development may be protected as national parks". Importantly, the more recent Nature Diversity Act also states that the "... regulations shall protect the landscape and its plants, animals, geological features and cultural monuments from development, installations, pollution and other activity that may defeat the purpose of protection, and ensure that people can enjoy an undisturbed natural environment" (Regjeringen.no 2011b, section 35). Visitors' needs and social values are thus explicitly incorporated in the present Norwegian national park legislation.

From the outset, an important goal of national park designation in Norway has been to distribute the parks throughout the country in order to protect a representative selection of Norwegian nature (Miljøverndepartementet, 2004). In reality, however, the national parks are typically found in (predominantly state-owned) alpine regions, whereas coastal or forest landscapes – particularly in the southern and western part of Norway – are underrepresented (Miljøverndepartementet, 2004, section 16.2.2). The criterion that national parks shall not include any 'major infrastructure' means that, by default, they are typically located in relatively remote rural areas of the country.

Each national park is governed by means of a specific regulation (*verneforskrift*) which defines the protected area's geographical boundaries, main goal(s), directives, instructions for motorized transport (normally prohibited) and management (Heiberg, Christensen, & Aas, 2005). The principle of 'common access' (*allemannsretten*), which is embedded in Norway's Outdoor recreation Act (Miljøverndepartementet, 2007), is generally acknowledged in the national parks. This means that activities like hiking, picnicking, skiing, berry picking, horseback riding, fishing and hunting are allowed in 'soft' forms, representing least possible impacts on the natural resources (Raadik, Cottrell, Fredman, Ritter, & Newman, 2010). Such activities are coined *friluftsliv* in Norwegian (directly translated as 'open air life') and they have been seen as an important aspect of the Norwegian way of life since the mid 19th century (Odden, 2008, pp. 165-167). The public is thus normally guaranteed natural experiences by way of "... traditional and simple *friluftsliv* with a low level of technical

facilitation", as it is often formulated in the national park regulations (Heiberg et al., 2005, p. 17). No entrance fee is required to enter any of the national parks in Norway, but payment is charged when visiting the 'national park centres' – information and visitor centres that are located near 14 of the parks².

Norway has typically upheld a tradition of limited facility development and commercial activities in its national parks (Haukeland & Lindberg, 2001). Public resources allocated to national park management have been far below that of other developed countries – both in terms of financial means and numbers of staff (Lindberg, 2001). Management plans tend to accept organized visitor activities that are embedded in the simple friluftsliv tradition, in areas that are seen as ecologically resilient and that may also have been specified as 'user zones' (Direktoratet for Naturforvaltning, 1996; Heiberg et al., 2005). As far as tourism activities are concerned, these sections of the national parks are areas of accommodation provision (often in private possession or owned by the Norwegian Trekking Association (DNT)) or they are land with long-established hiking routes. Areas which accommodate other user interests – such as local agricultural activities, reindeer husbandry or private cabins – are subject to 'differentiated management', which means that the management regulations are less strict compared to those in 'vulnerable' areas with minimum human use (Direktoratet for Naturforvaltning, 2008). Due to the lack of active management, this differentiation of national park land treatment may simply be regarded as a continuation of the traditional use pattern that was already in place when the land was protected.

Traditionally in Norway, each national park has its own management plan which has been drawn up by the management authority (typically the County Governor). Historically, this does not apply to all protected areas, but according to the recent Nature Diversity Act (Regjeringen.no, 2011b), such schemes are now required: A draft strategic management plan should be put in place when a decision is made to establish a new national park (Regjeringen.no, 2011b, section 35). The main purposes of the management plans are to clarify and consider protection values alongside user interests, to provide clear user guidelines, and information on management measures and the potential to accommodate visitors' needs (Direktoratet for naturforvaltning, 2008, chapter 5).

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² http://www.nasjonalparksenter.no/nasjonalparksentersidene/

The Nature Diversity Act (Regjeringen.no, 2011b, section 7) states that the management of national parks in Norway shall be based on scientific knowledge as regards "population status of species, the range and ecological status of habitat types, and the impacts of environmental pressures. However, it is also stated that management authorities "....shall attach importance to knowledge that is based on many generations of experience acquired through the use of and interaction with the natural environment, ... and that can promote the conservation and sustainable use of biological, geological and landscape diversity" (Regjeringen.no, 2011b, section 7). The inclusion of experience-based local knowledge is a new addition to the former Nature Conservation Act, which reflects a global shift in management priorities. However, the need for expertise in managing visitor needs and desires, or specific capabilities to ensure the supportive handling of local stakeholder interests has not yet been addressed in the national park regulations. Existing national park management plans were designed to clarify management rules and regulations for use of the parks, yet the majority of them make little or no reference to new business developments such as tourism enterprises (Heiberg, Hagen, & Christensen, 2006).

One of the key principles underlying the ethos of nature protection in Norwegian national parks is the 'precautionary principle' which is illustrated in the following statement: "If there is a risk of serious or irreversible damage to biological, geological or landscape diversity, lack of knowledge shall not be used as a reason for postponing or not introducing management measures" (Regjeringen.no 2011b, section 8). A lack of adequate scientific evidence is therefore not a sufficient reason for the management authority to avoid reducing or preventing perceived risks to the natural environment (Direktoratet for naturforvaltning, 2010a). The precautionary principle, in combination with the notion that "any pressure on an ecosystem shall be assessed on the basis of the cumulative environmental effects on the ecosystem now or in the future" (Regjeringen.no, 2011b, section 9), has, until now, allowed managers to justify a restrictive protection regime in Norwegian national parks. The current jurisdiction of national parks allocates decisive power to formalized central domains and, as noted by Riseth (2007, p. 184), "the environmental authorities have a predefined rule set which they have implemented locally without much deviation". The top-down management regime allows scant local influence in practice (Skjeggedal, 2007; Velvin, Krogh, & Vedeld, 2010).

2.3 National park management and sustainable tourism – a topic of increased political interest

During the past decade, the human dimension of national parks has risen to the forefront of Norway's political agenda. The ban on commercial activities in established parks was lifted in 2003 (Heiberg et al., 2005), but in reality, there was already a significant and growing tourism industry in and around the national parks by this point (Andersen, Svarstad, Dervo, & Aas, 2003). In the so-called 'mountain text' (Finansdepartementet, 2003; Miljøverndepartementet, 2005), the Norwegian authorities signalled a clear desire to increase sustainable economic development in protected areas. This change in the national policy has resulted in a series of regional and local initiatives to develop commercial activities (such as tourism) in protected areas. The Norwegian Directorate of Nature Management's programme for value-creating activities in association with protected areas (Direktoratet for naturforvaltning, 2010b) also reflects this political adjustment. In the recent "Action plan for tourism industries" (Nærings- og handelsdepartemenet, 2005), national parks are mentioned as a specific component of the new national branding strategy for tourism in Norway. The government's tourism strategy (Nærings- og handelsdepartementet, 2007) emphasises the importance of sustainable tourism development in protected areas, and highlights the importance of improved accessibility, more hiking tracks, enhanced parking facilities and information provision to increase visitation in the national parks. The Norwegian Directorate for Nature Management has launched a pilot project where appointed localities adjacent to national parks which meet certain criteria are given status as 'national park communes' and 'national park villages' (Nærings- og handelsdepartementet, 2007). In 2008, 23 'national park communes' (Direktoratet for naturforvaltning, 2011a) and 5 'national park villages' (Direktoratet for naturforvaltning, 2010b) were assigned a protected trademark logo that may be used in marketing of their areas.

In recent years there has also been an increase in the budget for management of Norwegian national parks (Miljøverndepartementet, 2010), which can be seen as an attempt to compensate for the modest resources that were previously allocated to this sector (Direktoratet for naturforvaltning, 2007) and as a result of the rapidly growing number of protected areas. So far, the majority of these resources has been allocated to the demanding processes associated with the launching of new national parks – the important question hereafter will be how the established national parks should be managed in practice (NTB, 2010).

New forms of decentralized management have been tested and evaluated in various regions of Norway (Falleth & Hovik, 2008). Based on this knowledge, a local management model for national parks and other large protected areas is being implemented in the country in 2011. The intention is to decentralize the management authorities on a voluntary basis, and to build up inter-municipal boards comprising various local stakeholders, with a secretary who is employed by the state but who resides in the local area (Direktoratet for naturforvaltning, 2010a; Miljøverndepartementet, 2009-2010). It is intended that this new management body shall replace the County Governor's traditional responsibility for the management of national parks in the future. As the new model has yet to be implemented, it is too early to assess how this new management system may affect the prospects for sustainable tourism development in national parks.

2.4 Social changes and the management shift from "protection against use" to "protection and use"

Fundamental social changes in contemporary society lie behind the recent political initiatives concerning national parks. The increase in protected areas can be seen as a response to the escalating loss of biodiversity and the rapid depletion of natural resources in modern societies (Zachrisson, 2009, p. 2). This swift expansion of the national park systems (which has taken place primarily in remote mountain areas in countries like Norway), coincides with a decline in traditional rural industries like agriculture and forestry in these regions (Rønningen, 1991). The local communities have thus experienced a loss of job opportunities, resulting in outmigration and an aging population (Martí-Henneberg, 2005; Niedomysl & Amcoff, 2011) at a time when the state has been taking control of many of the natural resources in adjacent territories in the name of conservation (Lundmark & Stjernström, 2009). In this social and political context it has become impossible for managers to seal off huge territories for nature preservation reasons without at the same time responding to a variety of social interests to safeguard sustainable development of the national parks and the surrounding communities.

The recent political initiatives and new management programmes mentioned above can be seen as a response to the pressure created by these various social mechanisms. In addition to preserving valuable landscapes and protecting ecosystems from human impacts, large protected areas are now also seen as important tools for regional development, where the aim

is to integrate conservation and local community development functions (Zachrisson, 2009, p. 11), even though research also indicates that nature-based tourism is a viable development option only for few destinations (Lundmark & Müller, 2010). According to Mose (2007), the 'static-preservation approach' (segregation approach) to protected area management is being replaced by the 'dynamic-innovation approach' (integration approach), where broader social and local community interests are increasingly taken into consideration. These new approaches, which aim to involve national park users and stakeholders and to develop management strategies that are acceptable to all affected parties, correspond with the adaptive, interdisciplinary and holistic system management based on partnerships and networks discussed in Chapter 1.3. Collaborative management (co-management) or joint management of the commons is seen as a pathway to sustainable use (Carlsson & Berkes, 2005) and can be defined as "the sharing of power and responsibility between government and local user interests" (Berkes, Georges, & Preston, 1991, p. 12). If the overall goal is the sustainable development of national parks, then visitors' needs and preferences, as well as local tourism businesses' and other legitimate stakeholder interests will have to be taken into consideration. The exploration of these social aspects is the prime focus of this PhD study and thus the research project will now be presented in further detail.

3. Framing the analysis

3.1 Nasjonalparkriket - regional development project and case study area

This PhD project is based on research in the national park region of *Nasjonalparkriket* in Northern Gudbrandsdal, southern Norway. *Nasjonalparkriket* was created in 2004 when the four local tourism organizations decided on a common marketing strategy for the national parks in the area - originally *Rondane*, *Jotunheimen*, *Dovre* and *Dovrefjell-Sunndalsfjella* and then *Reinheimen* (established in 2006) and *Breheimen* (established in 2009) (Figure 1). *Nasjonalparkriket* was established following the lifting of the ban on commercial activities in Norwegian protected areas. The organisation's vision is to become the number one national park region in Northern Europe (Regionrådet i Nord-Gudbrandsdal, undated). *Nasjonalparkriket* includes the six municipalities *Lom*, *Vågå*, *Sel*, *Dovre*, *Lesja* and *Skjåk* in *Oppland County*.

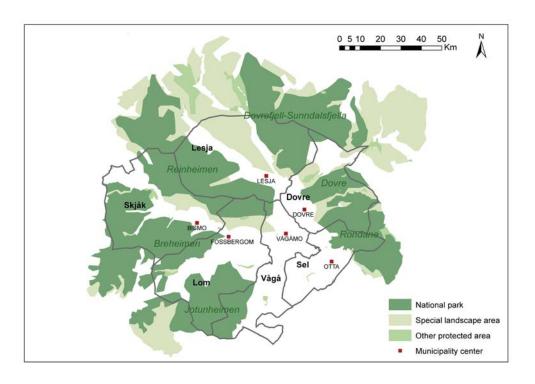


Figure 1. National parks and other protected areas in *Nationalparkriket*. Source: Direktoratet for naturforvaltning (Naturbase) and Berit Grue, Institute of Transport Economics.

Nasjonalparkriket is a regional development tool supported by *Oppland county*, *Statskog SF* (the Norwegian state-owned land and forest enterprise), local tourism organisations and the local mountain boards. The aim is to add value to local industries (tourism, agriculture and

local service industries) by supporting business development in national parks and their border zones (gateway communities). The development of several tourism products has been supported, and common marketing is organised mainly through the web site www.nasjonalparkriket.no.

3.2 SUSTOUR - the broader research project

This PhD project is part of a wider multi-disciplinary and multi-institutional research project, SUSTOUR³, of which the main objective is to clarify the prerequisites for sustainable tourism development in *Nasjonalparkriket* and to input into management and marketing strategies (Veisten, Haukeland, Dybedal, Vistad, Daugstad, Baardsen, Lindberg, Higham, & Fredman, 2007). In addition to the visitor surveys and stakeholder analyses presented in this thesis, the broader project also includes: ecological impact analysis, regional economic impact analysis and public preference analysis – based on surveys among both local residents and Norwegian citizens in general. One of the main goals of the SUSTOUR project has been to clarify public preferences under various tourism development scenarios, taking into account a series of ecological and economic impacts.

Within this wider framework, the current PhD project explores the social aspects of sustainable tourism development in Norwegian national parks. The social dimension of sustainability includes, in this context, those users who are dependent on the utilization of the protected natural resources, i.e. (potential) visitors who come to enjoy the national parks and local stakeholders living in the adjacent communities. This thesis thus takes both an 'outsider' (visitor) and an 'insider' (local community) social perspective on sustainable tourism in protected areas.

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³ SUSTOUR – Sustainable tourism development in mountain park areas: ecological and economic impacts, stakeholder interests, and marketing/management strategies under alternative scenarios.

4. Research contributions

4.1 Overview of the four papers

The 'outsider' social perspective takes *visitor expectations* and *concerns* into consideration: Tourism development in national parks cannot take place unless there is an element of tourist interest in visiting these protected areas. The key question in Paper 1 is therefore 'what kind of facilities or tourism products will be of interest to (potential) visitors in national parks? 'An expansion of the tourism infrastructure and recreational activities in protected areas may, however, also cause various negative ecological effects, and Paper 2 seeks to explore visitors' concern for the environmental impacts of tourism in national parks.

The 'insider' social perspective highlights *local stakeholder interests and viewpoints*: Local tourism businesses are dependent on their guests' access to, and enjoyment of, the national parks. The entrepreneurs must therefore take into account their clients' expectations of tourism facilitation (Paper 1) and environmental concerns (Paper 2) in order to develop adequate tourism products. They also need to work within the framework set by Norwegian national park management policies and regulations. Paper 3 thus addresses local tourism stakeholders' assessments of management conditions for tourism expansion. Prospective tourism growth can also affect other local user interests (for example, local landowners and farmers). The interrelations between local tourism businesses and 'traditional' users of these areas delineate the social constraints and opportunities for tourism activities and tourism development in and around the protected areas. Analysing these social preconditions for national park tourism is the focus of Paper 4.

Paper 1 – Turning national parks into tourist attractions: Nature orientation and quest for facilities

Paper 1 seeks to explore German, Dutch and Danish motor tourists' Quest for Facilities in relation to their expressed Nature Orientation. It does this by means of a quantitative survey, conducted during the summer of 2008. The tourists were all leaving the country by ferry, and this segment of motor tourists makes up a considerable share of international visitors to Norway during the main tourist season (Rideng, Haukeland, & Heimtun, 2007).

With regard to tourists' Quest for Facilities, a variety of variables were chosen for the survey. The variables all related to infrastructure, facilities, services, activities and experiences faced by the (potential) visitors – outside or inside the national parks. The 21 variables were selected from traditional management provisions but also included services that are less developed in a Norwegian national park context, and commercial offers to cater for the needs of the tourists. Four key dimensions were identified by means of exploratory factor analysis: "Tracks & signposts" within national parks, "Infrastructure & services" in and around national parks, "Food & accommodation" products outside national parks and "Tours & interpretation" services in national parks. Each of these dimensions represented a meaningful and consistent Quest for Facilities. A cluster analysis showed that visitors tended to support traditional management measures ("Tracks & signposts" and "Tours & interpretation") within the park boundaries, and classic, high quality commercial tourism products ("Food & accommodation"), whereas the grander scale dimension "Infrastructure & services" received less overall support.

Tourists' Nature Orientation comprises a broad range of nature-related motives, values, attitudes and actual behavioural preferences in a natural setting. The 21 indicator questions were inspired by Uddenberg's (1995) qualitative study of modern Swedes' nature orientations, and are therefore considered particularly relevant in a Norwegian/ Scandinavian context. Through exploratory factor analysis, four vital dimensions of Nature Orientation were identified: Inspiration, Recreation, Challenge and Sightseeing. The findings also revealed that the national parks' provisions can potentially match the different Nature Orientations, as each of the four categories of desired management measures/ commercial tourism offers was related to distinct nature interests: The Nature Orientations Challenge and Sightseeing supported the expressed desire to extend and upgrade "Tracks & signposts" within national parks. The hedonistic desire for more grand-scale "Infrastructure & services" was upheld by the orientations Challenge and Sightseeing but was contested by Recreation – an orientation characterized by a search for tranquillity, peacefulness and physical relaxation in nature. "Food & accommodation" products (mainly outside the parks) were particularly appealing to the Nature Orientation Sightseeing, and expansion of "Tours & interpretation" services and facilities were supported by those seeking Inspiration or Sightseeing in natural surroundings. The distinct tourist interests mirror social user interests that represent opportunities for transforming the national parks into viable tourist attractions.

The contested, and generally low level of support, for large-scale "Infrastructure & services" indicates that the foreign motor tourists were very keen to protect the distinct character of Norway's national parks. This leads to Paper 2 in the dissertation.

Paper 2 – Visitors' acceptance of negative ecological impacts in national parks: Comparing explanatory power from psychographic scales in a Norwegian mountain setting

Nature-based tourists tend to see biodiversity and an intact environment as vital components of their experiences in protected nature and landscapes. Maintaining the integrity of the natural resources in the eyes of the park visitors is thus considered to be of great importance (Buckley, 1999; Buckley & Pannell, 1990; Teisl & O'Brian, 2003; Wurzinger & Johansson, 2006). In line with this, and because nature-based tourism also has the potential to be self-destructive (Pigram, 1990), this paper seeks to identify visitors' tolerance for potential negative ecological impacts due to tourism in a national park context.

The empirical data is based on a survey among visitors in *Nasjonalparkriket*. Respondents were recruited partly at the roadside and partly at accommodation sites during the summer of 2009 and this was followed up with an internet survey during the winter 2009/2010. The majority of respondents were Norwegian, but visitors from various foreign countries of origin were also represented in the sample. The indicators for potential negative environmental effects (wild reindeer habitat, raptor nesting and attrition of vegetation) were selected because they are regarded as particularly serious threats from tourism activities and facilities in the area (see Haukeland, 2010; Nellemann, Vistnes, Jordhøy, Støen, Kaltenborn, Hanssen, & Helgesen, 2010; Strand, Gundersen, Panzacchi, Andersen, Falldorf, Andersen, Moorter, Jordhøy, & Fangel, 2010). Results showed that visitors in *Nasjonalparkriket* were generally sensitive to detrimental effects on the environment. Half of the respondents felt that any negative impacts on raptor nesting was unacceptable, two fifths felt that there should be no impacts on wild reindeer habitat and one third accepted no impacts on vegetation loss. Less than one in ten visitors felt that "major impacts" on any of the three indicators was acceptable.

The distribution of attitudes was analysed by means of four psychographic scales: Two of them are long-established scales – the Wilderness Purism Scale, reflecting the respondent's

degree of purism in wilderness and the New Ecological Paradigm, reflecting the degree to which they hold a pro-ecological worldview ("eco-centrism"). Two of these scales are elaborated in Paper 1 (Nature Orientation and Quest for Facilities⁴). The underlying dimensions of Nature Orientation and Quest for Tourism Facilities that were revealed thorough exploratory factor analyses supported the previous findings in Paper 1, with one exception – the Nature Orientation dimension *Sightseeing* was relabelled *Comfort* due to the importance of the comfort aspect in the *Nasjonalparkriket*-survey.

Visitors' positioning on the various psychographic scales was closely related to their acceptance of negative ecological effects from tourism activities and facilities in national parks. Visitors who displayed a purist attitude on the Wilderness Purism Scale also expressed a particularly low tolerance for detrimental environmental effects. This effect was even more pronounced when compared with the New Ecological Paradigm scale – i.e. the stronger the pro-ecological sentiments, the lower the acceptance of ecological impacts. The Nature Orientation dimension *Inspiration* lead to a greater concern for the environment, whereas both *Comfort* and *Challenge* dimensions were prone to less environmental concern. The Quest for Tourism Facilities dimensions *Infrastructure & service* and *Food & accommodation* produced greater relative acceptance of negative ecological impacts.

The findings also revealed that pro-environmental attitudes increased with higher educational (university) levels, but other social background factors had little influence. Overall, these findings signify that psychographic scales, in general, are appropriate tools for predicting visitors' tolerance for potential negative ecological impacts due to tourism activities and infrastructure in national parks (Wurzinger & Johansson, 2006).

Paper 3 – Tourism stakeholders' perceptions of national park management in Norway

Typically, tourism interests do not have a significant involvement in the conservation and planning processes of protected areas, which are the responsibilities of the national park management agencies (Jamal & Stronza, 2009; Hiwasaki, 2006). Local tourism industry stakeholders, nevertheless, are often entirely dependent on the natural resources contained in the national parks – a reliance that may produce severe tensions between national park

⁴ Coined "Quest for Tourism Facilities (OTF)" in Paper 2

management and tourism businesses located in the adjacent communities. These tensions may be even more acute in a country like Norway where the management approach has been described as "classical nature protection" (Aasetre, 1998).

This paper is based on 14 qualitative interviews, undertaken mainly during the spring of 2009, with representatives of tourism businesses from two national park areas in Nasjonalparkriket – Rondane and Jotunheimen. Despite their general support for the national park status, local tourism stakeholders were critical of the management planning processes and outcomes. First, the tourism representatives reported only minor involvement in the national park planning processes, and had very little input into the final planning arrangements. Second, they felt that management rules and regulations restricted opportunities for tourism-related business operations within the parks. Third, respondents perceived a lack of competence among park managers concerning business management and tourism development issues due to their excessive emphasis on natural science problems (also described by Emmelin (1990, p. 140)). In Rondane National Park, doubts were expressed about the necessity of the measures implemented to protect the wild reindeer, and the scientific evidence supporting these measures. In *Jotunheimen* National Park, respondents called for a visitor strategy to be developed, and expressed a strong desire to be involved in the co-management of the park. In addition, they thought that sustainable tourism development should be explicitly included in management visions and goals for the national park. Overall, a more interactive and positive user strategy with regard to tourism interests was called for.

The local tourism industry in *Rondane* and *Jotunheimen* national parks perceived the current 'top-down' management policies as too rigid, and lacking the flexibility to deal with the complex social dynamics associated with the protection of natural resources in contemporary society (Folke 2004; Hammer, 2007). The frustrations expressed by respondents towards the current management regime can also be understood against a national political backdrop with greater emphasis on viable tourism developments in protected areas, as expectation of improved management dialogue and active support for tourism expansion are likely to have increased during recent years. Based on the findings, there appears to be potential for local tourism operators to take greater responsibility in planning processes and management operations. Considerable investment in communication and relationship-building is likely to

be required in these two national parks to foster durable social links and trustworthy planning partnerships (Cole, 2006) between responsible managers and local tourism stakeholders.

Paper 4 – *Harmony or conflict?* A focus group study on traditional use and tourism development in and around *Rondane* and *Jotunheimen* national parks in Norway

In addition to the *local tourism interests* there are also *traditional rural user interests* in the national parks. The latter category comprises farmers or local landowners with longestablished practices for summer farming, grazing, forestry, hunting and fishing in the mountain areas. Local residents who use the protected areas for recreational purposes (including those securing household supplies by berry picking, hunting and fishing) are also defined as *traditional rural user interests* in this context. The relationship between the traditional rural interests and the local tourism entrepreneurs (who are dependent on a certain level of visitation and thus often express an interest to expand tourism activity in the national parks), are scrutinized in this paper. The study is based on the findings from four focus groups among each of the two stakeholder categories in *Rondane* and *Jotunheimen* national parks.

During the past few decades, a fundamental structural change in the nature of rural areas in the Western world has been witnessed – from being traditional 'landscapes of production' of food and fibre towards 'landscapes of leisure and consumption' (Butler et al., 1998; Groote, Huigen, & Haartsen, 2000; Hoggart, Buller, & Black, 1995). The expansion of nature-based tourism activities and associated services in and around the growing number of protected areas is part of this diversification process. These developments represent new business opportunities for local entrepreneurs. The findings from this study revealed very few clashes of interest between the traditional rural user interests and the entrepreneurial local tourism stakeholders. However, the two groups differed in their views on the wild reindeer protection in *Rondane* National Park. Tourism stakeholders felt that the restrictive management regulations were hampering the tourism industry, whereas local stakeholders who pursue hunting interests felt that it was extremely important to sustain the wild reindeer population. Despite this, the latter group still expressed frustration over certain proposed management measures and regulations, which were considered as 'meaningless', concerning the protection of the wild reindeer.

Contradictory views were evident between groups when discussing the need for genuine tourism growth in the area. The local tourism interests in *Jotunheimen* National Park supported the expansion of a wide range of tourism facilities and activities, including a possible grand-scale development such as the installation of a cable car (gondola) outside the national park. These views reflected an 'openness to change' in order to sustain their businesses and the local community. The traditional rural user interests, however, had a more sceptical attitude, and feared that large-scale developments might change the character of the rural community. The protection of rural lifestyles and the long-established character of the local community were their primary concerns.

Despite the fact that the national park status was broadly supported by the various local stakeholder interests, there were clear differences of opinion regarding the management principles and actions in the parks and surrounding areas. The lack of tourism facilities and services, and the poor conditions for tourism expansion were of great concern to the local tourism interests in both parks. They felt that innovative ideas and new developments which could help to improve the situation for the tourism industry were frequently constrained by management restrictions. This paper concludes that park managers will need to take the views of both 'traditional' and 'new' interest groups into account in the future, and that the efforts of stake holding groups will have to be mobilized to resolve complex and potentially controversial issues which may arise. Focus groups could be a useful tool in the process of ongoing negotiation between the various stakeholder interests.

4.2 Relationships between the four papers

Examining the social dimension

The four papers deal with social 'outsider' and 'insider' perspectives on Norwegian national parks, as both various visitor and resident user interests are taken into consideration. Visitors comprise both potential (Paper 1) and actual (Paper 2) visitors in the national parks of *Nasjonalparkriket*. International tourists are represented in both surveys, but Norwegian tourists form only a proportion of the second survey (conducted in *Nasjonalparkriket*). In the resident stakeholder studies, both tourism entrepreneurs (Paper 3 and Paper 4) and traditional rural user interests (Paper 4) are analysed. In exploring the social dimension of sustainable tourism in national parks, this PhD thus has a particular focus on international tourists'

perspectives (Paper 1 and Paper 2) and local tourism businesses' attitudes (Paper 3 and Paper 4).

By exploring these 'outsider' and 'insider' interests in various ways, this research presents different aspects of the social dimension of sustainable national park development, and thus contributes to an improved knowledge platform for sustainable tourism in national parks.

Case studies and the generalisability of research findings

Paper 1 refers to the situation in Norway in general, Paper 2, to the case study area (Nasjonalparkriket) and Papers 3 and 4 to the state of affairs locally, in Rondane and Jotunheimen national parks (in Nasjonalparkriket). The question is therefore, whether the conclusions from these inquiries can be applied to the regional and national level, i.e. comprising national parks in general in Norway. Every national park has its own distinct natural character, its unique social history and its specific type of visitation. However, one may argue that Norwegian national parks in general share some common features, as outlined above (Miljøverndepartementet, 2004), cf. Chapter 2.2. There is thus reason to believe that the remote, rural, alpine national parks in the case study area (which are subject to the national jurisdiction and the Norwegian management regime), do not differ significantly from this general pattern. The principal Nature Orientations, and the associated Quest for Facilities in and around national parks that were developed from the national border survey in Paper 1, are therefore likely to be relevant to other Norwegian national parks at the regional and local level. The key Nature Orientations and Quest for Facilities were validated in the Nasjonalparkriket-survey, thus indicating the robustness of these findings. It is therefore reasonable to assume that the environmental concerns expressed by the tourists in the latter survey (Paper 2) could also be found (at least to a certain extent) among national park visitors in the rest of Norway.

The local social interests were examined in relation to two protected areas; *Rondane* and *Jotunheimen* national parks. Both parks are located in the case study area, but are different in character. *Jotunheimen* National Park has the highest mountain peaks in Scandinavia and the famous mountain ridge *Besseggen*, and receives relatively high numbers of visitors each year (Vorkinn, 2011; Dybwad & Klæbo 2008), while *Rondane* National Park is deemed to have sensitive ecological status due to the presence of the wild reindeer (Fangel, Abrahamson, &

Ruud, 2009). One could argue that the two parks are, to a certain extent, atypical (because most national parks receive modest visitor numbers, and very few accommodate wild reindeer within their borders) and that they represent 'critical' cases (Yin, 2009, p. 47), which make them highly interesting. Two core dimensions are captured in these parallel case studies (Paper 3 and Paper 4); the significance of high visitation and the issue of susceptible natural resources reflect the principal dimensions of the 'use' vs. 'protection' debate which is central to national park management. The findings are thus of relevance to a wider national park context.

National park management policies and regulations represent opportunities and constraints for tourism activities, and thus have a direct influence on the prospects for tourism industry expansion. The two case studies revealed strong support among all local stakeholders (both tourism entrepreneurs and traditional rural interests) for the national park status of both parks. Local tourism entrepreneurs' critiques of the national park management processes and regulations in the qualitative interviews (Paper 3) were largely supported by focus group participants (Paper 4), and few clashes of interest were reported between the two stakeholder groups in both national parks. In the focus groups, the local tourism entrepreneurs demonstrated an 'openness to change' in order to sustain their businesses and the local community. The last two papers demonstrate that, despite the abovementioned differences in the character of *Rondane* and *Jotunheimen* national parks, local tourism stakeholders share parallel views of both parks. From this recurring pattern (Robson, 1993, p. 401), it can thus be hypothesized that similar local tourism stakeholder positions could be identified in other Norwegian national parks, both inside and outside *Nasjonalparkriket*. The general lack of local adaptation to national park management (Riseth, 2007) supports this supposition.

The visitor interest approaches in Paper 1 and Paper 2

The Nature Orientation scale utilised in both Papers 1 and 2 was developed in a Scandinavian context. Uddenberg's (1995) research into modern Swedes' interpretation of the meaning and significance of natural elements, and the way they immerse themselves with nature was taken as a point of departure. The whole spectrum ranging from basic worldviews and fundamental values to situational attitudes and behavioural preferences is represented in the series of variables used in the national border survey (Paper 1) among foreign motor tourists in Norway and in the internet survey among visitors in *Nasjonalparkriket* (Paper 2). The scale is

thus generated among potential or actual nature-based tourists in a Scandinavian/ Norwegian context, and an enhanced understanding of their main types of nature appreciation is attained. The internet survey among actual visitors in *Nasjonalparkriket* validated the four basic Nature Orientations identified in the border survey; however the *Sightseeing* orientation was re-labelled *Comfort* due to the relative importance of comfort aspects in this dimension.

The scale developed for measuring tourists' Quest for Facilities is explicitly related to Norwegian national park visitation, and could thus be adapted directly to the case study setting. The various requirements for infrastructure, facilities and services comprised provisions located both inside and outside the national parks, and similar dimensions of tourists' Quest for Facilities were found in both surveys. Both scales produced meaningful social categories, and the border survey showed that each of the four principal types of Quests for Facilities was related to distinct Nature Orientations in different ways. The local visitor survey also highlighted that the Nature Orientations *Inspiration* and *Comfort* (Sightseeing)/ Challenge related to more or less concern respectively for the wild reindeer habitat, raptor nesting and attrition on vegetation. The Quest for (Tourism) Facilities dimensions "Infrastructure & service" and "Food & accommodation" (i.e. tourism product interests upheld by Comfort (Sightseeing) and Challenge according to the border survey) fell into the latter domain and, in relative terms, were related to higher degree of acceptance of negative ecological impacts.

The scales used in this PhD study have thus proved to be useful tools for analysing tourist desires, and their level of concern for environmental degradation resulting from tourism activities and facilities in the national parks. In the local visitor survey, the application of more established psychographic scales (the Wilderness Purism Scaling and the New Ecological Paradigm scale) as regards acceptance of negative ecological effects was demonstrated. Thus both new and more conventional scales have been validated.

The local stakeholder approach in Paper 3 and Paper 4

Qualitative interviews with local tourism stakeholders in Rondane and Jotunheimen national parks (within Nasjonalparkriket) revealed that, despite their general support for the national parks status of the mountain areas, they felt that the management planning processes and outcomes left a lot to be desired (as shown in Paper 3). The tourism representatives reported

only minor involvement in the national park planning processes, and stated that they had very little input into the final planning arrangements. The lack of opportunities for tourism-related business in the parks (due to management restrictions) was also highlighted, as was the perceived lack of competence among managers concerning business management and tourism development issues. In *Rondane* National Park, doubts were expressed about the necessity of the measures implemented to protect the wild reindeer, and the scientific evidence supporting these measures. In *Jotunheimen* National Park, respondents thought that sustainable tourism development should be more explicitly included in management visions and goals for the national park, and they called for a visitor strategy to be implemented. They also expressed a desire to be involved in the co-management of the park.

The focus group study in Paper 4 identified similar opinions among local tourism stakeholders in the two parks mentioned above. The traditional rural users (i.e. local landowners, farmers etc.) in the national parks are social interests defining the 'action space' with respect to existing tourism activities and new tourism industry initiatives. When exploring the opinions of both groups (local tourism interests and traditional users) about tourism in the protected areas, there were very few direct clashes of interest. However, contradictory views were evident amongst groups when discussing the need for genuine tourism growth in the area. The local tourism entrepreneurs demonstrated an 'openness to change' in order to sustain their businesses and the local community, whereas the traditional rural user interests had a more sceptical attitude and were afraid that new developments could change the character of their countryside and undermine rural lifestyles and the integrity of their local community. Viable directions for tourism development should therefore be negotiated between the two stakeholder interests.

The qualitative interviews (Paper 3) in *Jotunheimen* National Park revealed that local tourism stakeholders wanted a more explicit inclusion of sustainable tourism development in the management visions and goals for the national park, and called for a visitor strategy to be developed. In the focus groups (Paper 4) respondents in *both parks* called for genuine tourism growth in the area, and the local tourism entrepreneurs demonstrated an 'openness to change' in order to sustain their businesses and the local community. The desire for a visitor strategy in both parks, and the strong emphasis on the need for tourism expansion in both areas may be, in part, an effect of the method chosen, as focus groups often enable groups to exchange more elaborated ideas compared to qualitative interviews.

Both interviews and focus groups enable local tourism entrepreneurs to be 'given a voice' on crucial topics. The inclusion of local knowledge and local stakeholder involvement in management processes are seen as important issues in these two parallel papers.

The relationship between visitor interests (Papers 1 and 2) and local tourism stakeholder concerns (Papers 3 and 4)

The generally low degree of acceptance of negative ecological impacts in national parks among (potential) visitors (Paper 2) and the scant support for "Infrastructure & services" (i.e. large scale installation like gondolas, staged experiences for a greater audience and more commercial offerings) in Paper 1 indicate a relatively high environmental awareness with regard to tourism developments in protected areas. Moreover, the quest for "Infrastructure & services" is upheld by the *Challenge* and *Sightseeing* (*Comfort*) dimensions (i.e. Nature Orientations are less prone to environmental concern) but disapproved by *Recreation*. The nature and location of these types of tourist infrastructure must therefore be carefully considered in order to satisfy the interests of various visitor groups. The prevailing support among tourists for further developments of "Tracks & signposts", "Food & accommodation" products and "Tours & interpretation" services (that could potentially advance the national parks into fully fledged tourism attractions) represent management challenges but also business opportunities for local tourism operators. When negotiating tourism expansion in the national parks, it would be useful to report the tourist desires and expectations (documented in Papers 1 and 2) to the local tourism stakeholders.

Management implications of the four papers

The two surveys (Papers 1 and 2) have produced new information about tourists' Nature Orientations, Quest for Facilities and ecological concerns. These results have high relevance for management policies and decision-making. The findings also represent potential input into the visitor strategy that is called for by tourism stakeholders in Paper 3. Visitors' preferences and concerns are important elements of a knowledge platform which could also represent input into a common sustainable tourism development programme, backed by management agencies and local tourism stakeholders. Such a scheme could be developed for each of the two national parks in question, or for the wider *Nasjonalparkriket*. As

demonstrated in Paper 4, the local tourism stakeholders' aspirations comprise further initiatives to expand tourism in both *Jotunheimen* National Park and *Rondane* National Park.

Paper 3 highlighted the importance of including sustainable tourism development in national park management visions and goals. Findings from the qualitative interviews demonstrated a need for more direct local stakeholder involvement, and improvements in the dialogue between management agencies and the local tourism interests. It is also recommended that park managers increase their knowledge of tourism business and tourism management to foster durable social links between the parties, and to enable the formation of trustworthy planning partnerships. The need for a closer collaboration and coordination between park management and local interests is also a conclusion of Paper 4. Despite the fact that there were few direct clashes of interest between local tourism interests and traditional rural user interests, differing local opinions about important issues were identified. The local tourism interests were primarily concerned about the limited conditions for tourism developments in and around the national parks, and called for a series of new initiatives to encourage tourism development. The traditional rural user interests, however, feared that any major growth in the tourism industry could lead to a loss of local community character. These differences of opinion highlight the importance of open dialogue and integrated planning, involving all local user interests.

5. Further research

Hopefully this dissertation brings new insights into the social aspects of sustainable tourism development in national parks. Still, future research within this field could preferably scrutinize the assumptions in the present PhD study in order to examine the robustness of the conclusions made. Supplementary research approaches and refinement of the methodological instruments could increase the scientific rigour of this work. In addition, such research may benefit from the inclusion of relevant social perspectives that are not part of the current analysis.

One way of expanding the research would be to triangulate (Denzin, 1970; Robson, 1993) within each of the problem domains that are addressed in the dissertation. The thesis draws on two quantitative surveys (a national border survey and an internet survey among visitors in *Nasjonalparkriket*) and two qualitative approaches (interviews and focus groups). Although the quantitative surveys were partly inspired by Uddenberg's (1995) qualitative study, future research would be strengthened by combining qualitative and quantitative techniques for both visitor and stakeholder interests.

A possible research approach would be to also conduct stakeholder studies in various national parks *outside* the case area *Nasjonalparkriket*, as the replication of multiple-case studies is seen as a way to resolve the external validity problem of the research findings (Yin, 2009, pp. 43-44). Cross-site analyses would enable the generalisability of the findings to be assessed (Miles & Huberman, 1984, p. 151) in a wider national context. The stakeholder approach could be employed in other parks with particularly sensitive species (such as the wild reindeer) and in protected areas with less susceptible ecosystems. Another fruitful avenue for further research would be to explore the implications of the recent Norwegian local management model (Direktoratet for naturforvaltning, 2010a; Miljøverndepartementet, 2009-2010).

With regard to the methodological instruments used in this PhD, there is a need to refine the psychographic scales for use in future studies: The insufficient underpinnings of two Nature

Orientation dimensions, i.e. *Comfort* and *Challenge* (cf. Paper 2), indicate that these dimensions should be elaborated further (cf. Thurstone (1927) to include at least three factors per indicator). In addition, the social dimension of the various Nature Orientations could be more fully captured in the survey instrument, as the significance of closeness to co-travelers is included, but not the importance of the presence of other tourists. The role of the latter category is of particular interest as it relates directly to an important dichotomy in the tourism literature – the 'romantic gaze' vs. the 'collective gaze' (Urry, 2002; Jacobsen, 2004). This is the idea that 'romantic tourists' emphasize "...solitude, privacy and a personal, semi-spiritual relationship with the object if the gaze" (Urry, 2002, p. 43), which is in contrast to the 'collective gaze' where the attendance of other tourists supposedly gives the place a unique and appealing atmosphere (Urry, 2002).

Psychographic scales are increasingly being used to identify and segment nature oriented tourists (Luo & Deng, 2010). As demonstrated in Papers 1 and 2, such scales were also appropriate tools in this PhD study – even if the new instrument Nature Orientation requires further refinement and validation. This will be carried out in future SUSTOUR research tasks, representing the total Norwegian population and in the follow up PROTOUR project⁵.

Several social perspectives which were not included in the PhD project should also be addressed in any future research. For example, the survey reported in Paper 1 covers motor tourists from three countries of origin, leaving Norway by ferry. The sample therefore represents only a proportion of the international tourism traffic in Norway, meaning that generalisations of these findings to international tourists from other countries of origin and/ or using other modes of transport cannot be made. In addition, the social interests of the general Norwegian public and the wider population residing in the *Nationalparkriket* area are omitted in the PhD study. These interests are, however, addressed in the wider SUSTOUR project (Veisten et al., 2007). Social or political movements (such as voluntary environmental protection and cultural preservation interests), political representatives on local, regional and national levels and international organisations (such as EU, IUNC, UNWTO) should also be included in future research to cover a broader range of social interests on various societal levels.

⁵ The full name of the follow-up PROTOUR project: Prospects for Managing Tourism Development in a Period of Transition

Management interests at a municipal, county and national level should also be taken into consideration. Research-based insights into management participation processes are lacking (Gundersen et al., 2011), and alternative courses of actions for managers should be highlighted. In what ways can visitor desires and local tourist interests be included in national park management strategies? The challenges and opportunities presented by such inclusions could be legal regulations (laws and conventions), economic (human or material resources), professional (staff expertise in business and tourism as well as natural sciences), and sociocultural (custom, tradition for what are considered relevant management tasks). These social mechanisms should be further scrutinized. Alternative management perspectives based, for example, on zoning strategies developed in North American national parks (Manning, 1999b; Emmelin, Fredman, & Sandell, 2005, Haukeland & Lindberg, 2001; Gundersen et al., 2011) are relevant to discuss in this context. One example is the Recreation Opportunity Spectrum (ROS), which has been implemented in Fulufjället National Park in Sweden (Fredman, Friberg, & Emmelin, 2005). Gundersen et al. (2011) propose an adaptation of both the Recreation Opportunity Spectrum (ROS) and the Limits of Acceptable Change (LAC) framework in their recommendations for goal-oriented management in Norwegian national parks.

Some important organisational and planning issues are addressed in the forthcoming PROTOUR project – for example, the conflicts embedded in various parts of the management systems, leading to slow, and sometimes irrational, management processes. This research will examine more practical strategies for co-management, incorporating the views of managers and various stakeholders as a way of building trust and mutual understanding. International comparisons will also be made between management practises in Norway, and in countries with more advanced policies for sustainable tourism development in national parks (Veisten et al., 2007).

In summary, future research should seek to further expand our knowledge of the social aspects of tourism in protected areas. The aspiration is that this stream of research (of which the present PhD study is a part), will contribute to the knowledge platform supporting sustainable tourism development in national parks throughout the world. This will hopefully help to support new synergies and to nourish new partnerships between tourism and nature conservation interests in protected areas.

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Paper 1



Turning National Parks into Tourist Attractions: Nature Orientation and Quest for Facilities

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ABSTRACT This paper presents an exploratory analysis of foreign tourists' quests for facilities in Norwegian national parks, related to their expressed nature orientation. The analysis was based on a survey among German, Dutch and Danish tourists during the summer season of 2008. Exploratory factor analysis was applied to identify underlying dimensions from indicator questions related to nature orientations and to quest for facilities inside and outside the national parks. The indicator questions were primarily inspired by Nils Uddenberg's classification of modern Swedes' nature orientations. We found a significant, although fairly weak, relationship between nature orientation and quest for facilities, applying multivariate regression modelling. The strongest relationship was found for the quest for larger management measures - "Infrastructure & services" - supported by nature orientations labelled Challenge or Sightseeing, while these were disapproved of by the traditional outdoor Recreation orientation. The wish for "Tracks and signposts" was also upheld by nature orientations Challenge and Sightseeing. A segment of the tourists, based on cluster analysis, indicated that one third requested development of "Infrastructure & services", but this segment demanded all kinds of facility developments. The results indicate national park development potentials, clarifying which developments are contended, and diversifying the demand from three major nationalities visiting Norway.

KEY WORDS: Sustainable tourism, protected area, mountain region, factor analysis, cluster analysis, resource management

Introduction

Tourism is becoming increasingly segmented, and among those growing is the nature-oriented segment. The quest for nature experiences is apparent worldwide (Cohen, 2008). According to Newsome, Moore and Dowling (2002) nature-based tourism is booming and amounts to 20% of all leisure travel globally. Particularly in the

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Scandinavian context the image of the various tourism destinations and sites is to a large extent associated with natural attractions and the possibilities for nature-based activities. Experiencing nature is thus considered as a primary travel motive among foreign visitors in the Nordic region (Gössling & Hultman, 2006, p. 3; Viken, 2006). National parks in particular are assumed to represent potentials for tourism development, as pristine and protected natural areas with outstanding scenery and undisturbed natural environments have a strong appeal to international tourists in Scandinavia (Reinius & Fredman, 2007).

Due to its high importance as an element in modern travel it is of principal interest to identify what kind of meaning and significance visiting tourists ascribe to nature experiences. In spite of the restrictive management of national parks in Norway, the authorities have signalled a candid desire to increase sustainable economic development in protected areas (Finansdepartemenet, 2003; Miljøverndepartementet, 2005). Moreover, one of the approved basic principles of sustainable management of protected areas is the incorporation of various user interests in the planning process (Bushell & Eagles, 2007, p. 333). The foreign tourists in Norway represent an important stakeholder group that should be paid attention to (Jacobsen, 2007) and the principle goal of this paper is thus to reveal the foreign tourists' user interests and opinions regarding management issues inside and adjacent to national parks.

The data is based on a survey among German, Dutch and Danish motor tourists leaving Norway by ferry during the summer season 2008. The study sheds light on a category of user interests related to the management of protected areas that to date has been inadequately scrutinized in Norway. By the use of factor analysis vital dimensions regarding the quest for facilities inside and outside national parks are identified based on an array of variables comprising various elements of infrastructure, facilities, services, activities and experiences faced by the visitors. These expressed interests and specific concerns as regards national park management issues are explained by vital dimensions of the respondents' nature orientation which are extracted from a broad range of nature-related motives, values, attitudes and actual behavioural preferences. By way of a cluster analysis essential market segments regarding quest for facilities are finally distinguished, and their general size and occurrence within the three international markets are presented.

The indicator questions were primarily inspired by Nils Uddenberg's classification of modern Swedes' nature orientations (Uddenberg, 1995) and our analysis illuminates their significance for the tourists' *quests for facilities* particularly relevant in a Norwegian/ Nordic context (Kajala et al., 2007). Identification of these relationships will clarify premises for possible management strategies in Norwegian national parks and their degree of support among three tourist nationalities visiting Norway.

The paper is arranged as follows: In the next section theories of tourism motivations and factors explaining search for tourist experiences are presented. Moreover, how values and basic attitudes form the foundation for what tourists seek in a natural setting and in protected areas more specifically are also discussed. The methodology for identifying the vital dimensions in the study and the data base for the analysis are introduced in the third section. The fourth section presents the results of the data analysis, including exploratory factor analyses and cluster analysis. Our findings are discussed and concluded in the final section.

Theoretical Background

Tourist Motivations and Socio-Economic Explanations of Demand for Tourist Experience

In the general tourism literature various motivation elements influencing choice of destination have been highlighted since the 1970s (Gibson & Yiannakis, 2002; Pakizeh, Gebauer & Maio, 2007, p. 458), but as noted by Ryan and Glendon (1998) and Pearce (1993), there are few comparative studies within the field of tourism in this respect. Crompton (1979) identified nine motives which affect the choice of destination; i.e. seven socio-psychological motives: escape from a perceived mundane environment, exploration and evaluation of self, relaxation, prestige, regression, enhancement of kinship relationships, and facilitation of social interaction, and two residual motives, novelty and education, that founded the remaining cultural category. Dann (1981) assumed that there are principal differences between socio-psychological motives (push factors) and destination attributes (pull factors) in determining destination choices. In line with this Iso-Ahola (1982) constructed the escape-seeking dichotomy, claiming that both factors in the individual's daily surroundings and destination attributes create a certain disposition for the destinations that are preferred. There is a wish both to leave behind an everyday environment and to seek an intrinsic reward in the form of a new experience at the place chosen for the vacation. Various social forces may also account for the variance in tourist behaviour and these may be more or less inter-related with motivational factors (Crompton, 1979). Holidaymakers' needs and their actual performing of tourist roles have been understood for instance within a life course perspective (Gibson & Yiannakis, 2002), a life stage viewpoint (Anderson & Littrell, 1995) and within the so-called "Travel Career Ladder" (Pearce, 1996), which is related to Maslow's theory of the hierarchy of human needs (Maslow, 1954). Factors related to the significance of the holidaymakers' age have been focused (Fleischer & Pizam, 2002) and the gender issue has been addressed by Gibson and Yiannakis (2002). The explanatory power of the tourists' socio-demographic profile is demonstrated by Alegre and Pou (2006).

Values, Attitudes and What Tourists Seek in a Natural Setting

Value systems play an important role in people's worldviews or basic orientations in their lives. Building on Feather (1992), Rohan (2000), Rokeach (1973) and Schwartz and Mark (1992), Pakizeh et al. (2007, p. 458) maintain that "people rely on these values by using them implicitly or explicitly to determine their future directions and justify their past actions, ... and rationalize their attitudes and behaviour". Keulartz, van der Windt and Swart (2004) emphasize the importance of values as something which is not negotiable in contrast to for instance social interests. Values thus serve as a guiding principle of a person or a social unit (Schwartz & Mark, 1992), and can predict attitudes and actual behaviour (Bardi & Schwartz, 2003). Values are regarded to be quite stable and transcend specific situations (Buijs, 2009; Rokeach, 1973). Attitudes can be seen as something that are derived from values (Ajzen & Fishbein, 1980; Grob, 1995) and can be considered as predispositions toward a concrete object

or situation (Buijs, 2009), for example related to preferences for various specific management measures and commercial services in a national park setting.

Values are emotionally based beliefs and motivational constructs that guide the selection and evaluations of for instance policies and policy measures, concrete actions etc. (Schwartz, 2009). Although the relationship between values, attitudes and actual behavioural preferences is not absolutely clear, we will assume that it is possible to condense the broad range of elements across the layers within this hierarchy into more restricted sets of coherent and meaningful frameworks¹.

Kluckhohn (1950) proposed a scheme for categorizing individuals' worldviews defined by answers given to questions in six basic "orientations" of human thought. Two of these were defined as man-nature orientation and activity orientation (see also Kluckhohn and Strodtbeck (1961), Koltko-Rivera (2004)²) and they are highlighted here as they seem highly relevant to the identification of nature-based tourism experiences or outdoor recreation profiles. Within the man-nature orientation humans could be subjugated to nature, live in harmony with nature, or be in mastery over nature; the latter two being particularly relevant in the context of management of protected natural areas. The way people relate to the natural environment has been a major concern in this stream of research (see for example Uriely, Reichel & Shani, 2007) and Thompson and Barton (1994) present the two classical approaches as regards the principle ways human beings relate themselves to the physical environment: According to the *ecocentric* approach individuals appreciate nature because of its intrinsic value whereas in contrast the anthropocentric attitude underlines that nature should be protected as a means for maintaining or enhancing the quality of life for humans (for economic or aesthetic reasons for example). It is also observed that ecocentric values are by and large expressed by urban and highly educated people (Bell, Greene, Fisher, & Baum, 2001).

A nature-oriented tourist is often coined an "ecotourist"; a tourist visiting natural environments while seeking to contribute to minimal harm and/or enhance protection of the resource base (Dolnicar, 2006; Eagles, 1992; Kretchman & Eagles, 1990)³. According to The International Ecotourism Society (TIES) ecotourism at the same time enhances the well-being of local people (TIES 1990). A differentiation between the so-called "hard core" ecotourists who display a strong environmental commitment and the softer type who demonstrate a more superficial attitude has also been made (Weaver, 2005, 2008). The former ideal tourist is, among other things, characterised by searching deep interaction with nature, being more physically active, seeking more physical challenges, expecting few if any services and above all emphasising personal experiences. The "soft" ecotourist, on the other hand, typically interacts with nature in a shallow way, seeks comfort, expects services, puts emphasis on interpretation rather than physical challenges. Weaver also maintains that "... soft activities typically involve larger numbers of participants who make relatively short and physically comfortable visits to serviced sites as one component of a multipurpose experience ..." (Weaver, 2005, p. 446)⁴.

A parallel distinction is made between "high-" and "low-level" specialization of outdoor recreation activities (Bryan, 1979), where the former is corresponding to "hard core"/ "deep" ecotourism and latter to "soft"/ "shallow" ecotourism. Like all leisure activities various outdoor recreation and nature-based activities can be

measured according to their intensity of involvement (Scott & Shafer, 2001). Within this continuum it is assumed that the more specialized the nature tourists are, the more skilled and knowledgeable they are, and the more dedicated they tend to be towards sustainability issues (Lemelin, Fennel, & Smale, 2008). Related differentiations of activity types and levels have been made within adventure tourism literature (Ewert & Hollenhorst, 1997; Schneider, Vogt, & Smith, 2006), e.g. "soft nature" vs. "hard challenge" (Sung, Morrison, & O'Leary, 2000) or "nature tourists" vs. "physical challenge seekers" (Lang & O'Leary, 1997).

Implications for Visitor Management

In spite of the assumption that "high-level" specialists demand few amenities on the natural site they visit, Butler (1999) points out that tourism development will have some impacts upon the location within which it occurs. Many forms of small-scale alternative tourism, such as for example high-level ecotourism, are often situated at highly sensitive and vulnerable sites and even moderate levels of use may generate severe environmental impacts — especially if adequate infrastructure and effective planning measures are not put in place (Butler, 1999, p. 12). Besides, even the most sophisticated nature-oriented tourists may have particular demands on qualities and facilities (Knowles, Macmillan, Palmer, Grabowski, & Hashimoto, 1999).

Increased differentiation of activity interests among nature-oriented tourists will necessitate more adequate information about potential visitors in national parks and a better understanding of their expectations (Bushell & Eagles, 2007, p. 38). In many countries around the world, and not least in the Scandinavian/ Norwegian context that we now shall turn to, national park managers will probably be more and more interested in analyses of visitors' needs and preferences to develop management programmes and to provide adequate recreational opportunities in order to serve the tourists' expressed interests (for an overview of examples of research on visitor attitudes and preferences for facilities and services in natural settings, see Manning (1999, pp. 49–63) and Kajala et al. (2007)).

Essential Nature Orientations and Quest for Tourism Developments in Norwegian National Parks

Uddenberg (1995) has made an in-depth examination and classification of modern Swedes' interpretation of the meaning and significance of natural elements and experiences in their personal lives and the way they immerse themselves in the surrounding nature. A series of variables ranging from philosophical reflections and aesthetical considerations to recreational opportunities and activity interests were considered important in Uddenberg's study which was based on qualitative interviews. The expressed nature orientation thus comprises the whole spectrum ranging from basic worldviews and fundamental values to situational attitudes and behavioural preferences. The deeply felt values were even under some circumstances considered as sacred, allowing the interviewees to experience something mighty and overwhelming (Uddenberg, 1995, pp. 46–47). In a natural setting the respondents were given the opportunity to immerse themselves with the physical surroundings and thereby feel a

kind of connectedness with nature and landscape (Uddenberg, 1995, p. 48). A certain magic and mysticism can be traced in the verbal reflections and also the magnificent character and outstanding beauty of nature and landscape were identified as essential. Uddenberg (1995, p. 55) found that nature provides a broad spectrum of captivating sensual impressions. Moreover, nature represents tranquility and peacefulness, a space that is different from everyday life, a pulse/ time rhythm that is uncommon and a source of inspiration and also providing renewed strength and energy (Uddenberg, 1995, pp. 38–40, 48, 56).

Several studies indicate that various elements similar to the above mentioned are important when tourists visit natural areas. Based on a literature review Pan and Ryan (2007) identified five general categories regarding motivations for visiting forest parks in New Zealand; "relaxation, sociability, skill mastery, intellectual, and a sense of belonging in terms of place attachment" (pp. 289–290). In their study of motivations they included elements like the wish to learn about nature, to gain inspiration, to protect one's health and to seek tranquillity/to contemplate in addition to general motivation factors commonly used in tourism studies (Pan & Ryan, 2007).

With a reference to Eagles (2001), Reinius and Fredman (2007) point out that the name national park is closely related to nature-based tourism and is a symbol of high-quality natural environments. The national parks thus tend to be prominent tourism attractions and in many countries a well-designed infrastructure is often put in place to serve the tourists. In Reinus and Fredman's study of users of protected areas in Sweden both motivational factors and the importance of various tourism facilities are identified as reasons to visit the nature attractions.

The literature review has revealed that tourists' nature orientations can be understood as an integrated part of their basic values and worldviews. The significance that tourists actually ascribe to various orientations is therefore a major concern in order to obtain a better understanding of their quest for facilities when they visit nature areas. As much of the literature is based on observations in other parts of the world and the main concepts of people's nature interest are developed in different social and cultural contexts, we find it particularly relevant to take Uddenberg's (1995) above-mentioned Swedish study into consideration as a point of departure. The aim of this contribution is therefore to explore the ascribed meaning of and fascination for nature in further detail and to analyse how the various dimensions are linked to preferences for actual facilitation for tourism in a national park setting.

Tourism Developments in Norwegian National Parks

In contrast to many other countries the national parks in Norway are modestly developed to cater for the needs of the tourists. The management schemes for the various parks have traditionally viewed tourism as a threat to the natural resources, despite the fact that there has been a dearth of research to support this – a state of affairs that Kaltenborn (1996) believes to be common in management regimes driven by natural researchers and operating in a worldview of bio-ecological science. In a study of Norwegian nature managers' attitudes, Aasetre (1998) described the national park management strategies as "classical nature protection", in which strong emphasis is

placed on the safeguarding of natural elements, and far less concern is given to tourism development interests. This approach indicates that protected natural areas should be separated from other societal activities; as expressed in the catchphrase of the Norwegian Directorate of Nature Management: *Nature as it was meant to be*.

Until the beginning of the millennium commercial activities within the national parks' borders were not permitted and firm restrictions have to date been put on visitor facilities and services, apart from a system of signposting, hiking tracks and accommodation provisions that has been upheld by a membership organisation, *Den norske turistforening* (DNT) — the Norwegian Trekking Association (http://www.turistforeningen.no/english/) — specializing on hiking activities. But since the millennium, a new way of thinking has emerged within national political circles. The decline of rural economies has led to increased interest in using nature tourism as a regional development tool, and the expansion of facilities and activities in and around national parks is viewed as a means of creating additional tourism-related jobs in adjacent communities (Finansdepartemenet, 2003; Miljøverndepartementet, 2005). Further, in the Government's action plan for the tourism industry national parks are mentioned as a specific component of the new national branding strategy for Norway (Nærings- og handelsdepartementet, 2005).

Material and Methods

Design and Sample

In 2008 the total number of international summer holiday visitors to Norway was estimated to be 2 million, representing 16.6 million guest nights according to the Norwegian Visitor Survey (Rideng, Haukeland, & Heimtun, 2007). The data presented in this analysis is based on a representative sample of 947 German, Dutch and Danish motor tourists leaving Norway by ferry during the summer season 2008 (1 May–30 September). The corresponding tourist population amounts to 331,000 holiday tourist arrivals and 3.9 million guest nights. These figures imply that the chosen category of foreign motor tourists make up a substantial share of the total number of international summer holiday visitors in Norway.

The survey comprised international passengers on seven out of eight international ferry lines conveying Danish, German and Dutch tourists to and from Norway. The final sample of ferry departures was selected to reflect the actual structure of the passenger traffic from Norway to Denmark and Germany (there are no direct connections between Norway and the Netherlands). Four Norwegian city and town harbours (i.e. Oslo, Langesund, Kristiansand and Bergen) were covered comprising the seven ferry lines Oslo – Kiel, Germany; Oslo – Frederikshavn, Denmark; Oslo – Copenhagen, Denmark; Langesund, Norway – Hirtshals, Denmark; Kristiansand, Norway – Hirtshals; Kristiansand – Hanstholm, Denmark and Bergen, Norway – Hanstholm. Nineteen departures dispersed throughout the summer season were included in the final sample. A total of 1048 motor tourists were asked to take part in the survey and 986 completed questionnaires were collected, resulting in a response rate of 95%. The final sample consisted of 947 questionnaires, as other nationalities, business travellers and day visitors in Norway were left out.

The Questionnaire

The respondents' quest for facilities in association with visitation in Norwegian national parks is measured by a range of questions related to various requirements for infrastructure and services, and the questionnaire also comprises preferences for activities and experiences related to these elements. Questions covering the respondents' nature orientation are presented as general nature-related motives, values, attitudes and actual behavioural preferences. These two series of questions were listed in batteries and presented on a five point Likert-like scale ranging from 1 (of none importance) to 5 (of great importance). In addition, several social background characteristics were included, such as the respondents' nationality, level of income, level of education, size of place of residence and access to nature areas at home. Questions regarding their Norway tour were also presented, comprising number of repeat visits to Norway, main type of accommodation used, number of places with overnight stays in Norway, and regions visited in the country.

Data Collection

The survey was based on a self administered fill in questionnaire and handed out to the motorists waiting in line to embark the ferry and collected by a trained staff of interviewers. A pre-test of the questionnaire was undertaken among a small number of motor tourists waiting in the line to embark the ferry from Oslo to Frederikshavn. A Danish version of the questionnaire was thereafter translated into Dutch and German. Respondents typically used approximately 20–30 minutes to fill in the questionnaire. We consider the time upon leaving the country to be optimal for conducting a visitor survey of this type, as the respondents have a fresh experience and also a relatively detailed memory about their stay in Norway. The waiting time in the queue of vehicles is also for practical reasons advantageous, as the time spent is uncontested for most respondents and respondents may complete the questionnaire undisturbed while sitting waiting in their own vehicle.

Data Analysis

Non-response was in general treated as missing values in the generated SPSS version 14.0 data file. Exceptions were made in those cases where similar types of questions were listed in relative comprehensive batteries. Within these batteries the lowest value (for instance "of no importance") was attributed to non-response on a given question supposing one or more questions in the same battery was ticked off. If no question in the battery was marked, the whole series of questions was treated as missing values.

The aim of the existing analysis was to examine the quest for facilities in association with visitation in Norwegian national parks. Expressed interests and specific concerns as regards national park management issues are explained by vital dimensions of the respondents' nature orientation. By way of applying exploratory factor analysis to sets of indicators representing tourists' nature orientation and their quest for facilities in Norwegian national parks, we scrutinize the two conceptual constructs (factors) and explore their dimensions. Exploratory factor analysis is

appropriate for uncovering how underlying constructs influence responses to a set of questions about these indicators, without assuming a relationship a priori (Harman, 1976). In assessing possible relations, the old advice from Thurstone (1927) of including at least three indicators per factor is applied.

Factor analyses based on the principal component extraction method with the Varimax rotation is applied, i.e. an orthogonal rotation of the factor axes to maximize the variance of the squared loadings of a factor (column) on all the variables (rows) in a factor matrix. Regarding assessment of factor loadings on indicators, Raubenheimer (2004) differs between "high" (above 0.60), "medium" (between 0.40 and 0.60), and "low" (between 0.25 and 0.40). We consider loadings above 0.40 as minimum for providing a characteristic of the factor. The number of factors is determined using the variance explained by retained factors. For an assessment of the robustness of the estimated relations, a bootstrap test is carried out. Moreover, to detect the particular interest segments concerning *quest for facilities*, a K-means cluster analysis is performed.

Results

Description of Sample

The data set contains information about the respondents' social background attributes. The sample consists of 57% German, 26% Dutch and 16% Danish motor tourists. Sixty-one percent of the respondents were male and the average age was reported to be 47 years (arithmetic mean, SD 12.2). A total of 24% stated they had a high income and 63% a medium level income (self reported on a three level scale). A total of 32% had higher education (at least 4 years in college/ university) and 25% lower education (elementary school only). Thirty-seven percent live in a medium sized (> 50,00 inhabitants) or larger city (> 500,000 inhabitants) and 31% described their access to natural areas in their daily habitat as "very good".

A series of characteristics regarding the Norway tour can also be described. A total of 27% of the respondents visit the country at least once a year, but on the other hand 39% were first time visitors or had not visited Norway in the last three years. In the 2008 summer season 15% stayed mainly (i.e. more than half the guest nights in Norway) in hotel accommodation, 45% stayed mainly in rented or privately owned cabin, 37% stayed overnight in only one single place, whereas 17% stayed at eight or more diverse locations. A number of 45% had stayed overnight in the southernmost part of the country and 7% in the northern part of Norway. The arithmetic average number of overnight stays in Western (Fjord) Norway was 6.12 (standard deviation 6.8) and in Northern Norway the respective figure was 0.72 (SD = 3.0).

Dimensions of Nature Orientation on the Norway Tour and Quest for Facilities in Norwegian National Parks

Nature orientation is built on a set of indicators exposing philosophical reflections, aesthetical considerations, recreational opportunities, recreational interests, etc., which mirror values, attitudes and behavioural preferences. Table 1 includes the

Table 1. Rotated factor matrix for basic *nature orientation* on Norway tour (factor loadings lower than 0.4 are not shown); N = 762.

	Inspiration	Recreation	Challenge	Sightseeing
Feel connectedness with landscape and nature	.713			
Experience nature's magic and mysticism	.693			
Obtain a deeper connection in life	.689			
Obtain a feeling of freedom	.687			
Find inspiration in natural surroundings	.650			
Encounter something different from everyday life	.649			
Experience nature's beauty	.598			
Regain another pulse/time rhythm	.554			
Experience something mighty and overwhelming	.527			.477
Feel greater closeness to co-travellers	.526			
Recharge batteries/regain strength	.445	.543		
Tranquillity and peacefulness		.796		
Physical relaxation in nature		.743		
Fresh air, clean water and unpolluted environment		.694		
Sense impressions (sight, hearing, fragrance, taste, etc.)		.579		
Endorse good health		.562	.557	
Search for challenges with a certain risk			.724	
Demanding physical activities in nature			.688	
Increase my knowledge/ understanding of nature			.470	
Enjoy comfort in natural surroundings				.662
Sightseeing on my own				.518
% of variance explained	37.9	7.2	6.4	5.0

various indicators that have been addressed in association with the respondents' Norway tour. An unpolluted environment with fresh air and clean water is ranked highest and seen as rather or very important by 9 out of 10 respondents. At the other end of the scale the search for challenges with a certain risk is considered unimportant by 6 out of 10.

Table 2 shows the selected set of indicators for the *quest for facilities* in the national parks and their immediate surroundings. Visitor centres with exhibitions receive the highest score, as they are assessed to be of some degree of importance among nearly

50% of the motor tourists in the sample. At the opposite end roughly 75% deem staged experiences for a greater audience to be of little or no importance at all.

By the use of factor (principal component) analysis vital dimensions regarding the respondents' interpretation of the meaning and significance of experiencing natural and landscape elements on their Norway tour were identified. Table 1 reveals the four solutions suggested by the exploratory factor analysis as regards the informants' basic *nature orientation* (56.4% of the total variance in the data was explained):

- (1) *Inspiration:* Underlining the importance of experiencing something different from everyday life, regain another pulse/ time rhythm, obtain a feeling of freedom, recharge batteries/ regain strength, find inspiration in natural surroundings, experience nature's beauty, come into contact with something mighty and overwhelming, obtain a deeper connection in life, feel connected with nature and landscape, be subjected to nature's magic and mysticism, and feel greater closeness to co-travellers. This orientation thus includes a desire for belonging to both natural and social elements.
- (2) Recreation: Focusing on physical relaxation, recharging batteries/regaining strength, quest for tranquillity and peacefulness, pursuing good health, sense impressions and appreciation of fresh air, clean water and an unpolluted environment. The serenity and undisturbed quality of nature is highly appreciated in this dimension.
- (3) Challenge: Searching for demanding and challenging physical exercises with a certain risk in addition to emphasizing the value of attaining good health and enhanced knowledge about nature. The orientation represents an active physical utilisation of the resource base.
- (4) *Sightseeing:* The enjoyment of touring Norway in a comfortable way and seeing sights of interest and the delights of sublime nature is embedded in this particular orientation.

In a parallel way the use of factor (principal component) analysis distinguishes four vital dimensions regarding the *quest for facilities* in association with visiting Norwegian national parks (Table 2). The factor solutions are based on the statistical treatment of a set of variables comprising the perceived importance of various elements of infrastructure, facilities, services, activities and experiences faced by the visitors (60.1% of the total variance in the data is explained):

- (A) "Tracks & signposts": Claiming improved tracks for hiking and cycling, more nature paths for self-guiding, better signposting, more accessible information, enhanced picnic areas, increased opportunities for various activities, zoning of activities and more service personnel. The desires are related to management measures within the national parks' boundaries.
- (B) "Infrastructure & service": Demanding entertainment and staged experiences for a greater audience and cable cars and similar large physical installations, and also requiring increased sales and renting of clothes and gear, welcoming additional activities, more service personnel and extra motor boat trips on the lakes, and also wishing for physical zoning of the various activities. The aspirations for

Table 2. Rotated factor matrix for *quest for facilities* in and adjacent to Norwegian national parks (factor loadings lower than 0.4 are not shown). Facilities inside the park borders are marked in italics; n = 664.

	"Tracks & signposts"	"Infrastructure & service"	"Food & accommodation"	"Tours & interpretation"
More and better sign posting	.772			
More nature paths for "self-guiding"	.723			
More accessible information	.681			
More and improved rambling tracks	.678			
More picnic areas	.675			
More cycling tracks	.543			
More service persons	.533	.594		
Increased opportunities for various activities	.501	.656		
Zoning of different activities	.490	.544		
Gondolas and similar great installations		.747		
Staged experiences for a greater audience		.666		
Better options for motorboat trips on the lakes		.659		
Purchase/rent of clothes and outfits		.471		.407
Accommodation with good standard			.785	
Well developed food and beverage facilities			.754	
Abundance of accommodation facilities			.750	
Local food specialities			.586	
Guided tour/sightseeing to see animals/natural attractions				.794
Guided tour/sightseeing to cultural attractions				.755
Visitor centres with exhibitions				.689
Supply of roads, parking areas, etc.				.479
% of variance explained	37.7	9.6	7.1	5.7

- management developments comprise both the national parks as such and their surroundings (gateways) and also commercialized tourism products of various kinds are welcome.
- (C) "Food & accommodation": Asking for abundant provision of places to stay overnight and high standard accommodation and taking an interest in adequate meal services and local food offerings. The developments asked for are located outside the national parks' boundaries and reflect an interest in tourism products among foreign motor tourists bypassing the national parks.
- (D) "Tours & interpretation": Desiring tour guiding/sightseeing to both cultural and natural attractions, expressing an interest in visitor centres with exhibitions and imparting of knowledge and also requiring purchases or rent of clothes and outfits and supplies of roads and parking areas. The developments asked for will normally be based outside the national parks' boundaries but could also comprise tours into the protected areas.

In order to test the robustness of the factor extractions, a bootstrap test was conducted on a new data set sampled by random selection with replacement from the original data, such that the new sample obtained the same number of observations as the original sample. The factor analyses of the *nature orientation* and *quest for facilities* indicators were then repeated on the drawn sample. The new statistical test showed no alterations compared to the original factor compositions, indicating satisfactory robustness of the factor structures. Both factor structures were based on the samples of all variables first selected to represent the *nature orientation* and *quest for facilities* aspects. Factor analyses excluding variable loadings above 0.4 on more than one factor were also tested. These tests rendered less stable factors with weaker explanatory power in both factor and regression analyses. The original factor structures containing also variables bridging over two factors were thus retained for the further analyses.

Internal consistency for the scales of each factor is examined using Cronbach's alpha. The alphas show high values for both the *quest for facilities* and the *nature orientation* factors (Cronbach's alpha was .71 for *Challenge* and varying between .80 and .89 for other indicators), and could not have been further increased by eliminating any items. One exception was found from this pattern; Cronbach's alpha for *Sightseeing* was .46 which is considered a low figure. In spite of this weakness, which is probably related to some unbalance in indicator questions as only three variables are related to this factor, the fourth nature orientation still gives meaning to us: "The pleasures of sightseeing in sublime natural surroundings are considered to be a classic tourist practice in Western countries since the dawn of modern tourism" (Löfgren, 1999, pp. 39–40). Besides, inclusion of this factor does not influence on the variable composition of the other three factors for nature orientation. The skewness (highest absolute score –.81) and kurtosis (highest absolute score –.77) are acceptable for assuming a normal distribution.

Explaining Quest for Facilities in National Parks by Nature Orientation

A multiple regression analysis was carried out in order to identify and measure how the four principal dimensions regarding desirable tourism development instruments in national parks are influenced by basic nature orientation and other social factors. The various dimensions of nature orientation and quest for facilities are represented as composite scores of the items with sufficient factor loadings (>.4). Multicollinearity problems among the explanatory variables have not been detected. The level of intercorrelation is in general low with only a few occurrences of moderate collinearity.

When controlled for, a series of social background characteristics and attributes of the actual Norway tour the preferences for "Tracks & signposts" within national parks are positively influenced by two of the identified nature orientations (Table 3): The orientations coined *Challenge* and *Sightseeing* respectively are both significantly (p < 0.01) contributing to the desire for "Tracks & signposts". The identified interest in this type of classical park management instruments is thus underpinned by two rather diverse nature orientations among the foreign motor tourists. The variables having a statistical effect on the requested management measures and tourism products named "Infrastructure & services" in and around national parks are presented in the regression model in Table 4. The wish for these more resource demanding and partly grand scale management efforts and commercialized products are influenced in a significant way (p < 0.01) by both nature orientations *Challenge* and *Sightseeing*. On the other hand, the orientation labelled *Recreation* has a significant (p < 0.01) negative impact on these hedonistic management provisions.

The dimension "Food & accommodation" products outside national parks reflects the interests of foreign motor tourists bypassing the national parks and looking for high quality accommodation and food services with a mark of local origin (Table 5). The facilities and provisions asked for are supported statistically (p < 0.01) by the nature orientation *Sightseeing*. Not surprisingly this quest is also statistically strengthened by motor tourists staying mainly in hotel accommodation on their Norway tour.

Table 3. Coefficients from linear regression analysis of Factor A "Tracks & signposts".

Variable	Description	Standardized Coefficients
(Constant)		
Challenge	Nat. orient.: Composite score on factor 3	.163***
Sightseeing	Nat. orient.: Composite score on factor 4	.116***
REPEAT_VISITOR	Dummy (1/0). 1: One or more yearly visit(s) to Norway	133***
SOUTH	Dummy (1/0). 1: Visited Southern Coast of Norway	.118***
HOTEL_CAMPING	Dummy (1/0). 1: >50 % of overnight stays were hotel or camping	120***
AGE_MALE	AGE (ratio) * MALE (1/0): Age (years) of male motorist	185**
AGE_FEMALE	AGE (ratio) * FEMALE (1/0). Age (years) of female motor tourist	182**
COUPLE	Dummy (1/0). 1: Couples with or without children	.102**

Significance levels: *< 0.1, **< 0.05, ***< 0.01

Adj. $R^2 = 0.11$, n = 573

Table 4. Coefficients from linear regression analysis of Factor B "Infrastructure & services".

Variable	Description	Standardized Coefficients
(Constant)		
Recreation	Nat. orient.: Composite score on factor 2	166***
Challenge	Nat. orient.: Composite score on factor 3	.212***
Sightseeing	Nat. orient.: Composite score on factor 4	.185***
SOUTH	Dummy (1/0). 1: Visited Southern Coast of Norway	.162***
EAST	Dummy (1/0). 1: Visited Eastern Norway	.088*
HOTEL_CAMPING	Dummy (1/0). 1: >50 % of overnight stays were hotel or camping	081*
1-2_PLACES	Dummy $(1/0)$. 1: One or two overnight places in Norway	.106*
TRAVEL_PARTY_SIZE	Ratio. Number of persons in the travel party	.066*
COPENHAGEN	Dummy (1/0) 1: Departure by ferry to Copenhagen	110***
DISTANCE_NO_DUTCH	DISTANCE_NO (Ratio) * DUTCH (1/0). Distance (10 kms) driven in Norway by Dutch motor tourist	.081*
AGE_MALE	AGE (Ratio) * MALE (1/0): Age (years) of male motorist	198**
AGE_FEMALE	AGE (Ratio) * FEMALE (1/0). Age (years) of female motor tourist	186**

Significance levels: *< 0.1, **< 0.05, ***< 0.01

Adj. $R^2 = 0.12$, n = 577

Earning a self-reported relatively low or medium household income has a negative impact on the quest for "Food & accommodation".

The nature orientations *Inspiration* and *Sightseeing* influence in a positive way the support of management means coined "Tours & interpretation" services in national parks (Table 6). Interestingly, the wish for tour guiding or sightseeing to both cultural and natural attractions and additional quest for visitor centres with exhibitions conveying knowledge as expressed in Factor 4 is also supported by the motor tourists with the highest education level and by the first time visitors or international tourists with scant experience from previous Norway tours. "Tours & interpretation" services in Norwegian national parks are also endorsed by urban dwellers in cities of more than 500,000 inhabitants and respondents reporting residing in areas with "very good" access to natural areas in their daily habitat.

The regression model that has been developed showed relatively weak relationships between nature orientations and the four types of quests for facilities, as the proportion of explained variance (R²) in the regression models of quest for facilities is relatively low (11–12%). However, several identified nature orientations have significant coefficients with plausible signs in the regression models.

Table 5. Coefficients from linear regression analysis of Factor C "Food and accommodation".

Variable	Description	Standardized Coefficients
(Constant)		
Sightseeing	Nat. orient.: Composite score on factor 4	.155***
EAST	Dummy (1/0). 1: Visited Eastern Norway	.078*
HOTEL	Dummy $(1/0)$. 1: >50% of overnight stays were in hotel	.111**
CABIN_OR_VFR	Dummy $(1/0)$. 1: >50% of overnight stays were in cabin or VFR	.100**
TRAVEL_PARTY_SIZE	Ratio. Number of persons in the travel party	.071*
DISTANCE_C_DANISH	DISTANCE_C (Ratio) * DANISH (1/0): Distance (10 kms) driven on the continent by Danish motor tourist	127***
DISTANCE_C_GERMAN	DISTANCE_C (Ratio) * GERMAN (1/0): Distance (10 kms) driven on the continent by German motor tourist	087*
COPENHAGEN	Dummy (1/0). 1: Departure by ferry to Copenhagen	105***
REPEAT_VISITOR	Dummy (1/0). 1: One or more yearly visit(s) to Norway	072*
AGE_40-	Dummy (1/0). 1: Age below 40	084**
FEMALE_50+	Dummy (1/0). 1: Female age 50 or more	.103**
EDUCATION_LOW	Dummy (1/0). 1: Education on elementary level	.095**
EDUCATION_HIGH	Dummy (1/0). 1: >4 years college/university education	.074*
INCOME_LOW_MED	Dummy (1/0). 1: Relatively low or medium household income	102**
NATURE_ACCESS_GOOD+	Dummy (1/0). 1: Good or very good access to natural areas in daily habitat	.074*

Significance levels: *< 0.1, **< 0.05, ***< 0.01

Adj. $R^2 = 0.12$, n = 590

Identification of Essential Market Segments as regards Quest for Facilities in National Parks

To identify the specific interest segments regarding *quest for facilities*, the scale score on each variable loading on each factor for every single respondent was used as an input to the *K*-means cluster analysis procedure. After evaluating cluster solutions based on three, four and five segments, a solution of four clusters appeared best in differentiating segments. The robustness of the four-cluster solution was tested on the same bootstrap sample as was used for testing the factor solutions. The bootstrap sample yielded a four cluster solution very similar to the four cluster solution from the original data. Thus, the segmentation seems robust to sample alterations.

Table 6. Coefficients from linear regression analysis Factor D "Tours & interpretation".

Variable	Description	Standardized Coefficients
(Constant)		
Inspiration	Nat. orient.: Composite score on factor 1	.097**
Sightseeing	Nat. orient.: Composite score on factor 4	.101**
EAST	Dummy (1/0). 1: Visited Eastern Norway	.088*
SOUTH_WEST	Dummy (1/0). 1: Visited South Coast or Western Norway	.179***
SOUTH_WEST_NIGHTS	NIGHTS (ratio) * SOUTH_WEST (1/0). 1: Number of overnights in South coast or Western Norway	108**
DISTANCE_TO_NORWAY	Ratio. Distance (10 kms) from domicile to Norwegian border (car + ferry)	196***
SEVERAL_PLACES	Dummy (1/0). 1: Eight or more overnight places in Norway	078*
TRAVEL_PARTY_SIZE	Ratio. Number of persons in the travel party	.067*
RARE_VISITOR	Dummy $(1/0)$. 1: First time visitor or less often than every third year in Norway	.109***
DUTCH	Dummy (1/0). 1: Dutch motor tourist	.078*
DANISH	Dummy (1/0). 1: Danish motor tourist	228***
EDUCATION_HIGH	Dummy (1/0). 1: >4 years college/ university education	.094**
LARGE_CITY	Dummy (1/0). 1: Live permanently in a large or larger city (>500,000 inhabitants)	.080**
NATURE_ACCESS_GOOD+	Dummy (1/0). 1: Good or very good access to natural areas in daily habitat	.135***

Significance levels: *< 0.1, **< 0.05, ***< 0.01Adj. R² = 0.11, n = 618

The interest scale scores on the factors for *quest for facilities* in the four clusters (I–IV) are presented in Table 7: Segment I expresses a distinct interest in both "Tracks & signposts" and "Tours & interpretation", indicating a broad interest in improved opportunities for hiking and guided tours with an emphasis on information services. Segment II asks for both "Food & accommodation" and "Tours & interpretation", which calls for facilities and services comforting traditional tourist needs. Segment III demands all types of facilitation including also "Infrastructure & services", whereas Segment IV does not want any further facilitation and takes scant interest in "Infrastructure & services" in particular.

Based on the selected four cluster solution, Segment I represents 21% of the total number of respondents, and Segment II 26%, Segment III 33% and Segment IV 20%, respectively. Among the Danish motor tourists a relatively low share is found in Segment II and a comparatively high portion belongs to Segment IV. These segment

	"Tracks & signposts"	"Infrastructure & service"	"Food & accommodation"	"Tours & interpretation"	n
Segment I	3.1	2.2	2.2	2.8	139
Segment II	2.5	2.0	3.3	2.9	174
Segment III	3.4	3.0	3.5	3.5	221
Segment IV	1.6	1.2	1.7	1.7	133
Total	2.8	2.2	2.8	2.8	667
F significance	<.001	<.001	<.001	<.001	

Table 7. Mean scores and ANOVA significance levels on variables representing the various dimensions of *quest for facilities* in four interest segments.

sizes are considered indicative, since the four cluster solution based on the bootstrap sample yielded somewhat more evenly sized segments, and also slightly less difference between nationalities.

Discussion and Conclusions

The identified nature orientations mirror the variety in tourist motivations among foreign motor tourists visiting Norway during the summer season. The first factor solution regarding *nature orientations* which has been coined *Inspiration* corresponds in many respects to Uddenberg's reported in-depth nature orientation among Swedish citizens (Uddenberg, 1995), as many of his observed components of deeply felt nature experiences are encapsulated in this dimension. The second factor solution, Recreation, is in line with a contextual interpretation of Iso-Ahola's escape-seeking dichotomy (1982) underlining that holidaymaking takes place in a serene and undisturbed natural environment that is dissimilar from the individual's daily surroundings which affords positive recreational experiences. Recreation is also consistent with Uddenberg's (1995) identification of the desire for a space that is different from everyday life and providing new strength and energy. The third factor, *Challenge*, comes close Crompton's (1979) socio-psychological motives: escape from a perceived mundane environment, exploration and evaluation of self and probably also prestige. The fourth factor, Sightseeing, is similar to both Iso-Ahola's (1982) escape-seeking dichotomy and what Crompton (1979) classifies as search for novelty in what we might classify as a comfortable nature setting (Löfgren, 1999).

To various extents these nature orientations comprise elements of values, attitudes and behavioural preferences and they also represent dispositions for an assortment of *quests for facilities* in and around Norwegian national parks. The four extracted factor solutions regarding the quest for facilities that were singled out, "Tracks & signposts" within national parks, "Infrastructure & services" in and around national parks, "Food & accommodation" products outside national parks and "Tours & interpretation" services in national parks, all represent meaningful and consistent *quests for facilities*. They are partly in line with existing management and commercial services in Norwegian national parks and partly not, but they all have in common the call for an

expansion of existing arrangements and more active management to cater for the needs of the foreign visitors.

The nature orientations *Challenge* and *Sightseeing* thus support the expressed wishes for extension and upgrading of "Tracks & signposts" within national parks including supplementary information services, picnic areas, cycling tracks, service persons etc. The challenge to serve these interests is first and foremost a park management concern and responsibility but in the Norwegian setting this responsibility has also to date been partly taken care of by the DNT comprising the operation of a comprehensive marked hiking trail network in the mountains. The management means asked for are to a large extent in line with the (until now modest) Norwegian tradition for national park development. However, further expansions in this direction would undeniably require more economic resources and personnel in the management of the national parks.

The quest for "Infrastructure & services" in and around national parks encompasses the wish for larger staged performances and greater physical installations, more commercial offerings and additional activities. This hedonistic orientation is upheld by the nature interests *Challenge* and *Sightseeing*, but the dimension *Recreation* disapproves such developments. It can therefore be postulated that these kinds of large scale interventions and types of commercializations represent a strain of controversy as they are at odds with the broad category of international motor tourists searching for physical recreation in serene and unspoiled natural surroundings. Such developments and intensified commercialization could very well serve some tourist interests but should be developed in ways that are not too provocative in the eyes of those who first and foremost appreciate the tranquillity, peacefulness and undisturbed quality of nature. Perceptions of wilderness for instance may vary between various user interests (Higham, Kearsley, & Kliskey, 2000).

"Food & accommodation" products outside national parks are unsurprisingly found particularly appealing to the nature orientation coined *Sightseeing*. The lack of negative relationships with any of the basic nature orientations in the regression model indicates that these products, which are located external to the protected areas, may cause no serious provocations to other types of co-travellers at the outset. The high quality tourism products that are treasured by this nature interest also include the appreciation of local food and could very well stimulate various local culture elements and the local economy.

"Tours & interpretation" services are associated with tour guiding to places of specific natural and cultural interests and the demand for visitor centres. The quest for such services and facilities is supported by the nature orientations *Inspiration* and *Sightseeing*. Responsible managers could very well develop such guiding operations in cooperation with DNT or specialist (local) tourist firms, but national park management should definitely take the lead in the development of information and exhibition centres.

An interesting finding in this survey is that the national parks can match the various nature orientations in several ways. Each of the four identified categories of desirable management measures/tourism products is related to distinct nature interests in alternate ways. These interests represent possibilities for transforming the national parks into more advanced tourism attractions offering the opportunity for regional

economic development, which is in line with new political guidelines (Finansdepartementet, 2003; Miljøverndepartementet, 2005; Nærings- og handelsdepartemetet, 2005). Whereas the traditional management measures ("Tracks & signposts" and "Tours & interpretation") within parks and classical high quality tourism products ("Food & accommodation") outside the parks' borders have general support, the desirability of expanded "Infrastructure & services" in and around national parks seems to have lesser overall support and to be more contested by various user groups. A management approach to safeguard minimum negative experiential impacts would be to avoid requested infrastructure, crowding and types of activities that cannot be ignored and to give critical user interests options to avoid such provisions (Manning, 1999).

The estimated segment sizes are somewhat sensitive to the selected cluster solution. However, the cluster analysis based on four segments showed that the biggest market segment (Segment III) comprises all four types of quest for facilities and thus welcomes a series of developments. The contested "Infrastructure & services" interest is typically not craved for by any of the other three segments. The two remaining "enthusiastic" segments comprise interest in "Tours & interpretation" in combination with either and "Food & accommodation" (Segment II) or "Tracks & signposts" (Segment I). About one fifth of the foreign motor tourists take no particular interest in any of the identified quests for facilities (Segment IV). The conclusion is that there is a market potential for developing all identified types of facilities inside and outside parks, but one should be aware that the support for large-scale arrangements (e.g. "Infrastructure & services") is poor in several segments and in particular among those who do not endorse any kind of facility development. An interesting feature is that this general scepticism towards tourism developments has a greater market share among visitors from the neighbouring country Denmark compared to those who reside in Germany and the Netherlands.

Our contribution in this study has been to utilize Nils Uddenberg's identification of nature orientations and analyse their implications for visitors' *quests for facilities* in a Norwegian national park setting. Thereby premises for national park development potentials have been clarified including which developments are contended, and diversifying the demand from three major nationalities visiting Norway. Thus the results add knowledge of high relevance to the management of national parks as tourism attractions and the acquired insights will potentially have practical value for implementing management and marketing policies in national parks and surrounding areas. The segmentation analysis is helpful to identify target markets and may be utilized in the positioning of relevant products in a market strategy. In addition, controversies regarding some of the potential tourism developments are also revealed and should be paid attention to by managers.

Academically the results throw light over a phenomenon that until now has been inadequately researched in a Norwegian context and new empirical insights have been gained by the exploitation of a unique set of data. The study has, however, some methodological limitations: It does not cover all key inbound markets and domestic tourists are not included. Moreover, the *quest for facilities* dimensions are based on indicators that are specifically relevant in a Norwegian context, even though similar developments are well-known in many countries. Regarding tourists' *nature orientations*,

Uddenberg's study (1995) of how modern Swedes relate themselves to nature was used as a point of departure. In spite of this, the scale that is developed to measure *nature orientations* is also constructed for the specific purpose and has not as yet been validated in other studies. The next step should therefore be to replicate these measurements and compare them with other validated scales such as New Ecological Paradigm, Wilderness-Purism Scale or Recreation Experience Scale. An interesting task would be to study the explanatory power of the present construct in comparison with scales that are established in the literature.

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Notes

- 1. Several scales have been developed to measure people's value systems, see for example Schwartz and Mark (1992) and the List of Values (LOV), originally developed by Rokeach (1973) with a set of basic values, which is today widely utilized.
- 2. The other orientations were: *Human nature orientation* (if the human nature is good, evil, neutral, or a mixture of good and evil); *mutability orientation* (if human nature can be changed, or not); *time orientation* (if the person prefers to focus on the past, the present, or the future); and *relational orientation* (if the person prefers hierarchical forms of relationship, collegiality and consensus, or individualism).
- 3. Ecotourism may represent one end of a combined nature-orientation—activity-orientation scale. According to Ceballos-Lascurain (1996), ecotourism is environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features both past and present) that promotes conservation, has low visitor negative impact and provides for beneficially active socio-economic involvement of local populations.
- 4. Soft activities are according to Weaver (2005) dominant for instance in well-known US National Parks like Grand Canyon or Great Smokey Mountains. In contrast, the hard ideal type is more environmentally aware and seeks daring nature encounters, where Antarctica stands out as an iconic hard ecotourism destination.

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Paper 2

Visitors' acceptance of negative ecological impacts in national parks:

Comparing explanatory power from psychographic scales in a Norwegian mountain setting

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Visitors' acceptance of negative ecological impacts in national parks: Comparing explanatory power from psychographic scales in a Norwegian mountain setting

Abstract

Even in protected areas, it is inevitable that any human use will produce some impact on the natural resources. The present study sought to identify visitors' tolerance for potential negative ecological impacts resulting from tourism activities and facilities in a Norwegian national park context. The measurements were based on park visitors' expressed degree of acceptance of negative effects on particular species of wildlife (wild reindeer and raptors) and on vegetation.

Attitudes were analysed through the use of four psychographic scales, reflecting respondents' nature orientations, their specific facility desires, their preferences in a wilderness setting and their concerns about human interaction with the natural environment. Findings demonstrated that the psychographic scales explained more variation in attitudes than social background and trip characteristics. Higher levels of education among visitors were, however, strongly associated with increased ecological concern. The salient ecological awareness among park visitors in general (which was particularly expressed among highly educated individuals) signifies the potential strategic alliance between tourism and conservation interests.

Keywords: Nature-based tourism, National parks, Visitor attitudes, Psychographic scale, Ecological concern.

Visitors' acceptance of negative ecological impacts in national parks: Comparing explanatory power from psychographic scales in a Norwegian mountain setting

Introduction

'For the Benefit and Enjoyment of the People'. This well-known phrase, engraved on the stone arch marking the northern entrance to Yellowstone National Park (Est. 1872) symbolises the ideals behind the original concept of a national park: the earliest parks were "meant to function as reserves for scenic landscapes and as sanctuaries and resorts" (Hall & Frost, 2009, p. 308). The idea of ecological and species conservation within national parks, however, soon began to assume much more importance and, from the 1960s onwards, the ecological ethic became the prime consideration in the designation and management of the parks. During this period, the absence of human impact was considered to represent the highest form of ecological integrity – a way of thinking that is reflected in the International Union for Conservation of Nature (IUCN) classification system for protected areas (Eagles & McCool, 2002, p. 22).

In recent decades, however, the human dimension of protected area management has regained importance in a number of countries, and we are once again seeing a shift in the concept of a national park, reflecting a return to its utilitarian roots (Hall & Frost, 2009, p. 308). In Norway, a country with a relatively short history

of national parks (the nation's first park, *Rondane*, was established in 1962), the protection of nature has always been the primary goal of park designation (cf. the *Nature Conservation Act* of 1970). Despite recent shifts in the thinking behind national parks, the main purpose of Norwegian parks is still to safeguard biological diversity and ecological processes within protected areas (*Nature Diversity Act* 2009). However, the Act (§1) also states that "the environment provides a basis for human activity, culture, health and well-being, now and in the future...". This dual function of nature preservation and what must be understood as mainly tourism/ recreation use is a characteristic of most national parks throughout the world, and additional functions may also be important (Hall and Frost 2009, p. 308).

The debate over 'preservation versus use' is evident in national parks throughout the world, and can generate conflict between different interest groups (McCool, 2009). A number of studies have documented various negative impacts on ecosystems resulting from visitation and tourism activities in natural areas (see, for example, Cunha, 2010; Liddle, 1997; Newsome, Moore & Dowling, 2002; Eldegaard, 2010; Hunter & Green, 1995; Buckley, 2004). The severity of these impacts may increase in the future, due to the fact that nature based tourism is one of the fastest growing sectors of international tourism (Fredman & Tyrväinen, 2010; Saarinen, 2005). National parks are becoming ever-more appealing tourism destinations (Reinius & Fredman, 2007), leading to increased park visitation in most countries (Wray, Espiner & Perkins, 2010; Balmford et al., 2009).

The growing interest in experiencing protected areas is often based on affection for nature, but with increased visitation, there is a mounting concern that tourists are 'loving the parks to death' (Berle, 1990). The present study seeks to identify national park visitors' tolerance for potential negative environmental impacts resulting from tourism activities and facilities. The data were collected through an internet survey among visitors to a national park region, consisting of the six municipalities, Dovre, Lesja, Lom, Sel, Skjåk, and Vågå, in Nord-Gudbrandsdalen, Southern Norway during the summer of 2009. The measurements were based on visitors' degree of acceptance of detrimental effects on certain species of wildlife (identified as susceptible to tourism developments by park managers in the region), and on vegetation. Attitudes were analysed using four scales, reflecting: 1) respondents' nature orientations (Nature Orientations, or NO), 2) their specific facility desires (Quest for Tourism Facilities in and around national parks, or QTF), 3) their preferences in a wilderness setting (Wilderness Purism Scale, or WPS); and 4) their concerns about human interaction with the natural environment in general (New Ecological Paradigm, or NEP). The first two scales (NO and QTF) are outcomes of recent research in a Scandinavian setting (see Haukeland, Veisten & Grue, 2010) whereas the latter two are well-known scales, developed in the 1960s and the 1970s (see Hendee et al., 1968; Stankey, 1973; Dunlap & Van Liere, 1978).

Theoretical background

Environmental impacts of visitation

Tourism infrastructure and recreational activities in protected natural areas may impact on the environment in various ways. See, for example, Spencely's 2005 review of negative environmental impacts on natural resources like air, water, geology, soil, landscapes, habitats and wildlife (p.138-139). Edington and Edington (1986), Buckley and Pannell (1990), Buckley (1999, 2004) and Hunter and Green (1995) also provide similar overviews of specific environmental effects, including negative visual impacts. The environmental consequences of tourism are, however, not easy to predict (Pigram, 1990), and environmental impact researchers have found it difficult to identify and assess causal relationships (Spencely, 2005). These difficulties may be due in part to a lack of knowledge of the environmental conditions prior to the introduction of tourism (Hunter & Green, 1995), which limits the possibilities for post-development investigations. Besides, "... the extent to which ecosystems can recuperate following impacts is poorly understood" (Spencely, 2005, p. 139).

Further, despite there being over one thousand contributions within the field of *recreation ecology*, studies of this nature typically lack a theoretical basis, and are seldom built on previous research (Monz et al., 2010; Eldegard, 2010, p. 8; Cole, 2004, p. 46, 55). An important feature of this body of research, however, is that

tourism impacts on *wildlife* and *vegetation* are frequently addressed. This will be discussed next.

Effects of tourism activities on wildlife

Wildlife viewing is a major attraction for nature oriented tourists all over the world (Buckley, 2003, p. 230). Based on a review by Boyle and Samson (1985), Sterl, Brandenburg and Arnberger (2008) argue that recreation activities in protected areas still have negative effects on wildlife, despite the fact that a variety of measures have been implemented to avoid endangering animal species (see also Buckley, 2003, p. 230). Various types of wildlife disturbance may occur, for example, altering the animals' habitat through tourism infrastructure, interrupting tranquility through human activities (not necessarily involving direct contact with wildlife) or molestation through direct contact (Liddle, 1997). A number of authors have found that situation specific factors may also influence the level of wildlife disturbance – for example, the location of the tourist activity, its direction and its speed of movement (see Sterl et al. 2008; Ingold 2005; Gander and Ingold 1997). Interestingly, in cases where visitor behaviour becomes predictable, a "national park effect" may be observed, where some wildlife species become increasingly familiar with, and less sensitive to, predictable and "harmless" visitors. In addition, the sensitivity of species may vary temporally, and with the frequency of disturbance (Sterl et al., 2008).

Most visitors to protected areas seem to understand that animals may be affected by recreational use (Dolsen et al., 1996). A study in an Austrian national park setting indicated that 40 per cent of the respondents were aware of recreational disturbance of wildlife, and that 12 per cent believed they could have disturbed wildlife on the day of the interview (Sterl et al., 2008). Information and education about the negative effects on wildlife is becoming an increasingly widespread way of raising visitors' awareness of their potential impacts on wildlife (Anthony, Steidl & McGarigal, 1995).

Effects of tourism activities on vegetation

Severe trampling may kill plants directly, reduce their vigor or their reproductive capacity, and visible vegetation impacts often occur rapidly during the initial development and use of a recreation site (Hammit & Cole, 1998, p. 64-65; Cole, 2004, p. 53). Trampling damage is unwelcome in scenic areas because it leads to the destruction of attractive plants and the development of unattractive eroded soil surfaces. Not all plant communities are equally vulnerable, however. Edington and Edington (1986) note, for example, that damage to trailside vegetation is greater in forests than in grasslands, and that at elevations above the tree-line, alpine plants are especially susceptible to flattening by hikers. Impacts on vegetation tend to be noticed immediately by visitors, and such visual effects are often found in the most popular tourist locations.

Environmental impacts and visitor experience

Hammit and Cole (1998) argue that vegetation, along with water, is probably the most essential natural resource component affecting visitor selection of natural sites. A review of the literature comparing managers' and visitors' views of environmental impacts (including wildlife disturbance and vegetation attrition) nevertheless shows that managers tend to view such impacts as more of an issue than visitors do (Manning, 1999). Perceived environmental damage, however, is still found to be a common source of complaint among tourists in natural areas (Buckley & Pannell, 1990). Intact biodiversity is therefore very important for the tourism industry because, as noted by Buckely (1999, p. 49) "it is a critical product component for tourists who travel to look at scenic landscapes, most of which owe their particular character to vegetation and fauna as well as underlying terrain".

There is evidence in the literature that an interest in experiencing nature is tied to an ecological interest (Teisl & O'Brian, 2003). Wurzinger and Johansson (2006) identified a relationship between the degree of environmental concern and the amount a person focused on nature during the actual trip. This is in line with previous research by Weaver and Lawton (2002), who found that "hard ecotourists" (those travelling in smaller groups, visiting less accessible destinations and expecting fewer services) were more worried about the protection of nature than "soft ecoturists" (those who are more dependent on infrastructure and services). Similarly, Teisl and O'Brian (2003) found that environmental

concerns were more clearly expressed by those performing appreciative activities (such as wildlife watching and nature photography) than those involved in consumptive pursuits like fishing.

Nature-based tourism can be self-destructive (Pigram, 1990) and thus this sector relies heavily on an intact environment and biodiversity. Yet, as stated by Buckley (2004, p. 11), "... in relative pristine protected ecosystems, any human use produces some impacts, even if the greatest skills and care are used to minimize them" (Buckley, 2004, p. 11). As Butler (1999) notes, it is impossible to avoid the fact that tourism development will have some environmental impacts upon the location within which it occurs. Given the tourism industry's reliance on intact biodiversity, it may seem surprising that there has not been a dramatic growth in the number of partnerships between tourism and conservation interests. Buckley (1999) advocates such an alliance, and highlights the importance of maintaining the integrity of the natural resources in the eyes of park visitors. Nature-oriented tourists are more likely to appreciate the benefits of nature and landscapes that have been sheltered from severe human impact, and therefore to support the conservation ideal of protected areas. A strong interest in nature preservation may therefore go hand in hand with a view of national parks as appealing tourism attractions.

In addition to this appreciation of a high quality nature-based tourism experience, many individuals can also obtain contentment from the fact that a resource is not being exploited but is being maintained intact for its own sake or for the enjoyment of future generations – a type of valuation that has been labelled "existence value" (Pigram, 1990).

Social background characteristics may play a significant role in the forming of attitudes related to environmental concern. Regarding the variables used in the present study, the literature suggests that young and well-educated adults typically have more pro-environmental attitudes than their social counterparts (Dunlap et al., 2000). Some authors have suggested that this link at present is somewhat more tenuous than what has been observed earlier, however, so such assumptions must be handled with care (Fransson & Gärling, 1999). Studies have also shown that women often reveal greater concern for environmental impacts than men, and these disparities are largely accounted for by differences in their particular value systems (Stern et al., 1995).

Psychographic scales and visitors' attitudes towards environmental impacts
Researchers are increasingly interested in identifying and segmenting nature
oriented tourists by their social or environmental attitudes (Luo & Deng, 2010).
Psychographic scales may serve as a tool to capture individuals' basic nature
orientations, principal recreational interests and activities, and more general

ecological concerns. In the following section we provide a brief description of the scales adopted for use in the present study.

Nature Orientations (NO) and Quest for Tourism Facilities (QTF) in a Nordic setting

Using in-depth interviews, Uddenberg (1995) explored the meaning and significance of nature experiences in the lives of Swedes, and examined how they immerse themselves with nature. The study identified a variety of criteria, ranging from basic worldviews to more specific viewpoints and expressed activity interests. These criteria were used as input into a study of German, Dutch and Danish motor tourists in Norway during the summer season 2008 (Haukeland et al., 2010). Through an exploratory factor (principal component) analysis on responses to a series of questions (listed in Table 2), the following four key dimensions were extracted: 'Inspiration' (the appreciation of nature and landscape as personal stimulation), 'Recreation' (the enjoyment of serenity and undisturbed quality of nature), 'Challenge' (the search for demanding physical activities) and 'Sightseeing' (the pursuit of touring and comfort). These dimensions reflect what may be coined Nature Orientations (NO) in a Nordic setting.

A range of questions (variables listed in Table 3) related to preferences for tourism infrastructure, facilities and services inside and outside national parks was also adopted in the same empirical research (Haukeland et al., 2010). Again,

through an exploratory (principal component) analysis, four key dimensions related to the *Quest for Facilities (QTF)* in Norwegian national parks were identified. These were: '*Tracks & signposts*' (mainly for hiking and cycling purposes), '*Infrastructure & services*' (including large physical installations), '*Food & accommodation*' (quality meals and overnight stay facilities) and '*Tours & interpretation*' (visitor centres and guided tours).

The Wilderness Purism Scale and the New Ecological Paradigm

The Wilderness Purism Scale (WPS) is a multidimensional construct, originally developed to measure the level of consensus between the wilderness dimensions stated in the US Wilderness Act (1964) and attitudes among wilderness users (Hendee et al., 1968; Stankey, 1973). The scale has since been modified and applied in a range of different studies and in different countries. For example, in the United States (Shafer & Hammitt, 1995; Hall et al., 2010), in New Zealand (Higham, 1998; Higham et al., undated), and in Scandinavia (Wallsten, 1988; Vistad 1995; Fredman & Emmelin. 2001). A key finding from a number of these studies is that, although the purism scale comprises a number of interdependent dimensions, it is still meaningful to calculate a total purism score (see Jaakson & Shin, 1993; Shafer & Hammitt, 1995; Vistad, 1995). In the early Swedish and Norwegian studies, the chosen purism items were somewhat different from one study to another (Wallsten, 1988; Vistad, 1995). A study in Femundsmarka in Norway (a wilderness and national park area near the Swedish border), showed

that strong purists were more sensitive than low purists (called "urbanists") to recreational impact on vegetation and ground (Vistad, 1995).

A fourth scale adopted in this study is the *New Ecological Paradigm (NEP)*, originally proposed by Dunlap and Van Liere (1978), and further developed by these, and other, authors (see Noe & Snow, 1990; Luzar et al., 1995; Dunlap et al., 2000). The construct aims to assess whether an individual has a pro-ecological worldview (termed "eco-centrism") or not. There is a growing consensus that the items used in the *NEP* scale represent core elements in a worldview that influences attitudes and beliefs towards more specific environmental issues (Dunlap et al., 2000).

For both the WSP and NEP indicators, factor analysis to identify underlying dimensions represents an alternative to the one-dimensional sum-scores for purism and a pro-ecological worldview.

Assumptions in the present study

In the present study, *visitors' acceptance of potential negative influence on wildlife (wild reindeer habitat and raptor nesting) and vegetation in a Norwegian national park setting* is scrutinized. Based on the existing literature available on this topic, we made a number of assumptions/ hypotheses which we tested through our research. These are outlined next. Our first assumption is that the

acceptance of negative environmental impacts will vary with both social background characteristics and psychographic attributes, but that psychographic attributes will explain more variation in the visitors' expressed acceptance. This leads to our first hypothesis:

H1: Psychographic scales will explain greater variation in expressed tolerance for negative ecological impacts than social characteristics and attributes connected to the actual tour.

With regard to social characteristics, we assume that:

H2: Female respondents will be less tolerant than their male counterparts.

H3: Younger respondents will be less tolerant than their elders.

H4: Well-educated respondents will be less tolerant than those with fewer educational qualifications.

With regard to the influence of psychographic attributes' on acceptance of environmental impacts, we expect the following relationships within the various scales in question (*NO*, *QTF*, *WPS* and *NEP*):

<u>NO</u>

Previous research indicates that 'Challenge' and 'Sightseeing' orientations tend to require more (large scale) tourism facilities in a national park setting compared to the 'Inspiration' and 'Recreation' dimensions. We therefore assume that:

H5: 'Inspiration' will lead to less tolerance for ecological impacts.

H6: 'Recreation' will lead to less tolerance for ecological impacts.

H7: 'Challenge' will lead to more tolerance for ecological impacts.

H8: 'Sightseeing' will lead to more tolerance for ecological impacts.

QTF

The 'Tracks & signposts' orientation corresponds to measures that have traditionally been used to accommodate visitors' (hikers') needs within national parks in Norway. We therefore assume that the 'Tracks & Signposts' dimension will be more in line with strict nature conservation mind-sets compared to expressed interests in more expansive developments within and outside park borders, i.e. the dimensions that have been labelled 'Infrastructure & service', 'Food & accommodation' and 'Tours & interpretation':

H9: 'Tracks & signposts' will lead to less tolerance for ecological impacts.

H10: 'Infrastructure & service' will lead to more tolerance for ecological impacts.

H11: 'Food & accommodation' will lead to more tolerance for ecological impacts.

H12: 'Tours & interpretation' will lead to more tolerance for ecological impacts.

WPS

The literature suggests that people yearning for solitude and few physical provisions in a wilderness setting (strong purists) tend to be less accepting of negative ecological effects compared to non-purists. Thus we assume:

H 13: Nature tourists with strong purist wilderness attitudes will demonstrate less tolerance for ecological impacts than non purists.

<u>NEP</u>

Pro-ecological (eco-centric) worldviews have been found to reduce the visitors' tolerance for negative ecological impacts in a national park setting. We therefore assume:

H14: An expressed pro-ecological worldview (eco-centrism) will lead to less tolerance for negative ecological impacts.

Data and method

Recruiting e-mail addresses

Data for the current study were gathered through the use of an internet survey. National and international respondents were recruited in *Nord-Gudbrandsdalen* during the period June to September, 2009. Potential participants were contacted on site, and asked to provide their email addresses for participation in the study. Information about the project and its purpose was provided at this point in six languages (English, German, Dutch, Swedish, Danish, and Norwegian). Two methods were used for participant selection: First, stratified (quasi-random)

sampling at the roadside: All drivers of motor vehicles on the six main roads in the case area were stopped¹ and asked to fill in the recruiting scheme with email addresses when leaving the area at 18 (rotating) full weekdays the during summer season 2009. Only two per cent refused to be recruited at this stage. Second, self-selected sampling at accommodation sites during the same period: 84 accommodation providers in the study area were asked to assist with the collection of email addresses. Ten refused to cooperate from the outset, and only 42 completed recruiting schemes were received (after two reminders). Ankre & Reinus (2010) discuss the possible weaknesses of this approach in further detail.

A total of 2719 e-mail addresses were collected (61.5% from roadside and 38.5% from accommodation providers). After deciphering and address corrections, 2510 respondents were eventually identified. 1318 of these (52.5% of the net sample) confirmed their participation after a maximum of two reminders and completed the internet survey during the winter of 2009/2010. The questions were presented to the respondents either in Norwegian, German (for those residing in Germany, Austria and Switzerland) or English (for all other nationalities).

Of those who completed the internet survey, 63 per cent resided in Norway, ten per cent in Germany, eight per cent in the Netherlands, four per cent in Sweden and four per cent in Denmark. Nine per cent lived permanently in another

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¹ The Norwegian Public Roads Administration gave the necessary permit and practical assistance.

European country and three per cent outside Europe. This distribution of nationalities was approximately the same as among those who were initially recruited for the survey in-situ during the summer.

Questionnaire and utilization of scales

The internet survey comprised questions about social background characteristics and the trip in *Nord-Gudbrandsdalen*, as well as indicators of the psychographic scales. The various scales; *NO, QTF, WPS*, and *NEP*, were based on different numbers of indicators. The selection of *WPS* indicators was built on experiences and recommendations from several Scandinavian studies and manuals (Vistad 1995; Vorkinn 2003; Kajala et al. 2007; Vistad 2009; Vistad & Vorkinn, 2010). In 1999, the scale was simplified and standardized and reduced to eight items (six covering attitudes towards physical service facilities and two items covering social attitudes) to allow for comparisons between different studies (Vorkinn, 2003). Our selection of wilderness attitude items is identical to these eight (recently presented in Vistad & Vorkinn (2010)). The *NEP* indicators (seven items) build on Dunlap et al. (2000). Due to the high number of questions/ variables, the sample was split into two sub-samples. Table 1 shows the number of indicators and type of questioning (Likert scale) used. The sub-sample and table number are specified for each scale:

Insert Table 1 here

Types of data analysis

Exploratory factor analysis was applied to identify dimensions of *NO* and dimensions of *QTF* respectively in sub-sample 1. The principal component extraction method with the Varimax rotation was employed (an orthogonal rotation of the factor axes to maximize the variance of the squared loadings of a factor (column) on all the variables (rows) in the matrix). Raubenheimer (2004) distinguishes between "high" (above 0.60), "medium" (0.40 to 0.60), and "low" (between 0.25 to 0.40) loadings on indicators. Only loadings above 0.40 were considered as characteristics of the factors in our study. The number of factors was determined using the variance explained by retained factors. Bootstrap tests were also applied to assess the robustness of the estimated relations.

The components in the WPS and NEP scales in sub-sample 2 are handled as index scores, capturing the respondents' levels of purism and eco-centrism from lowest to highest. These latter measurements are based on seven and five item Likert scales respectively.²

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² An exploratory factor analysis was also applied to the *WPS* and *NEP* indicators. For *WPS* a three-factor solution was considered (Chronbach's alpha equal 0.76), and the factors were termed: 1) *Tracks*, showing an appreciation of poles/stones for dry shoed trail crossings, huts/ lodges and food services, maintained tracks and information about trail routes; 2) *Camp sites*, approving facilitated camp grounds and disposal of rubbish; and 3) *Solitude*, appreciating solitude and avoidance of crowding. For the factors Chronbach's alpha was, respectively, 0.81, 0.73, and 0.56. However, we opted for the well-established use of a one-dimensional *purism* sum-score. Furthermore, there was significant positive correlation between all eight indicators in the *WPS* scale. For *NEP* a two-factor solution was considered (Chronbach's alpha equal 0.73), and the factors were termed: 1) *Environmentalism*, underlining that humans are abusing the environment, the balance of nature is easily upset, plants and animals have definite rights to exist, and that an ecological catastrophe may occur; and 2) *Ingenuity*, suggesting the contrasting idea that the balance of nature is resilient, that human ingenuity will overcome severe ecological challenges, and that the so-called "ecological crisis" facing humankind has been exaggerated. For the factors Chronbach's alpha was, respectively, 0.70 and 0.66.

Multiple linear regression analyses were conducted to test the relationship between acceptance of negative ecological impacts in national parks due to tourism developments and social background characteristics, trip-related attributes and NO/QTF (model 1) or WPS/NEP (model 2). The dependent variable was an index (sum score) for three indicators: acceptance of negative influence on wild reindeer habitat, raptor nesting and attrition of vegetation. These potential ecological impacts are regarded as particularly serious threats from tourism activities and facilities in Nord-Gudbrandsdalen (Haukeland, 2010; Nellemann et al., 2010; Strand et al., 2010). The specific variables were measurements on a four point Likert scale for each indicator (1 representing "None", 2 representing "Medium", and 4 representing "Major" impacts).

Results

Nature Orientations (NO):

The *NO* scale is developed from a set of indicators which represent values, attitudes and behavioural inclinations among visitors in *Nord-Gudbrandsdalen* (Table 2). "Fresh air, clean water and an unpolluted environment" was seen as 'rather important' or 'very important' by 95 per cent of the respondents and received the highest rank among the various indicators listed. "Tranquility and peacefulness", various "sense impressions", "physical relaxation in nature" and "endorsement of good health" were also ranked as 'very important' by at least 50 per cent of the visitors. At the other end of the scale, the majority of respondents

considered "challenges with a certain risk" as 'rather' or 'completely unimportant'.

Table 2 also shows the outcome of the exploratory (principal component) analysis. Four key dimensions related to the ascribed meaning and significance of experiencing natural and landscape elements were identified: 'Recreation', 'Inspiration', 'Challenge' and 'Comfort'. The various orientations can be described as follows:

- 1) 'Recreation': Within this dimension, the importance of "experiencing tranquillity and peacefulness" and "fresh air, clean water and an unpolluted environment" was paramount. "Physical relaxation in nature", "sense impressions", "endorsing good health and recharging batteries" were also important elements.
- 2) 'Inspiration': Crucial aspects of this dimension in our study are "obtaining a deeper connection in life", "experiencing nature's magi and mysticism", "finding inspiration in natural surroundings", "feeling connectedness with landscape and nature" and "attaining a feeling of freedom".
- 3) *'Challenge'*: Visitors in this dimension are "searching for challenges with a certain risk" and take an interest in "demanding physical activities in nature"³.

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³ Only two variables loaded on this particular dimension, which is add odds with the recommendation to require at least three components to represent one dimension (Thurstone, 1927). It was kept, however, due to the fact that the two variables in question were stable across the two data sets and also appeared with very distinctive scores.

4) *'Comfort'*: The enjoyment of "comfort in natural surroundings" was a vital element of this dimension, but "closeness to co-travellers" and "sightseeing" interests were also important.

Insert Table 2 here

Quest for Tourism Facilities (QTF)

The *QTF* scale is also an application of the same set of indicators that were utilized in Haukeland et al. (2010). They include the perceived importance of infrastructure, facilities, services, activities and visitor experiences in a national park context. The most sought-after facilities and experiences *outside* the park borders (Table 3) were: "an abundance of accommodation facilities, "local food specialties", "visitor centres with exhibitions" and "guided tours/ sightseeing to see animals/ natural attractions". These elements were seen as 'rather' or 'very important' by between two thirds and half of the respondents. At the other end of the spectrum, more than half of the respondents felt that "staged experiences for a greater audience" and "gondolas and similar great installations" were 'completely unimportant' or 'rather unimportant'. *Within* the park borders, "more and better sign posting", "more and improved rambling tracks" and "more nature paths for self-guiding" were seen as 'rather important' or 'very important' by a distinct majority of the visitors. Conversely, "motorboat trips on the lakes" was viewed by most visitors as 'rather' or 'completely unimportant'.

Based on the findings from the exploratory factor (principle component) analysis, the following descriptions of each dimension can be provided:

- 1) 'Infrastructure & service': The main indicators which characterised this dimension were "interest in increased opportunities for various activities", "staged experiences for a greater audience", "gondolas and similar great installations" and "appreciating better options for motorboat trips on the lakes".
- 2) 'Tracks & signposts': Visitors in this dimension expressed a notable wish for "more and improved rambling tracks", "more nature paths for self-guiding" and "more and better sign posting".
- 3) *'Tours & interpretation'*: This orientation included primarily "guided tours/ sightseeing to see natural and cultural attractions", and an interest in "visitor centres with exhibitions".
- 4) 'Food & accommodation': This dimension was characterised by expressed interest in "well developed food and beverage facilities", "an abundance of accommodation facilities" and "accommodation with good standard".

The dimension 'Infrastructure & service' include facilities located both inside and outside the park borders, whereas 'Tracks & signposts' refer to requested measurements within park borders only. 'Tours & interpretation' and 'Food & accommodation' refer entirely to services and facilities located outside the national parks.

Insert Table 3 here

Internal consistency of the scales was high for the two most prominent *NO* factors, '*Recreation*' and '*Inspiration*' (Chronbach's alpha of 0.90 for both scales), and lower for '*Challenge*' and '*Comfort*' (0.65 and 0.50, respectively).

The *QTF* scales all proved good consistency by alpha values ranking from 0.84 to 0.76.

Wilderness Purism Scaling (WPS)

More than four out of five respondents felt that the provision of track information at the start of walks, and at track junctions contributed to the enjoyment of a natural area. The same number expressed similar appreciation for well-maintained and signposted tracks. On the other hand, only one in four felt that the ability to experience solitude was an important element of their trip.

New Ecological Paradigm (NEP)

Among the various elements in the *NEP*, the most commonly supported statements were "the balance of nature is very delicate and easily upset" (more than four of five respondents agreed) and "plants and animals have as much right as humans to exist" (more than three quarters of respondents agreed). Conversely, the following statements were typically *not* supported by study participants: "the balance of nature is strong enough to cope with modern industrial nations" (opposed by three out of five respondents) and "the so-called "ecological crisis"

facing humankind has been greatly exaggerated" (opposed by about half of respondents).

Linear regression analyses

"Acceptance of negative ecological impacts due to tourism activities and facilities in national parks" was treated as a dependent variable in the linear regression analysis. The index represented the sum score of three elements: wild reindeer habitat, raptor nesting and vegetation loss. Half of the respondents in both samples accepted no negative impacts on raptor nesting, two fifths accepted no impacts on wild reindeer habitat and one third accepted no impacts on vegetation loss.

Among those who accepted some ecological impacts, "minor impacts" was the most frequent choice and less than one in ten visitors felt that "major impacts" on any of the three indicators was acceptable.

The results are presented as two models for each of the two sub-samples (Table 4). In both sub-samples the explanatory power of Model 2 is notably larger than that of Model 1. H1 is thus supported. The social attribute that had the strongest effect (and in both sub-samples) on impact tolerance was education on university level. The longer a respondent had spent in education, the less likely he or she were to accept negative ecological impacts. Female visitors showed significantly lower levels of tolerance than their male counterparts in sub-sample 2.

Accordingly, H2 and H4 were supported by these findings. However, H3 is not

verified because the respondents' age did not affect their stated tolerance for negative ecological effects on wildlife and vegetation.

As regards NO, it can be observed from sub-sample 1 that 'Inspiration' leads to less tolerance for ecological impacts, while 'Challenge' and 'Comfort' lead to greater acceptance of negative effects. Consequently, H5 is supported, H6 is not supported and H7 and H8 (somewhat modified as 'Sightseeing' has been labelled 'Comfort' in this context) are both upheld. A low variation in the response scale for 'Recreation' may help to explain the insignificance of this factor in the regression analysis. Within the same sample the QTF dimensions 'Infrastructure & service' and 'Food & accommodation' produce a higher tolerance for negative ecological impacts. Thus H10 and H11 are supported, but H9 and H12 are not.

The linear regression analysis in sub-sample 2 reveals the isolated effects of the index scores for *WPS* and *NEP*. The signs on both coefficients show that higher expressions of purism and a pro-ecological worldview (eco-centrism) are typically associated with low tolerance for the ecological impacts, of which the latter variable showed the most pronounced effect. These findings support H13 and H14.

Insert Table 4 here

Discussion and Conclusions

Psychographic scales

Overall, the four dimensions on the *NO* scale identified in our study are very similar to Haukeland et al.'s 2010 findings in the Norwegian research discussed earlier. The main difference is that the '*Recreation*' and '*Inspiration*' orientations surface as factor no. 1 and factor no. 2 respectively in the present study, whereas they appeared in opposite rank in the Haukeland et al. (2010) study. In addition, the comfort aspect was more important in factor 4 in the study in attendance. As a result, we re-labeled this dimension '*Comfort*'. With regard to the *QTF* scale, the four orientations also corresponded closely with Haukeland et al. (2010) research. The only difference was that the factors' order changed in the present study (factors 1 and 2 and also factors 3 and 4 changed their positions mutually). Both scales have thus been corroborated to a certain extent in the present study. The more established psychographic scales (*WPS* and *NEP*) clearly distinguish between degree of purism and degree of eco-centrism in the survey in attendance.

Visitors' tolerance for potential negative effects on wildlife and vegetation

The findings signify that psychographic scales are, in general, appropriate tools for predicting visitors' tolerance for potential negative ecological impacts (in this case, on wild reindeer habitat, raptor nesting, and vegetation in a Norwegian national park setting) due to tourism activities and facilities. The utility of such scales may explain the increasing scholarly interest in identifying and segmenting

nature oriented tourists by their social and environmental attitudes (see Luo and Deng (2010)).

It was assumed that social background factors would help to explain variations in the level of visitors' ecological concern. This study has confirmed Anthony et al.'s (1995) and also Dunlap et al.'s (2000) assertion that pro-environmental attitudes increase with higher educational levels. Differences in attitudes between men and women (Stern et al., 1995), however, were only supported by one of the two sub-samples. Further, no relationship between age and the level of concern over ecological impacts (Dunlap et al., 2000) was identified. This suggests that the relationship between social background factors and ecological concern may be weakening (Fransson & Gärling, 1999).

The various psychographic scales have been shown to influence visitor acceptance of negative ecological effects from tourism activities and facilities in national parks. The NO dimension 'Inspiration' represents a relatively high level of nature focus and thus supports Wurzinger and Johansson's (2006) assumption that this factor leads to a greater concern for the environment. The division between "hard" and "soft ecotourists" (Weaver & Lawton, 2002) is also evident in these findings, as 'Inspiration' complies with the former and 'Comfort' with the latter category. 'Challenge' is also most likely to apply to the "soft ecotourists" as their focus tends to be more on the activity than the nature experience, and a higher level of

services is sought within this dimension. Both 'Comfort' and 'Challenge' orientations are prone to less environmental concern. In the same vein, the QTF dimensions 'Infrastructure & service' and 'Food & accommodation' are in line with the "soft ecotourists" greater acceptance of negative ecological impacts.

In accordance with the nature orientation 'Inspiration', the WPS (purism) produces a low level of acceptance of detrimental environmental effects. With regard to the NEP scale, this effect is even more pronounced (i.e. the stronger the pro ecological sentiments, the lower the acceptance of ecological impacts). This supports Dunlap et al.'s (2000) assumption regarding the implications of the proecological (ecocentric) worldview.

Limitations, further research and management implications

The only indicator with high factor loading on 'Comfort' was "Enjoy comfort in natural surroundings". This might imply a flaw in the Nature Orientation (NO) scale, in that a single indicator cannot fully capture the dimension's variability. A relatively low consistency measure also suggests that there is a need for more accurate indicators underlying this dimension. In addition, the 'Challenge' dimension has few underpinnings and should be explored further. This research has, nevertheless, demonstrated the effectiveness of using psychographic scales to help explain visitors' levels of concern for the environmental impacts of tourism in a Norwegian national park setting.

The salient ecological awareness among park visitors in our study (and, in particular, among highly educated individuals) should be encouraging for protected area managers. The findings suggest that nature-based tourists would be particularly receptive to improved and increased information on ecological issues and management actions, as suggested by Anthony, Steidl and McGarigal (1995). This could in turn help to protect susceptible natural resources, whilst also allowing for the inclusion of tourism and recreation functions in protected area policies. The development of a strategic alliance between tourism and conservation interests in Norwegian national parks may thus hold significant promise for the future.

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Table 1: Scales used in the study.

Abbrev	Scale	No. of	Type of	Sub-	Table with
iation		indicators	questioning	sample*	specifications
NO	Nature Orientation	21	Degree of importance	1 (760)	2
QTF	Quest for Tourism Facilities	21 (11** + 10***)	Degree of importance	1 (760)	3
WPS	Wilderness Perception Scaling	8	Degree of desirability	2 (280)	
NEP	New Ecological Paradigm	7	Agree or do not agree	2 (280)	

^{*)} No. of respondents in parenthesis
**) In national park buffer zones
***) Within national park borders

Table 2: Rotated factor matrix: *Nature Orientation (NO)*. Factor loadings lower than 0.4 are not shown and above 0.6 are in bold; n = 759.

	Recreation	Inspiration	Challenge	Comfort
Tranquillity and peacefulness	0,830			
Fresh air, clean water and unpolluted environment	0,802			
Physical relaxation in nature	0,754			
Sense impressions (sight, hearing, fragrance, taste, etc.)	0,746			
Endorse good health	0,645			
Recharge batteries/ regain strength	0,640			
Experience nature's beauty	0,537	0,403		
Sightseeing on my own	0,490			0,453
Encounter something different from everyday life	0,443	0,458		
Increase my knowledge/ understanding of nature	0,413	0,452		
Obtain a deeper connection in life		0,809		
Experience nature's magi and mysticism		0,749		
Find inspiration in natural surroundings		0,727		
Feel connectedness with landscape and nature		0,719		
Obtain a feeling of freedom	0,410	0,620		
Experience something mighty and overwhelming		0,504		
Regain another pulse/ time rhythm		0,590		
Search for challenges with a certain risk			0,836	
Demanding physical activities in nature			0,795	
Enjoy comfort in natural surroundings				0,856
Feel greater closeness to co-travellers				0,564
% of variance explained	40,0	8,2	6,6	5,5

Table 3: Rotated factor matrix: *Quest for Tourism Facilities (QTF)*. Factor loadings lower than 0.4 are not shown and above 0.6 are in bold. Facilities inside the parks borders are marked in italics; n = 759.

	Infrastructure	Tracks &	Tours &	Food &
	& service	Signposts	interpretation	accommodation
Increased opportunities for various activities	0,741			
Staged experiences for a greater audience	0,725			
Gondolas and similar great installations	0,683			
Better options for motorboat trips on the lakes	0,681			
More service persons	0,597			
Zoning of different activities	0,407			
More and improved rambling tracks		0,813		
More nature paths for "self-guiding"		0,728		
More and better sign posting		0,782		
More cycling tracks		0,596		
More picnic areas	0,549	0,439		
More accessible information		0,500	0,485	
Guided tour/ sightseeing to see animals/ natural			0,770	
attractions				
Guided tour/ sightseeing to cultural attractions			0,725	
Visitor centres with exhibitions			0,696	
Purchase/ rent of clothes and outfits			0,489	
Local food specialities			0,472	0,511
Well developed food and beverage facilities				0,791
Abundance of accommodation facilities				0,760
Accommodation with good standard				0,754
% of variance explained	33,9	9,1	7,4	6,9

Table 4: Linear regression: Acceptance of negative ecological impacts due to tourism activities and facilities in national parks^a) regressed against respondent's characteristics (Model 1) and respondent's characteristics and *NO*, *QTF*, *WPS* and *NEP* scale-based (Model 2). Sub-samples 1 and 2. Standardized Coefficients.

		Sub-sample 1		Sub-sample 2	
Variable	Description	Model 1 ^b)	Model 2°)	Model 1 ^d)	Model 2°)
(Constant)					
Female	Dummy (1/0). 1: Female respondent	-,023	,000	-,143**	-,113*
Bachelor	Dummy (1/0). 1: Completed bachelor degree	-,158***	-,128***	-,110	-,131*
Master/doctorate	Dummy (1/0). 1: Completed master/doctorate degree	-,211***	-,171***	-,236***	-,221***
From Denmark or Sweden	Dummy (1/0). 1: Respondent's place of residence is either Denmark or Sweden	,067*	,105***	,104*	,092
From Germany	Dummy (1/0). 1: Respondent's place of residence is Germany ^f)	-,090**	,028	-	-
Knowledge of NPs	Number of the national parks known in the region	-,009	,019	-,139**	120**
Travel experience in NPs	Number of the national parks visited	,024	,027	,133**	,151**
Overnight visit	Overnight stay in Northern Gudbrandsdal	-,086**	-,048	-,109*	-,096
Small travel party	Dummy (1/0). 1: Total number of persons (adults+children) the travel costs cover is one or two	-,054	-,061*	-,101	-,097*
Long trip	Dummy (1/0). 1: More than four overnight stays	,007	,009	-,156**	-,080
factor 2 – NO	Inspiration (composite)		-,217***		
factor 3 – NO	Challenge (composite)		,086**		
factor 4 – NO	Comfort (composite)		,106**		
factor 1 – QTF	Infrastructure & service (composite)		,176***		
factor 4 - QTF	Food & accommodation (composite)		,118***		
WPS	Purist (index)				105*
NEP	Environmentalist (index)				365***

a) Index: Negative influence on wild reindeer habitat, raptor nesting and vegetation

b) Adj. $R^2 = 0.04$, n=704 c) Adj. $R^2 = 0.25$, n=248 c) Adj. $R^2 = 0.14$, n=704 f) Germany was not included in sample 2 due to a coding error d) Adj. $R^2 = 0.11$, n=248 Significance levels: *<0.1, **< 0.05, ***< 0.01

Paper 3



Tourism stakeholders' perceptions of national park management in Norway

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Local tourism firms represent an important stakeholder interest in national parks. The present study examines these stakeholders' perceptions of management processes and their assessments of the resulting management plans and operations. This research is based on qualitative interviews with representatives of tourism businesses in two different national park settings in Norway - Rondane National Park and Jotunheimen National Park. The findings illustrate that despite their general support for the national park status, the local tourism stakeholders interviewed had experienced only minor involvement in the management planning process, and had had very little influence in the final management decisions. They believed that opportunities for business operations were lacking due to excessive management restrictions, and that managers lacked competence with regard to business management and tourism development issues. In addition, they thought that management authorities should more explicitly include sustainable tourism development in their visions and goals. Based on the findings, it is assumed that there is potential for local tourism operators to take greater responsibility in planning processes and management operations. It is concluded that measures should be taken to foster durable social links and trustworthy planning partnerships between responsible managers and local tourism stakeholders in the two national parks.

Keywords: national park; management; planning; stakeholder; tourism development

Introduction

The establishment and management of national parks is often a highly contested process because of the inherently conflicting values and goals associated with the protection of natural resources. Broadly speaking, the existence of a national park requires managers to find a balance between two competing goals – preserving the natural resource base and providing access to visitors who come to enjoy the same nature and landscape. According to McCool (2009), resolving these two goals is challenging especially when it concerns tourism development in protected areas. In the case of Norway, conservation goals are considered superior to visitor access and tourism development goals.

A series of problems arise as a result of not only fundamental differences in the goals of protected area planning and administration agencies, and the local tourism industry, but also because of dissimilar cultures and social and economic dependencies between the two parties (McCool, 2009). Tourism interests are, as yet, not closely involved in the conservation and planning processes, which are the responsibility of the national parks management agencies (Jamal & Stronza, 2009). The local tourism industry stakeholders,

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nevertheless, are often totally dependent on the natural resources contained in the park - a reliance that may produce severe tensions.

This paper explores the complexities arising from the frequently opposing/contrasting management obligations and local tourism interests in a Norwegian national park setting. The management regime in Norway has traditionally viewed tourism as a threat to the natural resources contained in national parks, despite the fact that there is no research to support this belief (Kaltenborn, 1996). The Norwegian park management approach has been described as "classical nature protection" (Aasetre, 1998) – a strategy where little concern is given to commercial interests and stakeholder involvement in park management. As noted by Saglie (2006, p. 10), sector-agencies are often based on a specific knowledge base and staffed by members of certain professions guarding special interests.

As a response to the decline in rural economies in Norway and the associated lack of job opportunities in these areas, the national authorities have recently decided that national parks and other protected areas may be utilised for certain commercial purposes like expanded tourism activities (Finansdepartemenet, 2003; Miljøverndepartementet, 2005). Such developments signify that the tensions and social dimensions of protected area management are moving to the forefront of protection policies. The political signals reflect a movement that has been witnessed internationally (see for example the general outlooks in Hall & Frost, 2009, p. 308 and Hammer, 2007, p. 21), where the traditional "static-preservation approach", which is dominated by segregated top-down governmental planning, is being challenged by the "dynamic-innovation approach", where cross-sector local interests come into play (Mose, 2007, pp. 12-13). This approach is based around integrative and cooperative efforts which aim to involve local stakeholders in the planning process, in order to develop management strategies that are acceptable to affected parties. The recognition of local tourism businesses as legitimate stakeholders and the inclusion of tourism functions in park management operations therefore become more and more pertinent assignments to managers. Moreover, a high level of trust among the various actors involved is seen as vital to achieve fruitful co-operation, and thus it is a key aspect of good governance in protected areas (Graham, Amos, & Plumtre, 2003).

Given these recent developments in the approach to Norwegian park management, it would seem timely to examine the experiences of local tourism stakeholders¹ within "the integration approach" (Mose, 2007, p. 13). The focus of the present study is, therefore, the perspective of local tourism firms. The extent to which these stakeholders influence management processes in Norwegian national parks, and how they assess the resulting management plans and operations, are examined. In doing so, some key questions addressed are:

• Do the local tourism stakeholders support the idea of establishing a national park in their area?

The rationale for starting with this question is the assumption that if tourism stakeholders are supportive of the nature protection values upheld by the national authorities, this will serve as a common platform and thus facilitate co-operative efforts.

- How do local tourism firms view their involvement in the management planning process?
- What are the local tourism stakeholders' views on the outcomes of the management plans? (A critical point to consider here is whether management practices within the

park impinge on local tourism business operations and thereby have a negative effect on the livelihood and social wellbeing of their households.)

• And finally, to what degree do local stakeholders feel that mutual relations and trust are built in the management processes and concluding planning resolutions?

Parallel case studies were conducted for this research, illuminating the situation in two neighbouring but rather different national parks in Norway: Rondane and Jotunheimen national parks. The local tourism firms in these parks operate under various degrees and types of management restrictions due to the particular strict protection policy for the wild reindeer habitat in Rondane National Park. There is reason to expect that this may be a bone of contention for the local tourism industry in Rondane compared to Jotunheimen. The two cases are therefore well fitted for a multiple case study (Yin, 1994) comprising comparison of the local tourism industry interests' experiences and assessments within two different park contexts regarding current management progression and solutions.

Management of national parks in Norway

Since Rondane National Park was established as the first of its kind in 1962, there has been a steady growth in the number of national parks in Norway. Today, the 33 parks on the mainland comprise more than 8% of the total land mass (Figure 1), and when other categories of protected areas are included, this rises to more than 15% (The Norwegian Pollution Control Authority, 2010). According to Norway's Nature Conservation Act, 1970 (*Naturvernloven*), the main goal for establishing protected areas is to safeguard a representative selection of Norwegian habitats and landscapes. This is reinforced by the new Nature Diversity Act, 2009 (*Naturmangfoldloven*), which states that national parks should protect particular or representative ecosystems and landscapes.

As is the case in many other Western countries (Hall & Frost, 2009; Hammer, 2007), outdoor recreation is typically a secondary objective of national park creation in Norway – in other words, recreational and other tourist activities must take place within the framework of nature conservation (Miljøverndepartementet, 1992). In the Norwegian national parks policy, there has traditionally been little emphasis on active management and care of facilities and services (Haukeland & Lindberg, 2001). Even where management plans have been introduced in parks over recent years, limited resources have so far been allocated to management staff, monitoring and implementing visitor services (such as information and guidance), or to the development of an adequate visitor infrastructure. These insufficiencies may hamper tourism operations and activities within the parks' boundaries.

The management of the natural resource base both within and outside protected areas has been founded on the general principle of "common access" (*allemannsretten*), on which Norway's Outdoor Recreation Act (*Friluftsloven*) is based (Miljøverndepartementet, 2007). The Act allows for unrestricted foot access to all in wilderness areas (areas which are not regarded as cultivated) such as national parks throughout the year. Outdoor activities such as skiing, walking, berry picking, horseback riding, cycling, as well as hunting and fishing are usually permitted. No entrance or concession fees for using the national parks areas are required.

The backdrop for this management regime in Norway is the fact that a comparatively large proportion of the land is characterised by mountains, moorland and forests. Apart from some "hot spots", the pressure from recreational users on the natural resources in these extensive areas has been modest. The national trekking organisation, DNT (*Den Norske Turistforening*), has for a long time taken advantage of *allemannsretten*, and this

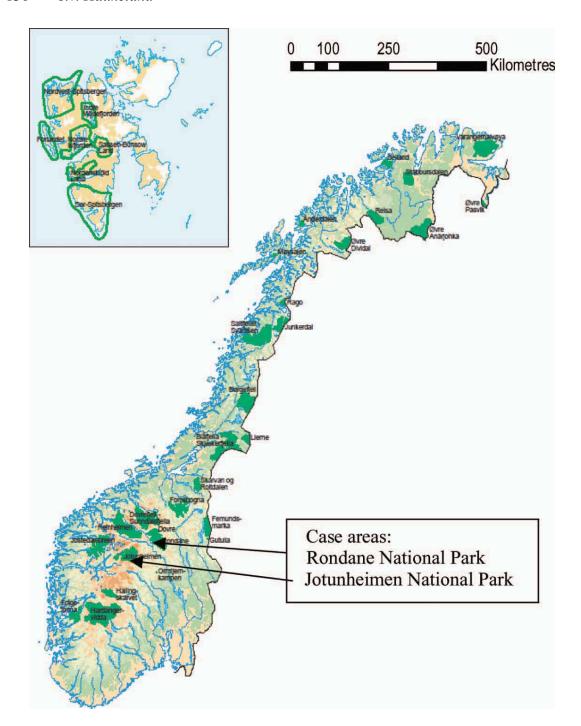


Figure 1.² National parks in Norway and case areas. Source: Direktoratet for naturforvaltning, www.dirnat.no.

membership organisation has set up a system of marked routes and cabins for hikers in large parts of the Norwegian mountains comprising also several national parks. However, management regulations for each park may provide specific restrictions on the kind of activities that are permitted. The management is also based on an agreement with DNT, which is responsible for the maintenance of signposts, markers (red letter Ts on cairns and rock faces), paths, footbridges, skiing trails etc.), both within the national parks and other outdoor areas where it operates.

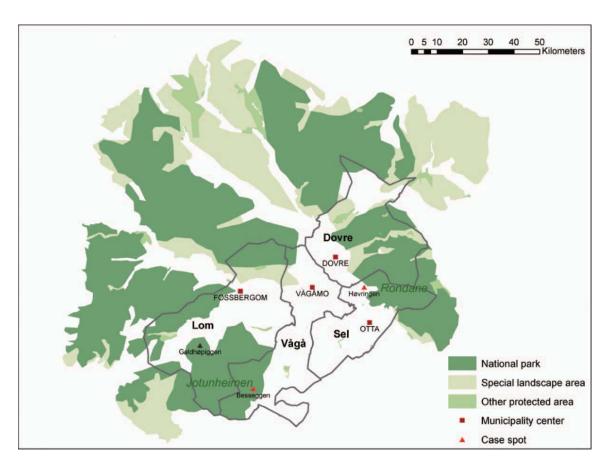


Figure 2.³ Rondane and Jotunheimen national parks. Source: Direktoratet for naturforvaltning, www.dirnat.no.

Rondane and Jotunheimen national parks

Both national parks selected for this study (Figure 2) are located in the same geographical mountain area in the interior of Southern Norway and they are primarily administered by Oppland County Governor (a governmental agency with ministerial responsibility).

According to the "Bern Convention" (Convention on the Conservation of European Wildlife and Natural Habitats, CETS No. 104), signed in 1979, Norway has a particular responsibility to protect the unique wild reindeer habitat within the borders of Rondane National Park. This area is deemed to be particularly sensitive to human impact (Vorkinn & Bråtå, 2006). Although juridical preservation directives were put in place at the very outset when Rondane National Park was set up in 1962, the process associated with the management plan was first initiated in 2005. After a comprehensive management procedure, where about 60 stakeholders participated in various reference groups, theme and area committees, and a widespread hearing process including 152 single statements was undertaken, the management plan has been recommended by the County Governor and forwarded to the Directorate for Nature Management and the Ministry of the Environment for final approval (the Directorate for Nature Management has recently endorsed the plan). The main goal in the management scheme is "to uphold a mountain ecosystem comprising the last remaining herd of North Europe's wild reindeer. At the same time simple outdoor recreation activities ('enkelt friluftsliv') with limited technical facilitation will be tolerated" (Fangell, 2008, p. 2). One important measure is the channelling of hiking routes and skiing tracks mainly to the outskirts of the national park area in order to shelter the wild reindeer (especially the calving sites in the interior part) and to prevent the crossing of hikers and skiers in the east—west direction. Recommended restrictions on commercially organised tours outside approved zones and marked paths and tracks, and also new regulations on the grooming of cross-country skiing trails, have been especially contested among locals. The draft management scheme thus resulted in a local protest, including a petition called "Enough is enough!" with more than 4000 signatures, which was made manifest during the winter of 2008.

Jotunheimen National Park is probably the most well-known national park in Norway, as it contains the highest alpine mountain peaks in the country, including the famous, and frequently visited, mountain edge of Besseggen. Visitation and tourism activities are considered less ecologically problematic in Jotunheimen National Park than in Rondane, but new building facilities and motorised traffic are still prohibited within the park, and any applications for dispensations to this rule are handled very carefully. Jotunheimen National Park was founded in 1980 and the current management plan dates back to 1998. The revision of the management plan was initiated in 2004 as a response to the finalisation of the ban on commercial activities in Norwegian national parks in 2003 and the associated initiative to form a regional organisation called Nasjonalparkriket (The National Park Realm) in order to strengthen tourism development in the region. The management plan's main aim is to clarify the balance between use and protection; the principal goal is to protect the nature with its fauna and flora and also the cultural heritage; and important sub-goals will be to support agriculture, outdoor recreation, hunting, tourism, education and research. Again, "the Norwegian outdoor recreation and the values it is based on" (Dybwad & Klæbo, 2008, p. 7) are emphasised regarding the user perspective. Local supervisory committees have been set up in Jotunheimen National Park, including representatives of managers and local stakeholders from various sectors.

Management models and stakeholder involvement

The traditional vs the integrative management regime

According to Mose (2007), the above-mentioned "static-preservation approach" is a product of the twentieth-century preservation movement. Increasing industrialisation and the growth of mass tourism led to a growing belief that natural areas were extremely vulnerable to human impact and that they should be spatially separated from other societal functions and protected by legislation to avoid pollution and degradation. In this approach, "neutral" experts play an important role in forming the premises for preferred policies and decision-making by the use of scientific data. Unfortunately, as noted by McCool (2009), this type of rational-comprehensive planning approach is based on the assumption that the world is predictable. Drawing on several critiques of this expert-driven planning paradigm (e.g. Fischer, 2000; Williams & Matheny, 1995), McCool argues that this planning approach "marginalizes experiential and traditional knowledge, privileges the scientific elite, and often excludes those affected by decisions in the planning process" (2009, p. 136).

This type of approach is also questioned in the case of protected area tourism planning – a context which is often described as complex and non-linear and where there is a lack of knowledge about causal relationships. This in turn leads to a high level of uncertainty in decisions which are based on this approach, as conflicting interpretations will always be present in both the biophysical and social domains. Various interpretations will co-exist and in situations where high levels of conflicts do exist, such discrepancies can only be resolved through a process of careful deliberation and negotiation, and through the creation of tourism planning partnerships (McCool, 2009).

In contrast to this static approach to protected area management is what Mose's has termed a "dynamic-innovation" approach, whereby nature protection becomes a policymix, where top-down and bottom-up approaches are intertwined. The highest level of acceptance from relevant stakeholders is essential in this integrative management regime and the involvement of local players is considered to be of utmost importance in order to "implement communicative and participatory forms for the planning of protected areas" (Mose, 2007, p. 16). The societal backdrop for this shift in management approach is the global drive to establish more protected areas (World Commission on Protected Areas, 2005) and the growing recognition that national parks can also be instruments for regional development and expansion of the tourism industry (Hammer, 2007).

Governance and the need for stakeholder involvement

This reorientation of the approach to park management mirrors the prevailing principles for good governance in our societies. Graham et al. (2003, pp. 2–3) define governance as "the interactions among structures, process and traditions that determine how power and responsibilities are exercised, how decisions are taken, and how citizens and other stakeholders have their say". Three of the five "Good Governance Principles" that have been produced for the World Commission on Protected Areas (WCPA) are highly relevant as regards stakeholder involvement: *Legitimacy and Voice* (including participation and consensus, reflecting a high degree of trust among the affected parties), *Direction* (comprising a common strategic vision for protected areas) and *Performance* (demonstrating the responsiveness of responsible institutions and processes to stakeholders).

Protected areas around the world contain some of the most important ecosystems, habitats and species on the planet (Eagles, 2009). It can be assumed that a possible support expressed by local tourism stakeholders for Norwegian national parks is of fundamental significance, and that a shared understanding of the strategic vision for the national parks (*Direction*) is a necessary precondition for the functioning of an integrative management regime. However, there is also reason to believe that support for the management *outcomes* will depend on the level of involvement of these stakeholders (*Legitimacy and Voice*), and whether they are able to work together (*Performance*) in order to resolve problems, minimise conflicts and maximise benefits (Dredge & Jenkins, 2007; Inskeep, 1991).

The inclusion of social dimensions in the planning and decision-making process, for obvious reasons, requires the involvement of relevant stakeholders and collaboration between the various interests. According to Freeman (1984), there are two main categories of stakeholders: (1) those who can affect decisions and (2) those who are affected by the decisions taken. Prell, Hubacek and Reed (2007) have termed the stakeholders in group "2" "moral stakeholders". Collaboration is seen to occur when "a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms and structures, to act or decide on issues related to that domain" (Wood & Gray, 1991, p. 146). Although this definition does not include any reference to the scope or breadth of the problem, the number or power of participants, or how representative they might be, it emphasises the intention to "act or decide on issues" in any collaborative process. This means that a mere exchange of information is insufficient.

Mannigel (2008) discusses two distinct perspectives for participatory approaches, with reference to Cleaver (1999) and Diamond (2002). She argues that stakeholders should be seen as an *end* (i.e. understood as necessary for equity and empowerment of stakeholders), and as a *means* to improving management interventions. The theory has thus both normative and instrumental value. In other words, all affected interests are legitimate and have an

intrinsic significance, and the most effective strategy in the long run will be to take all of these interests into consideration. With reference to authors such as Jamal and Getz (1995) and Murphy (1985), Bramwell and Lane (2000) claim that tourism stakeholder involvement "can lead to democratic empowerment and equity, operational advantages, and an enhanced tourism product" (p. 2). Again, this highlights that the stakeholder approach has both normative and instrumental values. There are thus many potential benefits from collaboration and partnerships and also some potential problems (for a comprehensive list, see Bramwell & Lane, 2000, pp. 7–9).

Stakeholder participation requires a significant degree of involvement. Mannigel (2008) argues that active information exchange (i.e. dynamically consulting with a swapping of views and opinions), and negotiation and active participation are mechanisms that will empower local stakeholders within the framework of shared processes (see also Agarwal, 2001; Borrini-Feyerabend, 1996; Mattes, 1998; Pimbert & Pretty, 1997). The creation of protected area tourism planning partnerships should strive to create, maintain and reinforce consensus on a common vision for the development of the area (McCool, 2009). A collaborative learning process is necessitated where planners/managers, scientists and various tourism players participate. Dialogue and mutual adaptation then become crucial elements in planning and management, and it is believed that the various parties will learn to "live with" negotiated solutions as they share basic common interests and goals (McCool, 2009). Wilson, Nielsen and Buultjens (2009, p. 282) have, on the basis of their case study of a tourism public-private partnership in an Australian national park setting, and building on Laing et al.'s (2008) comprehensive multi-disciplinary review of partnership research, underlined the importance of addressing "process-related factors of success, such as trust, commitment, open communication, flexibility and ability to manage conflict".

When designing successful planning partnerships for tourism development in protected areas, several criteria should be met. These are representativeness, ownership and trustful relationships (McCool, 2009). "Representativeness" refers to the integration of local tourism stakeholders' goals, their means of achieving them, and their experiential knowledge in addition to technical and abstract scientific knowledge provided by professional managers and experts. "Ownership" refers to the fact that responsible involvement in the planning process is likely to generate a loyalty towards the process, and support for the outcome and the implementation of agreed actions. This ownership may also open up opportunities for operational co-management (McCool, 2009). The final outcome of a successful collaborative process would thus be mutual trust among the actors involved. This, however, does not always occur. A lack of trust is seen a fundamental barrier against successful planning, and often a deep concern about such deficiency is observed (Lachapelle, McCool, & Patterson, 2003). Trust takes time to build, but is easily broken (Pretty & Ward, 2001), and when a social system is permeated by distrust, co-operative arrangements are unlikely to appear (Baland & Platteau, 1998).

Method

The method chosen for the present study was personal interviews with a selection of local tourism stakeholders who are particularly affected by the national park management plan. Such qualitative research is seldom used to study tourism stakeholders' perceptions of protected area management, but this approach is still considered promising as it allows for a rich and detailed examination of this relationship (Wilson et al., 2009). Tourism activities are concentrated in two areas in the case study parks – Høvringen in Rondane and

the Besseggen area in Jotunheimen. A focus on these two areas is therefore chosen, and also because of the attention they had been given in the management planning processes. The interviewees were selected through recommendations from the management staff at the Oppland County Governor's office and by leading representatives of the local tourism industry organisations. The purpose of the selection procedure was to include local tourism interests that would be "information-rich" (Patton, 2002, p. 242) regarding the effects of national park management principles and processes on their businesses. The sample of respondents was also intended to cover various types of tourism interests, but given the qualitative nature of the method, the aim has been to achieve "analytical representation" rather than "statistical representation" (Yin, 1994, p. 10).

Some key characteristics of the tourism traffic, tourism enterprises and tourism activities in the two national parks are presented in Table 1. The respondents constitute a cross section of the tourism operators in the two case areas. They are with a few exceptions local residents who are born or have lived for a long period in the area. These stakeholders are to a very high degree dependent on the natural resources that the national parks represent and most of their firms can date their history back to the period of time prior to the establishment of the national parks.

In Rondane National Park, the stakeholders represent tourism businesses located within, or in the immediate vicinity of, the eastern part of the park; within close proximity to the tourist site Høvringen, and within the borders of Sel and Dovre municipalities. With the exception of one informant (who operates a staffed DNT cabin inside the park), all respondents run their own small-scale enterprises – primarily accommodation facilities and eateries. None of the businesses selected specialise in any particular outdoor activity, but several of them provide guided tours and additional services for their clients. One representative of the central DNT unit in Oslo with responsibilities for the organisation's activities in both Rondane and Jotunheimen national parks was also interviewed. The empirical analysis is thus based on seven interviews with representatives of mainly family-driven tourism enterprises, offering a tourism product which is heavily dependent on the Park's resource base.

In Jotunheimen National Park, a similar group of affected local tourism business entrepreneurs was selected for interview. Five of them operate close to Besseggen mountain edge — either within the park boundaries or in the gateway area connected to this major tourism attraction. One informant operates an adventure firm located elsewhere in the area and one informant is positioned in the western part of the park, in the gateway to Mt. Galdhøpiggen, i.e. the second major nature attraction in Jotunheimen with relatively high visitor numbers. Most of the informants provide accommodation as their main tourism product, but some offer organised outdoor activities and one provides a transport service for visitors to the park. A total of eight people were interviewed in relation to Jotunheimen National Park (including the above-mentioned representative of the central DNT unit in Oslo with responsibilities for both national parks in question).

One pilot interview was carried out in 2008 and the remainder (13 interviews) were conducted during the period February–April 2009. This number of interviews turned out to be satisfactory in order to obtain "theoretical saturation" (Bloor & Wood, 2006, p. 155; Charmaz, 2006, p. 113), i.e. additional observation would not produce any additional substantial information. Most interviews took place at the respondent's workplace, but three were undertaken elsewhere, and one had to be carried out by telephone for practical reasons. All interviews lasted between half an hour and 1 hour 10 minutes, and all followed a semi-structured interview guide (Kvale, 2006), which was slightly modified after the pilot interview. The dialogue was also shaped partly by emerging themes and points raised by

Table 1. Description of tourism traffic, tourism enterprises and tourism activities.

Descriptor	Rondane National Park	Jotunheimen National Park
Focus areas Annual tourist visits per year at crucial spots ^a	Høvringen 50,000 visitors are counted at the main entry point to the national park at Høvringen	Besseggen 40,000 hike over the mountain edge Besseggen – several more visit the area around Lake Gjende
Actual accommodation in staffed DNT huts per year (2009) within or close to national park borders ^b	18,000 guest nights	45,000 guest nights
Actual accommodation in hotels, camping and rented cabins per year (2009) in the four adjacent municipalities within Oppland county ^c	284,000 guest nights ^d	211,000 guest nights
Capacity of accommodation enterprises in the four adjacent municipalities within Oppland county	14 registered accommodation firms (8 in Dovre municipality and 6 in Sel municipality)	36 registered accommodation firms (28 in Lom municipality and 8 in Vågå municipality)
Average turnover per year (2005–2008) from tourism-related businesses in accommodation enterprises	NOK 2.4 million ^e	NOK 3.0 million ^f
Employment in accommodation enterprises Main types of tourism services in focus areas	4.7 (number of man years), mostly local employees ^e Accommodation and eateries (some offering organised supplementary activities).	4.9 (number of man years), mostly local employees finally accommodation and eateries (some offering organised supplementary activities), but also a few local museums and activity and transportation firms.
	DNT has a few staffed huts in Rondane National Park.	DNT has several huts, both staffed and unstaffed, in Jotunheimen National Park.
Main season Main tourism product	Winter Cross-country skiing and hiking	Summer Hiking

^aBased on oral information from tourism stakeholders.

respondents during the course of the interview (Bloor & Wood, 2006, p. 104). Iterative probing was also utilised in some cases to reach a certain level of understanding (Ritchie & Lewis, 2003, p. 152). The interviews were tape-recorded and transcribed in their entirety. The data were then grouped according to the main theoretical propositions and the research questions. During the analysis, some categories were revised and other new categories were added to reflect the meanings and ideas produced by respondents (Robson, 1993).

^bBased on statistical information from DNT (unstaffed DNT huts and other private accommodation not included).

^cFigures also include neighbouring Skjåk municipality. Source: Statistikknett (2010).

^d The relatively high numbers can be ascribed to the main highway E6 that passes through the area in a north–south direction.

^eBased on records from 12 firms in Dovre and Sel municipalities.

^fBased on records from 10 firms in Lom and Vågå municipalities.

One limitation of the research design is that both case study sites are managed by the same planning authority (the Oppland County Governor). In order to assess whether this had an influence on our findings, it could be useful to use case studies in parks which fall under a different administrative structure. A comprehensive survey covering a representative sample of local tourism stakeholders in national parks in Norway would also illustrate the problems that are being addressed in greater breadth.

Results

Support for national park status

In general, the local tourism stakeholders strongly support the idea that Rondane should maintain its national park status. The key reasons given in support of this view were the importance of preserving valuable nature reserves for future generations, and the perceived threat to nature from society's exploitation of natural resources. This also mirrors the tourism stakeholders' core vision of the national park:

Interviewer: Why do you think it is a good thing that this area is protected?

Respondent: Because it represents a wilderness that is also accessible for humans. The wilderness is preserved this way and humans may also experience nature's contrasts to urban life. It [the national park status] is a foundation for significant experiences of nature, and in this way it has a great value for the Norwegian society and also for international tourism.

The importance of the national park as a brand was also discussed by respondents. In several cases, this marketing aspect is extremely important to the success of their business operations:

Respondent: I think it [the national park status] is superb. To us it is marketing argument no.1! . . .

Interviewer: And the response is good?

Respondent: Absolutely – that's why we bought this place in the first place.... It has been decisive for us – it is the honey pot!

Similar to the findings from Rondane, all informants supported the statutory protection of the Jotunheimen mountain area. However, they also expressed a strong view that the national park status should not prevent people from using the area:

Interviewer: Do you support the legal protection of the area?

Respondent: Yes... because I think that it is important to safeguard the heritage that we have.... At the same time, we think that the area should be used, and that we should not hide it away for the benefit of those who will be here a hundred years from now.

Management plan processes

This general support for the park status does not, however, mean that the informants are satisfied with the planning processes leading up to the management plans. The interviews revealed a sceptical attitude towards the planning processes because of a perceived lack

of tourism industry input. Respondents felt that their views had been disregarded and that their local knowledge had not been sufficiently taken into account.

In the case of Rondane, there is a strong belief that local tourism representatives have not been able to contribute to the planning process in the way they would have wished, and that local viewpoints have been excluded from the management plan. A point which was stressed by several respondents is that the natural area has been managed for generations (prior to park designation) in a responsible way, and that local expertise should therefore play an important role in the management process. According to several interviewees, the process has been one-sided and undemocratic because national interests have taken precedence over local knowledge. Concluding management decisions were presented prior to the dialogue which took place about basic principles and the process was therefore locked at an early stage. The Rondane management plan is considered to be extremely rigid and very hard to influence due to the unfair power relation between managers and locals:

Respondent: I was a representative for the local tourism industry and I am familiar with the planning process from several consecutive meetings . . . but, as I told you, they want to decide. . . . It has been burdensome many a time because it has been of no use - of no use - to say anything.

The final draft of the management plan in Rondane was modified after a strong protest during the winter of 2008. One controversial point related to the grooming of skiing tracks was revised and accepted from the start of the season as a concession from the County Councillor. As explained by one local stakeholder:

Respondent: [The management plan] was very restrictive from the start but the result was an arousal of an exceptionally great public opinion. . . It surprised me that. . . [the final result] was better than I had expected. . . . Though the democratic process was terminated: . . . After a broad, participating process was put in place, the Directorate for Nature Management still makes the decisions themselves. . . . I think co-operation is extremely important.

As one respondent in Rondane explained, a balanced power relationship should be based on the precondition of mutual give and take – something which they believe has not happened so far in Rondane. She believes that dialogue in an early phase about local tourism industry needs would have made the process more constructive.

In Jotunheimen the contact between management staff and the tourism stakeholders is also perceived as very tenuous. Respondents feel that it is important to incorporate tourism interests into all levels of management if Jotunheimen is to develop into a user-friendly national park:

Respondent: Tourism interests were not represented at all when the first management plan was implemented I cannot remember having seen any local tourism interests represented on the supervisory board for the national park.

The lack of representativeness was also seen as a democratic problem in Jotunheimen, as a small number of people are members of local supervisory committees and mountain boards and also have limited relationships with the local tourism industry. The management process is seen as controlled in a top-down manner:

Respondent: Last year a proposed amendment [of the management plan] was sent out for a hearing, so we submitted a statement . . . So on this level we've been involved, but once you start looking for ways to achieve a workable implementation, there seems to be a wall between management and industry, where you are suddenly no longer invited or taken into consideration.

Assessments of management plan outcomes

A lack of convincing scientific evidence for the measures which have been implemented to protect the wild reindeer was a major concern expressed by respondents from Rondane. There was a general feeling that the wild reindeer are not threatened by tourism activities, and that the universal protection measures are unnecessary. This was seen as the management plan's weakest point. Respondents argued that tourism activities and wild reindeer successfully co-exist under current conditions and have done so for at least 150 years – since the first tourism businesses were established in the area. Moreover, the local enterprises have not witnessed any increase in the tourism traffic over the past decades:

Respondent: The utilization of the mountains was much rougher in earlier days. Imagine the grazing in competition with the wild reindeer. . . . Farm animals were swarming, with nearly 40 summer farms here at Høvringen. The area was filled up with people and animals.

A critical point is that the management concern for the wild reindeer is based on the precautionary principle, but local stakeholders do not believe that this is necessary. As explained by the following respondent:

Respondent: Our history is a sufficient documentation of the fact that the precautionary principle is unnecessary. . . . And when we now observe that the wild reindeer herd is expanding along with human use of the park, this should be seen as sufficient evidence. Thus it is pointless to make a rule that people should not visit the area.

Access to Rondane was also a concern for respondents. They believe that common access should be provided for various groups, including facilities for elderly and disabled people. The restriction on organised groups in the Rondane management plan was also contested by a number of interviewees, as they believe that it is at odds with the very strong Norwegian principle of "common access" (*allemannsretten*):

Respondent: And it must likewise be a misunderstanding of the principles [...] associated with common access to the wilderness that you have to hike on designated footpaths, because those people who really appreciate nature and wilderness, they want to go anywhere they like.

Critiques of the Jotunheimen management were first and foremost related to the fact that there is no strategy for tourism development in the park. Respondents attributed this partly to the lack of management resources, but there were also several criticisms of the lack of relevant competence among managers to implement adequate measures for tourism developments in and around the park. A number of participants expressed a desire for a more active management:

Respondent: It is obvious that it is in our interest to find solutions – around Besseggen in particular – in order to create positive experiences for the visitors; that it is clean, with toilet facilities at certain spots, that there is unnecessary queuing and everything runs smoothly.

Several informants emphasised the importance of keeping the park clean and tidy, and felt that systems for garbage handling and toilet facilities should be put in place. At several entry points to the park, and along the popular Besseggen route, litter and toileting issues are becoming a serious problem. In addition, respondents called for improved signposting and information services due to safety reasons. They emphasised the need for an active communication strategy to be developed for visitors to the park:

Respondent: Can you think of any other social field where there is no communication and information between those responsible and the users? When you enter the national park there is nothing. No signposting informs you about anything, and there is in fact nothing to inform about since nothing is facilitated.

Several respondents felt that the park management authorities were uninformed about recent developments in user interests and were unaware of emerging patterns of tourist behaviour. For instance, the "Norwegian outdoor recreation tradition" (which is typically based on long hikes from one DNT-cabin to another) is currently being challenged by new types of visitors, demanding shorter walks, picnic facilities, nature guiding, information services, parking areas and safety measures. These changes in the type of tourism in the area have been addressed, to a very limited degree, by the management authorities, though some new initiatives regarding information provision have been put in place (for instance boards and signposts). Such initiatives were praised by respondents who were aware of their existence. Some of the interviewees also expressed a need for comprehensive tourism development strategies which take into consideration the social and cultural resource base in the adjacent local communities.

A further criticism of the Jotunheimen management plan outcomes was a lack of flexibility regarding building applications within the park. These applications were regarded as necessary to update and expand the tourism infrastructure. In addition, the use of motorised transport for visitors to the park was seen as extremely important. The current provisions for motorised transport were believed to be insufficient and lacking in flexibility. For example, the licence for the motor boat service at Lake Gjende dictates a strict route system with little opportunity to adapt to fluctuations in traffic, or to respond to special requests, such as separate sightseeing tours for groups who are not interested in a Besseggen hike.

In Jotunheimen there is a strong desire to assist the management in the park planning process, and respondents showed a keen interest in the co-management of tasks like information provision and resolving issues such as littering and toileting:

Respondent: I have established a camp site at our place with sanitary installations and arrangements. . . . And, when visitors come and ask, we're the first to give advice about where to find [other] nice natural camping sites, but those who camp at such places must be made aware that they have to carry all their waste back out of the park.

The tourist firms currently provide a great deal of information about the national park for the visitors, and those interviewed indicated that they would like to expand this role. They believed that it was perfectly reasonable to expect local businesses operating in a protected area to inform their clients about management regulations, facilities and natural conditions. Nature guidance is also a responsibility that was mentioned in this context.

Management restrictions and tourism business operations

A number of management constraints were believed to be directly affecting the tourism businesses in Rondane. An example of this is the wish to restore the wild reindeer's previous migration routes which, it is claimed, will destroy tourism sites and settlements close to the park boundary:

Respondent: The restitution of the wild reindeer's earlier migration pattern is also an example of an extreme goal. Yes, I used the term *extreme* and I stick to that.... This goal in fact means that all [tourism] activities at Mysuseter and Høvringen must close down.

Another issue of contention is the motorised grooming of cross-country ski tracks. This is the main facility for cross-country skiers who visit the area. Motorised transport is not in accordance with the national park jurisdiction, however, and skiing activities may also affect the sensitive wild reindeer negatively, according to the management authorities. Continuing disputes over the use of motorised transport (for people and goods) and over building applications were reported as having negative impacts on business undertakings. For example, one operator explained that motorised transport to his cabin is now only permitted at certain periods, which has led to a decrease in the number of visitors. Respondents argued that tourism firms depend on predictable operating conditions, and that the unforeseen introduction of severe management restrictions weakens the tourism product and its position in the tourism market. Some of the local tourism stakeholders would therefore like to see less restrictive strategies and more active support for tourism activities from the management side:

Respondent: . . . in our submission document, we wrote that now as national parks are established all over the place, more supportive ideas about outdoor recreation activities in the parks should be reflected in the management plans and not only this 'no, no and no again'. . . . We just want a plan that points towards the future instead of constantly referring to what has been.

Interestingly, further discussion of this issue revealed that few tourism businesses in Rondane are actually threatened by closure in the near future because of new management regulations, and there is a belief that one should try to cope with the situation in spite of the difficulties.

In Jotunheimen, management restrictions were believed to be hampering tourism development to varying degrees. Some firms explained that they faced difficulties as a result of restrictions on the use of motorised transport. Examples include the boat services on Lake Gjende (mentioned earlier) and snowmobile provisions to bring customers to isolated overnight accommodation during winter time. Some interviewees felt that their economic problems were also due, in part, to the lack of active management to support and strengthen tourism development in the park. The following respondent explained how he believed more active management could strengthen the tourism industry in the park:

Interviewer: What kinds of activities would thrive [if more active management was introduced]?

Respondent: Those industries that are based here would expand more easily, with more stable conditions. And then there would be more firms offering nature activities.... It would secure both the business operations and the tourism product.... Extension of the season would also be possible. The short season is a challenge for most of us here ... because we have to close and then open again, which makes it difficult for us regarding the staff. All the time find new people.

Mutual relations and trust

One crucial concern expressed by respondents in Rondane is that they believe managers perceive them to be uninformed, and thus do not value their local knowledge, nor consider that it should be included as serious or relevant input in management processes. In addition, the park management is perceived as profoundly conservative, with a fear of anything "new" or "different":

Respondent: At the outset, managers should focus on what is allowed, rather than on all the things that are forbidden here.

Furthermore, regulations are often understood by managers in a restricted way:

Respondent: We observe that statements are interpreted in a relatively strict way as they have found their way into the management plan.

In spite of the perceived lack of human resources in the management system, participants expressed a desire for a more "real" and "open" dialogue, more stable relationships, and permanent management presence in the local area.

Also in Jotunheimen the relationship between management and local tourism businesses is characterised by infrequent personal contact and a lack of mutual engagement. As a result, there is a very low level of trust and confidence in management planning and decision-making in the park. Respondents feel disempowered and criticise the lack of communication between managers and local tourism stakeholders:

Respondent: The sad thing is that the management plan would have been respected, say, if we had been involved; after all we possess a great deal of professional competence and also competence held by visitors, because they live with us.

Finally, they strongly believe that there is very little enthusiasm or support for tourism development within the park and that park managers lack knowledge about business operations and the tourism industry in general, which again leads to a deficiency of trust:

Respondent: It [our relationship with managers] was ok when my father started up here, but it has worsened as this area became more valuable to other interests.

Discussion and concluding remarks

Overall, the local tourism stakeholders involved in this study demonstrated a general support for the national park status of the two areas in question. Despite this, several criticisms of the

management planning processes and outcomes were identified. First, the tourism representatives interviewed had experienced only minor involvement in the park planning processes, and had very little input into the final planning arrangements. Second, respondents felt that there was a lack of opportunities for tourism-related business operations within the parks because of management restrictions. However, the degree to which these restrictions have negatively impacted on the wellbeing of tourism operators and their families is somewhat unclear. Third, participants perceived a lack of competence among managers concerning business management and tourism development issues. They felt that this was restricting their ability to grow their businesses within the park. In Rondane National Park, doubts were also expressed about the necessity of the measures implemented to protect the wild reindeer, and the scientific evidence supporting these measures. In Jotunheimen National Park, respondents called for a visitor strategy to be developed and expressed a strong desire to be involved in the co-management of the park.

Our interpretation of the respondents' assessments indicates that the co-operation between the managers and local tourism stakeholders in Rondane and Jotunheimen national parks is not sufficiently developed, and that trustworthy relationships either do not exist or have not yet had time to fully develop. A certain amount of mistrust towards park management was expected in Rondane due to conflicts over measures to protect the wild reindeer habitat, but the additional above-mentioned problems were also contributing to the lack of trust between the two parties in both parks.

The findings from our two case study parks mirror the situation in national park areas around the world, where the traditional goals, cultures and values of park managers collide with local tourism interests (McCool, 2009). The two types of interests seem to represent contrasting worldviews with a deficiency of integration regarding not only planning processes and management operations (Jamal & Stronza, 2009; Kaltenborn, 1996) but also tourism development strategies on which the local stakeholders are dependent. As our study has demonstrated, the local tourism industry in Rondane and Jotunheimen national parks perceive the top-down management policies as too rigid and lacking the flexibility to deal with the complex social dynamics associated with the protection of natural resources in contemporary society (Hammer, 2007).

The qualitative interviews with local tourism stakeholders in Rondane and Jotunheimen national parks clearly demonstrated support for McCool's (2009) proposal that the rational-comprehensive planning approach excludes those affected by decisions in the planning process. Although our respondents expressed univocal support for the protection of the mountain areas as national parks, there was a strong feeling that they should have more input in the management planning processes and outcomes. In the case of Jotunheimen, participants were also keen to take on certain responsibilities for management operations, such as for information provision.

Mannigel's (2008) view that stakeholder involvement should be seen as an end in itself, and as a means to improve management intervention is supported by the respondents in this study. They claim to have a legitimate stake in the management of both parks, and believe that the disregard of their interests represents a democratic problem. In addition, they strongly feel that their knowledge about tourism management and business functions, and their extensive experience within the local setting should be seen as valuable assets in the management of these protected areas.

The current park management system in Norway is based on formal and scientific documentation and a comprehensive planning process comprising broad hearings among parties concerned. In order to ensure that "real" and effective collaboration takes place during this process, stakeholders should engage in interactive processes "to act or decide on issues"

(Wood & Gray, 1991). As noted earlier, a simple exchange of information is insufficient. Our findings demonstrate that under the present conditions in Rondane and Jotunheimen national parks, there is no sense of local ownership of the management plans. This suggests that the integrative management approach (which includes communicative and participatory elements; Mose, 2007) has not yet been recognised within the management of these parks as regards local tourism stakeholders. The introduction of new national park policy initiatives at the national level may, however, be seen as a move towards the application of this new management regime, reflecting a desire to include local stakeholders in the planning and management process. This gradual shift in management orientation is also evident in the principles of the new Nature Diversity Act, 2009 (Naturmangfoldloven), and in some central government documents (Finansdepartemenet, 2003; Miljøverndepartementet, 2005). Recent actions by the Directorate for Nature Management also reflect these changing ideas. For example, the allocation of additional resources to staffing, official designations of "national park villages" (Direktoratet for naturforvaltning, 2010a) and "national park communes" (Direktoratet for naturforvaltning, 2010b) and a programme for national park value creation (Direktoratet for naturforvaltning, 2010c). Despite this, the present study provides clear empirical evidence that respondents believe the "static-preservation approach" (Mose, 2007) is the dominant management approach towards the local tourism interests in the national parks in question. Much of the frustration expressed by respondents towards the park management regimes can also be understood against this political backdrop, as expectations of improved management dialogue and active support for tourism development are likely to have increased during recent years, but the reality does not yet reflect this.

A more profound alteration of the Norwegian park management approach into an integrative practice would require a more stable and trustworthy relationship between the planning authorities and the local tourism stakeholders, or what has been termed a quality partnership (Wilson et al., 2009). A prerequisite for this would be frequent and effective communications between both parties, based on open dialogue and collaborative learning (McCool, 2009) and the principles for good governance (Graham et al., 2003). The findings from this study indicate that there is potential for tourism firms to take greater responsibility in the planning processes, and also in the management operations (co-management) of the parks concerned. These human resources already in existence within the parks could be utilised more effectively if the management authorities are willing to adopt a more interactive and positive user strategy as regards tourism interests.

Finally, the findings from this research strongly suggest that park management authorities should include sustainable tourism development in their visions and goals for the national parks, and that they should incorporate tourism business and management competence into their organisations to foster mutual benefits and trustworthy relationships. A stronger emphasis on permanent management presence in the national parks may help to build stronger ties between the various interests involved. Changes such as these are viable ways forward to foster durable social links and trustworthy planning partnerships, but as noted by Cole (2006), considerable investment is required in communication and relationship-building between government agencies and tourism business interests if effective and sustainable park management is the ultimate goal. The study has shown that qualitative interviews are an adequate means to better understand the feelings and frustration among local tourism firms about a bureaucratic stakeholder relationship. This methodological approach is also well suited to capture the local tourism stakeholders' challenges in protected areas. Management agencies will hopefully take this knowledge into consideration in their future practice. However, there is still a need in future research also to address

the views and constraints of the National Park Authorities for the implementation of a sound participatory process.

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Notes

- 1. Traditional interest groups such as landowners, farmers, hunters and fishermen should also be incorporated in a multifunctional management perspective, but these local stakeholders are beyond the scope of this particular study.
- 2. Figure is refined by Berit Grue.
- 3. Figure is refined by Berit Grue.

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Paper 4

Special Issue on Tourism in Protected Natural Areas

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Harmony or Conflict? A Focus Group Study on

Traditional Use and Tourism Development in and around

Rondane and Jotunheimen National Parks in Norway

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Harmony or Conflict? A Focus Group Study on Traditional Use and Tourism Development in and around Rondane and Jotunheimen National Parks in Norway

ABSTRACT

Rural industries in Norway are increasingly being marginalised, and rural populations are decreasing. Rural areas and the mountain landscapes which often characterise them are, however, highly valued for their biodiversity, and for amenity values, which in many cases are associated with national parks and other protected areas. In this context, the present study seeks to explore local stakeholders' views on issues associated with tourism development in Norwegian national parks – in particular, their personal interests, rural discourses and management planning processes.

Four focus group meetings were undertaken in two prominent national parks in Norway, *Rondane National Park* and *Jotunheimen National Park*, and with two main user groups: *traditional rural user interests* and *local tourism interests*. Findings revealed strong support across all groups for the existence of the two national parks. Both groups in both parks were in favour of some level, and certain types, of tourism within the parks. The *local tourism interests*, however, felt more strongly than their counterparts that a more extensive tourism strategy was needed to support the local communities. A general frustration with the present management regime was noted among several stakeholders. A key conclusion is that local stakeholders should be significantly involved in future park management processes.

Key words: National park, tourism development, management, stakeholder interests, focus groups

INTRODUCTION

In line with much of the western world, the network of protected natural areas in Norway has expanded rapidly over the past few decades (Daugstad & Rønningen, 2004). More than 16 per cent of the country's land mass is currently protected (primarily as national parks), mainly covering mountainous areas that have been subject to minimal human impact. The main objective of these areas is to protect ecosystems and to maintain wilderness qualities. As noted in the Nature Diversity Act (2009, Section 35): "distinctive or representative ecosystems or landscapes, where there is no major infrastructure development may be protected as national parks". The national parks have predominantly been established in peripheral, rural areas of the country, where local communities are experiencing a decline in traditional industries such as agriculture or forestry. In most cases, the affected municipalities have also witnessed declining populations due to these structural changes (Müller, Hall & Keen, 2004, p. 26). At the same time, nature based tourism has become increasingly important as a (potential) source of income for rural areas (Kaltenborn et al., 2011; Ministry of Trade and Industry, 2009).

Various local groups have an interest in these protected areas. Although a number of these stakeholders may have shared interests (as is the case in the present study), they typically fall into two main categories; *traditional rural user interests* and *local tourism interests*. The former mainly comprises farmers and local landowners who use, or have used, rural areas for mountain summer farming, grazing, forestry, hunting and fishing. Thus they represent traditional interests that are inherited through generations. Local residents who use the protected area for recreation such as fishing, hunting, and other long-established outdoor activities can also be defined as traditional rural users in this context. The latter, on the other hand, represents local entrepreneurs (usually small scale) who see tourism as a business opportunity in and around protected areas. These local business interests are dependent on a certain level of visitation to the parks, and thus often express a desire to expand tourism activity in the area (Haukeland, 2011). A

particular challenge for tourism development in Norwegian parks, however, is that, by definition, a Norwegian national park has no modern infrastructure - just basic trails and ski tracks, and simple tourist cabins which were established before park designation: "No activity that has a lasting impact on the natural environment or cultural heritage is permitted in a national park, unless such impact is essential to achieving the purpose of protection" (Nature Diversity Act 2009, section 35).

Both the *traditional rural user interests* and the *local tourism interests* must be considered as legitimate stakeholders in and around national parks. Yet there exists a potential for conflicts between these two groups. *First*, they may not be able to pursue their own interests, since they are both dependent on utilizing the same natural resources. *Second*, there may be discrepancies in their general ideas about desirable developments of the local communities ('rural discourses'). *Third*, national park management plays an important role in the planning and operation of national parks, and disputes may arise as a result of differences in local opinions about management processes and resolutions.

In the present study, which is empirically informed by *focus groups* conducted in communities located adjacent to *two Norwegian protected areas* (*Rondane* and *Jotunheimen* national parks; established in 1962 and 1980 respectively), we explore how representatives of two key local stakeholder groups define their interests and how they assess the potential conflicts mentioned above. Through these focus groups, we seek to reveal the local discourses through which meaningful dialogues are generated, upheld and modified. The intention is to uncover local insights and to reveal issues of relevance to Norwegian protected area management.

Recent political initiatives indicate that the social dimension is gradually moving to the forefront of Norwegian national park management (Ministry of Finance, 2003; Ministry of Trade and Industry, 2009; Directorate for Nature Management, 2010; Ministry of Environment, 2009-2010). In the context of these new policy perspectives, the present study seeks to explore the development of socially

responsive management processes for protected natural areas.

THEORETICAL BACKGROUND

This section draws on theories that we find particularly relevant to the relationship between the *traditional rural user interests* and *the local tourism interests* in a national park setting. These theoretical perspectives contain assumptions about rural restructuring and stakeholders' interests, the associated rural discourses, and the national park management regime. They lead to three basic research questions which are examined in our focus group study.

Rural restructuring and emerging local stakeholder interests in national parks

Diversification of rural communities

In the post-productivist transition, rural areas in the Western world have undergone significant and fundamental structural changes (Hall & Jenkins, 1998). There has been a shift in the countryside from a traditional 'landscape of production' (i.e. the production of basic outputs like food and fibre), towards a 'landscape of leisure and consumption' (Butler et al., 1998; Groote et al., 2000; Hoggart et al., 1995). Key drivers of these changes have been: decreasing profitability in the primary industries, rural outmigration, an aging population, and a stronger focus on conservation issues (designated areas, biodiversity protection, cultural landscape schemes etc). During the last 25 years, the number of active farmers in Norway has declined by 56 percent (Statistics Norway, 2010). As a result of the growing significance of 'landscapes of leisure and consumption', the development of nature based tourism products and associated services offer new business opportunities for local entrepreneurs (Kaltenborn et al., 2011; Ministry of Trade and Industry, 2009).

In the wake of restructuring, the countryside is no longer a clearly-defined economic, social and geographical space, but an increasingly heterogeneous one

(van der Plog et al., 2000; Kaltenborn et al., 2008). The diversity of rural communities is therefore increasingly being addressed in the literature (Almås et al 2008; Vik & Villa, 2010; Kneafsey, 2000). In a rural Norwegian national park context we can identify two key types of local stakeholder categories (*traditional rural user interests* and *local tourism interests*), reflecting long-established and relatively recent socio-economic interests respectively.

Local stakeholder interests

A stakeholder can be understood as a person, or a category of persons, that has a direct or indirect stake in an organisation or institution (Freeman, 1984). In a national park setting, there are typically multiple stakeholders with diverse interests (Jamal & Stronza, 2009). Together, they make up a complex structure through their patterns of interaction and behaviour. The more constraining this structure is, the less freedom the various stakeholders may have to fulfil their aspirations (Caffyn & Jobbins, 2009).

Local stakeholders' diverse utilization of natural resources in protected areas may lead to structural limitations and thus conflicting interests. For example, local tourism firms with a desire to expand their products and services may clash with local landowners, who want to protect their grazing land; or with local residents, who would like to safeguard their traditional hunting rights. The stakeholders tend to interpret places and situations differently, reflecting their social and economic interests and the socio-cultural meanings that they attribute to the actual setting (Wray, Espiner & Perkins, 2010). The extent to which the use of common resources by different interest groups is contested is largely dependent on the amount of trust and reciprocity that has been built up historically between the groups (Ostrom, 2007). Thus, if the tourism industry expands in accordance with negotiated and mutually accepted principles amongst local stakeholders, we would expect that conflicts over development issues would be less likely to occur.

In this paper we focus on the interests of those people who are dependent on the direct use of the natural resources within, or adjacent to, protected areas. In Norway, the *traditional rural user interests* are mainly related to agriculture, but also include long-established outdoor recreation activities such as fishing and hunting. Even though traditional mountain summer farming (i.e. dairy farming) now only occurs in a few mountain areas; suitable parts of some mountain parks are still used for cattle and sheep grazing. For example, *Jotunheimen National Park* is also grazing land for a domesticated reindeer herd and for cattle, while local landowners and many local residents have interests associated with fishing and hunting (Dybwad & Klæbo, 2008). In *Rondane National Park*, wild reindeer hunting is seen as imperative, and this is also a very important component of the wild reindeer management (Fangel, Abrahamson & Ruud, 2009). Proximity to protected areas is also considered advantageous to the local population in both study sites for the purposes of recreational activities such as hiking, cross-country skiing and the like.

The local tourism interests in this study are predominantly companies which base their tourism product on natural resources associated with the parks. Nature based tourism is reported to be the fastest growing tourism sector globally (UNWTO, 2009). However, the significant increase in the demand for tourism activities in protected areas that has been witnessed internationally (Wray, Espiner & Perkins, 2010) has so far only been observed in particular hotspots in Norway (such as at Besseggen mountain ridge in Jotunheimen National Park). The tourism businesses in and around our two chosen national parks are typically family-based, and several owners may be characterised as 'lifestyle entrepreneurs' (Peters, Frehse & Buhalis, 2009) with a particular personal interest or passion in their working field. Many of their small mountain hostels have been developed from mountain summer farm dwellings. Nevertheless, their tourism businesses (and thus the livelihoods of their families) depend on commercial success, which may give rise to tensions due to expanding tourism use of the protected natural resources.

Rural discourses

Viewing rural areas and nature as a refuge from urban life (defined in the romantic period as 'the rural idyll') prevails as a focal point in rural tourism (Cloke, 2003; Groote et al., 2000). However, as noted by Frouws (1998), growing public concern over changes in the countryside due to restructuring illustrates that there are a number of different visions, or different 'rural discourses'. In general, it might be assumed (rightly or wrongly) that tourism entrepreneurs are likely to be more open to change than traditional users of the national parks because the shift from a traditional 'landscape of production' towards a 'landscape of leisure and consumption' would be better suited to their business needs. Frouws (1998) identifies *three discourses* in the Dutch countryside, the *agri-ruralist discourse*, the *utilitarian discourse* and the *hedonist rural discourse*, and argues that the findings also have much wider applicability. Hermans et al. (2010) apply Frouws' categories in a recent study on rural sustainability and find support for the typology.

The agri-ruralist discourse has a clear social dimension, where farmers are seen as the main supporters of rural values like food, natural and cultural landscapes, open space and cultural heritage. The utilitarian discourse focuses much more strictly on the economic dimension. The challenges of rural areas are believed to lie in their lack of potential for economic development. Consequently, the key to success is to exploit modern markets for rural housing, recreation, niche food production and tourism. The rural landscapes, nature and culture are thus seen as commodities, and the main goal is income generation and employment for local people. In the hedonist rural discourse, the cultural dimension is supreme and the ideal countryside is believed to offer good quality of life. Given this key point, it might be expected that the agri-ruralist discourse is associated with landowners, farmers and other traditional users, and tourism entrepreneurs to be attached with the utilitarian discourse and the hedonist rural discourse in our study, but these are questions that remain empirically open.

Management regime

Preserving the natural resource base whilst providing access for visitors is a particularly demanding management issue concerning nature based tourism development in protected areas (McCool, 2009). Additional interests represented by local landowners, farmers, residents and recreationists make the situation increasingly complex. Siebert, Lasckewski and Dosch (2008) argue that nature protection 'traditionally constitutes an external, top-down intervention based on scientific knowledge' (p. 226), but that the social context should also be considered when discussing knowledge related to biodiversity and nature protection. This also refers to knowledge about social processes and dynamics, economic dependencies and communication patterns (Siebert et al., 2008). Their empirical investigation concludes that local knowledge, rooted in local resource use practices, has become a scarce feature in European nature preservation and biodiversity maintenance. Their findings thus support Clark and Murdoch's (1997) claim that scientists and experts tend to neglect accumulated local (experience based) knowledge. A mutual relationship which can be beneficial to all parties involved and where local insights and interests are mobilised, is called for (Bell, Loyd & Vatovec, 2010).

Building on Healey (2004), Shucksmith (2009) describes the swing from the linear, directed (or predictable) local planning to a process of 'place-shaping' as a paradigmatic shift. The latter is seen as a social process that is continuously being contested - a contrast to the traditionally strong centralism and sectoralism that have previously dominated spatial planning. In a protected area context, this paradigm shift reflects what Mose (2007, p. 12-13) has termed the transition from 'the static preservation approach' (characterised by a spatial segregation of territorial functions with top-down and bureaucratic regulations), to 'the dynamic-innovation approach', which emphasises the cooperative efforts of all involved, and acknowledges that all relevant people (especially those with the least power and opportunities) should be taken into account.

Shucksmith (2009) and Healey et al. (2003) highlight the importance of capacity-building in local communicative planning. The challenge is to support debates and build connectivity between the various partners. Social conflicts should not be avoided, but should be seen as natural, and even productive, tensions that may foster innovation and creative solutions to problems (Healey, 2006). Gray (1989) explains that collaboration can be used effectively to resolve conflicts or to advance a shared vision, where stakeholders recognize the potential advantages of working together. Stern (2008a; 2008b) studied local opposition towards neighbouring protected areas. He concluded that local peoples' perceptions of the trustworthiness of protected area managers is the most consistent predictor of whether they comply with (or challenge) protected area regulations. Positive personal interactions with managers, and managers' receptiveness to local input to issues (including the benefits *and* disadvantages of the protected area for the locals) are critical factors. It is a question of trust and legitimacy (Stern, 2008a).

Given that a relatively strong central control, and strict scientific based spatial planning regime has dominated the management of protected areas in Norway until recently (see next section), it may be expected that stakeholders will perceive elements of top-down bureaucratic control and lack of inclusion of broader social interests. Furthermore, stakeholders who are linked to nature based tourism activities may be expected to express more opposition to seemingly rigid management regulations and principles due to their greater entrepreneurial dynamism. Once again these questions are available for empirical investigation.

Three research questions emerge from the theoretical contexts outlined above: Our *first research question* in this case study is whether the various local stakeholders are able to pursue their interests within the national parks, and if clashes of interest are leading to conflict between the two key stakeholder categories. In our *second research question* we ask: Are *traditional rural user*

interests more connected to an agri-ruralist discourse and are local tourism interests more closely aligned with a utilitarian discourse and a hedonist rural discourse? In the final and third research question we ask: To what degree are management actions and principles contested by the two main local stakeholder groups, and, if they exist, are frustrations about the top-down, expert driven management regime more evident among local tourism interests compared to traditional rural user interests?

NORWEGIAN NATIONAL PARK POLICY

The main objective of Norwegian national parks is to protect ecosystems and to maintain wilderness qualities. Several public documents (Ministry of Trade and Industry, 2009; Directorate for Nature Management, 2001) state that the extent to which human activity (including agriculture, outdoor recreation, and tourism development) can take place within a national park should be stated in the protected area regulations and the management plan for each park. A manual from the Directorate for Nature Management presents guidelines and formal instructions for management plans and the planning process (Directorate for Nature Management, 2001). The national park management authority is responsible for developing the management plan. In the traditional Norwegian management model this authority has been ascribed to the County Governor which is a national body located in each county.

This model has been controversial. While it has typically been accepted by nature conservation interests, local economic development interests (including agricultural and tourism actors) and local politicians (County Governor of Oppland, 2008) have mainly disapproved it. Political pressure has now resulted in a new locally based, standard management model: On the 14th December 2009, the Minister for the Environment invited all relevant municipalities to take responsibility for the management of their protected areas, by establishing local

management boards of local politicians for each park. The new Nature Diversity Act (2009) states that, "as far as is reasonable", park management shall be based on knowledge, and that a more adaptive management approach shall be implemented. This new management approach is described as "management by objectives" (Gundersen, Andersen, Kaltenborn, Vistad, & Wold, 2011). In line with these changes, it has been noted that Norway is moving into the 'management phase' of nature protection (Ministry of Environment, 2009-2010) and the national budget for management of protected areas has increased radically in relative figures in recent years.

Insert Figure 1 and Figure 2 here (maps)

NATIONAL PARKS IN THE CASE STUDY AREA

The empirical study was based in two neighbouring, but distinct, national park settings - Rondane National Park and Jotunheimen National Park in central southern Norway (Figure 1 and Figure 2). Until now, both parks have been managed by the County Governor. However, the new management model described above will be implemented in both parks in 2011. Rondane is characterised by the presence of the wild reindeer - an especially sensitive species, for which Norway has an international responsibility under the "Bern Convention" (Convention on the Conservation of European Wildlife and Natural Habitats, CETS No. 104), signed in 1979. The primary management goal of the park is to protect the wild reindeer population and its habitat. The reindeer are also of great importance in local debates, because they are viewed simultaneously as an icon, as an obstacle to development and as a valuable hunting resource. There are five staffed and one unstaffed tourist cabins in the protected area. The King in Council passed an expansion of the *Rondane National Park* (1460 km2) in 2003, and the Directorate for Nature Management approved the new management plan in April 2009.

Jotunheimen is regarded as less vulnerable to human impact than Rondane (Vorkinn, 2011; Fangel, Abrahamson & Ruud, 2009; Dybwad & Klæbo, 2008). It has a relatively high level of facilities (280 km of marked trails, five staffed and seven unstaffed tourist cabins) and experiences higher rates of visitation than Rondane. The most attractive one-day mountain hiking route in Norway (Besseggen) is located in Jotunheimen. The present management plan (County Governor of Sogn og Fjordane and County Governor of Oppland, 1998) allows the facilities and economic activities which were present at the time of park designation to continue to operate, as well as animal husbandry (including reindeer husbandry), and (small-scale) tourism.

To date both parks had been subject to lengthy planning processes, involving local stakeholders, to develop the new management plans. The two management plan drafts were made available in public hearings during 2007-2008, and the drafts and consultation responses are available at the County Governor's homepage¹. In addition, a regional plan for the whole Rondane "wild reindeer area" (according to the Planning and Building Act, 2009) was developed, and opened for public hearings in late 2009². The consultation responses from relevant stakeholders to these three plan proposals supplement our focus group findings and are included in the discussion section.

During the period 2002 to 2007 the populations of the municipalities adjacent to *Rondane* and *Jotunheimen* (*Sel*, *Dovre*, *Vågå* and *Lom*) decreased by a rate of 0.47 to 0.67 per cent per year (Statistics Norway, 2007³). The declining trend has continued in 2008, 2009 and 2010 (Statistics Norway, 2011⁴).

¹ *Rondane:* http://www.fylkesmannen.no/hoved.aspx?m=31510&amid=2240630 *Jotunheimen:* http://www.fylkesmannen.no/hoved.aspx?m=31515&amid=2198342

http://www.oppland.no/FDP-Rondane-Solnkletten/Nyheter/Regional-plan-for-Rondane---Solnkletten-til-horing/)

³ http://www.ssb.no/emner/00/01/20/valgaktuelt/tab-2007-08-30-01.html

⁴http://statbank.ssb.no/statistikkbanken/Default_FR.asp?PXSid=0&nvl=true&PLanguage=0&tilsid e=selectvarval/define.asp&Tabellid=01222.

METHOD

The main methodological approach applied in our study was focus groups. This method enables researchers to gain an insight into the way particular issues are debated or discussed in a relatively homogenous group (Hesse-Biber & Leavy, 2011). The focus group method is considered appropriate for exploring participants' feelings, thoughts and opinions about certain issues. The creation of a trustworthy environment in a focus group is thus crucial in order to encourage self-disclosure among members of distinct interest groups (Kreuger & Casey, 2009). Interaction and relational aspects are central (Conradson, 2005). Existing literature on focus groups highlights the crucial issue of whether researchers should aim to use 'natural', or 'pre-existing' groups (such as the daily networks within which the actors operate) or create a group for the purpose of the study. If the members of a group are already familiar with each other, this could help to ensure a safe atmosphere where people feel comfortable to express their opinions. However, it could equally have the opposite effect of restricting discussion and reflection because participants are too familiar with each other (Tjora, 2009; Conradson, 2005).

In this study, two focus group meetings were undertaken to discuss issues in each of the two parks. The groups were made up of participants from the two main stakeholder categories (termed *traditional rural user interests* and *local tourism interests* respectively). Members of all four groups were carefully selected to 'represent' the various types of interests within each category. It is important to note that the two interest groups were not mutually exclusive in either park because participants in both groups (in both parks) shared a number of common interests. For example, some of the traditional rural users (local landowners) also derived economic benefits from tourism and some of the local tourism business owners also had family roots in local farming activities. This mixture resulted in

somewhat less homogeneity *within* the single groups and to some extent less heterogeneity *between* the various focus groups than is recommended by Cameron (2005). In the present study, these group structures reflect the real world combination of interests in the actual rural communities. Before starting the focus groups, we made this potential overlap clear to participants, and encouraged them to express their opinions candidly. Despite this, there is still a possibility that participants may have been less outspoken than they would have been in a 'purified' setting (i.e. where the groups were mutually exclusive), and also our data analysis could probably have been simplified.

Participants were recruited through a combination of different approaches: First, by drawing up a preliminary list of potential stakeholders based on the research team's existing knowledge of the areas in question, and the research topic.

Second, by contacting key informants in the two parks - who then proposed participants within their local social network. Third, by 'snowballing' (i.e. asking participants who had already been recruited to recommend others). All members were asked on telephone if they were willing to take part in the focus groups. In a follow-up letter they were informed that all statements would be handled strictly confidential and that no information could be traced back to identifiable persons.

Focus groups are presented in the literature as a method where the researcher (by acting as moderator) can strongly influence the direction of the session (Stewart et al., 2007). For example, by using information provided beforehand, by choosing the structure of the groups and by deciding which topics should be discussed. However, these limitations also apply to individual interviews, and they should be carefully considered in any qualitative study. In order to reduce the impact of researcher bias, we moderated the sessions on a rotational basis, and gave feedback where appropriate. In the research team of three, one acted as moderator while the two others took notes, made observations and presented supplementary remarks if needed.

The recommended size of a focus group is between four and ten members (Tjora, 2009; Conradson, 2005). All four groups in this study had between four and ten participants (eight and four persons in the *Rondane* groups and eight and six members in the *Jotunheimen* groups). All focus group discussions revolved around the same topics. However, in the two *Jotunheimen* groups, the dialogue also covered two expansive tourism development scenarios which were particularly relevant to this park. Each focus group meeting lasted about 3.5 hours, including a lunch/coffee break of around one hour. All discussions were audio tape-recorded and transcribed. A substantial quantity of written information was then condensed into manageable data chunks by one of the researchers. This was done by deleting remarks which were not relevant to the key themes, and by condensing some of the comments into a shorter transcript. The material was thereafter independently checked by the other researchers in the team. Throughout this process, the research team repeatedly scrutinised the text in order to avoid losing the meaning of the original records.

The research findings are separated into themes that were highlighted in the previous theoretical discussion. Several textual elements fitted into two or more of these categories, and therefore the coding process was thoroughly reviewed by all three authors independently. The analytical means were designed for making comparisons between i) the main stakeholder categories and ii) the two national parks in question. Finally, quotations that were regarded as representative of a key theme or issue were then selected in order to illustrate and document the empirical patterns that emerged from the analysis.

RESULTS

The three basic research questions are addressed sequentially in the following section. For each question, we first look into how the *traditional rural user interests* in *Rondane* and *Jotunheimen* perceive their situation respectively. Then

we concentrate on the *local tourism interests* within each of the two parks. One exception is made regarding the discussion of two grand scale tourism development scenarios in *Jotunheimen* that were relevant to this park only.

Interest conflicts between local stakeholders?

Our *first research question* in this case study is whether the various local stakeholders are able to pursue their interests within the national parks, and if clashes of interest are leading to conflict between the two key stakeholder categories. The *traditional rural user interests* in both parks discussed *the grazing rights* with regard to local live stock (mainly cattle, sheep and horses). In *Rondane*, tourism activities were not seen as a problem for these domestic animals, and the presence of visitors in the mountain areas was regarded in a positive light because they could observe and report on injured animals during the grazing season. Also in *Jotunheimen*, the *traditional rural user interests* reported few problems concerning animal grazing. In this park, reindeer grazing permissions are based on concessionary terms. Stakeholders said they were largely satisfied with the present situation in the protected areas:

The local Mountain board⁵ safeguards the agricultural (grazing) interests [in the protected areas], and these interests have not experienced any obstacles to the present day.

No significant conflicts of interest between tourism activities and animal grazing were reported among the *traditional rural user interests* in the two parks. In the *Jotunheimen* focus group, the relationship between the two sectors (farming and tourism), was described as a 'peaceful co-existence'.

Likewise the *local tourism interests* in both *Rondane* and *Jotunheimen* felt that there was little conflict between tourism and farming interests in, or near, the protected areas. The predominant view was that there is a sense of harmony

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⁵ The Mountain board is responsible for management of the commonage and amenities on the Crown land (commons) in the actual municipality.

between groups within the park borders and that they often share a common interest, as close contact with farm animals and the authentic taste of local produce were seen as appealing to tourists. A local tourism stakeholder in *Rondane* expressed it in this way:

Anyhow, we have become good at producing our own traditional food. ...It is important to show that there is local food, what it is, how it is made etc. Guests enjoy such home-made gooseberry jam.

Likewise in *Jotunheimen*, the *local tourism interests* noted:

Inside the park there is no conflict - many [visitors] come to see the [domesticated] reindeer - it's an attraction that many are asking for.

The general view was that 'all parties benefit from co-operation'.

Hunting and fishing rights were relatively important issues for participants in this study. Among the *traditional rural user interests* in *Rondane*, there was a major concern about human pressure on the *wild reindeer* herd. The stress on the reindeer from tourism traffic was believed to be a major problem:

I get depressed when I hear local tourism operators making uninformed statements about the wild reindeer herd.

These stakeholders were also keen to point out that a strong and healthy reindeer herd was beneficial for tourism marketing of the area.

In *Jotunheimen*, the *traditional rural user interests* regarded the hunting and fishing opportunities in the park as vital for the local residents. They also considered these natural resources as positive attributes for visitors from elsewhere and highlighted their benefits for the tourism industry:

This is also beneficial to the tourism industry – they do indeed appreciate the rich opportunities for hunting and fishing.

In *Rondane*, the *local tourism interests* did not view the preservation of the wild reindeer as such an important concern. They were of the belief that the species has a flexible capacity to survive, and that it has adjusted well to various constraints

over the years. They were, however, in agreement that the reindeer have a positive impact on tourism in the area:

We who are involved in tourism business think that a well-functioning wild reindeer herd is positive. It is being used in marketing, and knowledge about this is of significance to the guests.

The views of the *local tourism interests* in *Jotunheimen* were also quite different from the *traditional rural user interests* on hunting and fishing, as they felt that the hunting and fishing permits were becoming more and more restrictive, and that this was having a negative effect on the tourism industry. Tourism operators lamented the fact that visitors were not able to fish in the nearby lake from a rowboat. It was argued that visitors would be willing to pay for hunting and fishing only if these activities were provided and facilitated. In the case of *Jotunheimen*, there were also conflicting views over whether grooming of ski tracks just outside the park border had the potential to disturb migrating elk in the valley.

In summary, there were few conflicting interests between the two key stakeholder categories with regard to the traditional agricultural industry and tourism activities in both parks. The views of the two groups did differ on two issues: the importance of wild reindeer protection in *Rondane*, (and, to a lesser extent, elk near *Jotunheimen*) and the distribution of hunting and fishing rights, especially in *Jotunheimen*, for locals and for visitors.

Rural discourses

We expected *traditional user interests* to be more conservative than *local tourism interests* with regard to the use of the park's natural resources. Subsequently we posed the following *second research question* regarding the general local discourses about the character of the community development: Are *traditional rural user interests* more connected to an *agri-ruralist discourse* and are *local*

tourism interests more closely aligned with a utilitarian discourse and a hedonist rural discourse?

In *Rondane*, the *traditional rural user interests* emphasized the importance of hunting and fishing for the locals, but they also noted that the local demand for these activities is declining - particularly among young people. It was seen as paradoxical that the commercialization of hunting is not permitted in this situation. Tourism businesses were (with few exceptions) regarded in a positive light by the *traditional rural user interests*, and consequently respondents in this group felt that there should be opportunities for further development:

Complete blocking of the development means that no one will invest or take over businesses.

The *traditional rural user interests* in *Jotunheimen* also highlighted the significance of fishing and hunting as key components of the rural lifestyle. They explained that these traditional outdoor recreation activities are also essential to many owners of private cabins (with local roots) in the area. The national park was described as a 'user park', where agrarian interests (mainly grazing, mountain summer farming), reindeer herding and tourism should continue. Tourism in its traditional form was supported among these stakeholders and a gradual process of development was welcomed:

When the national park was established, the idea was that traditional industry [including tourism in its long-established form] should be run as before and may be developed carefully over time.

With regard to hunting and fishing, the *local tourism interests* in *Rondane* and *Jotunheimen* were mostly concerned with the lack of opportunities to develop these activities any further as tourism products.

The *local tourism interests* in *Rondane* emphasised the importance of developing the protected area into a 'user friendly' park, since increased visitation could definitely contribute to a growth in the adjacent community. In general, however, they found the information provision about *Rondane National Park* to be

insufficient - both along the principal highway (E6) and at the main entry spots. Transportation facilities were also deemed to be underdeveloped. The dialogue was also based around the importance of opportunities for activities like hiking, fishing and hunting, cross country skiing and cycling.

Existing marketing efforts (through mass media and other channels) by the local tourism industry were also regarded as inadequate. Despite the fact that many local firms use the internet extensively to promote their businesses, respondents felt that the park was still 'invisible' in the eyes of the public, compared to competing winter tourism destinations in Norway. The aspiration to increase tourism and visitation to the park lies behind the desires for tourism product refinements and innovations. This again is tied to community development issues:

Everyone can see that increased tourism is significant for the employment in the community.

In *Jotunheimen*, the *local tourism interests* identified a broad range of ideas for increasing park visitation. These included: increased provisions for fishing and hunting, horseback riding and wildlife safaris (domesticated reindeer), improved visitor safety and enhanced information provision (including safety issues).

They also underlined the need for tourism industry initiatives like improved marketing (using new forms of media), mountain school camps, sightseeing tours on *Lake Gjende*, new service facilities at the main gateway (*Gjendeosen*), transport services within and outside the park, upgraded public transport in the vicinity of the park, and guided tours and interpretation services. They expressed a desire to see various packages of themed products (related to health, food, culture etc.), and intensified cooperation with national transport companies.

Overall, the *local tourism interests* were very much in favour of an extensive tourism strategy (and were therefore at odds with the 'careful development' strategy supported by the *traditional rural user interests*): A strong and vibrant tourism sector was seen as a prerequisite for a sustainable social development:

We need to make sure that we have opportunities for further developments, so that the next generation can live and operate here. ... The community must be sustainable and not die out. ... Some greater initiatives are necessary...

The discussion of two expansive tourism scenarios within both stakeholder groups in *Jotunheimen* illustrates the differences in value orientations and associated rural discourses. These were: a) sightseeing boat service on *Lake Gjende* and b) gondola service from the municipality centre (*Lom*) up to the mountain edge *Lomseggen*.

The *traditional rural user interests* were sceptical about sightseeing traffic on the lake, despite acknowledging that local politicians may support this. Their main concerns were the violation of restrictions on motorized traffic within the national park, and the potential conflict that this activity may provoke with fishing interests ('*Lake Gjende* has fantastic fishing'). There was, however, some ambiguity amongst *traditional rural users* regarding the gondola project. Some expressed negative attitudes towards such grand scale developments - especially those that would be controlled by external interests:

Our concern is that we should try to protect the area as it is today and prevent major developments and severe exploitations. One has to allow minor changes and some small scale developments here and there, but not that mighty players enter the stage and destroy the character of our community.

But others were broadly supportive of the idea:

I am a little bit in favour of the gondola... We must try something new if we want to uphold the population and not just focus on what is traditional. ... The community is divided in how to regard the gondola.

The *local tourism interests* strongly supported the prospects of sightseeing tours on *Lake Gjende*. The proposed gondola project at *Lomseggen* was also regarded in a very positive light. The general view was that it would be both economically viable and environmental friendly. Respondents in this group also felt that the project would be an effective means of encouraging many of the motor tourists that pass through the region to stop and spend money in the local area, thus

strengthening the local economy of the village (*Lom*). The lack of political support for such initiatives was attributed to conservative rural attitudes and caution regarding new developments or radical changes in the rural community.

In summary, the *local tourism interests* were very supportive of an extensive tourism strategy, and thus demonstrated an 'openness to change' in order to sustain their businesses and the local community. This perspective fits in with a *utilitarian* and a *hedonist discourse*. The *traditional rural user interests* were more conservative regarding new developments, although some were supportive of new tourism initiatives in both park settings. They thus regarded the protection of rural lifestyles and the long-established character of the local community as the primary concern. These attitudes are in line with an *agri-ruralist discourse*.

Management perspectives

Our *third research question* was: To what degree are management actions and principles contested by the two main local stakeholder groups, and if they exist, are frustrations about the top-down expert driven management regime more evident among *local tourism interests* compared to *traditional rural user interests*?

Management policies may have implications for local stakeholders' interests in various ways. In this section the following aspects are highlighted; a) general viewpoints on the national park status, b) local opinions about the national park management.

a) General viewpoints on the national park status

The national park status was generally supported by all four stakeholder groups. In *Rondane*, the *traditional local rural user interests* highlighted the importance of physical management measures - for example, channelling human traffic along trails and skiing tracks to protect the wild reindeer. In *Jotunheimen* this group felt

that their interests had been taken care of within the national park from the outset, but they admitted that not all groups had received such treatment:

But [the protection] has maybe led to less space for other interests than traditional ones like agriculture and domesticated reindeer.

Despite this, the national park status was regarded as an asset for the tourism industry:

It is very advantageous that it is a national park, both with respect to foreigners and marketing overseas.

This view is also strongly upheld by the *local tourism interests* in *Rondane*:

Everyone will say that [that *Rondane* should be a national park]. We have Norway's first national park, which must be excellent marketing!

In addition to the benefits associated with the protection of the natural resources, the national park was generally viewed as favourable by the *local tourism interests* in *Jotunheimen*. This was largely due to the branding effect attributed to the mountain area.

b) Local opinions about the national park management

Representatives of the *traditional rural user interests* in *Rondane* did not give any indication that their ability to carry out traditional rural activities had been hampered as a result of management restrictions. One voice within this stakeholder group (who also had links to tourism interests) felt that the very short length of concession agreements (permits for commercial activities within park borders) was creating uncertainty and economic insecurity:

[Lack of] predictability is the problem. No one dares invest in future.

Despite their broad support for the existence of the park, *traditional rural users* expressed great frustration over the challenging and time consuming management planning processes, and some of them described problems they had experienced related to this. Frequently, the problems were attributed to the County Governor's lack of knowledge about local conditions:

The State (through the County Governor) has created problems; picking at irrelevant things (dates for grooming of the ski trails, cabin construction in faraway areas) and using concern for the wild reindeer as argument. This ... creates little understanding for the management of the wild reindeer.

A number of respondents in this category argued that the prospects for the future were looking much more positive as new management models come into play:

Local management models are coming, and there is a brightening in the situation. It will be possible to build local expertise, and a better understanding of conservation will evolve. In a few years the management authorities will discover these benefits.

Management measures were contested to a lesser degree among the *traditional rural user interests* in *Jotunheimen*, although some similar issues were discussed (for example restrictions on signposting and marking of paths in certain areas). Respondents in this group felt that their basic interests were handled in a fairly satisfactory way within the present management policy.

In *Rondane*, *local tourism interests* believed that the structural constraints they experienced were largely due to management restrictions in the park. They expressed frustration over incomprehensible and unpractical management measures, and an 'ignorant' attitude towards local knowledge:

After the public hearings they [management authorities] just make 'chief decisions' and decide something different. This is what we really don't like. Unfortunately this is based on one-sided knowledge – they ... will not listen to local knowledge.

Tourism interests emphasised the need to have well-maintained ski and bicycle tracks, well marked hiking paths, guided tours and transportation services in the future. Several of these developments would be at odds with present management regulations. Addressing the needs of international tourists was seen as particularly important in this respect:

I think that foreigners [who visit the national park] make comparisons with national parks abroad [and that they expect] well-marked trails and things to be in good shape.

The lack of understanding of the challenges that local businesses face was therefore a key topic of discussion among *local tourism interests* in *Rondane*. Historical evidence was used to demonstrate a lack of management support:

We have Norway's first national park, and that must be good for marketing. ... Around 1990 we got a reprimand from the County Governor because we used *Rondane National Park* too explicitly in the promotion of the area.

As in *Rondane*, the *local tourism interests* in *Jotunheimen* expressed irritation over several 'meaningless' management appraisals and had a strong desire for more active management to support tourism activities. This stakeholder group also felt that the main constraints on the tourism industry were largely due to management restrictions. Certain areas were believed to have improved over the last years, however – for example: the removal of the lengthy application process for commercial activities in the park, less restrictive regulations for passenger boat traffic on *Lake Gjende* and the engagement of nature guides since 2009. An important discussion point was the idea of *Jotunheimen* as a 'park for use' with improved signposting (regarded as an important safety issue) and upgrading of the paths (this has been done at *Besseggen*). Tourism stakeholders felt that facilities were improving, but there was still considerable potential for enhancing the visitor infrastructure in the park:

It is a 'park for use', but we are concerned about how it should be facilitated, both now and in the future. Several things have cropped up, and there is great potential for the future as well.

As a summary, despite the fact that the national park status was broadly supported by the various local stakeholder interests, there were clear differences of opinion regarding the management principles and actions in the parks and surrounding areas. The lack of provision and poor conditions for tourism expansion were of great concern to the *local tourism interests* in both parks. Innovative ideas and new developments which could help to improve the situation for the tourism industry were frequently constrained by management restrictions. The frustrations about top-down, expert driven management and a lack of local knowledge and interests in the planning/ decision-making process were thus more evident in each

park among *local tourism interests* compared to *traditional rural user interests*, which supports our *third research question*.

Differences in the situations *within* the two parks were found: In the *Rondane* context, *traditional rural user interests* also felt that local and experience-based knowledge was not sufficiently taken into consideration when making management decisions, and there was a sense that locals often felt alienated and powerless. The management process regarding the protection of the wild reindeer in *Rondane* made the situation especially demanding.

DISCUSSION

In the preceding section, we presented findings from our three research questions separately for analytical purposes. It is important to note, however, that the questions are also thematically intertwined, as the following discussions illustrate. The two case study areas (*Rondane* and *Jotunheimen*) comprise local communities that have been heavily impacted by structural changes due to the decline in the traditional industries over the past few decades. The communities are experiencing significant outmigration and a decline in their resident populations (County Authorities of *Oppland* and *Hedmark*, 2010). In a period of national park expansion, the *local tourism interests* are seeking to explore new business opportunities and to stimulate growth in alternative local industries such as nature based tourism. At the same time, many of the *traditional rural user interests*, (and particularly those who also had tourism interests), were concerned about the limitations in the implementation of tourism development strategies.

The diversity of opinions across the two stakeholder categories in *Rondane* and *Jotunheimen* were not rooted in conflicting interests over land use (i.e. agriculture vs. tourist utilisation). Apart from differences of opinion over the allocation of hunting and fishing rights between locals and visitors, there were few signs of

interest conflicts which could be seen as 'obstacles' (Caffyn & Jobbins, 2009) to the fulfilment of stakeholder aspirations. The *traditional rural user interests* found the park management regulations to be well adapted to grazing of sheep, cattle and domesticated reindeer (in *Jotunheimen*). Across the stakeholder groups, there was a common understanding that tourism development (at least in a moderate form), should be allowed for, and in all four groups, a desire to develop adequate tourism products was expressed. Indeed, a desire for co-operation/collaboration between the two sectors was expressed. This mutual interest in developing a careful mountain and national park tourism was also expressed in several of the consultation responses to the different plan proposals (the two management plans and the *Rondane* regional plan). Both *traditional rural user organisations* and *local tourism organisations* criticized the fact that the *Rondane* management plan proposal did not contain a chapter on tourism opportunities, and called for a more positive approach from the County Governor towards humans and human activity in the park (County Governor of *Oppland*, 2008).

Sel Mountain Board (2011), one of the *traditional rural user interest* organisations, responded to the proposed *Rondane* regional plan with a suggestion to close, or relocate, some hiking trails in order to maintain a critical migration passage for the wild reindeer within the national park (to prevent the reindeer herd from dividing into two). However, the board also emphasized the need for further development of the tourism enterprises located within or adjacent to protection area. Importantly, the interviewed stakeholders unanimously viewed the national parks as an asset and as a positive influence in the area. The national park status was seen to symbolize the very basic qualities of serene nature and the precious mountains in the region, and in *Rondane* the existence of an emblematic species such as the wild reindeer was viewed as a strong pull for tourism.

This common understanding of the park's values indicates that the various stake holding groups share similar views on particular issues. This may partly be explained by the fact that the composition of the *traditional rural user interests* and the *local tourism interests* were 'overlapping' in our focus group study.

Representatives with economic interests in tourism activities could be found in the *traditional rural user interests* group, and lifestyle entrepreneurs (Peters, Frehse & Buhalis, 2009) with roots in the local community were also among the *local tourism interests* group.

However, differences in the stakeholders' opinions did become apparent throughout the focus groups. In terms of prerequisites for hunting activities, the traditional rural user interests in Rondane took a clear stance in favour of the restrictive management measures to protect the wild reindeer from potentially damaging tourism impacts. Sustaining the wild reindeer herd was seen as a very important issue for the local stakeholders who strongly pursue hunting interests in this park. However, traditional rural user interests in Rondane are not all of this opinion: Sumbissions to the management plan from several agricultural organisations were very critical of proposed restrictions on agricultural activity in an area southwest of the national park. They did not believe that there was a conflict of interest between agriculturalists and wild reindeer interests. The result is that the strict regulations have simply provoked the local farmers and have not served to benefit the wild reindeer interests in the way it was intended (County Governor of Oppland, 2008). Local tourism interests in Rondane had also questioned the need for such restrictive measures in the management plan (Haukeland, 2011; County Governor of *Oppland*, 2008). They felt that the measures hampered their business activities, and were tied to 'meaningless' management policies. These critiques thus support Siebert, Lasckewsli and Dosch's (2008) assertion that the integration of social interests should play an important role in natural resource management. The findings also corroborate Brechin et al.'s (2003) theoretical supposition that management objectives and measures may conflict with local economic interests.

While several local tourism actors in the *Rondane* area have questioned the excessive management focus on wild reindeer interests (County Governor of *Oppland*, 2008), the overall picture from the focus groups in this study is that both *traditional user interests* and *local tourism interests* support both the presence of

the national park and the need for a strict wild reindeer management policy. Nevertheless both interest groups expressed frustration over certain proposed measures and regulations, because they could not see the need or the rationality behind them. Some local actors displayed relatively strong antagonism towards the County Governor on this issue. This might challenge what Stern (2008a; 2008b) calls 'critical predictors for management support' among locals: are the managers regarded as trustworthy? Do they have legitimacy? Are they receptive to local input and do they understand the local situation? Both stakeholder groups in *Rondane* spoke critically about the 'demanding' management planning process and the perceived deficit of local knowledge in management appraisals. The common local view was that expert knowledge has unfortunately presided over situated, experience-based knowledge (see Clark & Murdoch 1997; Siebert et al., 2008).

Trust and reciprocity between the management agency and *local tourism interests* have evidently not been sufficiently developed in *Rondane* through the national park management planning process (Ostrom, 2007). There is, however, evidence that 'the situation is improving' as new local management models are implemented (Ministry of Environment, 2009-2010; Gundersen et al., 2011), and the recent regional planning process has produced greater consensus amongst locals and management (County Authorities of *Oppland* and *Hedmark*, 2010). Management issues thus emerged, during the focus groups (particularly in *Rondane*) as a major factor hampering the local tourism entrepreneurs' chances to pursue their business interests (Caffyn & Jobbins, 2009). The situation here is strikingly different from the lack of management obstacles reported by the *traditional rural user interests* in *Jotunheimen*, and the satisfaction they felt towards national park management in general.

These contrasting views on national park management may turn out to be particularly important as rural communities become more diverse, with the inclusion of modernized rural life styles and new economic activities (Almås et al 2008; van der Plog et al., 2000). A specific management challenge in this context

is the level of understanding of tourism business operations expected of them, and their comprehension of the general tourism development issue. In both national park settings in this study, the *local tourism interests* highlighted the importance of having an active tourism development strategy, and in *Jotunheimen* (in particular) stakeholders would like to see a very broad spectrum of tourism initiatives implemented (similar to those presented in the summary of consultation responses to the proposed management plan [County Governors of *Oppland* and *Sogn og Fjordane*, 2008]).

More contradictory views were evident amongst groups when discussing the need for genuine tourism growth in the area. In *Rondane* the *local tourism interests* felt strongly that tourist facilities should be increased within the national park, and that various kinds of information services should be provided (both within and outside the park) to make the tourism products more visible to potential visitors. The *local tourism interests* in *Jotunheimen* supported the expansion of a wide range of tourism facilities and activities, including a possible grand-scale development such as the installation of a cable car (gondola) up to Lomseggen in the vicinity of *Lom* municipality centre (outside the national park). The *traditional* rural user interests in Jotunheimen, however, expressed a more sceptical attitude towards tourism, and were afraid that such large-scale developments may change the character of the rural community. Their preference for a 'cautious evolution' of tourism differs significantly from the *local tourism interests*' enthusiastic support for an extensive tourism development strategy. These contradictory views reflect van der Plog et al.'s (2000) assumption that rural communities in a period of transition are developing into more heterogeneous social structures. The findings also support Jamal and Stronza's (2009) postulation that dissimilar and conflicting stakeholder value systems and beliefs appear in this social field.

These divergent views reflect different positions in rural discourses: The *traditional rural interests* uphold a predominantly *agri-ruralist discourse*, with emphasis on the protection of traditional rural values, and much less of a focus on economic dimensions (the *utilitarian discourse*). In contrast, the *local tourism*

interests endorse a *utilitarian* and a *hedonist position* (Frouws, 1998). This can be partly explained by the fact that the tourism entrepreneurs need to be aware of their clients' expectations of high quality tourism products, and thereby have to understand 'an outsider's perspective' of what their countryside should be like.

CONCLUDING REMARKS

Schucksmith (2009) argues that the 'place-shaping' of nature-based tourism attractions in rural areas is a social process of ongoing negotiation between the various stakeholder interest groups. An acknowledgement of this alters the role of both management agencies and affected local stakeholders, as it highlights the need for continuous building of connectivity, discourse formation and forming of coalitions (Healey, 2006). In order to safeguard the 'rural voice' (Bell et al., 2010) the views of both 'traditional' and modernized/ 'new' interest groups will have to be taken into account, and the efforts of (often contrasting) stake holding groups will have to be mobilized to resolve both complex and controversial issues which may arise.

We maintain that protected area management agencies in Norway currently lack the skills (and probably also the tools) to handle social conflicts resulting from differing local user interests (Haukeland, 2011; Kaltenborn et al., 2011). As the inspection of our three research questions among key local stakeholder groups has shown, there is a need for collaboration and coordination to ensure that the management of the parks and other interests work closely together (Jamal & Stronza, 2009). This is especially relevant to the new Norwegian management model for conservation areas that is about to be implemented (Ministry of Environment, 2009-2010). Even under this 'new regime', however, the primary goal of national parks remains the protection and management of biodiversity,

ecosystems and landscapes. As we have highlighted in this paper; there are a number of local stakeholders with legitimate social interests in and around the parks – all of which are arguably of equal importance. Further, the new model requests a close cooperation between the Board and local stakeholders; thus we propose that a stakeholder advisory panel should be established for each park. We call for a socially responsive management, where both local interests and local knowledge are taken seriously into consideration.

We believe that there is need for a new and collaborative management process in Norwegian national parks, but this requires a new openness in official Norwegian conservation and management policy. The authorities need to take responsibility for both the ecological and the socio-economic aspects of national parks. It is therefore worrying when the only explicitly requested qualification for the new national park managers is 'ecological skills' (Ministry of Environment, 2009-2010). Social issues and conflicting interests between various stake holding groups in protected areas need to be addressed by park managers. Focus groups with local stakeholders (even with somewhat heterogeneous groups like the ones we present in this paper), can be a way to reveal, elaborate and disseminate social meanings to the responsible management agencies. It is our belief that focus groups can be used in the future as a tool to advance local dialogues. It will also be crucial for future research to explore the challenges associated with implementing innovative collaborative principles within a management system of protected areas. Good governance and sound management require both appropriate tools and relevant skills.

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Figure 1 National parks in Norway and case areas. Source: Direktoratet for naturforvaltning, www.dirnat.no and Berit Grue.

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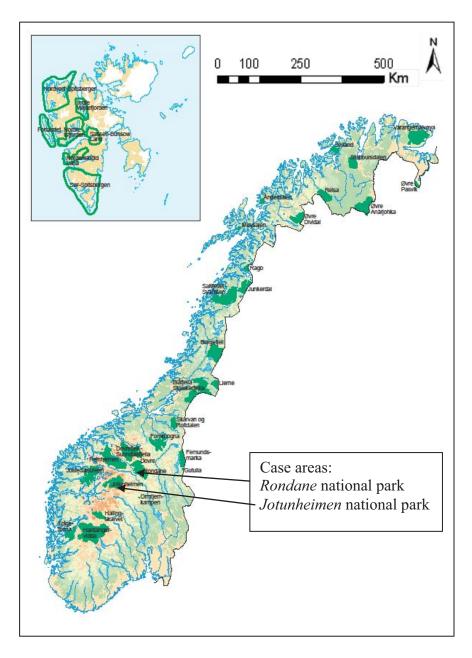
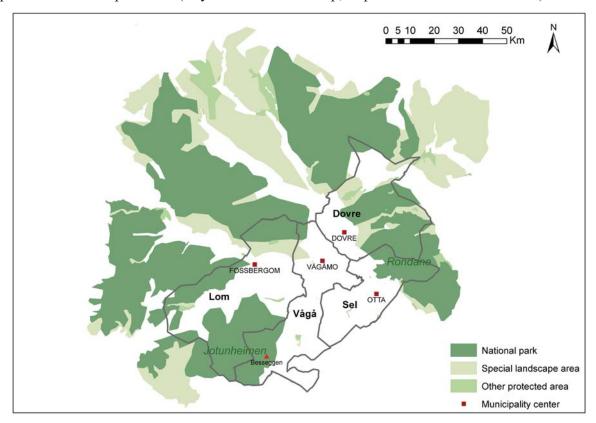


Figure 2 *Rondane* and *Jotunheimen* National Parks. Source: Direktoratet for naturforvaltning, (Naturbase) and Berit Grue.

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