NOTE TO USERS

Managing multiple land uses: Applications in subarctic Urho Kekkonen National Park, Finland.

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Abstract

Evaluating the integration of multiple land uses in protected areas by assessing user satisfaction assists in identifying the balance between ecological protection and the socio-economic and cultural needs of local populations. Urho Kekkonen National Park in northern Lapland, Finland, provides an example of such integration through the management of reindeer herding, visitor recreation and conservation within park boundaries. Through use of questionnaires, discussions, observations and maps, the impacts and perceptions of reindeer herding, visitor recreation and park management upon each other were assessed, including their relation to conservation. Results revealed a complex co-existence of the users, based on the intensity of demand for an area and spatial location within the park, with overall benefits from the existence of the national park. Discussion of similar arctic-subarctic land use issues in Canadian parks management made apparent the many commonalities of the concerns among national parks worldwide.

Keywords

national park management, tourism, indigenous peoples, reindeer herding, conservation, circumpolar north

Résumé

L'analyse de l'intégration des usages multiples dans des endroits protégés, à l'aide de l'évaluation de la satisfaction des utilisateurs, permet d'identifier le juste milieu entre la protection écologique et les besoins socio-économiques et culturels des populations locales. Le Parc National Urho Kekkonen dans le nord de la Laponie (Finlande) est un exemple de ce type d'intégration, où l'administration des troupeaux de rennes, l'usage récréatif et la conservation dans les frontières du parc doivent être pris en considération. À partir de questionnaires, discussions, observations et cartes, les perceptions et impacts des troupeaux de rennes, de l'usage récréatif, de l'administration du parc et leur impact sur la conservation furent évalués. Les résultats ont révélé une co-existence complexe des utilisateurs, basée sur l'intensité de la demande pour une location et sa situation géographique dans la parc, avec des bénéfices surtout grâce à l'existence du parc. L'analyse des résultats, incluant des problèmes similaires à l'intérieur de l'administration des parcs canadiens a rendu apparent des similitudes dans les parcs nationaux à travers le monde.

Mots de clés

administration des parcs nationaux, tourisme, peuples indigènes, troupeaux de rennes, conservation, nord circumpolaire

Table of Contents

List of Finnish institutions with their English equivalent.*

Metsähallitus	Finnish Forest and Park Service
Lapin Paliskunta	Lappi Reindeer Herding Co-operative
Ivalon Paliskunta	Ivalo Reindeer Herding Co-operative
Kemin-Sompion Paliskunta	Kemi-Sompio Reindeer Herding Co-operative
Paliskunnat	Reindeer Herding Co-operatives

*The Finnish title will be used in the text.

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Chapter 1

National Parks: Issues of conservation and the challenge of management.

1.1 Urho Kekkonen National Park: A northern circumpolar case study of land-use management.

This study will address how effectively an example of national park management is able to integrate multiple land uses, specifically investigating the case study of Urho Kekkonen National Park, Finland, and assessing policies already in place integrating the goals of reindeer herding, tourism/recreation and conservation. Formally addressing the views of various users is a technique to identify how satisfactorily management has been able to meet various needs, thus indicating to managers and researchers alike how to best address enhancing conservation and cultivating a consideration for the human component most effectively in the future.

Urho Kekkonen National Park was created in 1983 in northern Lapland, Finland in response to alarm over rapidly expanding land clearing due to extensive forestry in the region (Burgess 1999). Located above the Arctic Circle, it is the second largest national park in Finland, boasting over 2 500 square kilometers of land and a variety of ecosystems including altitudinal tundra, boreal forest and peatlands. Lands included in the park boundaries also make up traditional herding, fishing, hunting and gathering grounds for the local indigenous Sámi and immigrated Finns and were included with the agreement that traditional livelihood practices were permitted to continue. In the early 1990s concerns of arctic countries regarding the environment increased, addressing the use of local natural resources (Stokland et al 2003; Tennberg 1999). Urho Kekkonen National Park has been challenged with the goal of balancing increasing visitor numbers, meeting the needs of local people and maintaining conservation as a high priority through the implementation of strategic management plans. They are not alone in their efforts, as is clearly demonstrated in the similar circumstances of parks worldwide (Agrawal 2000; Brown 1998;

Burgess 1999; Fox et al 1996; Ite 1996; Mehta and Kellert 1998; Osborne 1995; Schelhas 1991; Straede and Helles 2000).

1.2 Value and purpose: The role of national parks and importance of continuing research.

Maintaining the integrity of our natural ecosystems has become an increasingly important goal for human society in recent years. A combination of augmenting human pressures on natural resources and awareness of the value of ecosystems and maintenance of biodiversity has led to a number of actions and policies put forth in an attempt to mediate the ensuing conflicts. The value of biodiversity may be observed in many ways, including a socio-ecological standpoint which has interest in protecting natural resources for their benefits as a collective good, as well as deep ecology thinkers valuing the preservation of ecosystems for their own sake, separate from people (Herring 1990). From a practical, material viewpoint, biodiversity creates a foundation for ecologically sound sustainable development by giving ecosystems the viability to support current human production (Laihonen 2003; Munasinghe 1993). Protecting the integrity of biodiversity has the dual effect of preserving renewable as well as non-renewable resources, both equally important to many aspects of human consumption needs and purposes. In addition, our future needs are unpredictable and maintaining biodiversity ensures the existence of potentially valuable species, economic or otherwise, that might be lost (Munasinghe 1993). Also, our understanding of the complexity of ecosystems is insufficient to predict the consequences of removing any given component, making the maintenance of biodiversity important to secure whatever our current demands may be in a given region and protect against unwarranted changes in systems we depend on (Munasinghe 1993).

Political ecology discussions bring together concerns for ecosystem conservation in combination with human influences. This involves an appreciation for social organization as it exists today, including political processes and decisions, as well as economic circumstances that bring about a conflict of

interests with conservation (Atkinson 1991; Rudel and Horowitz 1993; Blaikie and Brookfield 1987). Once the importance of biodiversity is established and there is recognition of the value in maintaining ecosystem integrity (Atkinson 1991; Laihonen 2003; Herring 1990; Munasinghe 1993), political ecology identifies the major human related areas of inquiry for solutions. This field of thought is primarily concerned with establishing a new social and political framework that has a sustainable relationship with nature as a whole and thus is radically different from the one currently functioning (Atkinson 1991; Keil et al. 1998).

Placement of this study lies most accurately within the theory of Conservationism, which carries the same interests of creating an ecologically sustainable system as Political Ecology, but whose main concern is the maintenance of specific parcels of land and environments (Atkinson 1991). The technical problems with regard to the management of nature are addressed with respect for existing social arrangements and concern with conserving environments, perhaps as confirmation of the stability of the status quo (Atkinson 1991). This can include, but is not limited to, identification of the causes of environmental change in relation to the context of a given situation, the specific conflicts over access to resources and the political consequences of environmental change (Bryant 1992). Knowledge of these factors is instrumental in designing appropriate actions, and governments and institutions worldwide have become involved with acting to maintain environmental health (e.g. Commonwealth Environment Protection Agency, Institute for European Environmental Policy, Pan American Centre for Sanitary Engineering and Environmental Sciences, United Nations Environment Programme) (Phillips 2002; UTGORN 2003). It is with these values of Conservationism that this study holds significance.

As discussed by Rudel and Horowitz (1993), policies implemented in an effort to protect ecosystems identified as being at risk or in need of protection may be of a direct or indirect nature. Direct policies act to create immediate boundaries and set aside specific parcels of land for protective purposes, for example the creation of parks and reserves. Indirect policies act to influence the

economic incentive of consumption and using certain resources or lands, including development projects, price controls or subsidies and the introduction of technology. Selection of the application of a policy approach should be specific to the regional context in which an environmental issue is to be addressed (McNeely 1993; Rudel and Horowitz 1993). For example, when dealing with small parcels of land at risk the use of direct policy is most effective (McNeely 1995; Rudel and Horowitz 1993). The creation of national parks globally is a popular solution of the strictest nature for such a circumstance. However, both approaches present weaknesses when implemented independently, and a combination package of direct and indirect policies specific to a site is most desirable (Rudel and Horowitz 1993). Local people often come into conflict with the creation of fixed boundaries and thus national parks are not always a suitable or successful solution (Osborne 1995). To ensure attainment of park goals and mediate conflicts, continued assessment is necessary.

When attempting to define what qualifies as 'achieved conservation' for a given location, critical to this discussion is an identification of what constitutes 'ecological integrity,' including a clear definition of the means by which to measure it. At a purely scientific level, this proves to be problematic by the very complex nature of biodiversity. It is quantitative without necessarily being quantifiable (Guyer and Richards 1996). Further complicating the situation are the various interpretations and perceptions of biodiversity, from local to national to global interests, each with its own purposes and values, which makes assessment and application of resource management particularly difficult (Brown 1998). Within Europe, for example, Finland has become a symbol of 'natural landscape' or 'wilderness.' The European Union has placed responsibilities on Finland for the maintenance of wilderness and wildlife, and with that comes another outlook on what is acceptably considered 'ecological integrity.' The implementation of the "Natura 2000" framework and projects has taken rise from these concerns. The perceptions of wilderness from a European Union perspective to a Finnish perspective and down to a local perspective may vary greatly (Metsähallitus 1996). In addition to this discussion are the varying

perceptions of 'wilderness' and 'ecological integrity' at an international level. What is considered as 'natural landscape' in northern Finland is in fact a land that has been altered and used for centuries as a cultural landscape by the Sámi people most notably for their reindeer herding practices. However, when looking at lands also considered as 'natural landscape' within areas such as northern Russia or Canada, we observe systems with comparatively little human cultural influences (or otherwise). Thus, when attempting to monitor the level of conservation or 'achieved conservation' in a location, it is critical for the validity of results to carefully select environmental indicators appropriate to the chosen definition of ecological integrity and the social organization (such as politics, values and needs) of a given situation (Machlis 1992). In order to overcome challenges inherent in the conflicts to be studied, careful attention must be paid to research design as well as a clear recognition of the meanings and variations of terms in use.

Scientific literature and research spans a wide array of studies focused on the local difficulties of direct policies applied through national parks. Conflicts between parks and people ultimately undermine the long-term efforts of biodiversity conservation (Mehta and Kellert 1998). In fact, community support for parks and conservation approaches is essential to the success of protecting ecosystems (Agrawal 2000; Bookbinder et. al. 1998; Ite 1996; Mehta and Kellert 1998; Schelhas 1991; Sherry 1999; Straede and Helles 2000). Thus it is important to analyse the involvement of different park users and how well their needs are being met in addition to ecological integrity. Brown (1998) stated in regard to Royal Bardia National Park, Nepal, that conventional wisdom dictates that local people's utilisation of the protected area is in conflict with conservation and tourism. By assessing the management of integrating reindeer herding, recreational tourism and conservation in Urho Kekkonen National Park, Finland, this study will address this very issue. Although much work has been carried out observing conflicts between protected areas, local and indigenous peoples, the greater body of this literature is focused on examples in the tropics and impoverished countries (Agrawal 2000; Brown 1998; Fox et al 1996; Ite 1996;

Mehta and Kellert 1998; Munasinghe 1993; Osborne 1995; Rudel and Horowitz 1993; Schelhas 1991; Sherry 1999; Straede and Helles 2000). Research in Urho Kekkonen National Park, Finland and inquiry of Canada with use of appropriate literature and site visits will illustrate the global nature of conservation conflicts with local people who wish to make consumptive use of areas selected for preservation. As mentioned before, perspectives of land use and land values may vary from different societal levels of scale, from broad governmental bodies down to a local standpoint (Klein 1994; Sherry 1999). This research will reveal that the northern environments share the same difficulties, and demonstrate that perceived preservation of the land also varies between land users as well as societal scale. What may seem 'protected' to one group of respondents is not necessarily so when questioning another. Understanding the demands and relationships of each group with the land in question will help to make solutions clearer, and provide an approach that is applicable in other regions. Thus, the research will contribute to the general body of knowledge with a northern circumpolar perspective.

1.3 Life before the park: Prior land-use organization.

The location of Urho Kekkonen National Park is an area with a long history of human occupancy prior to establishment of the park. The area was used by the Sámi people as part of their wide-ranging territory since their presence on the Fennoscandian landmass. The initial stages of Sámi cultural development began between 3-4000 years ago, and included use through hunting, fishing, berry picking and reindeer husbandry (Lehtola 2002, Pennanen and Näkkäläjärvi 2002). In more recent decades many activities such as reindeer herding, fishing, hunting, berry picking, forestry and even hiking and camping have been practiced in the area by Finns and Sámi. It is only quite recently that the area has seen any notable increase in permanent residents. For example, 10 Sámi reindeer herding families (the ancestors of many families today making up members in the Lapin Paliskunta) were recorded to have migrated to the formerly known Sompio District from the western Enontekiö/Kautokeino region of Finland/Norway in 1870-1890 as a result of restricted reindeer herding

movements from the Russian closures of the Norway-Finland border in 1852-1854 (Aikio 1989). Still, regional population numbers are quite small. Ivalo, the largest town in the study area, holds a population of 4000 residents. Saariselkä, Vuotso and Savukoski each consist of just over 200 year-round residents. In contrast to the period before Urho Kekkonen National Park was created, perhaps the most notable population increase was the influx of visitors to the study site area, annually 100 000 – 150 000 tourists, mostly in Saariselkä which at the time of the field research had the capacity of holding 10 000 visitors per night in existing hotels and lodgings (Female Lapland Board of Tourism staff, personal communications, Saariselkä, May 2003).

Reindeer herding began initially as a form of livelihood practice based on the natural rhythm of following reindeer herd migrations. Once political borders were created and European State governments claimed control of the land, herding was eventually forced to operate with greater reindeer management including fixed boundaries. The first establishment of the paliskunnat took place in 1898, and over the following ten years the districts of Ivalo, Lappi and Kemi-Sompio were created, each including within their boundaries a portion of the current Urho Kekkonen National Park. Reindeer herding practices use common lands, and the land itself was claimed by the State as was the case in this area since the first declared colonial occupation by Sweden, continued later by Russia and finally Finland (Lehtola 2002). Thus Metsähallitus (having itself gone through a number of organizational changes in over 140 years of existence of both Russian and Finnish control) eventually came to be the authority user of state land. It is interesting to observe that Metsähallitus plays the role of land guardian with both consumptive/profitable (forestry) and conservation/value added (parks) objectives. The difficulty today is the history of the State taking control of the land left over from colonial times. With conflicts of useage interests, the State's historical rule usurps the usufruct land rights of the Sámi people from original inhabitance, leaving much ongoing debate as to the justice of the current power balance and what should be in place.

1.4 An idea is born: The creation of Urho Kekkonen National Park.

Identified by many as the first concrete action leading to the creation of a national park in the study area was the publication of Kullervo Kemppinen's books "Lumikuru" (1958) ("Snow Valley") and "Poropolku kutsuu" (1961) ("Call of the Reindeer Trail"). Their natural history description of the Saariselkä/Koilliskaira wilderness areas and the positive depiction of hiking made an impression on readers and essentially created the idea of this area as a true wilderness (Saarinen 1995). It is important to note that the idea of 'wilderness' and its definition is a debatable issue with different perceptions from a protection standpoint (Klein 1994; Metsähallitus 1996; Sherry 1999), however it is clear that the books did much to increase interest in the area; in the years immediately following the publications the number of visitors per year doubled from the annual rate for the early 1950's (Saarinen 1995). These books along with the media helped to bring the Saariselkä/Koilliskaira region to the public eye during a time of Finnish discussions of national park creation (Borg 1992). The location became well known as one of the last wilderness areas not only in Finland but also in the whole of Western Europe, and its image and the economic well-being of the 1960's kept a steady rate of increase in tourism (Häyrinen 1979; Luoma 1992). Although tourism brought with it a certain set of problems (disturbing reindeer, trail creation, garbage, etc) (Hoogersteger 1976; Nenonen 1990; Partanen 1992), it was not seen as conflicting with nature conservation and in fact maybe in some ways encouraged it (Saarinen 1995).

At the same time as tourism development was taking place, Metsähallitus was expanding their widespread forestry activities at an alarming rate, particularly in the Kemi-Sompio area. It was recognized that if some course of action was not taken soon, the entire wilderness area would be consumed by forestry. These pressures were in addition to the ongoing hydroelectric development taking place in the region by Kemijoki Oy, leading to the creation of Lokka and Porttipahta artificial lakes. The constantly increasing popularity of the Saariselkä/Koilliskaira area in the public eye as a place of recreation and wilderness eventually led to its protection, and not a moment too soon. In fact, by the time initiatives were well

under way to protect the area and all logging had been brought to a halt, plans for building roads and selected cutting blocks had already been identified and drawn up.

In 1983, Urho Kekkonen National Park was officially established (Fig. 2). It was named after Mr. Urho Kekkonen, a long-serving Finnish President and well-known outdoorsman, in honour of his 80th birthday (Saarinen 1995). During his leadership as President he was generally much liked by the public, and was known not only as an avid skier and hiker but also for his promotion of Lapland through numerous visits and infrastructure projects including road-building. As the second largest national park in Finland, its size and role in protecting a natural area seemed fitting to the political legacy left behind by President Urho Kekkonen, teamed with his outdoorsmanship. He passed away in 1981, before the official creation of the park.

1.5 Law and order: Park management and policy.

Metsähallitus has drawn up a number of policies over the years to be used as guidelines for the management of parks and wilderness areas under its jurisdiction. The most recent of these documents is "The Principles of Protected Area Management in Finland: Guidelines on the aims, function and management of state-owned protected areas" (Metsähallitus 1999). This was a rather quick revision of its predecessor, written and accepted in 1992 and finally published just three years prior (Metsähallitus 1996), and may have been prompted by the publication in the interim of "Finlands protected areas: A technical assessment," (Eidsvik and Bibelriether 1994) which was written by two foreign experts in order to obtain an evaluation from external parties. The most significant changes include simply restructuring the content, as well as incorporating the concerns of the European Union's environmental program "Natura 2000", focused on compiling information on thousands of natural landscape variables including plant and animal species presence, which had recently come into play in Finland after joining the European Union January 1, 1995. It is based upon this document that specific management plans for all protected areas in Finland are written. Though

not legally binding, it is an important pan-European initiative with much political image value and available grant monies for research, not to mention its eventual untold worth as an information pool and database.

It is of interest to recognize that Urho Kekkonen National Park (incidently along with Pallas-Ounastunturi National Park) was dropped from Category II – National Parks of the "United Nations List of National Parks and Protected Areas" in 1990 (Metsähallitus 1996:10). The present classification of the list, kept by The International Union for Conservation of Nature and Natural Resources (IUCN), dates from 1982 and the national park definition dates back to 1969 (Metsähallitus 1996:9). The IUCN list categorizes six different types of protected areas, Category I being the highest level of protection (Strict Nature Reserve / Wilderness Area) and Category VI being the lowest level of protection (Managed Resouce Protected Area). Reasons for exclusion of Urho Kekkonen National Park from Category II were due to the recreational hunting and fishing rights permitted for local people which extended beyond the activities deemed necessary for the maintenance of traditional livelihood practices, as well as tourist activities (e.g. commercial snowmobile route) unsuited to the concept of a national park (Metsähallitus 1996, 1999). In fact the international status of some other national parks in Finland is also debatable due to the same reasons, and similar allowances on the threshold of 'suitability' can be seen in other Finnish protected areas such as "wilderness areas" and "strict nature reserves" (Eidsvik and Bibelriether 1994; Metsähallitus 1996, 1999). Having said all that, it is important also to recognize that the definitions of national parks and what is suitable conduct within them is entirely the decision of the country in which the park resides, and classification may vary. It is true that the IUCN has published guidelines and categories for various types of protected areas, but these are only suggestions and there is nothing outside of political and perhaps international pressure to enforce the use of correct nomenclature for different protected areas. For example, the proudly acclaimed Banff National Park in Canada has two major ski resorts operating within park boundaries, not to mention two towns and two major highways. It has been suggested that Finland is particularly strict with its

own definitions, which may have led to the dropping of these parks from the IUCN official list (Male Finnish Metsähallitus staff, personal communications, November 2003). Having said this, the discrepancies of what protection measures must be in place to make an appropriate national park become clear when one takes a closer look at other IUCN listed national parks in Finland in comparison, such as Lemmenjoki, or even non-Finnish examples of international IUCN listed national parks (cf. Chapter 8).

It is interesting to observe Finland's successes and difficulties in maintaining protected areas with such a strong cultural philosophy towards land use and human rights on the land. This refers directly to land use policies such as indigenous use for reindeer herding and "Every Man's Right." The former is a human cultural practice which is exercised on all lands in northern Finland, including protected areas, and the latter originated as unspoken rules of conduct for people on the land and has since been put into official documents and policy regarding movement on the land for recreational purposes where land rights are concerned. The point is that through the flexibility and social approval of using many protected wilderness areas for human purposes of cultural practice or recreational use such as hiking, skiing, hunting, fishing, berry picking, reindeer herding etc, Finland has unique issues to be dealt with where protection and conservation of 'ecological integrity' is concerned. Metsähallitus has the challenge of integrating these uses and while on one side it faces significant challenges and difficulties while managing a cultural and ecological landscape, there are also many positive attributes to the Metsähallitus parks system which so thoroughly accepts cultural activities on a large scale as part of their 'natural' environment.

There are, of course, many areas of discussion on this topic, including the political and management issues of the parks system. Controversy has long stood between local users and bureaucratic policy makers that are far removed from park locations. Urho Kekkonen National Park, being a relatively remote park in northern Lapland, is no different, and there has in the past been debate surrounding the perceived repression of local people from becoming part of the

top management staff. Whether such political views remain today within the system or whether there is a lack of available, qualified locals interested in gaining Park Director or higher level positions is a point for discussion.

The most recent management plan created for Urho Kekkonen National Park was published in 2001 and touches upon all of the responsibilities and policies of different activities involving the park (Metsähallitus 2001). The first and only other such plan was written upon the inception of the park in 1983 and published in 1984 (Metsähallitus 1984). It is clear upon reading these two plans that much progress in the way of management has taken place since the creation of the park. Most probably these management techniques were always present, but their validation in a published management plan manuscript is important for clarity in understanding acceptable conduct as well as for legal purposes, and the second publication is much more detailed and explicit. While the first plan touched upon various concerns and issues including the division and care of regions in the park, use for hiking, skiing, reindeer herding, forestry, fishing, berry picking, research, goals and additional plans, the content regarding these subjects was extremely vague and general. There was much room for improvement and it would seem that, although perhaps somewhat overdue, in the ensuing 17 years until the management plan was thoroughly revised, the park did well in recognizing more clearly the issues at hand in running such a park. If not yet in print, in the meantime management staff had certainly developed guidelines and methods for dealing with the multifaceted responsibilities of the park.

The new management plan involves policies for various park users as well as guidelines for park staff conduct involving various activities, for example, waste disposal. Guidelines are explicitly covered and explained from all aspects. Details include addressing the protection of nature and historical sites, protection of flora and fauna, guiding – including all visitors centers and interpretive facilities – park infrastructure, safety and security, the provision of services (e.g. firewood, propane gas), reindeer herding, berry picking, hunting and fishing activities, cooperation with public authorities and involvement with research and additional plans among other topics. Each is well described with a number of sub

points addressed - from first glance an immense improvement upon the prior, vague management plan. Maintaining and enforcement of park regulations is somewhat difficult as staff is limited and their responsibilities with various aspects of the park are great. Appropriate conduct relies on an honor system and appears to work efficiently considering the volume of visitors in the park. This includes among other things the proper disposal of waste, maintaining park cabins and making open fires only at specified fire-pits. How well this un-enforced system works will be revealed in section 4.2 when the perceptions of park visitors towards tourism and recreation are discussed.

1.6 A delicate balance: The on-going challenges.

Since the increasing popularity of outdoor wilderness recreation activities in northern Finland on lands shared with reindeer herders, there have been contrasting pressures on managers to decide how protected lands should be developed and used. This comes as much from the contrast of how different parties use the land as it does from differences in a cultural perception of what the land is for, what its value is. "A Laplander never goes into the forest without a purpose," an interesting phrase referring to the Sámi that was to follow my thoughts over the course of the field research. Outdoor recreation for its own purpose is simply not a concept understood by a people who spend much of their time through the course of their livelihood living outdoors, not to mention their small communities which exist so close to largely uninhabited wild spaces. There is simply no separation of wilderness from daily living.

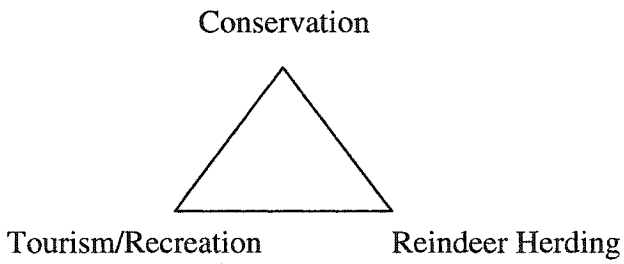
On the other hand, visitors from cities in southern Finland and other countries who come to find refuge, peace and revival in wild spaces often carry mixed perceptions. As much as they are excited by witnessing reindeer in the forest, they also bring with them ideas formulated by the media and ongoing debates regarding the numbers of reindeer and their effects on lichen cover. The responsibility of maintaining the natural integrity of the landscape as well as the presence of both recreational visitors and reindeer herders has resulted in an introduction of contrasting ideas between different users, and has brought about

challenges of varying natures to park managers since Urho Kekkonen National Park was first created. These issues and viewpoints will be discussed in detail in the following chapters.

1.7 Course of action: The thesis framework.

With a focus on the natural environment and our place as humans within it, the thrust of this thesis addresses the complexity of interactions facing the relationships between multiple users of a given land area with potentially conflicting interests (Fig. 1).

Figure 1. Relationships of Multiple Users (author's design).



The history of coexistence, the current struggles of maintaining balance and the direction suggesting the most satisfactory outcome for all in the future are examined. Chapter 2 consists of the entirety of the research methodology. Chapters 3, 4 and 5 analyse the data collected during the field research and discuss the results of the interactive perceptions of recreational visitors, reindeer herders and park staff respectively. Through the use of maps demonstrating landscape changes, Chapter 6 addresses conservation in the park as a land use. Chapter 7 acts to bring together the views discussed in previous chapters and observe them from a district perspective, within each of the three reindeer herding districts actively using the park. Chapter 8 touches on the northern circumpolar application of the interactions observed in this case study, drawing from a Canadian context as an example. Chapter 9 offers the final summary and conclusions of the research.

Chapter 2

The Case Study: The research process, materials and methods.

2.1 Method to the madness: Research methodology.

The following methodology will act to summarise and identify the satisfaction of users with the management of Urho Kekkonen National Park and efforts to integrate reindeer herding, tourism/recreation and conservation interests. By involving different land users, this study incorporates a general framework of the Participatory Approach (Loikkanen et. al. 1999). The subject population included park visitors, reindeer herders, park personnel and other tourist industry members. In brief, methods included the distribution of questionnaires, informal interviews, participation of the researcher in relevant land use activities, and personal observations recorded in a journal (Berrouard 2003). All measures taken to ensure ethical conduct and identify participants, precise method techniques, study site specifics, analysis procedures, perspectives and other considerations are discussed.

2.2 Research conduct: The permit process and ethical considerations.

This research project observed all necessary actions in order to ensure ethical conduct. An application was made to the McGill Ethics Review Board and on April 8, 2003 a McGill Ethics Certificate was awarded for the research (Appendix A). In Finland there is no formal requirement or regulation regarding research permits. Permission should be granted by local agencies where the research will take place, but no specific certificate is necessary. Prior to arrival in the field, verbal and written support and approval of my research was received from the Director of Urho Kekkonen National Park, Finland, Mr. Sakari Kankaanpää. This included the extension of accommodations and other in-field assistance generally made available to me. Contact was initially made through e-mail correspondence, followed by numerous face-to-face meetings and updates throughout the five-month field research period.

Acceptance and permission of access to the communities and locations that were subjected to questionnaires, interviews and field observations through

participation was obtained through continued communications and agreement with contacts initially acquired through Dr. Ludger Müller-Wille, my thesis supervisor at McGill, and Mr. Sakari Kankaanpää, as well as through contacts made directly by myself in the field. All individuals voluntarily participated in my research, including the park visitors, park staff and local reindeer herders. I received permission and was invited to attend the paliskunta spring meeting for each of the three districts active in Urho Kekkonen National Park. I attended the meeting for the Kemin-Sompion Paliskunta on May 27, 2003, the meeting for the Lapin Paliskunta on May 30, 2003 and the meeting for the Ivalon Paliskunta on May 31, 2003. At each of these meetings I made contacts with the heads of the paliskunnat, gave a presentation to the reindeer herders introducing my research and distributed questionnaires (Appendix B). I was invited back by each paliskunta to attend the reindeer calf marking events. My attendance of the reindeer calf marking events only occurred with the Lapin Paliskunta, during the nights of June 23-24, 24-25, 26-27 and 27-28, where in addition to the formal invitation I was the personally invited guest of a reindeer herding family. Contacts in the reindeer herding community occurred as I was introduced by already familiar persons to additional people of interest within my research.

2.3 A matter of perspective: Researcher's position in the field.

There were no previous personal ties between myself and the study site, making for less personal bias in the collection of information. This included working in a country where the nationality was not my own and where I was unfamiliar with the language. Many of the basic conditions and circumstances of the area were largely previously unknown to me and I was experiencing them for the first time. Research support in the form of accommodations and contacts, etc., was extended by Urho Kekkonen National Park, which in effect allowed me to better access and explore all sides of the issues present rather than being restricted in movement or resources. Preparations prior to arriving in Finland included the personal initiative to acquire some skills in Finnish through private lessons. This earnest effort to learn the language helped considerably in making contacts, and I

made a point of expanding my Finnish knowledge throughout my stay in Finland. By the end of the field season, I was capable of undertaking moderate discussions with non-English speaking Finns.

It should be noted that my gender, i.e. female, had an influence on some of the human to human interactions that took place during the data collection period. This refers to the distribution of questionnaires and recruiting participants for informal interviews and discussions. Being female proved to be very conducive to open conversations and finding willing participants. This is in view that there was verbal mention on a few occasions by participants that had I been male, it was suggested overall participation would have been lower or the commentators would not have participated themselves. "If you had been a man, X and X said that they would not have filled out your questionnaire," was an offhand comment made one evening during a calf marking event (Female Reindeer Herder, personal communications, Lapin Paliskunta calf marking event, June 2003). A recreational visitor hiking in the park made quite an extended comment summing up the benefits of my position due to the personal, opinion-based and potentially sensitive nature of the questions I was posing. "You are in a very good position as a researcher. You are young, foreign with no attachments to any interests here, you can't speak Finnish and you are female, all of which makes you appear vulnerable. You're not a threat so people will be more likely to speak with you. Being female, it makes you easier to speak to, especially for men who tend to have more difficulty talking than women," (Male Finnish hiker, personal communications, Luulampi, 28 May 2003). These are two examples of comments which identified the less obvious considerations of my position as a researcher in the field.

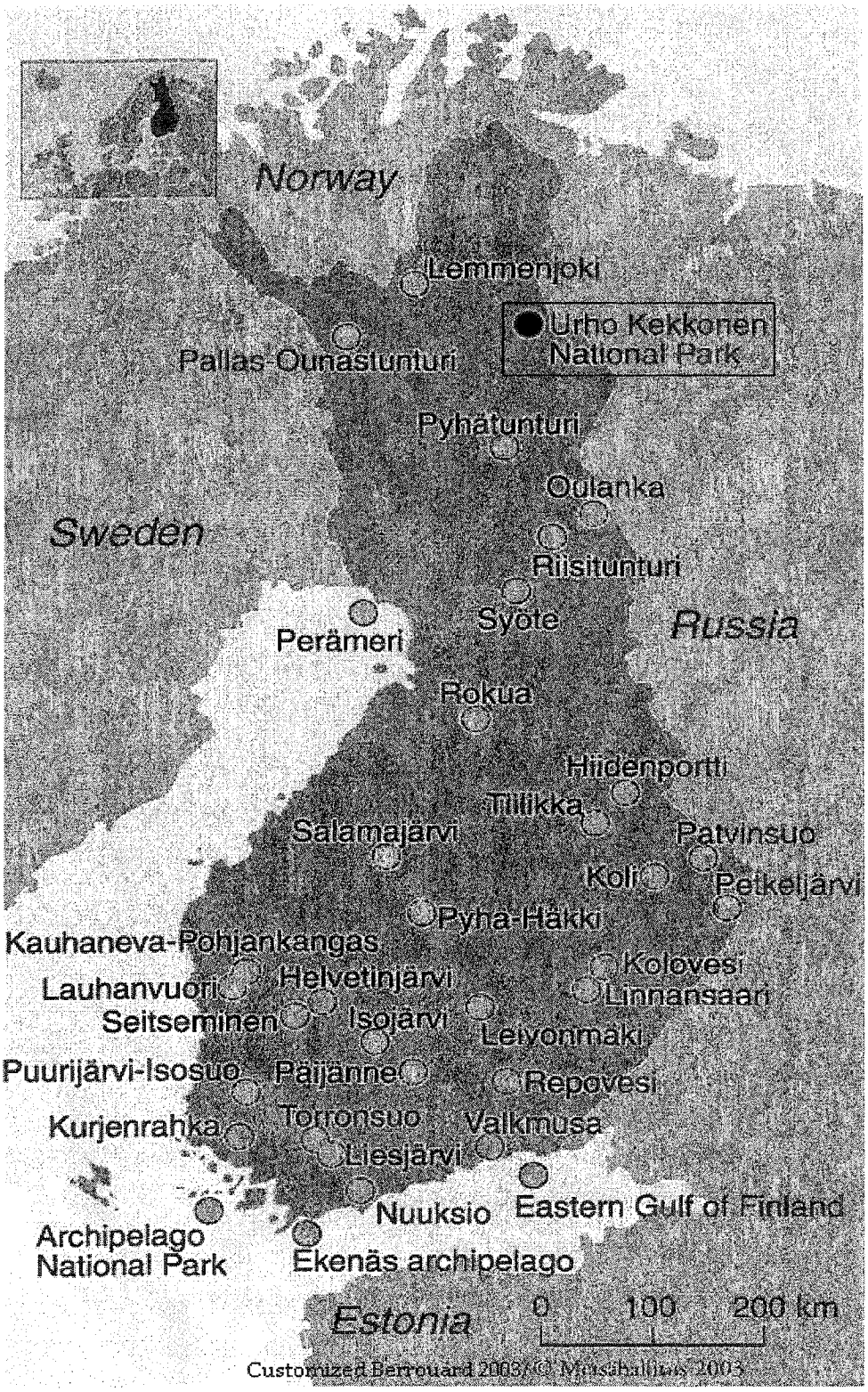
2.4 The environs: Field study location.

The field research took place in and around Urho Kekkonen National Park, Finland (Fig. 2). This park is 2500 km^2 located in northern Finnish Lapland, between 68° and 69° latitude with the eastern side bordering Russia. Vuotso and

Figure 2. Urho Kekkonen National Park in Finland.

Source: Finland's National Parks–Metsähallitus

www.metsa.fi/natural/nationalparks/kptengl.htm

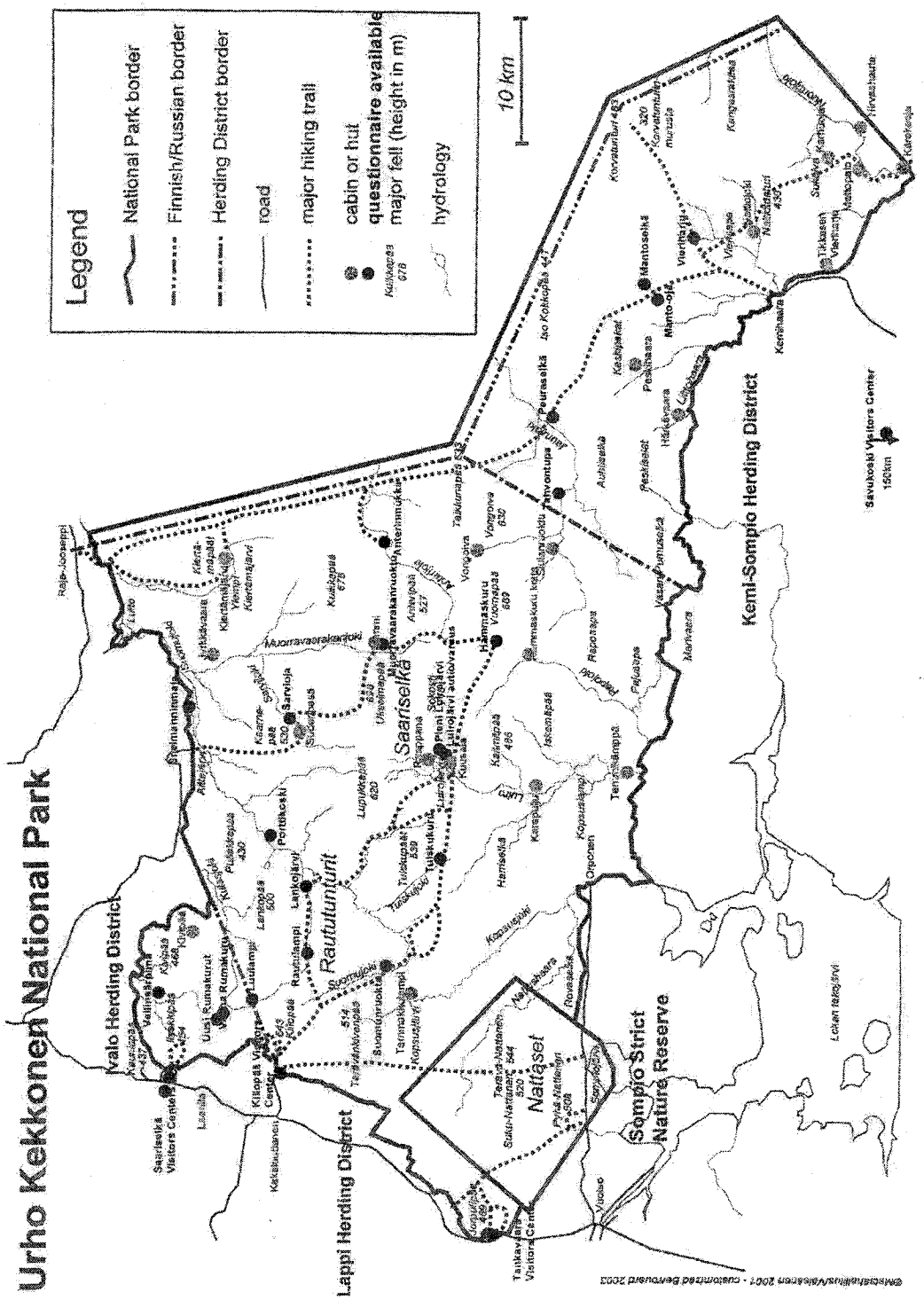


Saariselka were the two villages from where most local participants were drawn, both of which possessed only a few hundred year round residents. Other involved towns included Ivalo and Savukoski, where members of two paliskunnat were found as well as park staff in the latter. The town of Sodankylä and city of Rovaniemi were sources of literature, assistance, information and some discussions through the Metsähallitus offices located there. Rovaniemi also provided access to the Arctic Centre at the University of Lapland and the Arktikum. Visits were made to other types of protected parks and areas in Finnish Lapland, including Kevo Strict Nature Reserve in northernmost Finland, Sompio Strict Nature Reserve beside Urho Kekkonen National Park (Fig. 3.), Lemmenjoki National Park in northern Finland (Fig. 2) and the Ylläs-Aakenus Protected Area (expected to gain national park status in January 2004) in northwestern Finland south of Pallas-Ounastunturi National Park (Fig. 2). Additional components of the overall field study not involving the immediate environs of the site research location include Espoo (Helsinki University of Technology), Vantaa (Metsähallitus, Finnish Forest Research Institute) and Helsinki (various university libraries).

2.5 Who, what, when and where: The distribution of questionnaires.

For the purposes of discussion between user groups and analysis throughout the entire thesis, the park has been strategically divided up into three regions which are based on the border lines between the paliskunnat operating in the park; the Ivalo Herding District, the Lappi Herding District and the Kemi-Sompio Herding District (Fig. 3). Conveniently simplifying later discussion comparing reindeer herding and visitor use, the trends of visitor use also seem to follow these borders. Although the park has created its own zoning areas and names, for the sake of discussing user groups together, and by merit of the near-exact shared boundaries of those zones delineated by the park and those by the paliskunnat boundaries, the latter is used during this discussion. **It is important to recognize that the area of the paliskunnat boundaries that lie inside of the national park only comprise a portion of the entire paliskunnat regions.**

Figure 3. Urho Kekkonen National Park Detailed Map.



However, for the purposes of discussion here, when reference is made to a paliskunta region, it is explicitly referring to ONLY the region within park boundaries unless otherwise specified.

In reference to the Urho Kekkonen National Park boundaries, Figure 3 indicates the three paliskunnat boundaries. Also to be noted is the double boundary along the Finnish-Russian border. A one to five kilometer buffer zone exists along the official political border, and although the park technically extends to the national border, the paliskunnat boundaries only extend to the buffer zone. No activities are permitted in the buffer zone excepting those of the Finnish National Guard patrollers.

The voluntary act of filling out a questionnaire was considered as consent. The decision to include any personal information (e.g. name, profession) was optional to all participants and use of the questionnaires was (and will be) restricted to control by my supervisor, Dr. Ludger Müller-Wille, and me. A brief description of the research was stated at the top of the questionnaires to inform participants of the objectives and in what way the surveys would be used. After analysis, questionnaires were placed into the archive at Urho Kekkonen National Park in the Koilliskaira Nature Center in Tankavaara with a caveat explaining the project initially involved with the questionnaires and the contact information of Dr. Ludger Müller-Wille and myself who must be contacted for permission if the questionnaires are requested for any additional purpose.

Questionnaires were available in Finnish and English and were distributed to the park recreational visitors, reindeer herding members, park staff and some other local tourist industry employees (Appendix C). The surveys were offered individually to persons identified as being reindeer herders within the Kemin-Sompion, Ivalon and Lapin Paliskunnat after a brief introductory presentation given during their respective spring meetings as well as during calf marking events in the Lapin Paliskunta (Appendix B). A total of 120 questionnaires were completed by reindeer herders; of 48 questionnaires distributed in the Kemin-Sompion Paliskunta 41 were completed (85% return), 25 of 30 in the Ivalon Paliskunta (83%) and 47 of 47 (100%) in the Lapin Paliskunta. Questionnaires

were made available at the workplace to persons identified as being parks staff and tourism associated. Of the 20 questionnaires distributed to park staff, 18 were returned completed (90% return). Questionnaires were available to park recreational visitors at information centers in Tankavaara, Savukoski, Kiilopää and Saariselkä, as well as in 22 of the 42 cabins accessible to the public in the park (Fig. 3). 1112 questionnaires were distributed, 1058 were collected in September (the other 54 were unaccounted for, either lost, used for fire-making or taken by visitors) and of those, 750 were completed (67% return).

The distribution of questionnaires to visitors centers and cabins began on May 22, 2003 and ended on September 27, 2003. I brought the questionnaires by foot to each cabin and visitor center. Approximately three to four weeks were necessary for me to visit all of the survey sites during the periods of delivery and pick-up of questionnaires. When possible the locations were re-visited once during the summer before the final collection to ensure that blank questionnaires were still available. Fourty questionnaires were available in 17 cabins, and 60 in five cabins with higher visitor numbers. I collected questionnaires by personally visiting each cabin and visitor center. The time during which questionnaires were available to the public varied from location to location with an average of three months, and each time interval overlapped over the same 2.5 month period from June 21, 2003 to September 8, 2003 (Appendix D, Table 1).

2.6 Discussing the issues: Conducting interviews.

Interviews took place in English, a mix of Finnish and English and Finnish with the assistance of a third party acting as a translator. The approach of informal interviews, conversations and discussions was used and the dialogue followed the outline of the survey questions. This format was desirable and best suited to the field circumstances. Producing any formal forms of consent to sign was culturally and socially inappropriate and actively barred any discussion from taking place. The risk of pursuing this avenue was one of latent bias, based on the rationale that formal consent forms would have resulted in fewer contributors and participation by only the most opinionated and secure persons. The informal

approach included a verbal explanation of who I was, where I was from and what my research project entailed before any discussion continued. After my introduction, speaking with me was the free choice of the participant. No compensation was given, as all subjects were recruited on a volunteer basis. Informants included parks personnel, local reindeer herders from each of the three paliskunnat active in the park and recreational visitors. All individuals in these groups were approached when the opportunity presented itself, including arranged and random meetings and during the calf marking events. During trips to the park cabins, willing recreational visitors were approached and asked to participate in discussions. All informal interviews were recorded in note form in a field journal, during or after the discussion (Berrouard 2003). Discussions lasted from 10 minutes to 2.5hrs, with a rough average of 30-40 minutes.

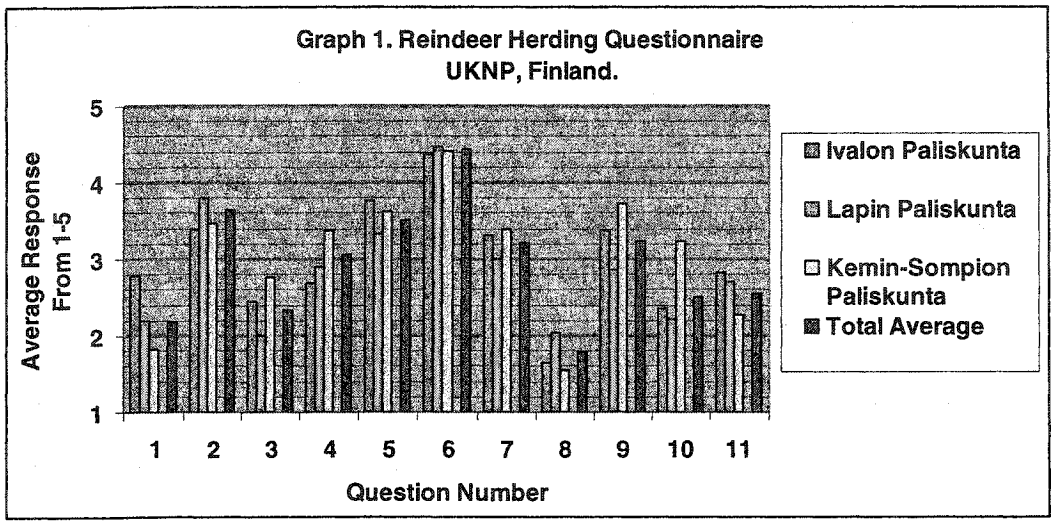
2.7 Making sense: Analysis.

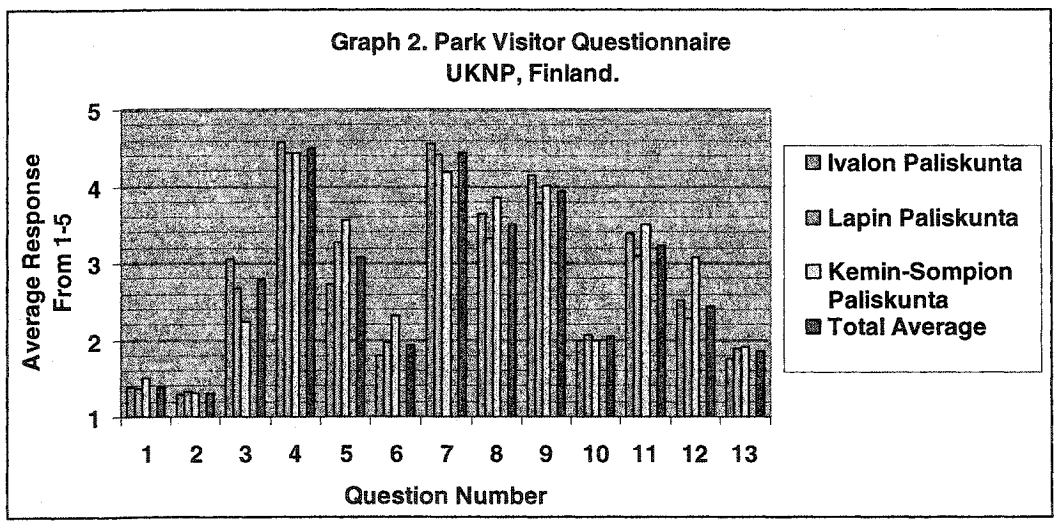
2.7.1 Quantitative analysis

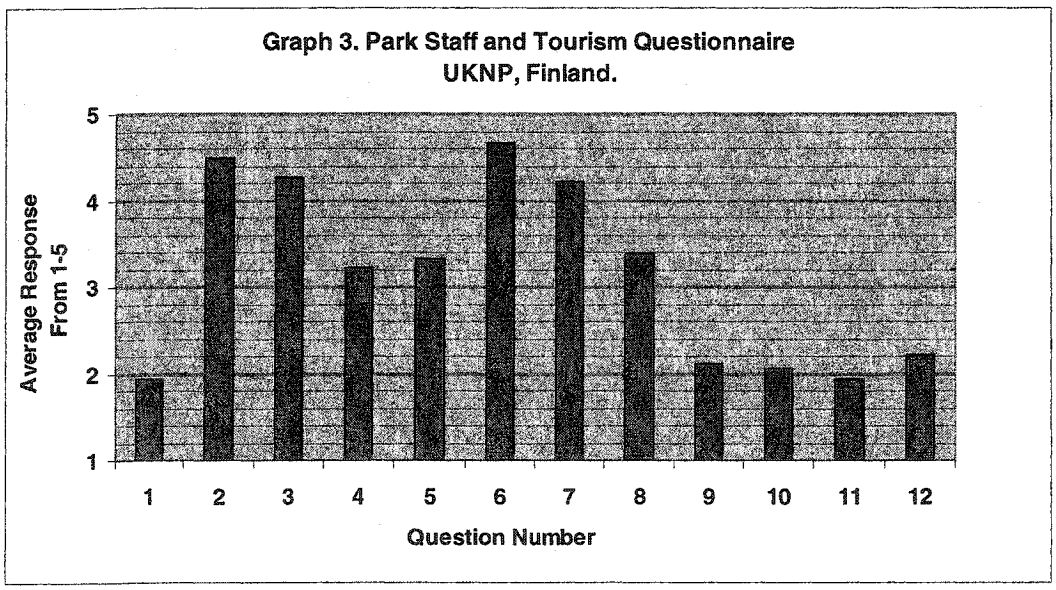
Comparisons of the varying perceptions and perspectives were made through quantitative analysis of the questionnaires, identifying the results within groups, within districts and between groups. Using a technique of classifying and analyzing public input (Loikkanen et al 1999), the questions were broken down based on their relevance to one another (e.g. analyzing within a user group all questions relating to reindeer herding, or examining the results of an identical question between user groups). Responses to each question were averaged and the final result acted as representative of the group examined. These average points were used to create graphs for visualization of results (Fig. 4). In the following discussion chapters a response of 'yes' indicates a value in the range of 1-2.5, 'undecided' fell into the range of 2.5-3.5, and 'no' in the range of 3.5-5.

The park has no means to conclusively count the number of individuals entering the park for recreational purposes, as there is no required registry. Information on user numbers was collected from the sign-in books available in every park cabin during the period of May 2003 to the final visit in September 2003 and was complete for 17 of the 22 cabins used in this study – logbooks

Figure 4. Graphs of Questionnaire Results, May – September 2003







which were filled and subsequently removed/replaced by park staff during the summer and could not be located for five cabins. Information included the dates the book was signed, how many signatures were made and what country the signatures came from (Appendix D, Table 2 and Fig. 6). This information was used to observe how many Finnish versus foreign visitors there were during the study period, and to approximate how many total visitors there were to cabins during the same period. It was estimated that 80% of recreational visitors to cabins tended to sign the cabin sign-in books. This is in accord with estimations made by Metsähallitus employees. Please note the relative representation of Figure 6, that a greater percentage of signatures may not necessarily represent a higher number of visitors. My own signatures were included in the tally, and although I know only two different Canadians signed the studied logbooks in May-September 2003, the great frequency with which I made my signature due to the large amount of time I spent in the park resulted in "Canada" being the seventh most prominent signature. Rough estimates drawn from the total signatures acquired from the logbooks suggest that at least 93% of visitors signing the books were Finnish (Appendix D Table 2).

The original intention was to make specific comparisons between the revenues generated by each of these land uses in the park. This proved to be problematic as the statistics available from each land use were not specific to the boundaries within which they were intended. For example annual paliskunta revenues included the entirety of the lands in which they operated, of which Urho Kekkonen National Park is only a part, and often of seasonal use. Therefore specific analysis and comparison were not made, although points of interest were identified. All data and information were obtained through Metsähallitus and the paliskunnat.

2.7.2 Qualitative analysis

Qualitative results were analysed through the review of interviews and personal observations. These results were used to assess the social climate surrounding the issues studied. All personal observations were kept in a field

journal for referral (Berrouard 2003). My participation in activities relevant to the research was recorded, as well as my ideas and thoughts. Activities included attending the paliskunta meetings of the three districts active in Urho Kekkonen National Park, attending four reindeer calf marking events in the Lapin Paliskunta, visiting most areas of Urho Kekkonen National Park as a recreation participant and engaging with visitors on trails and in cabins, visiting other protected areas of Metsähallitus including Kevo Strict Nature Reserve, Sompio Strict Nature Reserve, Lemmenjoki National Park and the Ylläs-Aakenus Protected Area (expected to gain national park status in January 2004), visiting the SIIDA Sámi Museum in Ivalo, the Arktikum in Rovaniemi and visiting Metsähallitus offices in Tankavaara, Saariselkä, Savukoski, Sodankylä, Rovavniemi and Vantaa/Helsinki.

Aerial and recreation maps of Urho Kekkonen National Park were studied and accessed from the National Land Survey of Finland in Rovaniemi. These maps varied in scale from 1:20 000, 1:31 000 and 1:50 000 (m) and spanned from 1965, 1969, 1972, 1989, 1997, 2001 and 2003. Objective comparative analysis of specific locations of interest in the park was undergone based on these maps as part of assessing the major landscape changes that have taken place since the creation of the national park.

2.8 "What was the bear's answer?": Other methodology considerations.

The inability to inquire directly about the satisfaction of 'conservation' or 'nature' as a user of the park was one difficulty in this study. Assessing biodiversity as an indicator or reviewing the natural impacts on the land could easily have constituted one or more entire studies in itself, involving perhaps vegetation sampling in various locations to assess vegetation cover or various methods of determining wildlife densities (droppings, trapping, infrared sensors, etc.) near and apart from visitor and reindeer use, to name a few possibilities. Although this study did not survey the perceptions of nature itself on its satisfaction with the park, the fact of the matter is that the area was made a park in order to protect it from forestry harvesting and maintain the 'original wilderness.'

Many studies worldwide have demonstrated the impacts of forestry and recreation on wildlife and plant distribution (Aho 1994; Bookbinder et al 1998; Burgess 1999; Fox et al 1996; Hyytiäinen and Tahvonen 2001; Mason 1994; Pesonen et al 2001; USDA Forest Service 1996; Uotila et al 2002; Uuttera et al 1996). Admittedly, there are downfalls to having recreation or consumptive activities in 'wilderness areas.' It could, however, at least be said that with the creation of a park, the trees remain standing regardless of the visitors that are attracted. The approach chosen was to identify indirectly the satisfaction of conservation by inquiring of park recreation visitors, reindeer herders, park staff and other tourism associated workers their perception on the maintenance of the natural integrity of the park landscape (e.g. questions: Do you feel the park protects nature well / high conservation? Have you seen damage to nature in the park?).

With the limitations of time and one researcher, questionnaires were left in cabins for the voluntary participation of hikers. Although highly unlikely, there is no way to ensure that an individual did not fill out more than one survey. The attempt at a random method was flawed in that filling out questionnaires was neither supervised nor randomly selected, instead carried out by interested parties that read the questionnaire at one of the available locations. Considering the scope of this study, and the numbers of questionnaires that were completed and used in calculations, this flaw was considered an acceptable weakness.

Considering the abundance of survey distribution locations, the estimated percentage of recreational park visitors who came into contact with the questionnaires was over 90%. Using the statistics on visitor numbers registered in Saariselkä hotels estimated from May to September 2002, a total of 760 surveys completed indicated 1.17% participation from visitors from May to September 2003. 65 167 visitors were estimated during this time, which was calculated by combining all the overnight visitors, counting only the proportions of those who were identified as visiting for the purpose of leisure. When using the information on numbers of signatures collected from the study cabins from May to September 2003, 8.68% visitor participation with questionnaires was indicated. Visitor participation was estimated by dividing the number of questionnaires completed

in a given cabin by the total number of signatures. In cases where no blank questionnaires were available upon final collection, the latest dated questionnaire was noted and no signatures after that date were included in the calculation.

The percent of reindeer herders that were surveyed from each paliskunta represented 25.7% of the total registered owners (467) in February 2003 (Poromies 2003(2):18); 27.2% in Kemi-Sompio, 29.8% in Lappi and 18.5% in Ivalo. Owners are registered as individuals, not as family units, and include all children from birth onwards. This means that in a family of four if only the head of the household completes a questionnaire, numerically it represents 25% participation but it may represent a much greater percentage of the views and opinions of the group. Kemi-Sompio makes up approximately 30% of the park surface area, Lappi 55% and Ivalo 5%.

The number of full-time year-round parks staff was only 16, a small study pool. There were roughly eight additional seasonal staff – at points during the entire study period seasonal staff numbers varied. However, 14 park staff (seasonal and permanent), plus four additional relevant tourism staff in the Rovaniemi Metsähallitus office and the Saariselkä Lappi Board of Tourism visitor center, completed a questionnaire. It should be mentioned that over 40% of the park staff were also involved in reindeer herding as a livelihood practice, either directly or through a spouse or close family member. Regardless of status as a reindeer herder, staff were asked to fill out only a 'Park Staff / Tourism' questionnaire considering their limited numbers.

Finally, responses to questionnaires, interviews and casual observations were taken at face value. There is always the risk of skewed or inaccurate information being collected in view of a special interest, concern or bias (cf. Romstad et al 2003). This was, however, considered to be unavoidable and is addressed in the discussions of localities in Chapter 7. Of note is the sensitive nature of making inquiries directly relating to the livelihood and traditional/cultural practices of a local community. It is understood that, regardless of the openness to discussions, more time than three to five months is needed in order to create a trusting relationship. That is to say, it is entirely

possible that certain issues of concern to local people or reindeer herding participants in regard to Urho Kekkonen National Park may not have become apparent through the course of this study. This study is by no means exhaustive in its aim to reveal the perceptions, ideas and concerns surrounding the issues of the existence of Urho Kekkonen National Park.

Chapter 3

A way of life: The perceptions of reindeer herders.

Undertaking the practice of reindeer herding as a consumptive land use within national park boundaries is a situation of conflicting interests in managing the natural resources. By combining a review of the questionnaires, discussions and personal observations, the reactions and ideas of reindeer herders towards reindeer in the park, reindeer herding, recreational visitors in the park, management and the impacts of each on the profession of herding as well as ecological integrity will be identified. This analysis will look at responses from all reindeer herders as a combined total, as well as from the perspective of each paliskunta.

3.1 Reindeer herding, a tradition and livelihood.

3.1.1 Straightforward opinions.

In relation to their own activities within the park, reindeer herders from each of the three paliskunnat were asked two questions; are they satisfied with their activities and are there too many reindeer using the park? (Appendix C and Fig. 4) Reindeer herders from each district reported that yes, they were satisfied with their use of the park, with the strongest level of satisfaction coming from the Kemin-Sompion Paliskunta (where the lowest level of visitor traffic is experienced) and the lowest level of satisfaction (undecided) from the Ivalon Paliskunta (where the highest level of visitor traffic is experienced). Reindeer herders unanimously felt there are not too many reindeer using the park.

3.1.2 Little more to add in discussions.

Reindeer herders had few comments to make in regard to reindeer herding in the park. Informants from the Kemin-Sompion Paliskunta maintained that they do not feel there are too many reindeer using the park, yet nor are there too few. From these particular individuals there was no feeling of a necessity to increase herd size. There was one written comment indicating that damage was seen in the

park caused by park workers and reindeer herders, presumably relating to the use of ATVs.

It was revealed by some informants that in so far as reindeer herding is concerned, there do exist some internal disagreements among reindeer herders. This arises from the differing practices of keeping reindeer close to home for observation and supplementary feeding in the winter-time, versus the philosophy of leaving all the reindeer free to roam on open pasture for the winter-time without captive feeding. The feeding issue can become even more complex, and is delicate by the nature of the difficulties of reindeer herding. That is, maintaining reindeer herding as a practice is difficult enough in the face of external forces without having or admitting to dissention inside of the group. It is of note regarding the perceptions of reindeer herders towards their profession and thus mentioned here, but also of relevance when taken in the context of the management of Urho Kekkonen National Park. Differences in feeding and herd care practices could have implications for the state of the feeding grounds within the park, either suggesting that the feeding grounds do not provide enough sustenance or eventually supporting herds which are too large for a natural habitat. Although the practices of reindeer herding is out of the hands of park management, mention of the relationships with the park is important.

3.2 The influx of tourism and recreation.

3.2.1 A mixed bag of questionnaire reactions.

Overall, reindeer herders were quite undecided or equivocal in their responses towards tourism. This reflects the conflicting recognition that tourism can have impacts on reindeer herding and at the same time is a valuable source of income to the residents of Lapland. Six questions of the eleven in the questionnaire distributed involved tourism and recreational hikers (questions 3, 4, 5, 7, 9 and 10, Appendix C and Fig. 4). Results revealed that reindeer herders felt that they see many hikers in the park, most strongly expressed in the Lapin Paliskunta. However, whether too many hikers were using the park, or if hikers had a negative impact on reindeer herding was undecided in all districts. General

tourism was not felt to be positive for reindeer herding, though herders remained undecided in the Lapin Paliskunta. Witnessing damage in the park was again quite undecided, with the Kemin-Sompion Paliskunta weakly showing a 'no' value. Whether or not herders felt the damage was caused by visitors revealed a value that was undecided overall. However, both the Ivalon and Lapin Paliskunnat reported that yes, this damage was due to visitors, with the indecision of the Kemin-Sompion Paliskunta leaning towards 'no'.

3.2.2 Breaking down the indecision.

When it comes to herders' views on recreational hiking, skiing and general tourism, there is a clear point of division between the reindeer herding districts in the park. This is due to the variation in the levels of use by visitors in the different areas. Informants from the Kemin-Sompion Paliskunta did not consider tourism to be a problem as so few visitors used this region of the park. They did make mention of two local people using reindeer in tourism to draw profit, but having said that they then identified tourism as being neither positive nor negative towards the practice of reindeer herding itself.

The consensus in the Lapin and Ivalon Paliskunnat was that tourism, though recognized as being an important source of income, was the source of some conflicts with reindeer herding practices. Written comments from the Lapin Paliskunta included an indication of damage seen in the park caused by visitors as well as the admission that using tourism as a source of income for part of the year allows the possibility of continuing to work with reindeer herding. Both districts expressed opposition to plans within their areas to further develop tourism facilities. One informant in the Lapin Paliskunta discussed how too many people in an area can affect reindeer, causing them to move to areas less populated by people. She felt that there was enough space in the park to accommodate such adjustments and relocations (Female Reindeer Herder, personal communications, Lapin Paliskunta calf marking event, June 2003). However, in the Ivalon Paliskunta where the park only makes up a small proportion of their herding grounds, this is not possible. Relocation means exiting the park altogether, which

is what has happened. The park is only used by a few hundred reindeer during the summer grazing period – out of five to six thousand in total. Ivalo reindeer herders have largely arranged their herd rotations on their district lands in order to avoid the park entirely in the winter time.

It may be appropriate here to make note of a comment made by a hiker in the park. The perception of 'too many' visitors may not be measured on the same scale between users. The discussion involved the recognition that local people might perceive of the land in a different manner than perhaps a visitor. They used an example: "I think that the feeling of too many people in the park is a personal thing, it depends on perception. Imagine the Sámi people who for generations are used to sitting on this hill and seeing their whole valley and not one other person. Then if two or three pass, maybe it is not many to you or me, but it is too many for them. I see it as if you sit in your living room and read or watch TV, and then strange people come and walk through your home. Of course the scale is different, but I think that the feeling is the same to them, seeing one other person in their valley. It is their home, they feel responsible and connected to it," (Male Finnish hiker, personal communications, Luulampi cabin, 28 May 2003). Sensitivity to these fine points of consideration is important.

3.3 Park management and conservation

3.3.1 The graphs reveal differences.

Urho Kekkonen National Park has made efforts in the years since its creation to be conscious of the traditional livelihood practice of reindeer herding and has attempted to create regulations of conduct that are both sensitive to the needs of local people and still maintain services and freedom to visitors as well as the values of nature protection deemed by the State. The responses of reindeer herders towards park management were dealt with in questions 2, 8 and 11 of the questionnaire distributed (Appendix C and Fig. 4). Results showed that reindeer herders generally did not feel that park regulations had a negative impact on reindeer herding, although this result overall was nearing indecision. In fact, the Ivalon and Kemin-Sompion Paliskunnat both had a response of indecision leaning

towards 'no.' The success of the park in maintaining high conservation values was agreed upon in all regions. However, when asked if the park had done a good job of integrating conservation, tourism and reindeer herding, the response was undecided and leaning towards 'yes.' Only the Kemin-Sompion Paliskunta clearly felt that 'yes,' this integration had been done well. These responses reflect the situations of each paliskunnat and their portion of Urho Kekkonen National Park, and the responses towards the question of integration best demonstrates this. As will be discussed later in Chapter 7, the portion of the park where the Kemin-Sompion Paliskunta lies is the least visited area of Urho Kekkonen National Park. The influences of tourism and recreation are least felt in this area both through low impacts on the land and low visitor numbers. Since the activities of reindeer herding have been least affected in this portion of the park in comparison to other areas (e.g. the Lapin and Ivalon Paliskunnat regions) it is not difficult to understand why the Kemin-Sompion Paliskunta would be the only paliskunta to clearly indicate that 'yes,' integration has been well carried out.

3.3.2 Some tough considerations and underlying issues.

Reindeer herders from all districts largely expressed the importance of the park as a mechanism for preventing the loss of forested land by prohibiting forestry practices. In general there were very few comments regarding any discontent towards the park management or legal restrictions. Reindeer herders had no comments regarding their regulated permission (permits are given to certain individuals for a certain period of time, and are renewable) to move freely within the park with the use of ATVs, and maintain traditional reindeer roundup sites, fences, camps and cabins associated with reindeer herding. There was some expression by one informant of irritation with park wardens who were seemingly "following" and "watching" reindeer herders' activities at times, but this appeared largely to be an individual's personal annoyance and was not a serious issue either to the informant or others within the discussion group. The Lapin Paliskunta reported initial unease at the creation of the park which later dissolved as it

became clear that local rights were not restricted. Kemin-Sompion Paliskunta informants reported no recollection of any historical problems with the park.

Some serious comments were made which came out through the questionnaires, which acted perhaps as a less personal, less vulnerable arena. (It should be added that comments were very few.) As mentioned in section 3.1.2, one reindeer herder commented on damage in the park caused by park workers and reindeer herders, presumably referring to the use of ATVs. Two individuals identified predators as a problem within the park, and urged that hunting be permitted more widely and freely within the park for locals, and to an extent non-local residents of the local districts; for example residents of the Sodankylä district who were not local to the park. Bears were particularly identified as problem predators. In addition two other individuals expressed a concern for the value and influence of reindeer herding as a priority within park planning. The comments included claims that reindeer herding was not considered well enough compared to other land uses and that the culture was suffering underneath these pressures. "Locals and herders need the park the most but get the least attention," (Reindeer Herder, questionnaire comments – translated from Finnish, May 2003). Another informant expressed this as well, noting the impacts of alternate land uses and the pressures on reindeer herding, "from all sides" (Female Reindeer Herder, personal communications, Lapin Paliskunta calf marking event, June 2003). Since reindeer herders are permitted to practice their work in the park freely and it has been expressed that legal restrictions and park management do not impact herders, it is reasonable to suggest that the consideration that is being requested is for higher restrictions on tourism, including both its development and activities within and at the borders of the park.

Chapter 4

Space and fresh air: The perceptions of recreational visitors.

Visitors to Urho Kekkonen National Park come from all walks of life and many different locations in Finland and the world. The reasons for coming may vary from individual to individual, but the overall intention to find peace through the enjoyment of nature is a common theme. It is evident through the annually increasing numbers of visitors, the amount of people repeatedly coming to the park and through the discussions and comments that the recreational visitors are passionate about and genuinely concerned for Urho Kekkonen National Park. By combining a review of the questionnaires, discussions and personal observations, the reactions and ideas of visitors towards reindeer and reindeer herding in the park, other visitors, park management and the impacts of each on visitor enjoyment as well as ecological integrity will be identified.

4.1 Enjoying the wildlife: Perceptions on reindeer herding.

4.1.1 Applause for reindeer with high popularity scores.

It is clear from the overall questionnaire results that recreational visitors to all parts of the park overall appreciated having reindeer in the park. In the questionnaire that was distributed to park recreational visitors, questions 5, 6 and 7 referred to reactions towards reindeer herding most directly (Appendix C and Fig. 4). Whether or not individuals saw many reindeer during their visit was undecided. This question was not designed to determine if many reindeer were in the park, only to determine the perception visitors have as to whether they are seeing many reindeer or not during their visit. Thus, the inconclusive response was not unexpected. Visitors did agree quite strongly that reindeer were a positive part of their visit, and the results revealed that it is not perceived that too many reindeer are using the park. It is interesting to note that when the responses were divided by reindeer herding co-operative regions, visitors using the Ivalon and Lapin Paliskunnat had more similar responses than those using the Kemin-Sompion Paliskunta region. The latter more decisively felt they had not seen many reindeer during their visit, they felt least strongly that reindeer were a

positive aspect of their experience in the park (nearing indecision although ultimately a positive response is indicated), and they felt more strongly that too many reindeer were using the park (though with a definite 'no' response). These responses were interesting because the Kemin-Sompion Paliskunta park users reported seeing fewer reindeer, yet felt slightly less inclined than other visitors to agree that reindeer were a positive aspect of their experience in the park or that the number of reindeer using the park was acceptable.

4.1.2 A deeper feel through dialogue.

While the results of park visitor questionnaires indicated a strong support for reindeer and reindeer herding, investigation of the written comments and reactions through personal discussions revealed other sides to an issue that was clearly more complex that it may first have seemed. It is clear that there were some very real concerns. In reference to reindeer, visitors most commonly identified a concern with overgrazing. This included the assertion that too many reindeer were using the park, lichen cover was reduced from 'natural' levels and 'damage' to the landscape was evident from grazing. Hikers frequently repeated some version of the same comment, "Go to the Russian border and look. You will see that on the Russian side there is a thick, thick mat of lichen, and on the Finnish side the ground is brown and barren," (numerous personal communications). It should be noted that this concern for overgrazing caused by reindeer did not stop with Urho Kekkonen National Park, but was extended to the whole of Finnish Lapland reindeer herding districts.

Other concerns involving reindeer herding included the creation of additional trails and landscape erosion from the movement of the animals, the creation of tracks from the use of ATVs and snowmobiles by reindeer herders, and garbage attributed to reindeer herders. Please note that it is difficult to confirm the source of garbage that is identified as originating from either visitors or reindeer herders. The same is true for the damage attributed to ATVs – three different types of users exist; park employees, reindeer herders and the Finnish

Frontier Guard (Rajavartiostolaitos). No judgment is made in this study as to responsibility, only the recognition of a given perception.

The extent of concerns for overgrazing and reindeer herding in general as seen from recreational questionnaire respondents in the park should be taken into context with the perceptions of visitors as viewed through interviews. In fact, for the most part the majority of hikers did not appear to be concerned at all with the effects of reindeer or reindeer herding on their visit. The infrequency of this concern among hikers can be argued through evidence of the overall clear support for reindeer in the park; Question 7 "Do you feel that too many reindeer are using the park?" elicited a definitive 'no' response (value 4.43) (Fig. 4). Direct discussions with park visitors revealed an array of perceptions to the idea of reindeer herding and its impacts on the visitor. While the concerns discussed above were voiced, there were also other more positive comments. These ranged from delight with seeing reindeer to an understanding of reindeer herding in the face of the environmental difficulties and additional issues it is being challenged with. At least two visitors made the assertion that the numbers of reindeer in the park have been reduced in the past twenty years (Finnish Male Hiker, personal communications, Uusi Rumakuru cabin, September 12, 2003; Finnish Male Hiker, personal communications, Hammaskuru cabin, 20 September 2003). Another hiker made an admission that while the media suggests strongly that there is a problem of overgrazing caused by too many reindeer, they themselves had seen lichen in the park, could not really claim witness to damage and that it is quite difficult to really say what is going on (Female Finnish Hiker, personal communications, Hammaskuru cabin, 20 September 2003). On a number of occasions when posed a question involving the impacts of reindeer herding and reindeer in the park on their own visit, visitors were baffled and confused with the concept and had difficulties trying to form a response. Often resulting in no response, this indicated that these visitors had no perception of reindeer having any impact on their visit. However, all of this does not negate the fact that there exist some real concerns among a group of hikers, including overgrazing caused

by reindeer, terrain damage caused by ATV tracks and garbage identified as a result of reindeer herders operating in the national park.

4.2 The influx of tourism and recreation.

4.2.1 A-hiking-we-will-go, and with pleasure!

It would seem that, by review of the questionnaires, the enjoyment that individuals were searching for in the park wilds was not inhibited by the numbers of other individuals doing the same. Seven questions related to the activities of tourism in the park, or the activities of the respondents themselves, including questions 1, 2, 3, 8, 9, 11 and 12 (Appendix C and Fig. 4). Overall visitor satisfaction with their use of the park is high. The frequency at which respondents had previously visited the park was undecided, but respondents felt strongly that they would come again. The level of visitor traffic seen in the park was ultimately undecided, but just on the borderline with a low response. In the Ivalon and Kemin-Sompion Paliskunnat the response was just on the side of being low – note that while the Kemin-Sompion Paliskunta is in reality the least visited region of the park, the Ivalon Paliskunta is by far the most visited region. Reaction as to whether too many people were using the park was more decisively no, with all regions in agreement. Interestingly, respondents in the Ivalon Paliskunta, where visitor traffic is the highest, had the strongest response that NOT too many visitors are using the park. In the Lapin Paliskunta where visitor traffic exists but is spread over a much wider area, respondents were the least decisive in responding that not too many visitors are using the park. Reports of damage seen in the park was indecisive with a tendency to lean towards a 'no' response, this being strongest in the Kemin-Sompion Paliskunta. Attributing such damage to visitors was again somewhat indecisive, though ultimately leaning to a 'yes' response. The Lapin Paliskunta was the only region that decisively maintained that 'yes', visitors were to be accounted for damage in the park.

4.2.2 Another side of the coin.

Of all the comments, including those involving not only other visitors but reindeer herding and park management as well, the single most frequently identified complaint or concern about the park was that of garbage. This message was voiced loud and clear. Garbage discovered in and around cabins and specified campsites was most often indicated, directly attributing it to the carelessness of other visitors. This in turn brought up concern involving garbage services provided by the park, which is discussed further in section 4.3.2. The next greatest concern involving other visitors was that of the creation of trails and landscape erosion through trampling, followed by the numbers of illegal campfire sites.

Certainly over the years the numbers of recreational visitors has increased, and hikers in the park have noticed this as well as the consequences. While trash, trail creation/erosion and illegal campfire sites are concerns, there was a great deal of understanding for the circumstances that came out through discussions and comments, and a tolerance of the situation. It seemed that while there was a strong attachment among visitors to the park, there was also a strong sense of the need for the park to remain available to any and all people who choose to wander in it within certain rules and guidelines. This included a respect for the existence of the cabins and facilities at the same time as the recognition that their existence could have damaging consequences. Similarly, the presence of too many people and a call for limiting or controlling groups of larger size was expressed amidst a number of positive comments. The damage caused by trail creation was from time to time sympathized with as an unavoidable result of hiking, and recreation was seen as a positive activity. Visitors were generally not suggesting that restrictive measures be taken to limit visitor numbers, though rather forlornly recalled a time of greater solitude. Indeed, many maintained that other visitors were not a concern because the size of the park allows for areas where one might retreat from the crowds, and there are still peaceful areas of wilderness.

4.3 The impressions of park management and conservation.

4.3.1 A job well done.

The responses to questions involving the effectiveness of park management and conservation were relatively strong. Questions 4, 10 and 13 revealed the views of park visitors in terms of the park's management performance (Appendix C and Fig. 4). Visitors clearly did not feel that park regulations had any negative impacts on their visit. Likewise, respondents reported that a high level of conservation values are being maintained in the park. For these two questions (4 and 10), responses from each region were quite similar. Visitors also agreed quite strongly that the park has done a good job integrating conservation, tourism and reindeer herding. Interestingly, the Ivalon Paliskunta respondents, which is the most highly visited area of the park, felt slightly more strongly that this was true.

4.3.2 Concerns for improvement and change.

As with any large organization, particularly involving a public service, it would seem that everyone has a specific complaint or suggestion about one thing or another. Quite an interesting list of ideas could be created from the comments and discussions with visitors during this project. Comments were sometimes conflicting – trail signage is good, more trail signs, too many trail signs, etc. There are, however, some points which stand out. Overall, comments were either positive or made as a suggestion for future management. Most suggestions or complaints involved visitors and visitor services, making only very occasional reference to management in terms of reindeer herding or nature conservation.

Following the outcry against garbage, the second most strongly and clearly voiced recognition of damage to nature concerned trails and roads created through the use of ATVs, snowmobiles and, to a lesser extent, ski-trail machines. If not the latter two, ATVs were certainly an issue to many visitors. The tracks were identified as unsightly and many questioned whether the current extent of ATV use was necessary. However, there was also a great deal of tolerance indicated through a number of comments which recognized the necessity of this

disturbance in the interest of maintaining services. As mentioned earlier, ATV activities are undertaken by park employees, local reindeer herders and the Finnish National Guard, all only for purposes related to work. It is difficult to ascertain what amount of damage is a result of which type of ATV user, except in areas where only one of the three authorities is operating.

An array of comments and reactions were made in reference to garbage disposal services. The national park has been providing garbage cans at park cabins and the service of periodically removing this waste for park users. In an effort to cut costs and direct monies to other services deemed more necessary, Urho Kekkonen National Park has made the decision to wean its visitors of waste disposal services and make the removal of garbage the responsibility of the visitor. This summer (2003) marked the first part of phasing out the garbage disposal service in Urho Kekkonen National Park, and it has caused much discussion. Reactions are mixed. Some support the decision, others deplore it and insist on having the service returned. Many are afraid of the consequences, feel that people are not responsible enough to deal with their own garbage properly and fear the unsightly build-up of trash. If the initiative works and is successful it would appear that much of the discussion would be quelled, but many park visitors are doubtful.

Numerous positive comments were accompanied by numerous suggestions. One of the most common suggestions was an interest in building more duckboards (a trail structure formed by two wooden boards laid side by side on the ground) over wetland areas in order to prevent trail damage and erosion caused by hikers trying to circumvent the soggy obstacle. Otherwise, most other comments were scattered and random, including increasing services at campsites among many others. The number of positive remarks was notable. Regulations were seen as necessary and reasonable, and while some suggested that facilities be increased, many applauded the existing facilities. People commended the information center, the cabins, the zoning arrangement of the park and the overall management practices.

Chapter 5

From the top down: The perceptions of park staff.

The park staff was in a particularly interesting position throughout the entire investigation. They represented the bureaucratic entity of the national park, along with all the regulations and management techniques created both on-site and passed along from as far away as the headquarters of Metsähallitus in Helsinki. Included in interviews and questionnaires were personnel from the Information Services, Park Rangers, Local and Regional Directors as well as some executive staff from the Vantaa/Helsinki office. At the same time most of the on-site staff represented members of the local communities, and as mentioned earlier over 40% of the immediate park staff participated in reindeer herding either personally or through a spouse or family member. These participants had an interesting meshing of backgrounds that situated their perceptions. Through a combined review of the questionnaires, discussions and personal observations, the reactions and ideas that park staff had towards reindeer in the park, reindeer herding, recreational visitors, park management and the interconnected impacts to each land use and to the ecological integrity of the park will be identified.

5.1 A long tradition of land use: Reindeer herding in the park.

5.1.1 Reindeer herding welcome.

Overall the questionnaire results indicated that reindeer herding is supported in the park. From the questionnaires that were distributed to parks staff and related personnel, five of the twelve questions were related to reindeer herding in Urho Kekkonen National Park (Questions 2, 4, 5, 6 and 7, Appendix C and Fig. 4). The most indecision towards these questions was in regard to the impact of hiking and tourism on reindeer herding. Similar to the situation of the reindeer herders, this response reflects the mixed feelings of the importance of the enjoyment of recreational visitors in the park, and at the same time a recognition that increased visitor numbers could have impacts on reindeer herding practices. Perhaps this is also a result of the uncertainty of park workers as to what affects reindeer herding. Park staff maintained with strong response that there are no

negative impacts on reindeer herding from park regulations. This is clear, as there are few regulations making any restrictions on reindeer herders in the park. Opinion also holds that there are not too many reindeer in the park and herding does not carry a negative impact on tourism.

5.1.2 A conflicting set of interests?

Urho Kekkonen National Park maintains the position that traditional livelihood practices are of high priority. This is evident in the complete freedom local reindeer herders have regarding movement and activities within the park boundaries. Reindeer herding fences run through the park, dividing paliskunta territories as well as separating summer and wintering grounds. ATVs and snowmobiles on the ground as well as low-flying planes for the purposes of surveying are all used in the park for reindeer herding activities.

It was agreed overall that the creation of the park has been a good thing for reindeer herders. In addition to having special rights of use on the land which acts to prevent any changes to local peoples' activities, park staff identified the importance to reindeer herding of preventing forestry from taking over activities on these lands. It was identified that, about ten years earlier, difficulties existed between the park management staff and the opinions of reindeer herders due to a push for tighter, stricter regulations on use of the park, for the purposes of ecological integrity. These difficulties were resolved over time as different Park Directors took charge, perceptions and priorities changed, and communications became more amicable between the park and reindeer herders. Park staff reported no observations of current tensions or disagreements between reindeer herders and park management.

Staff had mixed feelings regarding the natural integrity of the land and the numbers of reindeer and the activities of reindeer herders in the park. These differences are observed between the opinions of permanent, local resident staff and seasonal, non-local staff. Permanent, local resident staff regarded reindeer as a natural part of the landscape. No concern was identified regarding the numbers of reindeer, with some pointing out that the Ministry of Agriculture and Forestry

controls the reindeer populations at acceptable levels. One park staff member warmly commented, "We call this park the 'Reindeer's Home Park' because so many need and use it," (Female Park Staff, personal communications, September 15, 2003). Seasonal, non-local staff expressed concern regarding the numbers of reindeer using the park, and in fact all of Lapland. There was recognition of the importance of reindeer herding to local people, but the maintenance of the opinion that too many reindeer are using the park, causing overgrazing of lichen cover.

5.2 Tourism in the park.

5.2.1 Some exceptions apply to the questions posed.

The questionnaire results of park staff gave indication of their support for visitor enjoyment, but also revealed that there was room for discussion. Questions 3, 6, 8, 10 and 11 of the questionnaire made reference to tourism in the park (Appendix C and Fig. 4). Park staff strongly disagreed that there were any negative impacts on tourism from either park regulations or reindeer herding activities. There was also general agreement that some damage in the park existed, and that this damage was a result of visitor activities. When posed the question if too many hikers are using the park, the response was indecisive. These responses to the questionnaires serve as a generalization of the questions asked. The variation in the park staffs' background makeup brings into play a number of interesting considerations. This refers to the majority local staff, not to mention the large proportion of reindeer owning members, and the temporary staff non-resident to the Province of Lapland. In general it is clear that park staff felt that tourism was supported by the park regulations. Damage to the park was recognized and attributed to visitors. The inability to decide if too many visitors were using the park suggests that park staff were either not so certain that the integrity of the park was affected by visitors (i.e. high protection or affected by another user) or reveals a conflict of interests.

5.2.2 Tourism welcome - at what cost?

Although the philosophy of the park was not identified as specifically focusing on drawing visitors, the reception of visitors and the quality of education and provision of park information was regarded as highly important to park staff, and well delivered. No user fees were, or ever have been, imposed on visitors. There was some occasional discussion of the benefits such monies could provide the park, however, this was not suggested as important. Although the park itself does not monetarily benefit from increased visitor numbers, the park was identified as being an important vehicle for drawing tourism and associated income to an area of high unemployment for the benefit of local people and communities in Lapland.

Park staff recognized that visitors value reindeer as a symbol of Lapland. Two staff members also pointed out that visitors were at times disturbed by reindeer herding fences, perceived overgrazing, motor vehicles and garbage (including discarded oil cans and food packages) related to reindeer herding activities near and around reindeer herding cabins and roundup sites.

Largely, the numbers of visitors having an impact on other land uses was mostly kept to a discussion of the landscape changes associated with increased recreational use. Concern for increased visitor numbers and the associated management responsibilities was expressed. Recreational visitors were perceived as having an impact on the land in the form of trail creation and soil erosion. One staff member commented that recreational hiking and use of parks has its tradeoffs for conservation, but also come with great educational benefits and possibilities for investing in protecting more wild spaces based on their merit as a place for recreation. He maintained that improving facilities is an effective tool for active conservation, allowing visitors to appreciate the Finnish wilderness. Most people will concentrate where there are facilities, keeping on trails and resulting in larger expanses of wilderness invaded by fewer people. Firewood, toilet waste, etc. can then be monitored, controlled and managed by park planners (Male Park Staff, personal communications, August 2003).

Park staff, specifically staff from the Visitor Information Services, were concerned with giving good information services to park visitors, with the goal of informing and educating the public. At least two staff members commented that their co-workers, "are working from the heart." One expressed concern about mass tourism, and the role that the park Visitor Center may play in educating and informing such large groups. "I don't believe in affecting big masses of people.... People must feel and think those things through as individuals, personally," (Male Park Staff, personal communications, May 2003).

5.3 Park management and conservation

5.3.1 Park regulations without flaw.

While the decisions of management strategies often come from outside of the immediate park staff, support from the park employees and their belief in the position of the park as a land management tool is necessary to ensure the enforcement of policies. The questionnaire posed five questions in relation to the management and conservation of Urho Kekkonen National Park (Questions 1, 2, 3, 9 and 12, Appendix C and Fig. 4). Overall, park staff were satisfied with their own use of the park. Park staff maintained a strong 'no' as to the existence of any negative impacts park regulations may have towards reindeer herding and tourism. When asked if the park has maintained a high level of conservation, the response was less strong but tending towards 'yes.' The quality of integration of multiple land uses within the park, including conservation, recreation and reindeer herding tended to an opinion of 'yes' although the overall results were nearing an undecided response.

5.3.2 Looking inside the structure.

The park is agreed upon by staff as being a positive entity in so far as protecting the lands from forestry harvesting is concerned. Throughout the existence of Urho Kekkonen National Park, different agendas have been set by different directors. For example, at some point the activities of reindeer herders in the park were more strictly managed, such as restricting the use of ATVs. This

was thought as a necessary conservation measure. Today due to changing directors, perceptions and priorities, there are no such regulations and local people have many favored rights regarding land use. Some local people have argued for an increase of rights for non-locals, in order to enable local commercial tourism enterprises such as hunting and fishing, however these arguments are not supported by park management. Projects involving the rehabilitation of an endangered mussel and natural salmon populations are in progress.

Park staff did not identify weaknesses in management which failed to protect nature. While voicing concerns about visitor numbers, one park staff member commented that the park regulations cannot be too strict, as the park must be able to educate people and allow recreational enjoyment (Male Park Staff, personal communications, May 2003). Other staff members made comments to the changes in managerial structure within Metsähallitus over the years, but maintained that they observed no notable physical changes to the landscape within the park boundaries. One staff member commented that public criticism towards Metsähallitus exists, but this is not uncommon with organizations [in Finland], especially governmental ones (Male Park Staff, personal communications, August 2003). He maintained that overall the system is working well, and identified it as being multi-tiered, with different branches dealing with different parks. Metsähallitus is not a research institution (although it supports research), but rather an organizational body that uses research in order to manage land and make informed decisions.

Chapter 6

A changing landscape: Conservation in the park as a land use.

6.1 Ivalon Paliskunta Region.

Of the three paliskunnat dividing up Urho Kekkonen National Park, the Ivalo area has seen the largest landscape changes over the past thirty years. The Saariselkä recreational area of the Ivalo district is home to important calving grounds for reindeer herds. Moving reindeer have come for decades to this location, and reindeer herders have used the Niilanpää round-up site six kilometers south east of Kiilopää for many generations. I have identified three major areas of the Ivalo region in the park as having been the most physically changed over the past thirty years; Saariselkä, Kiilopää and the Rumakuru/Luulampi valley area.

The site of Saariselkä and the surrounding area has been the most altered area of the entire Urho Kekkonen National Park. An aerial photo from 1969 was compared with a recreational map from 1972, with few changes being witnessed. A few select trails and main roads are present. In this time period, one minor road was built branching off from the main loop road making up the existing small recreational village at the time, and perhaps most notable is the single ski lift that appeared on Kaunispää, accompanied by three or four ski runs. From 1972 to 1989, there was a large jump in available facilities. As there is a 17 year gap between available maps, it is difficult to ascertain whether this occurred as a reaction to the creation of the national park in 1983, or if the development was occurring independently. Regardless, it could be safely assumed that the creation of a national park enhanced the local appeal and encouraged development in the area. A number of roads, hotels, cottages, three small artificial lakes, two new ski lifts on Kaunispää and two new ski lifts on a new ski hill created on the park side of the boundary across from Kaunispää were added. Trails in the park increased somewhat, but remained virtually the same trail network as existed in 1972. The changes from 1989 to 1997 and 2003 took place largely within the park boundaries. The infrastructure had been laid down by 1989, and although there was more growth, the increase in the proportion of the landscape being used for

facilities was small compared to the prior jump witnessed in 1989. At the time of this final period, changes in the trails as an effect of trampling became more evident. Existing trails became visibly larger and more distinct, and new secondary and tertiary trails running alongside major trails were created.

Lesser in size and visitor capacity than Saariselkä, Kiilopää and the surrounding area bore the second greatest amounts of changes of the whole park. It is in this area that calf marking activities are undertaken by the Ivalon Paliskunta. An aerial map from 1969 compared with a recreation map from 1972 again revealed few differences in the landscape. Approximately 200 meters of road were added to the end of the original route, and a few new buildings were erected. Only one new trail appeared, clearly heading up to Kiilopää fell. As was seen in Saariselkä, the recreation map of 1989 revealed another drastic increase in the creation of infrastructure. This was the period of highest development for Kiilopää, with the creation of a new block of cottages, two existing buildings enlarged to encompass hotels, a visitors center and a sizeable artificial lake. Two existing trails were enlarged and over four major, new trails and three trails secondary to already existing ones appeared. Changes involving the growth of the area are visible in the 1997 aerial photo and 2003 recreation map, however the jump had already been made. Perhaps the largest difference, apart from the intensification of buildings and trail networks, was the rapidly occurring erosion from hikers going up Kaunispää fell, including even more secondary and tertiary trails. A stairway was built by Metsähallitus and opened for use in 2001, creating a clear path up Kaunispää fell in an effort to stem further erosion.

The Rumakuru/Luulampi valley area is one of the most popular destinations for day-hikers in Urho Kekkonen National Park. The 1965 recreation map reveals that a trail existed running through the valley, as well as two small cabins where Uusi Rumakuru and Vanha Rumakuru exist today. Luulampi had no buildings at the time. The 1997 aerial photo and 2003 recreation map show landscape changes caused by increased visitor use. This includes enlargement of the original valley trail, a number of new trails connecting other areas to the valley trail, the creation of a cabin/café and dry toilets at Luulampi and the

accompanying numerous new paths and erosion near buildings and Luulampi pond.

6.2 Lapin Paliskunta Region.

Used largely by visitors who spend two or more nights sleeping in the park, the Lapin Paliskunta region of Urho Kekkonen National Park has been spared the more drastic changes witnessed in the Ivalon Paliskunta region. In 1970 all the current cabins in the park existed, with trails leading only one or two kilometers away from the cabins in specific directions. The general physical changes over the past thirty years as seen on maps and reported by long-time hikers in the area included the creation of clear, continuous trails connecting cabins throughout the park and increased trampling and tent sites visible in the immediate area around cabins. Also, certain popular locations including Paratisikuru and Sokosti Fell have had a higher increase in visible trails and trampling than other areas. There are three locations in the Lapin Paliskunta region that have been identified as having experienced higher levels of landscape changes; Luirojärvi, Rautulampi and Tankavaara.

The differences between the 1965 and 2003 recreation maps show that Luirojärvi and Rautulampi share the same landscape changes as were described for the entire area. These locations are identified because the changes of increased number of trails to and from cabins and trampling/erosion changes near the cabins are notably higher than around other cabins. This is because these are very popular areas for overnight hikers. Luirojärvi has long been a reindeer collection site for Lappi reindeer herders and Rautulampi is used as a corridor for moving reindeer herds as well as traveling reindeer herders.

The location of Tankavaara has experienced a transformation from a single dirt road and small building as seen on a 1965 recreation map to a point of interest for passing visitors as seen on a 2003 recreation map. This includes paved connecting roads, the development of the Gold Village - a collection of small buildings including a museum and cottages designed as an old prospecting village to attract visitors - a modern visitors' center for Urho Kekkonen National

Park built by Metsähallitus and opened in 1985 as well as three accompanying interpretive trails. This development, however, has had little effect within the park boundaries aside from the interpretive trails which are well marked. This is due to the fact that there are no major trails accessing the park from this location. Hikers wishing to overnight in the park must access trails from another entry point.

6.3 Kemin-Sompion Paliskunta Region.

Due to the remote location of the entrance points, the Kemin-Sompion Paliskunta area of Urho Kekkonen National Park has even today still remained a largely unvisited area. Visitor use has certainly increased since the creation of the national park and the location of a visitors' center in the village of Savukoski, but by and large the Kemin-Sompion Paliskunta area is considered to be a wilderness area with very few recreational visitors for most of the year. Apart from the appearance of major trails connecting cabins, erosion, secondary trails and trampling around cabins was minimal or absent. The single exception was the creation of a new, major trail running from Kemihaara to Korvatunturinmurusta fell just outside of the border zone buffer area and across from Korvatunturi fell. Korvatunturi fell, the fabled home of Santa Claus according to Finnish legend, straddles the Finnish-Russian border and cannot be visited as it sits within the no-entry border buffer zone. Gaining a view of Korvatunturi fell is an activity in high demand by winter visitors to the remote village areas south of the park. The one distinct exception in all of Urho Kekkonen National Park, controlled travel by snowmobile for commercial purposes is permitted on the trail to Korvatunturinmurusta fell. In the winter season tour trips by snowmobile run daily along this trail. It is also used by the border patrol workers, soldiers of the Finnish National Guard, to get to and from their patrol areas along the Finnish-Russian border. The trail includes sections of wide duckboards designed to support motorized vehicles (used by the Finnish National Guard and the commercial tourism enterprises) over the existing mires, making travel possible and safe and preventing extensive erosion and enlargement of trails.

Chapter 7

Summing it up: Results.

7.1 Interface of numerous visitors in a small area: The Ivalon Paliskunta park regional challenges.

Though representing the smallest portion of Urho Kekkonen National Park, the Ivalon Paliskunta region has clearly experienced the highest level of transformation since the foundation of the park. From the outset the small recreational complex of Saariselkä offered the easiest point of access to the park, and was the most likely candidate for expansion and facilities development for visitors. Its geographic location facilitated this, being both next to the park boundary and along the main Finnish Lapland north-south State Highway 4. It is no surprise that development in the town jumped between the years of 1972 and 1989. Every year the numbers of visitors have risen steadily. The Ivalon Paliskunta region (also known as the Saariselkä user zone) is the most intensely visited region of the entire park.

While park visitors in this area reported quite high satisfaction with regard to their use of Urho Kekkonen National Park, the Ivalo herders indicated indecision in regard to their satisfaction (unlike either of the other district herders, which both indicated satisfaction). This is no doubt due to the fact that the influx of visitors to this area has changed the location and timing of some reindeer herding activities, disturbing some traditional practices. At the same time, while the creation of a national park encouraged the arrival of visitors, it also protected the area from forestry activities. The northern and southeastern sides of Urho Kekkonen National Park in particular were under considerable pressure from encroaching forestry at the time of the creation of the park boundaries. As the Ivalon Paliskunta portion of the park was an important spring calving ground and winter feeding area, this new protection came as a blessing. However, it did not come without a cost. Today Ivalon Paliskunta reindeer herders specifically avoid the national park in the winter-time on account of the high level of visitors and as a result of their reduced use of the area the herders have in effect lost their winter feeding ground. There is a recognition among reindeer herders that visitors to the

area bring income to local people which, combined with the protection of the park from forestry, may have tempered the results of satisfaction to tend to the side of being positive as opposed to being outwardly negative.

Although the Ivalon Paliskunta area is the most intensely used by visitors to the park, park visitors showed very little variance in their views with use of the park compared to visitors in other regions. Satisfaction is as high as it is in other areas and the intense visitation does not affect visitors to this area. This is particularly noticeable when we look at instances such as the overall response to Question 9, "Do you feel that too many hikers are using the park?" which was expressed as the strongest 'no' of all the districts. This may be due to the fact that visitors coming to this area have different expectations of hiking in a park than visitors in other areas. Reasoning aside, the needs of visitors to the Ivalon Paliskunta region seem to have been met thus far.

As for the needs of the landscape, it can be safely assumed that since the Ivalon Paliskunta region is designated as a high use zone it is a kind of "sacrificial buffer zone" for the rest of the park (Edisvik and Bibelriether 1994; visitor questionnaire comment, 2003). Evidence of the landscape changes through development of infrastructure and the creation of trails is seen in the history of aerial photos and recreational maps as discussed in section 6.1. The higher numbers of visitors has also created more trampling close to cabins and greater amounts of garbage near cabins and along the main trails than in other regions. Two informants did note a decrease in the amount of erosion on the fell sides (Male Finnish hiker, personal communications, Uusi Rumakuru, 12 September 2003; Male Finnish hiker, personal communications, Hammaskuru, 21 September 2003). Both speculated that this was due to changes in the use patterns of residing reindeer. Regardless of the changes inside of the park boundaries of this district, it would be of interest here to also note the landscape changes outside of the park over the same period of time. The northern boundary, replete with intense forestry cutting activities continuing to the present day, stands as testament to the utility of the national park.

7.2 A place of space, enough for all? The Lapin Paliskunta region.

Representing the lion's share of the entire park, the Lapin Paliskunta region sees a great deal of use by both reindeer herders and recreational visitors. The Lapin Paliskunta overall has experienced large amounts of changes to the management of their state-owned lands over different periods. This includes numerous forestry activities, which is also present in other districts, as well as the creation of two large artificial lakes for hydroelectric purposes (Lokka and Porttipahta) in addition to the creation of Urho Kekkonen National Park. With the displacement of local communities and the loss of herding and grazing grounds through the creation of the lakes, and with the constant battles over lands used for forestry, initial proposals for the national park were looked on with suspicion by Lapin Paliskunta reindeer herders. Reported negotiations with park planners before the formalization of the park convinced local people that local rights would not be lost or altered, and recognizing that at the very least the park would ensure that herding and grazing lands would not be physically lost (though legally was yet to be seen), a perhaps reluctant agreement was made (Female Reindeer Herder, personal communications, Lapin Paliskunta calf marking event, June 2003; Male Park Staff, personal communications, May 2003). It can be said that today, by reviewing my discussions and questionnaires, in general this study found that there is acceptance and a certain level of indifference towards Urho Kekkonen National Park. Likely there will always exist some amount of criticism, namely at a bureaucratic/legal level (for example dissatisfaction at the process required to obtain permission to build a new fence), however this can be found to exist within most any organization. There was clear indication at any rate that Lapin Paliskunta reindeer herders are satisfied with their use of the park.

The Lapin Paliskunta region of the park represents the largest area over which visitor recreation and reindeer herding overlap. In practice the use appears to have a balance. In the first, visitor numbers are not heavily concentrated (with the seasonal exception of Luirojärvi) as compared for example to the Ivalon Paliskunta region. As far as within the park boundaries, some reindeer herders pointed out that there are many other areas which reindeer can use when visitors

are a disturbance (as could be the case along popular hiking routes). In the case of Luirojärvi, which is a traditional reindeer round-up location, reindeer herders reported that, though still in use, the area is not as popular for round-ups as in the past. It was speculated that this was on account that reindeer have selected other areas for grazing as visitor recreational use of the lake as a major hiking destination increased (Female Reindeer Herder, personal communications, Lapin Paliskunta calf marking event, June 2003).

Recreational visitors to the Lapin Paliskunta region come generally to spend one to six or more nights in the park (Personal Observations). When referring to the conditions of the park, Lapin Paliskunta visitors made the clear distinction of identifying the Ivalon Paliskunta region as being more intensely used and therefore associated with the more negative influences of high visitor use (e.g. garbage, trampling, etc). Within the Lapin Paliskunta, other than occasional reference to the conditions of cabins, visitors are clearly satisfied with the maintenance of nature in the park and the interface between individuals and reindeer is largely positive, if not inconsequential. From the perspective of visitors in the park, the Lapin Paliskunta region has combined the land uses and met expectations well.

As with the other regions of the park, having legal national park protection has been instrumental in maintaining the ecological integrity of this high fell area of northern Finnish Lapland as well as the historical land use. The prevention of forestry and other such development in the area has already been discussed. Though the area has now drawn more visitors, and these consequences have also been discussed, the Lapin Paliskunta region is still largely spared the impacts on account of the Ivalon Paliskunta region taking the brunt of the activities.

7.3 The remote Kemin-Sompion Paliskunta region, an ideal scenario.

With the fewest recreational visitors and the least physical landscape changes of the entire Urho Kekkonen National Park, it comes as no surprise that the Kemin-Sompion Paliskunta has a high level of user satisfaction in all respects. As described earlier, the southeastern boundary of the park was experiencing

particularly high levels of forestry activities, which are on-going today, and the creation of the national park boundary preserved the forested area. This has been used with great content by both local reindeer herders and the recreational visitors who often choose to visit this region precisely because of its remote location and solitude.

The Kemin-Sompion Paliskunta region of the park is used by reindeer herders largely as a winter feeding ground. The natural features including excellent tree cover make it an important area to local herders. As visitor levels are low and this local area is particularly exposed to high unemployment levels and low economic opportunities, the opinions revealed through the questionnaires maintain a higher level of support of visitor recreation. For example, though still ultimately maintaining 'indecision', reindeer herders in the Kemin-Sompion Paliskunta region most strongly tended to 'no' when responding to question 4, "Do hikers have a negative impact on reindeer herding?"

As discussed, the numbers of recreational visitors in this area is low. Visitor expectations are quite different in this region than in the Lapin or Ivalon Paliskunnat; visitors are searching largely for solitude. The remote location discouraging many visitors from venturing so far creates just such an environment that is appreciated by those who frequent the area. Due to the low levels of visitors, discussions and comments were limited from this area. However, it can be safely said that visitors are satisfied, and any discussions of reindeer herding having impacts as a land use extend beyond the park into issues involving all of Lapland. Integration of reindeer herding and recreation seems to have been met with satisfaction on both sides.

Access to entry points in this region of the park is made difficult both by the significant distance of the nearest village and facilities, which are themselves relatively far removed from main traffic flows, and the absence of paved roads. In the interests of encouraging economic activity in this little favoured area, the national park permits the existence of one trail for commercial use by snowmobile tours bringing visitors to view the popularly known fell-home of Santa Claus, Korvatunturi. While highly trafficked in the winter and spring time, this area is

visited on a much lower level by hikers in the summer and fall. Both the construction of extensive duckboards, enlarged and intended for motorized vehicles, on trails across sensitive wetland areas and the restriction of commercial activities with snowmobiles to the months of complete snow cover have acted to do much to preserve the natural integrity of the trails and surrounding area. As for visitors and reindeer herders, respondents from this region maintained most strongly that there is not so much damage to nature in the park, and that the damage is not related to visitors when compared to the other districts (Fig. 4).

Chapter 8

Making the connections: Circumpolar application

8.1 Nahanni National Park Reserve, a Canadian example.

Nahanni National Park Reserve in the Northwest Territories of northern Canada is an excellent example of managing multiple land uses in a circumpolar environment. Identifying similar situations of conflict between park visitors, local users and conservation concerns strengthens the need to investigate these circumstances and provides an opportunity for learning from any differences in management approaches. The human and political histories molding the current governance of Canada and Finland differ, inevitably creating differences in technique when it comes to parks' organization. In addition, the landscapes, though regionally similar in environmental characteristics (e.g. boreal, subarctic), are vastly different in size and space availability (total physical area included vs. the actual terrain reasonably accessible to visitors due to natural features), thus creating unique circumstances and possibilities for management. It is both in the potential differences or the arrival at very similar techniques out of quite different historical paths where much can be gained from examining the two circumstances (Fig. 5).

8.2 Background of the Canadian context and creation of Nahanni National Park Reserve.

Nahanni National Park Reserve, located in the Northwest Territories of northern Canada, was established in 1976 with the first management plan approved in 1987 (Fig. 7). It was declared as the first UNESCO World Heritage Site in the world in 1978. The goal of this park within the role of Parks Canada, "is to protect representative natural areas of Canadian significance," (Nahanni National Park Reserve, Park Management Plan web page 2003) in this case focused on the protection of the unique landscape qualities of the Nahanni River Basin. The park is 4766km^2 in size and includes 320km of the Nahanni River. This area has long been inhabited by indigenous Dene people (Nahanni family

Figure 5. Nahanni National Park Reserve, Canada and Urho Kekkonen National Park, Finland.

(Customized by author 2003.)

Source:

The Atlas of Canada – Reference Maps – Outline Maps International atlas.gc.ca/site/english/maps/reference/outlineworld/circumpolar01/referencemap_view_image (North Circumpolar Region)

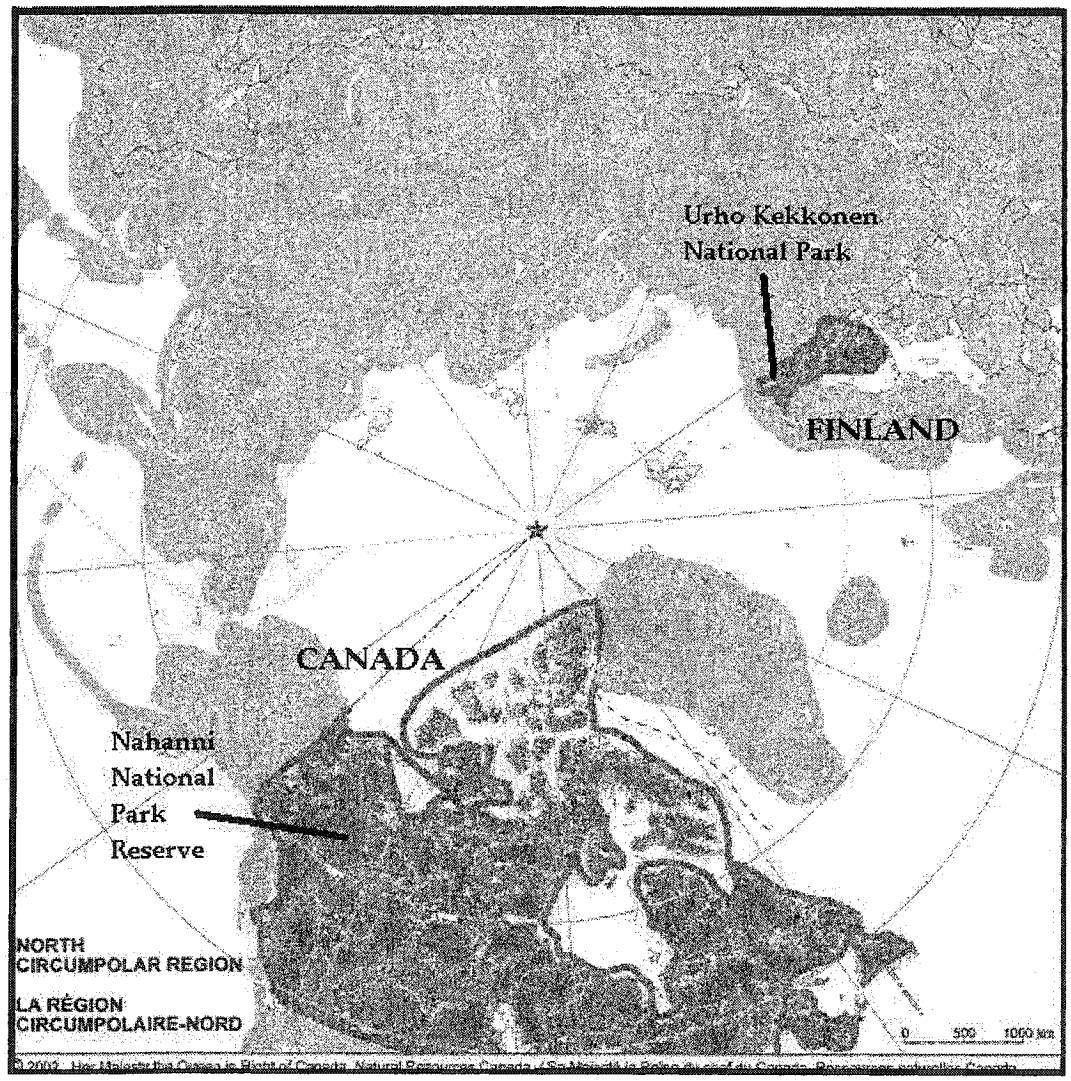


Figure 7. Nahanni National Park Reserve, Northwest Territories, Canada.

(Customized by author 2003.)

Sources:

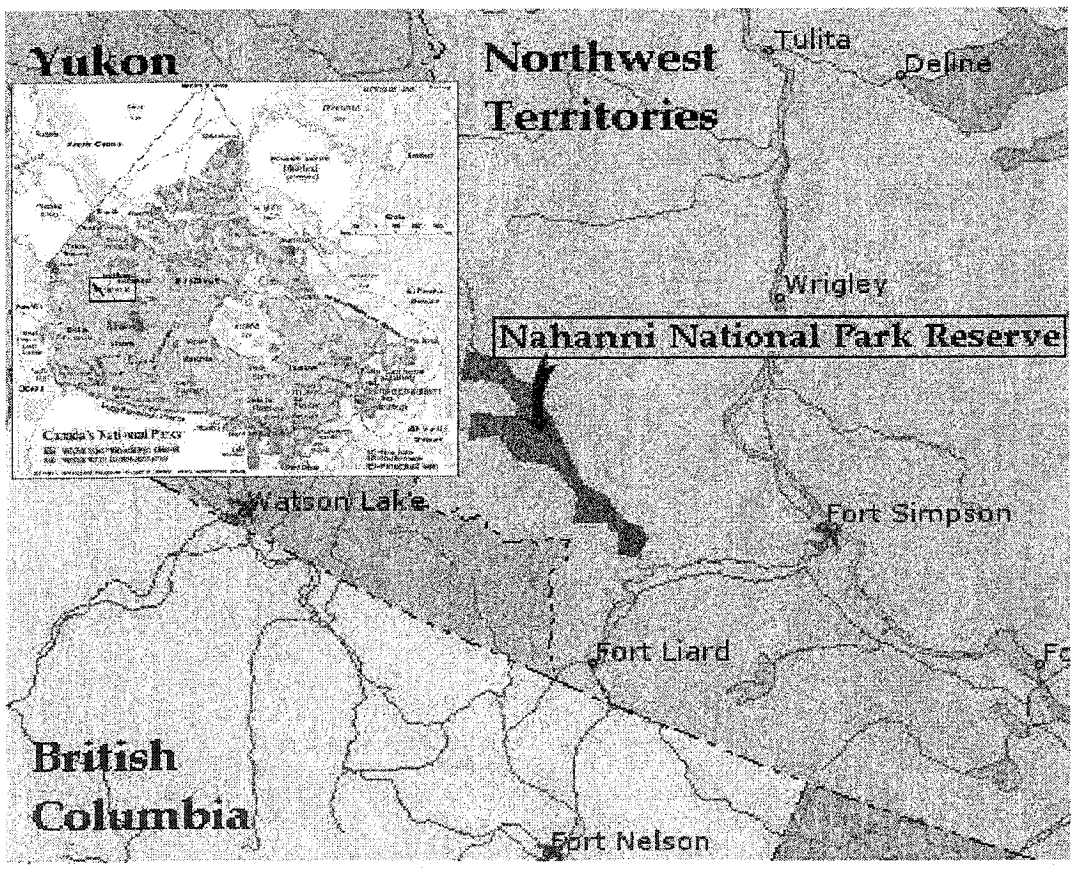
The Atlas of Canada – National Parks 2003

atlas.gc.ca/site/english/maps/reference/national/natpks_e/referencemap_view_image

Nahanni National Park Reserve (Political Theme) 2003

atlas.gc.ca/site/english/facts/parks.html

(Nahanni National Park Reserve)



territory) whose "cultural and land use practices over the past thousands of years have influenced the natural processes in the park and surrounding region," (Nahanni National Park Reserve, Cultural Resource Management web page 2003). The aspect of Dene cultural-historical significance brings the word 'reserve' into the national park title. The Nahanni River region was identified as a remarkable natural feature, worthy of protection and representative of the Canadian landscape. With designation as a National Park Reserve, inevitably visitor numbers to the area increased, drawing more and more people from outside of the region. Today, approximately 900 visitors visit the area each year. Coping with visitors is an issue common to all parks and reserves that allow recreational use, since the park title and associated infrastructure makes these areas more accessible to the public.

8.3 Applications of similar protected area management approaches.

As is the case within the Finnish parks system, local people are given maintained rights of access in Nahanni National Park Reserve in accordance with their traditional subsistence activities. In the case of Nahanni National Park Reserve, these additional rights include access for hunting and fishing, as well as the use of motorboats in the river. These rights are restricted to the indigenous residents of the Northwest Territories while they are practicing their traditional subsistence activities. Differences with Urho Kekkonen National Park are that the additional rights are extended to all local people, indigenous or Finnish. This has been a point of discussion and contention in the Canadian context. In many areas largely inhabited by indigenous people there are non-indigenous residents, and the argument arises as to the rights of local versus aboriginal people. However, today in Canadian legislation additional/maintained rights in protected areas are largely reserved for indigenous people alone (Bill C-27, Canada National Parks Act, 4 May 2000). In both Nahanni National Park Reserve and Urho Kekkonen National Park, these rights (for example, the use of motorized boats or all-terrain vehicles) are reserved solely for use while exercising rights to carry out traditional activities (e.g. fishing, hunting, or in Urho Kekkonen National Park, reindeer herding).

Motorized vehicles in Urho Kekkonen National Park are only to be used while conducting reindeer herding activities, and not for hunting or fishing purposes.

The differences in visitor numbers between the two parks clearly vary, carrying with them different levels of impacts. The arrangement and philosophy of access to the parks are quite different. To begin with, Nahanni National Park Reserve requires that all park visitors pay a user fee upon entrance to the park. In Finland, access to all parks and recreational areas is free of cost and supported by the government. The success of this system may be due to the strong financial support from the government, but it may also result in a lower level of infrastructure (which includes trails, interpretive centers, literature, etc.) within the Finnish parks system. One of the greatest criticisms made by Edisvik and Bibelriether in their technical assessment of Finland's protected areas, while praising the infrastructure of facilities, was that of inadequate staffing. "With 130-140 full time employees, Finland does not measure up against other countries either in its staffing of visitor centers or in field personnel," (Edisvik and Bibelriether 1994).

Differences in policies regarding the management of visitor use exist between Finnish and Canadian examples. In Urho Kekkonen National Park zoning seems to exist as a result of the selected use of areas by visitors, and is not applied in the reverse manner. (In fairness, this seems to be the case arising in many national parks – e.g. Nahanni National Park Reserve, Jasper and Banff National Parks, Canada, each developing zoning after the fact of usage.) For example, declared as an area of low use, the wilderness zone of Kemi-Sompio is currently visited by only few recreationists. However, differing from the zoning management of Nahanni National Park Reserve there are no policies or guidelines designed to keep this area as a wilderness zone of low usage, such as monitoring through the use of entrance registration or camping permits, and thus there is nothing preventing the uncontrolled growth of visitor numbers. Certainly certain obstacles makes rapid growth in this area unlikely, such as the remote location, far removed from even a small village center, and lack of paved roads. However, this is somewhat in contrast to the more strictly controlled visitor management of

Nahanni National Park Reserve, which is also a relatively remote area with similar visitor impacts. Other differences include the zoning of sensitive areas restricted to access by ALL people (Zone 1: Special Reservation Area), unless given special permission or accompanied by a park staff member. The obligation of a user fee and camping permits makes monitoring of park use easier for managers. Urho Kekkonen National Park has also identified some sensitive areas, including the popular alpine tundra fell passes of Paratisikuru, Lummikuru and Piurunportti, where overnight stays are prohibited. Despite this zoning, camping still occurs. A registration process would ensure that important information regarding conduct in the park is passed on to backcountry hikers, as well as increase the safety of visitors and the feed-back to Information Center Staff of backcountry conditions. The implementation of a park fee in Urho Kekkonen National Park would not be necessary, as simply requiring registration and/or permits for all visitors would serve the same purpose while providing additional benefits. It is recognized that the long history of registration-free combined with the suspicion of subsequent fees and the lack of staff for enforcement could make implementation of such a system difficult.

Discussion of the difficulties in applying a registration system goes beyond mere logistics and into the roots of Finnish philosophy. As far as access on the landscape is concerned, Finland has a long-standing strong philosophy of "Every Man's Right," which permits anyone free movement on all land, private or public, within certain rules of ethical conduct. The existence of this philosophy is also clear within the Finnish parks system and touches upon other aspects of management which differ from the Canadian context. With the exception of the trails in the Ivalon Paliskunta including some winter skiing trails, Urho Kekkonen National Park does not maintain designated trails, e.g. trail clearing, which essentially encourages off-trail use. Existing trails were created as a result of visitors trafficking specific areas to move from one cabin to another, and park staff neither create nor maintain any trails. Having said this, Urho Kekkonen National Park does encourage hikers to use a number of specific marked trails in the Ivalon Paliskunta (The Saariselkä Basic Zone). However this area is only

intended for day use, and in the greater part of the park hiking routes are not actively influenced, e.g. trails are not marked.

In any case, the majority of hikers remain on main trails and move in predictable patterns around the park while visiting the park cabins. There are designated camping areas with fire pits which in most regions are the only locations where open wood fires are permitted. Firewood is made available free of cost by park employees. The existence of facilities such as firepits, firewood and cabins does indirectly encourage use in specified areas, even if lack of trail maintenance does not. This type of management and distribution of services may be a result of low funds, but when considering the availability of free cabins, free gas stoves, free firewood and up until recently a garbage disposal service in the backcountry, it more likely demonstrates the differences in values between services as seen in Canadian national parks. Appropriate to mention as perhaps a sign of changing ideas, this summer (2003) the Nuortti River Trail, a marked 42km backcountry trail, was opened. The benefits of such facility-increasing initiatives in lieu of the 'hands-off' tradition of trail creation were discussed in section 6.2.2.

Discussion of off-trail movement is a non-issue in Nahanni National Park Reserve. The main natural attraction is the Nahanni River and visitor movement is focused on travel down the river, and in addition the surrounding relief and environment is rather rugged and difficult to move on. However, the management of Urho Kekkonen National Park can be compared alongside other Canadian examples such as Banff or Jasper National Parks, where visitor numbers are higher and the terrain popular for backpacking. In both cases while off-trail hiking and camping are permitted, movement throughout the parks are largely encouraged along specific, maintained routes and paths. Urho Kekkonen actively encourages usage along specific trails only in the Ivalo Region (Saariselkä Basic Zone), while the existence of facilities (cabins, firewood, firesites), which are largely unavailable in many areas of Canadian national parks, act to indirectly encourage use of specific routes in other areas of the park.

Differences in management of parks and protected areas may still result in similar levels of visitor satisfaction. The definitions of 'local people' and 'indigenous people' may have different meanings and associated rights, justifiable in different locations which may have been molded by any number of historical, political or cultural factors. If the majority of visitors in an area are not expecting to move off of trails, then there is no disappointment at being encouraged to stay in specific areas. In other cases there may be varying levels of discontent. Further study would be necessary to identify these specific differences and problems. Finally, one may ask the question as to the ecological consequences of different activities and management approaches. Assessment of the physical landscapes and analysis of ecosystem integrity through techniques such as sampling and comparative analysis would serve to furnish such an answer in future research.

Chapter 9

The final say: Summary and conclusions.

It is clear after investigation through this project that the management of multiple uses within Urho Kekkonen National Park is not a simple task. Not only does it involve a number of often conflicting perspectives, but it attempts to combine issues which may extend far beyond the park boundaries.

Though each region demonstrated unique concerns, on the whole, reindeer herders using the park were satisfied. There is no doubt that there are issues regarding tourism that should be addressed, although this is a difficult situation. Reindeer herders are not altogether against tourism because it provides a source of alternative income to an area with high unemployment. At the same time, tourism is a land use competitive with herding and can have impacts on the activities of reindeer herders. The situation present in the Ivalon Paliskunta region exemplifies this. Some of the land-use planning related to increased tourism that affects reindeer herders in this area is out of the jurisdiction of the park, for example the expansion of buildings and general infrastructure in Saariselkä which lie outside of the park's boundaries. However, when it comes to planning or conflicts of usage inside park boundaries, for example visitor traffic, it would be important to include reindeer herders around the discussion table and recognize their concerns seriously. Communication with reindeer herders is an important part of park management today, but there have been conflicts in the past. It would be advisable to consider that a mechanism be developed to ensure some level of influence of reindeer herders on management decisions. In fact, this would be a useful concept even outside of national park politics.

Recreational visitors to Urho Kekkonen National Park represent a wide variety of people with various expectations of what they are looking for once they arrive. It would seem that as the land area of the park is significantly large, and there are locations that still maintain a level of isolation due to lacking infrastructure and access, people visiting the park are still able to find the level of comfort or isolation that they are looking for. Visitors select their route plan based on their expectations and adjust according to what each zone has to offer.

The result is a high level of visitor satisfaction. There are numerous examples of visitors in the Lapin and Kemin-Sompion Paliskunnat regions who have visited the park many times over a period of 20-40 years or more. It is possible to undertake trips extending many days, and even weeks, with little overlap in route planning. The available facilities are appreciated and the main criticisms largely involve the misconduct of other visitors, for example disorderly cabins, abundant litter and illegal fire pits.

The attitude and interaction with reindeer herding is not simple. Certainly there are misconceptions as to the potential relationships between visitors and local reindeer herders. Aside from admiring seeing reindeer in the park, many visitors were confused entirely by verbal dialogue that questioned the effects of reindeer herding on their visit, let alone their own impact on reindeer herding. There did exist a great deal of concern for the perceived overgrazing of lichen. The comment repeatedly arose, "Go to the Russian border and you'll see – the Finnish side is bare and the Russian side has a thick mat of snowy white lichen cover," (Numerous personal communications 2003; numerous visitor questionnaire comments 2003). This concern is not isolated to the park, but extends to all of Lapland, and the debate as to the numbers of reindeer has a long history and is still on-going. Unfortunately, whether or not overgrazing by reindeer is taking place, the park is itself powerless to make any restrictions or management decisions on the numbers of reindeer. This legislative power resides with the nation-state in the Ministry of Agriculture and Forestry. Nor is the park able to limit the rights of access of reindeer herders within its boundaries due to the formerly negotiated local rights of access for traditional subsistence practices (Metsähallitus 1984). As mentioned, concerns by recreational visitors regarding overgrazing extended to all of Lapland. It is an issue that affects Urho Kekkonen National Park as well as a number of protected areas in Finnish Lapland, and must be taken seriously. However, this discussion is beyond the arena of national park management.

After piecing together the varying perspectives and arguments, we come finally to the question of the integrity of the environment in which this is all

taking place. As discussed in Chapter 2, targeting the environment directly through this project was not possible under the circumstances (resources, time available). A clear analysis of the conditions of the natural state of the park would require the selection of natural indicators, such as sensitive plant and animal species and sensitive ecosystems, followed by careful measurement likely undertaken over a period of time. Though not specifically focused within the park, just such a compilation of data is being attempted through the "Natura 2000" European Union project, undertaken by Metsähallitus, which has selected a number of sites across Europe for detailed observation. Through study of the available historical collection of maps for the park the areas of greatest change can be identified. This can be used as a tool to monitor overall changes in the park, and focus management on taking corrective action to mediate conflicts or environmental damage that may be caused, for example, by building trail structures to prevent erosion or restricting camping in certain sensitive areas. In this way the places and changes that were identified in Chapter 6 can be monitored and controlled, based on what is considered to be an acceptable landscape state for the natural environment within this natural park context.

Overall, the integration of the land uses of reindeer herding, recreational visitors and conservation seem within certain limits to have an acceptable level of satisfaction from users. Major criticisms from all sides involve complex issues with mixed benefits and drawbacks, or in some cases difficulties, that lie outside of the jurisdiction of park management. This creates the opportunity for the park to selectively support or apply pressure to the appropriate authorities, including local and regional administrators such as town councils and the paliskunnat, and political figures such as the Sámi Parliament. As a national park, the main concerns, extent of power and control of management lie strictly within park boundaries, but it is clear that there is yet another, important role that is played within the local communities through maintaining positions on varying levels of activities and rights. Notwithstanding the intricacies, the concerns of all park users are real and should be taken seriously. It is clear that despite somewhat limited resources, through constant communication, strategic management and

policy implementation, Urho Kekkonen National Park is actively making earnest efforts to address current issues.

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Appendix B

Transcript of presentations to Ivalon, Lapin and Kemin-Sompion Paliskunnat. (Author's uncorrected original transcripts.)

English Version (The first and last '-statements' are translated here for the reader, but were spoken in Finnish to the audience without a translator.)

- Hello and good morning. Thank-you for allowing me to be here. I am Delia Berrouard. I am Canadian and I am in Tankavaara for four months because I am doing a university research project in Urho Kekkonen National Park. I want to learn the Finnish language, but I do not speak or understand much Finnish. Aini/Pekka/Jammi will translate for me. Thank-you very much to Aini/Pekka/Jammi.
- The purpose of my research is to assess how well Urho Kekkonen National Park has been able to combine tourism, reindeer herding and conservation.
- To do this I will use questionnaires, interviews and statistical information.
- I will also learn a lot from living here and speaking with people.
- I am speaking here today to introduce myself and my project, and to ask if you would please fill out the questionnaire I have with me. It is in Finnish.
- The questions are about reindeer herding in Urho Kekkonen National Park.
- The Kemi-Sompio/Lappi/Ivalo District is an important part of my research.
- I am living in Tankavaara so it will be more difficult for me to know people in this region. (removed in the case of the Lappi presentation)
- I will need to chose people for interviews.
- When you answer these questions if you are interested in talking with me more about your opinions, please make a note on the back of the paper so that I can contact you.
- It's no problem if you write in Finnish, but please mention if you speak English.
- My e-mail is on the questionnaire and you can phone the Koilliskaira Nature Center in Tankavaara to contact me.

- Are there any questions?
- I will pass out the questionnaires now and I will collect them from you before I go, please bring them to me.
- Thank-you very much for having me here, and thank-you very much to Aini/Pekka/Jammi.

Finnish Version

- Hei ja hyvää huomenta. Kiitos että sain tulla tänne. Minä olen Delia Berrouard. Minä olen Kanadalainen ja mina olen Tankavaaraissa neljä kuukautta, koska minä teen yliopostoprojektio Urho Kekkonen kansallispuistossa. Minä haluan oppia suomen kielen, mutta minä en vielä puhu enkä ymmärrä paljon suomea. Aini/Pekka/Jammi tulkkaa minulle. Paljon kiitoksia Ainille/Pekalle/Jammille.
- Tutkimukseni tarkoitus on arvioida kuinka hyvin Urho Kekkosen kansallispuisto on kyennyt sovittamaan yhteen turismin, poronhoidon ja luonnonsuojelun.
- Kerään tutkimusaineistoa kysymyslomakkeilla, haastatteluilla ja tilastollisen tiedon perusteella.
- Haluan myös oppia paljon täällä asumisesta ja puhumisesta.
- Olen täällä tänään esitelläkseni itseni ja projektini ja kysyäkseni voisitteko täyttää kysymyslomakkeet jotka minulla on mukanani. Kysymyslomake on suomeksi.
- Kysymykset koskevat poronhoitoa Urho Kekkoses kansallispuistossa.
- Ivalon paliskunta on tärkeä osa tutkimustani.
- Haluaisin myös haastatella joitakin ihmisiä.
- Jos olette kiinnostuneita puhumaan kanssani ja kertomaan mielipiteitänne, kirjoittakaa tästä viesti lomakkeen takapuolelle, jotta voin ottaa yhteyttä. Voitte kirjoittaa suomeksi, mutta merkitkää jos osaatte puhua englantia.
- E-mail osoitteeni on lomakkeessa ja voitte myös soittaa Koilliskairan luontokeskukseen ottaaksenne yhteyttä minuun.

- Onko kenelläkään kysyttävää?
- Pyydän teitä täyttämään lomakkeet ja palauttamaan ne minulle ennen kuin lähdette.
- Paljon kiitos että sain tulla tänne, ja paljon kiitoksia Ainille/Pekalle/Jammille.

Appendix C

Questionnaires (author's design)

All questionnaires distributed included Department of Geography, McGill University (Montreal, Canada) letterhead and were on standard European A4 (8"x12") paper.

Park Visitor Survey **Summer 2003**

Researcher:
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Supervisor:
Dr. Ludger Müller-Wille
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Research Project
The purpose of this research project is to identify the success of Urho Kekkonen National Park, Finland, in managing the coexistence of tourism, reindeer herding and conservation. Aspects of economics (expenditures and revenue) the density of land use (# visitors, # reindeer, vegetation cover) and perceptions of success in meeting the needs of each land use group will be compared. Economics and density of land use will be determined using available statistical data and information. Perceptions will be determined through use of a survey and interviews. Participation in surveys is **voluntary** and may be anonymous. All questions are optional and additional comments may be made.

Questions:	Yes/High		Neutral		No/Low
1) Are you satisfied with your activities/visit in UK National Park?	1	2	3	4	5
2) Would you come again?	1	2	3	4	5
3) Have you been here before? Specify --	1	2	3	4	5
4) Do you feel that regulations have a negative impact on your visit?	1	2	3	4	5
5) Have you seen many reindeer in the park during your visit?	1	2	3	4	5
6) Do reindeer make your visit a positive experience?	1	2	3	4	5
7) Do you feel that too many reindeer are using the park?	1	2	3	4	5
8) How much visitor traffic have you seen on the trail?	1	2	3	4	5
9) Do you feel that too many hikers are					

using the park?	1	2	3	4	5
10) Do you feel the park protects nature well / high conservation?	1	2	3	4	5
11) Have you seen damage to nature in the park?	1	2	3	4	5
12) If yes, was this damage related to visitors? Other, specify--	1	2	3	4	5
13) Do you feel UK National Park has been successful in integrating tourism/recreation, reindeer herding and conservation?	1	2	3	4	5

The following information is **optional**. Surveys may be anonymous. Write additional comments on back.

(name) (profession) (home) (date) (location/duration of visit)

Reindeer Herding Survey **Summer 2003**

Researcher:
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Supervisor:
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Research Project
The purpose of this research project is to identify the success of Urho Kekkonen National Park, Finland, in managing the coexistence of tourism, reindeer herding and conservation. Aspects of economics (expenditures and revenue) the density of land use (# visitors, # reindeer, vegetation cover) and perceptions of success in meeting the needs of each land use group will be compared. Economics and density of land use will be determined using available statistical data and information. Perceptions will be determined through use of a survey and interviews. Participation in surveys is **voluntary** and may be anonymous. All questions are optional and additional comments may be made.

Questions:	Yes/High		Neutral		No/Low
1) Are you satisfied with your use of UK National Park?	1	2	3	4	5
2) Do you feel that regulations have a negative impact on herding?	1	2	3	4	5
3) Have you seen many visitors/hikers in the park or on trails?	1	2	3	4	5

4) Do hikers have a negative impact on

reindeer herding?	1	2	3	4	5
5) Does general tourism have a positive impact on reindeer herding?	1	2	3	4	5
6) Do you feel that too many reindeer are using the park?	1	2	3	4	5
7) Do you feel that too many hikers are using the park?	1	2	3	4	5
8) Do you feel the park protects nature well / high conservation?	1	2	3	4	5
9) Have you seen damage to nature in the park?	1	2	3	4	5
10) If yes, was this damage related to visitors? Other, specify--	1	2	3	4	5
11) Do you feel UK National Park has been successful in integrating tourism/recreation, reindeer herding and conservation?	1	2	3	4	5

The following information is **optional**. Surveys may be anonymous. Write additional comments on back.

(name) (profession) (home) (date) (location/duration of visit)

Park Staff / Tourism Survey **Summer 2003**

Researcher:
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Supervisor:
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Research Project
The purpose of this research project is to identify the success of Urho Kekkonen National Park, Finland, in managing the coexistence of tourism, reindeer herding and conservation. Aspects of economics (expenditures and revenue) the density of land use (# visitors, # reindeer, vegetation cover) and perceptions of success in meeting the needs of each land use group will be compared. Economics and density of land use will be determined using available statistical data and information. Perceptions will be determined through use of a survey and interviews. Participation in surveys is **voluntary** and may be anonymous. All questions are optional and additional comments may be made.

Questions:	Yes/High	Neutral	No/ Low
1) Are you satisfied with your use of			

UK National Park?	1	2	3	4	5
2) Do you feel that regulations have a negative impact on herding?	1	2	3	4	5
3) Do you feel that regulations have a negative impact on tourism?	1	2	3	4	5
4) Do hikers/tourism have a negative impact on reindeer herding?	1	2	3	4	5
5) Does general tourism have a positive impact on reindeer herding?	1	2	3	4	5
6) Does reindeer herding have a negative impact on tourism?	1	2	3	4	5
7) Do you feel that too many reindeer are using the park?	1	2	3	4	5
8) Do you feel that too many hikers are using the park?	1	2	3	4	5
9) Do you feel the park protects nature well / high conservation?	1	2	3	4	5
10) Have you seen damage to nature in the park?	1	2	3	4	5
11) If yes, was this damage related to visitors? Other, specify--	1	2	3	4	5
12) Do you feel UK National Park has been successful in integrating tourism/recreation, reindeer herding and conservation?	1	2	3	4	5

The following information is **optional**. Surveys may be anonymous. Write additional comments on back.

(name) (profession) (home) (date) (location/duration of visit)

Kävijän Vastauslomake **Kesä 2003**

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Tutkimusprojekti

Tämän tutkimuksen tavoitteena on selvittää, kuinka Urho Kekkosen kansallispuistossa on onnistuttu ottamaan huomioon sen eri käyttäjäryhmien, matkailun, poronhoidon ja luonnonsuojelun tarpeet. Tutkimuksessa vertaillaan näiden ryhmien taloudellisia näkökohtia (mm. tulot ja menot), maankäytön intensiivisyyttä (selvittämällä mm. kävijä- ja poromääriä sekä kasvillisuuden peittävyyttä) ja heidän käsityksiään siitä, kuinka hyvin eri ryhmien tarpeet on otettu huomioon. Taloudellisia näkökohtia ja maankäytön intensiivisyyttä tutkitaan saatavissa olevan tilasto- ja tutkimustiedon avulla. Eri käyttäjäryhmien mielipidettä pyritään selvittämään paitsi tämän kaavakkeen myös erillisten haastattelujen kautta. Tutkimukseen osallistuminen on **vapaaehtoista** ja vastata saa nimettömänä. Kaikki kysymykset ovat vapaaehtoisia ja lisäkommentteja saa kirjoittaa.

Kysymykset:	Kyllä/Paljon				Ei/Vähän
1) Oletko tyytyväinen aktiviteetteihisi/ käyntiisi UK-puistossa?	1	2	3	4	5
2) Tulisitko uudestaan?	1	2	3	4	5
3) Oletko ollut täällä ennen? Tarkenna.	1	2	3	4	5
4) Onko puiston järjestyssäännöillä negatiivinen vaikutus käyntiisi?	1	2	3	4	5
5) Oletko nähnyt paljon poroja käyntisi aikana?	1	2	3	4	5
6) Tekevätkö porot käynnistäsi positiivisen kokemuksen?	1	2	3	4	5
7) Onko kansallispuistossa mielestäsi liikaa poroja?	1	2	3	4	5
8) Kuinka paljon olet nähnyt muita retkeilijöitä retkesi aikana?	1	2	3	4	5
9) Onko kansallispuistossa mielestäsi liikaa kävijöitä?	1	2	3	4	5
10) Onko kansallispuiston luontoa mielestäsi suojeltu riittävästi?	1	2	3	4	5
11) Oletko nähnyt vaurioita maastossa?	1	2	3	4	5
12) Jos kyllä, olivatko ne kävijöiden aiheuttamia? Joku muu, mikä?	1	2	3	4	5
13) Onko UK-puistossa mielestäsi otettu riittävän hyvin huomioon matkailu/ virkistyspalvelut, poronhoito ja luonnonsuojelu?	1	2	3	4	5

Seuraavan kohdan täyttäminen on **vapaaehtoista**. Tutkimukseen saa vastata nimettömänä. Lisäkommentit paperin takapuolelle.

(nimi) (ammatti) (asuinpaikka) (pvm) (käyntisi kohde/kesto)

Porotalouden Vastauslomake **Kesä 2003**

Tutkija:
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Tutkimuksen valvoja:
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Tutkimusprojekti
Tämän tutkimuksen tavoitteena on selvittää, kuinka Urho Kekkosen kansallispuistossa on onnistuttu ottamaan huomioon sen eri käyttäjäryhmien, matkailun, poronhoidon ja luonnonsuojelun tarpeet. Tutkimuksessa vertaillaan näiden ryhmien taloudellisia näkökohtia (mm. tulot ja menot), maankäytön intensiivisyyttä (selvittämällä mm. kävijä- ja poromääriä sekä kasvillisuuden peittävyyttä) ja heidän käsityksiään siitä, kuinka hyvin eri ryhmien tarpeet on otettu huomioon. Taloudellisia näkökohtia ja maankäytön intensiivisyyttä tutkitaan saatavissa olevan tilasto- ja tutkimustiedon avulla. Eri käyttäjäryhmien mielipidettä pyritään selvittämään paitsi tämän kaavakkeen myös erillisten haastattelujen kautta. Tutkimukseen osallistuminen on **vapaaehtoista** ja vastata saa nimettömänä. Kaikki kysymykset ovat vapaaehtoisia ja lisäkommentteja saa kirjoittaa.

Kysymykset:	Kyllä/Paljon				Ei/Vähän
1) Oletko tyytyväinen toimintamahdollisuuksiisi UK-puistossa (vapaa-ajallasi)?	1	2	3	4	5
2) Onko puiston järjestyssäännöillä negatiivinen vaikutus poronhoitoon?	1	2	3	4	5
3) Näetkö puistossa usein retkeilijöitä tai muita virkistyskäyttäjiä?	1	2	3	4	5
4) Onko vetkeilijöillä/virkistyskäyttäjillä negatiivinen vaikutus poronhoitoon?	1	2	3	4	5
5) Onko matkailulla positiivinen vaikutus poronhoitoon?	1	2	3	4	5
6) Onko kansallispuistossa mielestäsi liikaa poroja?	1	2	3	4	5
7) Onko kansallispuistossa mielestäsi liikaa kävijöitä?	1	2	3	4	5
8) Onko kansallispuiston luontoa mielestäsi suojeltu riittävästi?	1	2	3	4	5
9) Oletko nähnyt vaurioita maastossa?	1	2	3	4	5

10) Jos kyllä, olivatko ne kävijöiden

aiheuttamia? Joku muu, mikä?	1	2	3	4	5
11) Onko UK-puistossa mielestäsi otettu riittävän hyvin huomioon matkailu/virkistyspalvelut, poronhoito ja luonnonsuojelu?	1	2	3	4	5

Seuraavan kohdan täyttäminen on **vapaaehtoista**. Tutkimukseen saa vastata nimettömänä. Lisäkommentit paperin takapuolelle.

(nimi) (ammatti) (asuinpaikka) (pvm) (käyntisi kohde/kesto)

Puiston Henkilökunta/Matkailuala Vastauslomake Kesä 2003

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Tutkimusprojekti
Tämän tutkimuksen tavoitteena on selvittää, kuinka Urho Kekkosen kansallispuistossa on onnistuttu ottamaan huomioon sen eri käyttäjäryhmien, matkailun, poronhoidon ja luonnonsuojelun tarpeet. Tutkimuksessa vertaillaan näiden ryhmien taloudellisia näkökohtia (mm. tulot ja menot), maankäytön intensiivisyyttä (selvittämällä mm. kävijä- ja poromääriä sekä kasvillisuuden peittävyyttä) ja heidän käsityksiään siitä, kuinka hyvin eri ryhmien tarpeet on otettu huomioon. Taloudellisia näkökohtia ja maankäytön intensiivisyyttä tutkitaan saatavissa olevan tilasto- ja tutkimustiedon avulla. Eri käyttäjäryhmien mielipidettä pyritään selvittämään paitsi tämän kaavakkeen myös erillisten haastattelujen kautta. Tutkimukseen osallistuminen on **vapaaehtoista** ja vastata saa nimettömänä. Kaikki kysymykset ovat vapaaehtoisia ja lisäkommentteja saa kirjoittaa.

Kysymykset:	Kyllä/Paljon				Ei/Vähän
1) Oletko tyytyväinen toimintamahdollisuuksiisi UK-puistossa?	1	2	3	4	5
2) Onko puiston järjestyssäännöillä negatiivinen vaikutus poronhoitoon?	1	2	3	4	5
3) Onko puiston järjestyssäännöillä negatiivinen vaikutus matkailuun?	1	2	3	4	5
4) Onko retkeilijöillä/virkistyskäyttäjillä negatiivinen vaikutus poronhoitoon?	1	2	3	4	5
5) Onko matkailulla positiivinen vaikutus poronhoitoon?	1	2	3	4	5
6) Onko poronhoidolla negatiivinen vaikutus matkailuun puistossa?	1	2	3	4	5

7) Onko kansallispuistossa mielestäsi

liikaa poroja?	1	2	3	4	5
8) Onko kansallispuistossa mielestäsi liikaa kävijöitä?	1	2	3	4	5
9) Onko kansallispuiston luontoa mielestäsi suojeltu riittävästi?	1	2	3	4	5
10) Oletko nähnyt vaurioita maastossa?	1	2	3	4	5
11) Jos kyllä, olivatko ne kävijöiden aiheuttamia? Joku muu, mikä?	1	2	3	4	5
12) Onko UK-puistossa mielestäsi otettu riittävän hyvin huomioon matkailu/ virkistyspalvelut, poronhoito ja luonnonsuojelu?	1	2	3	4	5

Seraavan kohdan täyttäminen on **vapaaehtoista**. Tutkimukseen saa vastata nimettömänä. Lisäkommentit paperin takapuolelle.

(nimi) (ammatti) (asuinpaikka) (pvm) (käyntisi kohde/kesto)

Appendix D

Table 1. Park Visitor Questionnaire distribution, collection and estimated percent participation in Urho Kekkonen National Park, May-September 2003.

Location	Date Questionnaires Brought	Date Questionnaires Checked	Date Questionnaires Collected	Total Number of Questionnaires Available	Number of Questionanires Collected
Suomenruoktu	3.6.03		8.9.03	40	36
Tuiskukuru	4.6.03		9.9.03	40	36
Luirojärvi Hotelli	4.6.03		10.9.03	60	44
Luirojärvi Varaustupa	4.6.03		10.9.03	40	35
Luirojärvi Pienitupa	4.6.03		10.9.03	40	28
Lankojärvi	28.5.03		11.9.03	40	38
Rautulampi	28.5.03		11.9.03	40	17
Luulampi	24.5.03	26.6.03	12.9.03	62	63
Vanha Rumakuru	24.5.03	26.6.03	12.9.03	60	69
Rumakuru	24.5.03	26.6.03	12.9.03	60	94
Vellinsärpimä	22.5.03	8.7.03	12.9.03	60	74
Muoravaaraka	15.6.03		19.9.03	40	40
Vierharju	21.6.03		25.9.03	40	37
Manto-oja	20.6.03		24.9.03	40	36
Porttikoski	13.6.03		17.9.03	40	35
Sarvioja	14.6.03		18.9.03	40	35
Tahvontupa	18.6.03		22.9.03	40	35
Peurasil	19.6.03		23.9.03	40	30
Anterinmukka	16.6.03		20.9.03	40	36
Snellmanamaja	13.6.03		16.9.03	40	37
Mantoselkä	20.6.03		24.9.03	40	39
Hammaskuru	17.6.03		21.9.03	40	34
Kiehinen	22.5.03		29.9.03	20	20
Saariselka Tourism Bureau	22.5.03		29.9.03	20	20
Savukoski	27.5.03		25.9.03	20	20
Koilliskairan	22.5.03		29.9.03	30	30
Kiilopää	3.6.03		8.9.03	40	40
Total value				1112	1058

(Table 1. continued on page 99.)

(Table 1. continued from page 98.)

Location	Number of Questionnaires Completed	Number of Finnish Questionnaires	Number of English Questionnaires	Number of Signatures (available)	Percent (%) participation
Suomenruoktu	36	18	18	547	6.58
Tuiskukuru	31	18	13	566	5.48
Luirojärvi Hotelli	44	27	17	560	7.86
Luirojärvi Varaustupa	7	7	0	114	6.14
Luirojärvi Pienitupa	26	13	13	222	11.71
Lankojärvi	28	18	10	424	4.72
Rautulampi	17	10	7	987	N/A
Luulampi	63	38	25	1497	5.86
Vanha Rumakuru	53	32	21	762	6.96
Rumakuru	94	53	41	1714	4.61
Vellinsärpimä	53	44	9	1187	4.47
Muoravaaraka	40	20	20	557	13.2
Vierharju	24	16	8	164	14.63
Manto-oja	13	8	5	89	14.61
Porttikoski	35	15	20	260	13.46
Sarvioja	29	16	13	591	4.91
Tahvontupa	17	15	2	175	9.71
Peurasil	14	12	2	161	8.7
Anterinmukka	31	18	13	502	6.18
Snellmanamaja	29	20	9	222	12.16
Mantoselkä	4	4	0	48	8.33
Hammaskuru	21	16	5	176	11.93
Kiehinen	10	9	1	N/A	
Saariselka Tourism Bureau	0	0	0	N/A	
Savukoski	0	0	0	N/A	
Koilliskairan	22	18	4	N/A	
Kiilopää	9	6	3	N/A	
Total value	750	471	279	11525	8.68

Table 2. Cabin Logbook Signature Summary, Urho Kekkonen National Park, May-September 2003.

Location	Signature Collection Period	# Total Signatures	# Finnish Signatures	# Foreign Signatures
Suomenruoktu	23.6.03-8.9.03	547	507	40
Tuiskukuru	2.5.03-9.9.03	593	545	48
Luirojärvi Hotelli	30.4.03-9.9.03	581	541	40
Luirojärvi Varaustupa	6.6.03-9.9.03	114	113	1
Luirojärvi Pienitupa	11.5.03-9.9.03	239	217	22
Lankojärvi	30.6.03-11.9.03	424	388	36
Rautulampi	1.7.03-11.9.03	987	898	89
Luulampi	1.5.03-11.9.03	1581	1454	127
Vanha Rumakuru	1.5.03-11.5.03	814	721	93
Rumakuru	18.6.03-11.9.03	1594	1498	96
Vellinsärpimä	1.5.03-11.9.03	1206	1143	63
Muoravaaraka	3.5.03-9.9.03	616	581	36
Vierharju	2.5.03-24.9.03	201	192	9
Manto-oja	1.5.03-24.9.03	127	122	5
Porttikoski	1.5.03-16.9.03	299	284	15
Sarvioja	30.5.03-17.9.03	663	628	35
Tahvontupa	1.5.03-22.9.03	226	220	6
Peurasil	2.5.03-23.9.03	200	196	4
Anterinmukka	3.5.03-19.9.03	583	564	19
Snellmananmaja	24.6.03-15.9.03	222	219	3
Mantoselkä	29.5.03-23.9.03	61	57	4
Hammaskuru	13.5.03-21.9.03	231	221	10
	Total Signatures	12109	11309	801

Figure 6. Distribution of the Total Foreign Signatures from Cabin Logbooks in the Case Study in Order of Value, Urho Kekkonen National Park, May-September 2003.