Författare: Peter Fredman, Klas Sandell, Lars Emmelin, Marie Stenseke, Mattias Boman, Ulla Romild, Linda Lundmark, & Christina Frimodig.

WWW.FRILUFTSFORSKNING.SE
Outdoor Recreation in Change
Landskapes, experiences, planning and development

Friluftsliv i förändring
Upplevelselandskap, planering och utveckling

PROGRAM PLAN
2006-08-18
Program leader: Dr. Peter Fredman, European Tourism Research Institute (ETOUR), Mid-Sweden University, 831 25 Östersund, Sweden. Tel: +46-(0)63-195804, Fax: +46-(0)63-195810, E-mail: peter.fredman@etour.se

Deputy program leader and project leader: Professor Klas Sandell, Karlstad University.

Communication and outreach: Ms. Christina Frimodig, ETOUR, Mid-Sweden University.

Project leaders: Associate Professor Mattias Boman, Swedish University of Agricultural Sciences. Professor Lars Emmelin, Blekinge Institute of Technology. Dr. Linda Lundmark, Umeå University. Dr. Ulla Romild, Mid-Sweden University. Associate Professor Marie Stenseke, Göteborg University.

Summary
This interdisciplinary research program will analyze the current dynamics of outdoor recreation and nature based tourism in Sweden, forming a thorough knowledge base for future research and monitoring. The program is integrated through a common empirical arena (Project A) that includes case studies of recreation landscapes and a national survey to provide information on outdoor recreation activities, participation and constraints. This will give a comprehensive input to five deepening projects: (B) Outdoor recreation patterns (motives, access, urban-rural tensions, gender, immigrants, youth, non-users and trends); (C) Urban proximate nature (outdoor recreational opportunities, economics and health); (D) Outdoor recreation in spatial planning (land use, conflict resolution, impact assessment and local management); (E) Outdoor recreation and nature conservation (integrated land management, environmental education and guiding); and (F) Nature-based tourism for regional development (demand, supply, impacts, protected areas and governance). The program will contribute to the achievement of current Swedish nature conservation policy objectives (Skr 2001/02). Communication at three levels (information, dialogue and collaboration) will establish strong linkages and ensure that results are disseminated to a broad group of stakeholders and practitioners. The program will establish a basis for further outdoor recreation research strategies and structures.

Content
Directions and goals .................................................................................................................................................... 1
Current knowledge ...................................................................................................................................................... 3
Practical relevance ...................................................................................................................................................... 11
Program structure, management and networks .......................................................................................................... 12
Communication and outreach .................................................................................................................................... 16
Scheduled program activities .................................................................................................................................... 18
Budget ........................................................................................................................................................................ 20
Co-funding ................................................................................................................................................................. 20
References ................................................................................................................................................................. 21
Appendix ..................................................................................................................................................................... 25

Directions and goals
The point of departure for this program is the diversity of outdoor recreation and nature based tourism. Diversity in terms of social and economic values – such as personal development, social bonding, health, freedom, education, conservation, economics and regional development. Diversity in terms of activities and manifestations – from walks close to home to specialized and globalized tourism activities involving a range of individual, organized, non-commercial and/or commercial activities. Diversity as a research field – multidisciplinarity ranging from philosophy and humanities...
(e.g. environmental ethics and wilderness concepts) to social and behavioral science (e.g. planning, political science and environmental perception) to economics (e.g. welfare economics and economic impacts) and natural science (e.g. physiology and ecology). Due to this diversity, the current research situation in Sweden, and the importance of outdoor recreation and nature based tourism in current Swedish nature conservation policy (Skr 2001/02), the overall aim of the program is to present a broad picture of the dynamics of outdoor recreation and nature based tourism in Sweden: One that is relevant for the work of the Swedish Environmental Protection Agency given its new role in outdoor recreation, by forming a solid scientific foundation suitable for future research and monitoring. Given limited budgets, it is of vital importance for decision makers and managers to know as much as possible about how policy is implemented in practice and over time. Therefore another important objective of the program is to establish strong linkages (networks) to different stakeholders, including national, regional and local authorities and organizations in the field of outdoor recreation and natural resource management. This will also involve forming a basis for decisions with regard to long term institutional structures, research efforts and knowledge transfer concerning outdoor recreation and nature based tourism in Sweden.

A major feature of the program is the goal of integration, going from a multidisciplinary interest in the phenomenon of outdoor recreation and nature based tourism toward interdisciplinary theory and application. The program will build on a common empirical arena (Project A: Activity and place) by means of local case studies and a national survey including over-sampling of municipalities (or parts thereof) adjacent to the case study areas. The goal of the common empirical arena (CEA) is to provide information on outdoor recreation participation, non-participation, constraints, visitor monitoring methodology, as well as descriptive data on case study areas. The CEA will integrate and provide a comprehensive input to the five thematic projects of the application, which are:

**Project B:** to analyze diverse and overlapping groups, motives and outcomes with regard to current outdoor recreation patterns in Sweden with special interest in: central-local and urban-rural tensions; access; socio-economic groups, gender, immigrants, youth, non-users and trends of special importance.

**Project C:** to deepen our understanding of outdoor recreation from a welfare economic perspective and how urban proximate nature contributes to outdoor recreation opportunities for different user groups.

**Project D:** to present methods of spatial planning for outdoor recreation and nature based tourism, including conflict resolution, impact assessment and management that can be adapted to the Swedish governance system at local and inter-municipal/regional levels.

**Project E:** to develop strategies and methods for land management integrating outdoor recreation and nature conservation, and for environmental education and nature guiding, contributing to a wider understanding of how perceived nature values and experience of nature are related in contemporary Sweden.

**Project F:** to assess the role of nature-based tourism for regional development and as a tool for sustaining rural communities, assessing demand, supply, socio-cultural and economic impacts, protected areas, governance and planning.

The length of the program is proposed as six years to allow for the completion of Ph.D. studies and to foster stability in building basic scientific structures, including the formation of an embryo to long-term institutions and networks in the field of outdoor recreation research in Sweden. The budget of 6 million SEK annually is necessary to substantially cover those different aspects of outdoor recreation emphasized in the program announcement by the Swedish Environmental Protection Agency (SEPA).
Current knowledge

Outdoor recreation is not a single subject or discipline, and the integrative and multidisciplinary approach underlying this proposal is essential because of the inherent diversity and richness of the field (e.g. Loomis & Walsh, 1997; Hamitt & Cole, 1998; Jackson & Burton, 1999; Manning, 1999; Pigram & Jenkins, 2006; Sandell & Sörlin, 2000; Eagles & McCool, 2002; Schantz & Silvander, 2004; and Emmelin et al., 2005). As a consequence, a brief overview of "current knowledge" and "state-of-art" research is difficult – it is not possible to present all relevant references, nor to cover all directions and topic areas. Nevertheless, after highlighting the common points of departure in the perspectives of sustainable development and landscape as place, we will briefly review some major fields of current knowledge. Before doing so, we note some extensive reviews carried out by team members, which illustrates the competence of the group with regard to current knowledge in the research field:

- The current Swedish overview of outdoor recreation history (Sandell & Sörlin, 2000);
- The broadest Swedish text book widely used for education in outdoor recreation (Brügge, Glantz & Sandell, 2002);
- A report from a foundational workshop for developing common knowledge and understanding of the role of social sciences and the humanities in landscape management research (Saltzman & Stenseke, 2004);
- An introductory international research outlook in Swedish about the benefits of outdoor recreation (Sandell, 2004a);
- The only broad overview in Swedish today about planning and management for outdoor recreation, currently being revised for use as a university text book (Emmelin, Fredman & Sandell, 2005);
- A text book widely used for Swedish university courses about education for sustainable development (Sandell, Öhman & Östman, English ed. 2005);
- A state of the art visitor survey, including chapters on monitoring methodology, tourism in protected areas and planning methods (Fredman, Hörnsten Friberg & Emmelin, 2005);
- The book of abstracts (approximately 400 from over 30 countries) from the International Symposium on Society and Resource Management (ISSRM) held in Östersund (Fredman & Heberlein, 2005);
- A visitor monitoring manual for practitioners carried out for the National Board of Forestry (Lindhagen & Ahlström, 2005);
- A book to be published by CABI based upon proceedings from the International Conference on "Perspectives on Tourism in Nordic and Other Peripheral Areas" in Umeå (Jansson & Müller, 2007).

Having noted these seminal works, and in the interest of space, we avoid citing this literature in the remainder of the application.

It is important to include multiple perspectives and approaches in the program while carrying out good research based on explicit theoretical contexts. This means that the theoretical approach of the entire program must be somewhat eclectic (Hall, 1981). We believe that a sound empirical basis emanating from an understanding of the practical workings of outdoor recreation planning and management can be subjected to the theoretical triangulation approach of evaluation research (Almås, 1990; Vedung 1991). The strength of the program lies in the combination of practical understanding of processes, empirical research and a multidisciplinary team focusing on interdisciplinarity; this makes scientific triangulation possible and avoids dependence on any single, partial theory. Each project/action will rely upon specific theoretical frameworks as described in the project plans (often shared by more than one researcher), but when cooperation within the entire or large sections of the program occurs (e.g. joint writing, seminars and joint analysis) a broader frame of reference will be utilized. This reflects the perspectives of a sustainable development, especially at the regional level, and of landscape and place. The common need in the program is for a dynamic and open arena for discussing, analyzing and communicating different activities, motives, attitudes and planning ambitions with regard to outdoor recreation and nature based tourism.

In their still highly relevant article Patterson & Williams (1998) are discussing different paradigms in social science dealing with natural resource management. They claim the need for the profession to "deepen its understanding of the nature of science by exploring recent advances in the philosophy of science" (ibid:abstract) and for this they pinpoint the tension (and continuum) between the basic perspectives of (i) rationalism/foundationalism (in line with the "traditional" perspective discussed by us below) and (ii) relativism/antifoundationalism (interpretivism, in line with the "discursive" perspective discussed by us below). In their article also they give examples of different types of
normative commitments which underlie scientific paradigms (ibid:table 1), i.e.: ontological commitments (objectivist vs. constructivist ontologies; deterministic vs. narrative ontologies and information based vs. meaning based models of human nature), epistemological commitments (dualism vs. fusion of horizons; linear process vs. hemenutic circle), and axiological commitments ("positivist" vs. "interpretivist" paradigms; "foundationalist" vs. "antifoundationalist" criteria). Each project and each deliverable in our program is focused and relies upon a solid theoretical base (often linked to a disciplinary tradition) but the field of outdoor recreation and nature based tourism demands at least the breadth we have involved in the program as a whole. So even though we purposefully have limited the span of disciplines and approaches involved we could note that our program as a whole involves aspects from both sides of the various different dichotomized perspectives listed by Patterson & Williams (ibid) as above. The alternatives of in spite of this claiming one shared theoretical framework for the entire program, or diverting the whole program towards a less broad approach have been rejected. Therefore we believe this illustrates the necessity of a theoretical approach of "critical pluralism" (Patterson & Williams, 1998) for a broad research program in the field of outdoor recreation and nature based tourism, especially if it involves high ambitions with regard to dialogues with practitioners – which is the case here.

In other words, our arguments for this to a large extent inductive and empirical and somewhat eclectic approach with regard to the overall theoretical approach of the entire program could be described like this. Out of literature and previous experiences with regard to research concerning resource management, outdoor recreation and nature based tourism in larger interdisciplinary programs we believe that a combination of the following aspects must be taken into consideration: (i) the research field as a whole has a strong tradition of being an applied field of science with to a large extent taken for granted traditional and positivistic scientific perspectives; (ii) if interested in a further dialogue with practitioners used to this and if interested in connecting and elaborating to previous research (e.g. with regard to international conferences and journals) this (i, above) has to some extent to be accepted; (iii) but simultaneously, in many ways and from different angles, this somewhat "atheoretical" approach is put under pressure, e.g. in all the grey-zones between the interdisciplinary applied research field and various more disciplinary rooted and "theoretical" research approaches tackling the field of outdoor recreation and nature based tourism; (iv) this pressure (iii, above) could to a large extent be described as epistemological challenges to methodology, i.e. between a traditional position of investigate-measure-explain versus to analyze and deconstruct in line with a discursive perspective (e.g. with regard to basic concepts used such as "outdoor recreation" and "nature" as exemplified below).

Out of this, and besides theoretically solid projects, we believe that a reasonable approach with regard to theoretical frameworks for the program as a whole is a combination of trying to build further upon and to a large extent accept established traditions in the field of outdoor recreation and nature based tourism research. But also we believe in the need to be reflexive and always open for a discussion concerning the need to challenge the content and consequences of this tradition. Also we strongly believe in the strength of letting different disciplines and research perspectives "meet in the landscape" in direct contact with the phenomena studied (individuals, groups and physical aspects). Therefore the inductive empirical approach of our common empirical arena (see further below) is given such a high priority in the program. Not only as an efficient way of collecting material for the different projects but also as a joint "workshop" for basic interdisciplinary scientific discussions.

The dynamic with regard to outdoor recreation is also present with respect to basic concepts used. A frequently used concept such as "nature," including themes like "contact with nature" and "nature values," obviously are deeply rooted in a cultural and historical context. Here we will use nature in a commonsense tradition fully aware of its rich and complex content (e.g. Macnaghten & Urry, 1998). Another basic concept is, of course, outdoor recreation, with broad meanings from, for example, the rhetoric of the Nordic "friluftslihv" tradition (see further below) to the fossil-fuelled high-tech practice
of a heli-skiing adventure. Likewise, outdoor recreation is associated with motives ranging from the public health benefits of urban proximate forest recreation to national balance of trade improvements from tourism investments in a national park in the high mountain area. In this application even though we will use the English phrase outdoor recreation our focus is "friluftsliv"; we believe these terms overlap to a large degree, but that they are not entirely equivalent concepts. Basically we use the official definition of the Council for Outdoor Recreation as our point of departure (to be outside in natural or cultural landscape for well-being and encounters with nature without demands for competition). If this activity is carried out away from one’s residence, as a tourist, we include this as nature based tourism. Also we see the focus upon areas with public access and the demarcations against urban areas and motorized activities as proposed by the SEPA as relevant for our discussions (Naturvårdsverket, 2005: attachment p. 5). Other contested concepts could be added as well; see e.g. about "wilderness", "conservation" and "reserves" in the section about "Outdoor recreation as conservation..." below. Many basic ideological policy issues are involved in the field of outdoor recreation from the point of view of laws, regulations, planning, authorities, organizations and individuals. Therefore, it is important to evaluate outdoor recreation and nature based tourism as policy related and contested concepts. Studies of outdoor recreation in change are studies of society and culture in change.

We also believe that different landscape approaches to place facilitate the investigation of this dynamic perspective on outdoor recreation and nature based tourism in light of sustainable development. When seeking a basic conceptual framework for discussing the dynamics and sustainability of mans’ relation with nature and landscape – such as in the context of outdoor recreation, nature based tourism and conservation – we commonly identify a dichotomy of domination versus adaptation. A similar division with regard to regional development has been suggested by Friedmann and Weaver (1979) using the concepts of "functional" and "territorial" development. A major effect of this approach, in many ways a parallel between centralized and decentralized systems, is that various aspects of social integration (politics, economy, and culture) are brought into focus together with human-ecological issues. Out of this foundation in human ecology and development strategies, a conceptual framework of ecostrategies (view and use of landscape) has evolved (e.g. Sandell, 1988). This framework has been further developed (using four main ecostrategies) and used for evaluations of outdoor recreation, public access and conservation (e.g. Sandell 2005a), and it will be further developed in this program (Project B). The framework utilizes one axis to illustrate the tension between "functional specialization" and "territorial adaptation," and a second axis to illustrate the dichotomy between the strategies of "active" use vs. "passive" contemplation of the landscape – the latter tension in short is a choice between utilization and conservation. Out of this axis framework, four main landscape perspectives are identified; the landscape as: (i) a factory for producing activities/products; (ii) a museum for external consumption; (iii) one’s home district to be utilized and (iv) one’s home district to be admired. These different ecostrategies involve various crucial consequences in terms of democracy, environmental issues, views of nature, local development, planning, pedagogic, identity, and so on, and the ecostrategy approach, together with the perspective of sustainable development, will be used as a tool for program integration. Even though in the figure below the different strategies may appear to be clear-cut categories, in reality, of course, it is a question of tendencies and blends involving a greater or lesser degree of passive vs. active use of landscape, and of functional vs. territorial strategies. With focus on conservation, outdoor recreation and nature based tourism, we may summarize the four ecostrategies as follows (cf. Figure A):

- The ecostrategy of "freezing" ("conserve"!) a specific landscape (and maintaining that "frozen" landscape) to be "set aside" as a museum for external consumption. This for the sake of, e.g., biodiversity, nature tourism or science – priorities carried out on a national or international basis.

- An ecostrategy in line with an active functional domination. The point of departure is the activities searched for. Special areas, equipment and organizations are established for these specialized
outdoor activities. Long-distance travel and heavy use of material resources are often involved. It could be argued that the landscape is looked upon as a *factory* for the production of adventure. A "factory" for the production of, e.g., bathing, snowboarding and climbing, and in its more extreme forms the activities are rebuilt indoors (climbing and swimming indoors, computer-games etc.)

- An ecostrategy in line with active adaptation. Here, as in the strategy of passive adaptation, interest is directed towards the features of the local natural and cultural landscape, the topography, the season etc. But the ecostrategy of active adaptation also involves direct utilization of the landscape – firewood, fishing, hunting etc. Outdoor recreation is one of many locally integrated aspects of *one's home district to be utilized*. What area is "one's home district" basically is a question of identity – to feel at home. Also it should be noted that this "feeling at home" of course could be an important aspect of urban as well as rural landscape and be a part of permanent living as well as leisure visits and other landscape relations (see e.g. further in Sandell, In Print).

- In the strategy of passive adaptation appreciative activities like strolling, cross-country skiing, bird watching, looking for flowers etc. are carried out in *one's home district to be admired*. These activities are characterized by passive amusement and on a superficial level (what is done, what type of equipment used etc.) it could be very much the same as the museum ecostrategy (but the latter is carried out without any deeper integration and identification with the local natural and cultural landscape apart from the special feature visited).

Figure A. The conceptual framework of four ecostrategies with regard to man’s relation to nature and landscape, here with examples illustrating various aspects of out-of-doors and conservation (adapted from Sandell 2000).
Also, in line with the two latter ecostrategies – from the entrepreneurs point of view – we will find many of the current attempts at ecotourism and small-scale locally based nature-oriented recreation involving active utilization as hunting and fishing (in line with one’s home district to be utilized) or passive admiration as in hiking and photo excursions (in line with one’s home district to be contemplated). Here the tourists are "invited" to one’s home district – although the context, from the tourist's point of view, is still a part of the tourist industry in accordance with the strategy of functional specialization.

It should here be noted that discussing the use of this conceptual framework of ecostrategies in this program we do not claim that we know that it will be a common theory for the entire program. But instead it will be tried with an open mind as a potential arena for joint discussions between the different projects e.g. in connection to the CEA. Out of its previous successful use for analyzing mainly written documents and semi-structured interviews linked to specific cases of conflicts (Sandell, 2005a, 2005b) also we will try to elaborate upon its use for e.g. survey material and its deeper connection to current conceptual landscape discussions in e.g. human geography (project B:actions 1 and 3).

Outdoor recreation as culture and history
The issue of outdoor recreation as culture and history involves basic questions about human perception of the environment, the role of place and landscape for identity, and the evolution of a modern commercialized welfare society (e.g. Tuan, 1990; Massey & Jess, 1995; Lundgren, 1999). And, as stated above, outdoor recreation is not a single subject or discipline – nor is it a static phenomenon. In tandem with the evolution of modern society, it started as a privilege for the upper class, then became a means to public health, national identity and equity in the welfare society, and today it is increasingly becoming commercialized, specialized and globalized (Gartner & Lime 2000). In the Encyclopedia of Leisure and Outdoor Recreation (Jenkins & Pigram, 2003:350) a "leisure explosion" in society is identified with parallels in outdoor recreation. However, two components remain constant over time: visits in outdoor environments and human recreation. One of the recurrent motives for outdoor recreation is individual and public health (Kaplan & Kaplan, 1989; Grahm, 1991; Kahn & Kellert, 2002; Hartig et.al., 2003), but other recurrent themes include pedagogic, environmental education, personal development and team building (Sandell, 2004c).
During the 20th century in Sweden, the idea of outdoor life and contact with nature was emphasized as fostering goals of different kinds. "The Swedish nature" and "the nature loving Swedes" became important rhetorical clichés in shaping the modern Swedish nation. Around the beginning of the 20th century the rapid industrialization and urbanization processes formed the background to great interest in physical leisure activities involving the establishment of various organizations. The "Swedishness" in this form of dealing with nature must not be over-emphasized (Oelschlaeger, 1991; Callicott et al., 1998), but there remains the Nordic outdoor life tradition ("friluftsliv") mentioned above characterized by simplicity and popularity, in which the right of public access is an important element (Wiklund, 1995; Tordsson, 2003; Faarlund, 1973; Kaltenborn et.al., 2001; Andkjær, 2005; Eichberg, & Jespersen, 1986; Ödmann et.al., 1982; Holm & Schantz, 2002).

Sustainable development
Societal change and dynamics currently is generally discussed in terms of so called sustainable development, and this is also the case when discussing outdoor recreation and nature based tourism, especially in rural and peripheral regions (Butler et al. 1998, Holden 2000, Sharpley & Telfer 2002). The concept of sustainable development was originally (WCEP 1987) a comprehensive concept including ecological, economic and social aspects (cf. Hall & Lew 1998, Hall & Page, 2002).
Different impacts have to be seen in the context of continuous change in the destination communities that result from other changes in society and that imply changing desires and life strategies among the local residents (Wall & Mathieson 2006). Meanwhile regulatory authorities try to keep control of developmental processes and negotiate contrasting local and non-local interests (Russell & Faulkner
1999, Ednarsson 2005). Hence planning becomes a central task to enable a maximization of benefits without compromising long-term environmental and socio-cultural qualities (Hall, 2000; Singh et al, 2003). A central aspect of sustainable development is the importance given to the local perspective, and this will be of utmost importance with regard to planning for outdoor recreation and nature based tourism as well.

In most cases tourism and outdoor recreation development is oriented towards sustainability. However, attempts to achieve sustainable development in tourism can often be characterized as naive and focused on the destination only. By that, Wall (1997) argues, they fail to acknowledge more complex relationships between tourism development and other sectors of economy and society, and moreover, they fail to acknowledge the far more comprehensive ambitions outlined in the Bruntland report by treating tourism as an isolated phenomenon only. Hence, to achieve a greater understanding of the role of tourism for a sustainable regional development, it is mandatory to integrate linkages between the tourism sector and other parts of societal life and here not least the economy. Here, flows and linkages between the various sectors are uncovered and integrated in modeling the tourism - regional development nexus. To achieve that a comprehensive database will be utilized in which tourism can be linked to broader aspects of social and economic development.

Taken together, the creation of a model (see project F) which produces scenarios of demand in a geographical context and the analyses of supply (both in terms of attraction and in terms of tourism service production) is a point of departure for a wider discussion on sustainability, in particular with regards to economic opportunities and local employment as well as socio-cultural processes. This also acknowledges that tourism can generate negative impacts as well such as environmental decline, economic costs and socio-cultural change (Hall & Page, 2002; Wall & Mathieson, 2006). The scenarios can thus be used as a base for sustainable tourism planning.

Outdoor recreation as conservation and education for sustainable development (ESD)

In the wake of ambitious conservation goals and expanded designation of protected areas, there is growing research on nature conservation as a discourse and the political implications of underlying perceptions of nature (cf. Mels 1999, Hornborg & Pálsson 2000, Castree & Braun 2001, Hedrén 2002). The results reveal the cultural construction of features such as nature, wilderness and biodiversity. One central aspect is the perception of the man-nature relationship, which reinforces the need to identify and analyze implicit perspectives in nature conservation. Considering people and their activities not as a threat but as integrated parts of “nature” implies challenges for landscape management (Pröbstl 2003). Many earlier studies on recreation and conservation have concerned areas managed for minimal human impact, including alpine “wilderness” areas, (Emmelin 1997).

Little research attention has been directed to protected areas that include agricultural landscapes or marine areas. Our research on environmental education and nature guiding in relation to perceptions and use of urban proximate areas will relate to international research concerning attitudes, values and the role of rural landscape and nature in modern society (Tuan 1990; Machnagten & Urry 1998) as well as to recent Swedish research on education for sustainable development, perceptions of rural landscapes and urban proximate nature out of a recreational perspective (cf. Sandell 2000b; Uddenberg 1995; Öhman 2003 and the ongoing projects Urbanwoods (www.svo.se/urbanwoods) and Neighbourwoods (http://www.sl.kvl.dk/euforic/ nbw.htm)). Results of such studies express the increasing distance between humans and non-settled areas in western societies. Nonetheless, they indicate that people in general have positive attitudes toward green spaces, urban proximate natural areas and “wilderness.” However, there are notable differences between various categories of people, implying that there exist not one but rather diverse urban perspectives. As for outdoor learning, a substantial amount of research has been carried out in the 1990s and 2000s. A review of research on outdoor learning (Rickinson et al, 2004) notes the role of affect as well as cognition, with the former being emotional engagement leading to positive development of attitude and behavior due to learning outdoors (Ballantyne & Packer, 2005). Research also points to negative reactions, fears and phobias when students encounter nature (Bixler et al., 1994; Wals, 1994). Regarding cognition, few
studies have looked at students’ knowledge when researching learning outdoors, or acknowledged learning theories in the studies that have been conducted (Rickinson et al. 2004; see also Ballantyne & Packer, 2005, p. 291). Rickinson et al. (2004) stress the need for future research on the nature of learning in outdoor education and the learning process.

Outdoor recreation in spatial planning and management
The international knowledge base with regards to planning and management of protected areas and “single-decision maker” natural areas for recreation is vast and covers all aspects of planning and management. The situation with regards to research relevant for Swedish conditions of outdoor recreation and nature based tourism in municipal planning is less favorable (Emmelin et al. 2005). The Swedish system for governing land and resources is based on a balance between two paradigms: on the one hand a planning paradigm of land use change and development and on the other hand a conservation paradigm that provides instruments to safeguard environmental standards, national interests (riksintressen), access to valuable natural and cultural resources and nature conservation. A relevant all encompassing theoretical framework for planning and management is lacking. Partial and competing theories and schools characterize planning research (Allmendinger & Tewdwr Jones, 2002). The planning in protected or other single-decision maker areas is largely based on rationalist models of planning processes and institutions and functionalist models of spatial conflict resolution and management. Underlying assumptions are models of rational consumer choosing for optimized or maximized benefits, the dominant model being that of Ajzen & Fishbein (1980). Recent developments include incorporation of deliberative elements and inspiration from theoretical frameworks of local governance and self organization (Stankey et al, 1999). Tourism geography has important contributions to make in planning frameworks (Hall, 2000). The current system of spatial planning and conservation is undergoing change and will continue to do so during the program period. Examples of change areas are legislation, the regional system of governance, participation and local responsibility. The changing context for outdoor recreation in spatial planning needs to be understood for the program to produce relevant recommendations.

Outdoor recreation participation and non-participation
There is a challenge ahead to better understand both outdoor recreation participation and non-participation in a Swedish milieu. The increased recognition of social and economic values in Swedish nature conservation (Skr 2001/02:173) emphasizes the need for relevant and accurate visitor information. Quantitative and qualitative visitor information are needed in area management, tourism development and regional planning. Because outdoor recreation participation takes many different forms, at different places during different seasons of the year, studies of outdoor recreation in a changing society call for good data that capture the core elements of activity participation, use patterns, attitudes, constraints, social and economic values, impacts and so on (Emmelin et al., 2005). Understanding why people do or do not travel to different places to participate in certain activities is also fundamental to understanding the mechanism of nature based tourism demand (Ryan, 2003). Current data on outdoor recreation in Sweden are often collected ad hoc in different research projects using different methodologies, and official statistics include only a limited number of outdoor recreation parameters (Statistics Sweden, 2004). Outdoor recreation participation can be measured in two fundamental ways – by means of general population surveys or on-site visitor surveys. The program will empirically and methodologically benefit from international experience with general population surveys of outdoor recreation participation (e.g. Pouta et al., 2000; Sievänen, 2001; Gray et al., 2003; Cordell, 2004), as well as recent developments in on-site visitor monitoring (e.g. Hornback & Eagles (1999); Watson et al. (2000); Lindhagen & Ahlström (2005); Kajala (2006). However, recreation demand does not always equal participation. While much outdoor recreation research has been directed to individuals who visit certain places or participate in certain activities, less focus has been on non-visitors and non-participants. Research on non-participants is important because it will facilitate understanding of the complex relationship between demand and participation. It is not enough to look at participation and interpret this as reflecting what people want to do since it also reflects what they are able to do (Pigram & Jenkins, 2006).
Recreation constraints and conflicts

Two themes with long traditions in outdoor recreation research, and with special relationships to the Swedish context (i.e. “friluftsliv”, Right of public access; environmental planning and policy etc.) are recreation constraints and conflicts. Although explicit research on leisure constraints is a recent phenomenon, it’s roots stretch back over a very long period of time – in fact, implicit notions of constraints have been central to practice in the parks and recreation field since its inception and subsequently to the emergence of leisure studies as a focus of academic investigation (Jackson & Scott, 1999). In the early studies, some 40 years ago, questions about barriers began to be asked explicitly, while during the 1980s more generic concepts of leisure constraints were developed. Today, research on leisure constraints has emerged as separate discipline of outdoor recreation research with numerous articles and several books published in the field (e.g. Jackson & Burton, 1999; Jackson, 2005; also see project A). However, compared to North America, the European tradition of constraints research seems to be weaker (Ravenscroft et al., 2005).

Recreation conflicts has also been at recurrent theme in studies of outdoor recreation. It coincided with increases in outdoor recreation participation in the 1960s and in the 1970s a theoretical basis for explaining and describing conflict in recreation settings was pursued with various models of recreation conflicts emerging (Ewert et al., 1999). Perhaps the most common and basic definition of recreation conflict is “goal interference attributed to another’s behavior” (Jacob and Schreyer 1980; Manning 1999). The presence or behavior of other recreationists may lead to a discrepancy between these desired or expected goals and those that are actually achieved; this discrepancy may reduce experience quality and thereby lead to dissatisfaction. Alternative concepts of conflict have appeared in the literature, including Vaske et al.’s (2000) focus on normative beliefs about unacceptable behaviors. Many different types of recreation conflicts have been identified in the literature, e.g. outdoor recreation vs. other resource uses, outdoor recreationists vs. resource managers, interactivity conflicts and intra-activity conflicts, e.g. crowding (Schreyer, 1990). And today recreation conflicts is expanding as technology contributes to development of new equipment and activities and as contemporary lifestyles become increasingly diverse (Manning 1999). For both recreation constraints and conflicts there exist an array of well developed theories and models applied to outdoor recreation. Given the limited tradition of such research in the Nordic countries, a major contribution of the proposed program will be to apply and test existing models in such cultural and social contexts. In the next decade or so, as Swedish outdoor recreation research has matured, there is perhaps fertile ground enough to develop our own set of models.

The economics of outdoor recreation

The value of an outdoor recreation experience is more than simply the out of pocket expenditures paid to participate. This is only a lower bound on the value, and often has little to do with the total value individuals place on goods or services. Visitor expenditure is the primary economic force behind regional tourism impacts and represents an influx of new money to the economy. However, it is consumer surplus that measures the benefits to the primary users of the recreation site. The latter will be useful when, for example, the benefits of providing recreational services in a given area are to be balanced against associated costs (Loomis & Walsh, 1997). Applied research involving natural environments frequently has an ambition to describe or evaluate different courses of action. The limited output of commodities (i.e. goods and services) that can be generated by these environments is an inherent problem, and resources are needed to produce these commodities. Economics is one useful approach for such evaluations, because the scarcity of means requires a balancing of competing objectives or goals. Biodiversity preservation, timber production, recreational aspects and urban and rural development are all examples of possible competing objectives (Tietenberg, 1994; Klemperer, 1996). An allocation of resources is said to be efficient if the net benefits to society are maximized by that particular allocation, and no change from such an allocation can be made in order to benefit some people without hurting at least one other person (Tietenberg, 1994). The balancing often involves commodities that are only partially, or not at all, priced in markets. Many of these
commodities are so called public goods, which may be consumed by all individuals simultaneously in the same amount, and no individual’s consumption reduces the consumption of anyone else (Samuelson, 1954). Outdoor recreational environments are, to a certain extent, public goods. An absence of prices that reflect their value to society may lead to private decisions that do not generate an efficient allocation of resources (Hanley et al., 1997). An important piece of information for an economic approach is therefore to empirically investigate the benefit, or value, side of outdoor recreation, since it cannot fully be observed from transactions in the marketplace. Such valuations often require the use of non-market valuation methods (Garrod & Willis, 1999). Within certain limits, it is also possible to transfer benefit estimates from one site to another with similar resources and conditions (Rosenberger and Loomis, 2001). Such results can also be used to recognize and understand the importance of conserving natural resources in maintaining and enhancing outdoor recreation participation. For example, research show that the annual recreational values from Swedish forests are of the same magnitude as the value of timber production (Kriström and Skånberg, 2001). A comprehensive overview of studies on outdoor recreation values in Sweden can be found in Sundberg & Söderqvist (2004).

Outdoor recreation as nature based tourism and regional development

The idea of nature-based tourism as a tool for regional development has been recently reviewed by Sharpley & Telfer (2002). The desire to develop tourism in rural and peripheral areas is mainly related to increasing problems of marginality caused by economic restructuring due to a decline in primary activities, a deindustrialization owing to increasing international competition, and a decline in public sector employment. This results in a need for new employment opportunities (e.g., Butler et al., 1998; Hall & Boyd 2005; Lundmark 2005; Saarinen 2003). However, Hall & Boyd (2005) claim that peripheral destinations lack control over tourism. They identify, among other factors, lack of access to transportation, information, political power and capital as strong constraints on successful development. Moreover supply is often small-scale and lacks resources for competing in a major market. However, protected areas have been noted as resources for developing nature-based/eco-tourism (Eagles & McCool 2002; Fennell 2003). Visitor patterns have been analyzed with regards to geography, and activities and seem to strengthen this assumption (Heberlein et al. 2002; Fredman et al. 2005). Wall & Mathieson (2006) even state that it is common sense that tourism induces local and regional development. However, few studies actually provide evidence of the extent to which nature-based tourism contributes to development. Instead, there is a common opinion that it is difficult to convert rural and peripheral areas into successful tourist destinations (Butler et al. 1998; Saarinen 2003; Hall & Boyd 2005; Jansson & Müller 2007). Current policy instruments and practices are not adequate and need to be developed, while international experience and models must be adapted to the Swedish legal, administrative and cultural context (e.g. the right of public access) (Emmelin et al. 2005).

Practical relevance

At the policy level, the program will form a part of the efforts to implement the Swedish strategy for sustainable development, especially in the field of sustainable community planning. The program also will provide a conceptual framework for strategies and practice concerning the integration of outdoor recreation and nature conservation in landscape management. A point of departure is the recent change in Swedish nature conservation policy (Skr, 2001/02) and the national research strategy for outdoor recreation (Naturvårdsverket, 2005). The results from this program will be relevant for human interactions topics in the developing work on the Convention of Biodiversity, for the national work on ratifying and implementing the European landscape convention and its integrated social and ecological dimension, and also for the SEPA’s expressed interest in linking socio-economic development and biodiversity via UNESCO’s Man and the Biosphere (MaB) program. Conservation, planning and management of nature and natural resources is central to implementation of the Swedish Environmental Objectives (miljömål; Swedish Environmental Objectives Council, 2000), and there are numerous examples of how outdoor recreation and nature based tourism must be seen as a viable element in carrying these out (for an overview see Skr,
Tools for conflict resolution and planning are of particular importance to the “landscape goals” and the development of the Natura 2000 network where demands for stringent planning for combinations of conservation, recreation and sustainable forms of tourism will be strong. The local nature conservation project (LNCP) approach will directly benefit from the research in this program, especially from the common empirical arena. New knowledge also will contribute to future work at the SEPA and Regional County Administration Boards with respect to protected areas (i.e. the "visa-vårdar-värna" program and new national park plan). Social values are likely to be upgraded in the new forest policy under development in Sweden, and output from this program will support this process.

The program also will add to current knowledge on both nature based tourism and outdoor recreation statistics. Tourism statistics at a macro level are collected both by Statistics Sweden (SCB) and independent research firms, but very little information is available on nature based tourism as such, partly due to lack of definitions. Outdoor recreation statistics collected by Statistics Sweden in their national census are limited in scope, and data from this program will broaden knowledge on outdoor recreation participation as well as associated economic measures. Program outputs will also benefit ongoing work with national environmental accounting. Statistics Sweden, the National Institute of Economic Research (KI) and the SEPA are developing national environmental accounting systems in which outdoor recreation values are one important component (Statistics Sweden, 2002). Members of the program (i.e. Sandell, Emmelin, Fredman and Müller) are also heavily involved in negotiations regarding both a national graduate school of outdoor recreation research and of tourism research. Assuming these schools can be developed, several of the program’s researchers will be involved through course work and supervision; we believe that they could form a very important link to new generations of researchers in the field.

The planned communication activities will ensure that knowledge produced in the program, as well as other national and international research, is disseminated to municipalities, regional governments and other practitioners. In addition to government agencies, we will focus on the needs of NGOs (basically the members of FRISAM) and schools (including the residential colleges for adult education who organize many relevant courses in this field). Practical relevance is very much a two-way communication process between researchers and external stakeholders, in which researchers learn from practitioners just as much as practitioners learns from researchers. In this respect the program will benefit from the previous experience of program members with stakeholder interactions via organizations and programs such as ETOUR, MountainMistra, HagmarksMistra, Naturvårdsksedjan, AGORA, the MiSt program, and so on. We believe it is particularly important, based on recent works like Emmelin et.al. (2005), Schantz & Silvander (2004) and Naturvårdsverket (2005), to undertake a discussion in the program concerning long term institutional structures, research efforts and knowledge provision with regard to outdoor recreation and nature based tourism in Sweden. Part of our program task is to form a basis for decisions with regard to such structures and strategies. In Appendix G it can be seen how the common empirical arena (project A) and the five research projects (B-F) build new knowledge with respect to: (i) research areas prioritized by the SEPA in the program announcement and (ii) key aspects of contemporary outdoor recreation in the Swedish society.

Program structure, management and networks

Research activities will be coordinated by a group of six researchers (the project leaders), the program leader, the communication specialist and a representative from SEPA. The program and project leaders, and associated researchers, have been carefully selected to represent a well balanced mix of strong Swedish research environments in the fields of outdoor recreation and nature based tourism. The geographical spread of the researchers involved will necessitate a well structured and efficient program management and internal communication. In this respect, we will build on previous experience from organizations such as ETOUR and the Mountain Mistra Program (Fjällmistra). The program leader will have responsibility for the program coordination group,
program integration, stakeholder communication plan and reporting to SEPA. The group will meet on a regular basis (see section on scheduled program activities below). A significant strength of the program is a well balanced mix of academic disciplines and research approaches that will foster interdisciplinarity within the field of outdoor recreation. The program will include experts in the fields of geography, economics, tourism, physical planning, pedagogy, ecology, forestry, sociology and statistics in order to achieve the program goal. While the social science domain is emphasized, natural science considerations will be well integrated into the research tasks. There is a well balanced mix of quantitative (8) and qualitative (8) researchers in the program. An important aspect of program integration will be a continuous series of internal scientific seminars utilizing the substantial international network of the program on both project-specific and more general topics. The different research perspectives will further be integrated by means of common synthesizing publications, workshops, conferences, and so on (see section on scheduled program activities below).

The program will benefit greatly from being embedded within the researchers’ different academic environments as well as coordinated with their ongoing and proposed research projects, including: the proposed project "Outdoor Recreation, Nature and Health" in collaboration with SEPA during 2006-2007; "the Mountain Mistra Program"; "Encounters with nature and environmental moral learning: A multidisciplinary study of educational practices for sustainable development in the perspective of environmental education, ethics and history" (the Swedish Research Council); the HagmarksMistra project “seminatural pastures and the general public”; the Nordic Network for Landscape research; the EU-life project “Urban woods”; the European Union Cost Action E33 (Forest Recreation and Nature Tourism); the Nordic-Baltic visitor monitoring project (Nordic Council of Ministers); the project “The welfare economic recreation value of broad-leaved forests in southern Sweden” (within the research program “Broad-leaved forests in southern Sweden”); the SUFOR (Sustainable forestry in southern Sweden) program; the international projects “BALANCE”; projects on “Sami Tourism” and the “Kvarken Council”; the Interreg project “AGORA” dealing with sustainable tourism in the Baltic sea region; Landskap i endring; the SEPA-financed “MiSt-programme on tools for strategic environmental assessment”; CBM’s ”Mångfald i närmiljö”; “the Heureka Research Program”; the proposed MISTRA research centre on “Sustainable governance and management of linked ecological and social systems”; “the Nordic Network for Landscape research”; TOPCOAST (an interdisciplinary research programme on nature tourism in northern Norway); the network “Research on Education and Sustainable Development”; and the “Peak of Tech Adventure” project at Mid-Sweden University.

In addition, all researchers have extensive networks and collaborations in their respective fields, including: Colorado State University, Oregon State University, University of Wisconsin, the National Institute of Economic Research in Stockholm, the departments of Forest Economics, Animal Ecology, Landscape Planning and Conservation Biology at the Swedish University of Agricultural Sciences; National centre for the promotion of physical activity (NCFF, Örebro university); the Royal Veterinary and Agricultural University, Copenhagen, Denmark; Rutgers University, New Jersey; Stockholm University College of Physical Education and Sports (GIH); The Department of Education, Stockholm University; Swedish Biodiversity Centre (CBM) at Uppsala; CTM at Stockholm university; the Centre for Research in Education and the Environment, Bath University; the Danish University of Education; Norwegian Institute for Nature Research (NINA); Norwegian Institute for Urban and Regional Research (NIBR); IIIIE International Institute of Industrial Environmental Economics, Lund University; Central European University, Budapest; Impact assessment and landscape planning unit, Manchester University; The International Geographical Union (IGU); University of Otago, New Zealand; Lillehammer University College; University of Oulu, Finland; Telemark University College, Norway; Lakehead University, Canada; USDA Forest Service, USA; and Department of Public Health, Trondheim University, Norway.

*A Common Empirical Arena*
Program integration and data collection will be achieved by means of a common empirical arena, CEA (also see project A: Activity and place – a common empirical arena). The CEA will consist of data collection and analyses at three levels:

The first level – a *national survey of outdoor recreation* – will include quantitative measurements of activity participation, patterns, constraints, motivation, economics etc. in addition to demographic background variables.

The second level – an *over-sampling of municipalities* (or parts thereof) adjacent to case study areas – will include most of the variables from the national survey plus measures of relevance for the local case studies.

The third level – *local case study areas* – will include quantitative and qualitative analysis of selected cases of Swedish recreation landscapes with respect to outdoor recreation participation, planning, recreational history, conservation policy, etc.

Therefore the CEA will produce general empirical information at both a national and local level, but also more in-depth case studies, together forming a solid and shared empirical basis and an interdisciplinary common arena for the program. In this way the whole program will have access to relevant empirical material, and the researchers will "meet on the ground" carrying out various in-depth studies linked to the same recreation landscapes and using shared quantitative and qualitative information. In addition, we believe that the CEA will be usable for other linked projects. For example, it will be an important complement to SEPA’s work on outdoor recreation statistics and visitor monitoring methods, the AGORA project in the Blekinge archipelago making ties to national data, etc.

The case-study areas (5-10 in total) will be chosen with priority to the existence of ongoing local nature conservation projects and variation in:

- landscape types (including at least the south and north of Sweden, coastal areas, urban proximate nature, forest areas, and rural marginal areas);
- types of municipalities (urban-rural; big-small);
- types of regional linkages (e.g. involved and not involved in new regional parliaments); and
- types of management forms (e.g. preserved areas of different designations).

It should be noted that: (i) other case study areas may be included to achieve specific objectives; (ii) we will include logistical considerations for efficient use of resources; (iii) we will decide the final selection of CEA case study areas in dialogue with SEPA and our reference group; and (iv) we will try to coordinate the final selection with SEPA’s interest in a case study area for testing monitoring and landscape interpretation. Some preliminary illustrative examples of case-study areas are (location and type):
• Koster, Västra Götaland, Strömstad (coast; nature reserve, planned national park);
• Kinnekulle, Västra Götaland (cultural landscape; nature reserve, planned biosphere area);
• Municipality in the south of Sweden (outdoor recreation area with deciduous forest);
• The Stockholm region, e.g. Järvafältet, Tyresta, Bogesundslandet (urban proximate nature);
• Glaskogen, Värmland (boreal forest; socially oriented reserve, municipality foundation);
• Tärna församling, Västerbotten (rural marginal area; nature reserve, incl. Naturum Hemavan);
• Östergötland, Linköping area (urban proximate nature; mid-sized town).

The development of the CEA is a matter not only of empirical data collection, but also of quantitative and qualitative research methodologies (e.g. Singleton & Staits 1999), as well as their integration. In the mail survey, a multi-stage sampling with varying sample fraction will give us the opportunity to fulfil most of the empirical need in the program. (Hansen et al, 1953) Variation in specific subgroups can be estimated in more densely sampled areas and later be used for estimation in other areas and for the population as a whole. With this type of information we will also get a better foundation for further surveys and qualitative research since we will have a better knowledge concerning variation in different segments of the population.

By integrating qualitative and quantitative design in methods and analysis the weakness of a single approach will diminish or even be overcome in terms of enhanced theoretical insights, incrementality and enhanced validity. (e.g. Polit & Beck, 2004, Lund, 2005) Qualitative and quantitative research constitutes alternative ways of viewing and interpreting the complex and multidimensional world that we live in. Multi-method research, or triangulation (Denzin, 1989), are known to lead to insights in multiple aspects that might be unattainable without such integration. The benefits of linking quantitative and qualitative data are multidimensional; i) to enable confirmation and collaboration; ii) to elaborate and develop analysis providing richer detail; iii) to initiate new lines of thinking through attention to surprises or paradoxes (turning ideas around); iv) to improve sampling procedures and survey design; v) to overcome abstraction problems; vi) to help show generality to monolithic judgements etc. (Miles & Huberman, 1994). A key aspect of triangulation is the use of dissimilar measures which do not share the same methodological weaknesses – an approach we think significantly will contribute to an integrative analysis of contemporary outdoor recreation, not the least given the different backgrounds of the researchers involved in the program. Our concept of a multi-method research by means of the CEA will give us better opportunities for testing alternative interpretations of the data. Since one of our objectives is to develop new measuring tools for the field, this way of working will be a fruitful way to converge in a higher level of knowledge. Deliverables (i.e. workshops and articles) with special focus on integrative aspects of quantitative and qualitative research methodology are planned during the latter half of the program.

The actual development procedure of the CEA will be a truly integrative process involving both quantitative and qualitative oriented researchers from the projects. During the initial year of the program, more detailed research questions will be developed, questionnaires will be designed and case study areas selected. A special CEA group will be initiated with representatives from the projects, and there is the separate budget for this process. The quantitative surveys are planned to be in the field about one year after program start (fall 2007), and data will be available for analysis some 3-4 months later (around January 2008). One critical aspect for both validity and reliability of the CEA is sampling sizes. In terms of quantitative data, we have budgeted for a mailed survey to at least 4300 randomly selected Swedish citizens – including a sample of 1500 at the national level and 2800 at the community level (see project A). We consider this a minimum level to perform the analyses proposed, and our intention is to increase the sample sizes significantly by external funding.

Gender perspectives
Like most academic fields, outdoor recreation research has been a male domain. In this program, gender perspectives are considered in i) research perspectives, ii) research methods, and iii) personnel, and the program will take on a responsibility to promote young female scientists in the
field which will, in the future, counterbalance the current skewed gender distribution. The gender distribution among program and project leaders is 43% female and 57% male, and in terms of budget the distribution is 35% female and 65% male. The gender distribution among other researchers is 55% female and 45% male. The somewhat skewed distribution is a function of the current supply of senior researchers in the field of outdoor recreation, with male researchers being more experienced and thus having higher salaries. Five female researchers will be able to conduct post-doctoral research due to the program. We believe this is a most efficient way to counterbalance the skewed gender distribution over time, since the post-doctoral time period often is critical for fostering senior researchers. In addition, two female researchers will initially be coached as project leaders by senior male colleagues. Looking at the entire program, the distribution of research time is 55% female and 45% male and research money is 44% female and 56% male.

**Communication and outreach**

Given the new interest in outdoor recreation politically, administratively and practically, there will be a great demand for trustworthy and efficient information from the program. In order to reach communication objectives, it is important to combine the written, verbal and electronic information in a structured manner (Eriksson, 2005). People absorb information differently, and the depth of knowledge needed varies. Consequently, the program will work with communication at three levels:

1. **Information** – Will reach most of our target groups, and an important task is to build confidence and create interest in the program. Major tools will be a web site, media queries, electronic newsletters and printed information.

2. **Dialogue** – Will deepen the basic knowledge that has reached the target groups on the first level. This includes an annual conference on outdoor recreation research, seminars, workshops, personal communication and a web-based information center for knowledge about outdoor recreation research.

3. **Collaboration** – Will focus on the highest priority target groups that will be involved in the research results and their fields of application. This include reference group meetings, thematic focus groups and work in close collaboration with primarily stakeholders.

The principles for the communication will be: easy to grasp, easy to understand, adapted to needs, scientifically correct, open and active.

**Communication goals and messages**

The overall goal for program communication is to support SEPA in its work with outdoor recreation. Further goals are to build confidence in the program as a professional organization and to establish it as an obvious knowledge resource and collaborative partner in the field of outdoor recreation research.

The goals of the external communication are:

- It will be obvious for target groups to turn to the program to gather research-based knowledge about outdoor recreation.
- The program is perceived as a competent and useful base of knowledge.
- It shall be easy to share the knowledge built by the program.
- The communication shall support the program in building a good reputation.
- The prioritized target groups shall perceive the opportunity for a continuous dialogue with the research program.

The goals of the internal communication are:

- Program participants are well informed about outdoor recreation in general and the research results of the program in particular.
- Program participants are involved and committed to the program.
- Program participants feel confident in communicating research results.
The major communication messages of the program will be based on the research questions in each project (see project plans A-F, section on “goals”) and communicated continuously based on research activities and results. The messages will be repeated and deepened depending on the needs of the target groups. Initially, in the program establishment phase (first year), an important message is to raise awareness amongst relevant stakeholders concerning the existence of the program and the focus of the research. As the program proceeds, communication messages increasingly will be based upon research results.

**Communication channels and target groups**

The three levels of communication include **information** (graphic profile, web site, electronic newsletter, report series, information material, media campaigns, study books, channels of partners); **dialogue** (information center for outdoor recreation knowledge based on research, annual outdoor recreation research days); and **collaboration** (personal contacts, thematic focus groups, annual reference group meeting, collaborations with research colleagues). The timing of the communication activities are presented in the section describing scheduled program activities (Table 1a and 1b).

The **web site** and **electronic newsletter** will be the basic channels of the program, in which target groups will find easily accessible information about research results. An extensive distribution list for the newsletter will be developed to reach designated target organizations and individuals. **The information center for research-based knowledge about outdoor recreation** implies a web-based center that people can turn to with their issues and questions with respect to outdoor recreation research. The web site and the communication specialist will be the liaisons. **Thematic focus groups** will be administered on approximately four occasions during the program. Research results will be summarized and their relevance discussed with a small group of knowledgeable persons from the prioritized target groups. **The annual conference on outdoor recreation research** will be a forum on current research, both within and outside the program. The conferences will be organized in collaboration with authorities, outdoor recreation organizations and/or other research organizations.

Given the broad scope of outdoor recreation, the program has a wide-ranging set of target groups. In addition to the **SEPA** and the **Council for Outdoor Recreation**, the target groups of the program are found within other national authorities with responsibilities in areas of importance for outdoor recreation (the **National Board of Forestry**, the **Youth Council**, the **Institute for Public Health**, the **National Board of Housing, Building and Planning**); the regional **County Administrative Boards**; municipalities; outdoor recreation organizations (e.g. organized by FRISAM), tourism businesses and outfitters; politicians; and individuals. The target groups can be subdivided into three levels depending on the respective needs of communication. **Appendix H** features a detailed list of target groups under each level of communication.

The **internal communication** of the program includes program meetings with all personnel at least two times a year; regular letters from the program director; intranet for the storage of documents, templates etc; training on press issues and verbal presentation for all researchers on the program; planning of communication activities with each project leader at the point of starting up of the project including an update once every year; internal series of seminars; and coaching of individual researchers in connection with frequently asked questions from the media and the public.

**Evaluations**

SEPA will evaluate the communication mid-way through the program period and at the end. The program will complement these evaluations with a more channel-specific perspective at the mid-point. The evaluation will be both quantitative and qualitative, with target group members questioned about the program. We will evaluate the focus groups and the annual outdoor recreation research conference after each occasion.

**SWOT analysis**
Significant strengths of the program include the extensive researcher competence and networks from previous work in outdoor recreation and researcher experience from similar applied research programs that involve both interdisciplinarity and research communication. At the same time, interdisciplinary research can be time consuming, particularly when persons involved come from different geographic locations, which leads to a potential weakness of the program. The significant interest for knowledge on outdoor recreation and nature-based tourism presents several opportunities for the program, including the provision of relevant input to ongoing political and administrative processes, the connection to national graduate schools and the establishment of future research structures (networks, center etc.) in outdoor recreation and nature based tourism. A threat can be excessive expectations by stakeholders, often driven by poor understanding of the conditions for research, that may lead to disappointment. A detailed SWOT analysis of the program is presented in Appendix H.

**Resources**

The total communication budget is 3,400,000 SEK, or 10 percent of the total budget, spread over six years (see budget section). A professional communication specialist will work 50 percent of full of time, while the researchers will allocate approximately 10 percent of their working schedule to communication activities (not included in communication budget). The communication specialist will coordinate and facilitate communication, while responsibility for communication content lies with the researchers (including seminars, workshops and reports, focus groups, media dialogue, personal communications etc.). A budget of communication activities is presented in Appendix H.

**Reference group**

A reference group of 10-15 persons will be linked to the program, with the list presented here refined in dialogue with the SEPA. This group will be consulted on a regular basis, especially with regard to the program as a total entity, and there will be one special annual scheduled meeting. In the composition, priority will be given for gender aspects and practitioners. The following two main groups are identified: The first group is of agencies, including the SEPA, the National Board of Housing, Building and Planning; the Council for Outdoor Recreation; the National Board of Forestry; the Swedish Association of Local Authorities and Regions; plus persons from the municipality and county levels. The second group is of individuals with broad knowledge and networks (these have accepted): Dr. Katarina Saltzman, Göteborg university; Prof. Tom Heberlein, University of Wisconsin, US; Dr. Björn Tordsson, Telemark College, Norway; Director Anders Szczepanski, Center for Outdoor Environmental Education, Linköping University; Director Ulf Silvander, FRISAM (association for outdoor organizations); and Prof. Sverker Sörlin, Royal Institute of Technology. In addition, different focus groups will be formed according to specific fields of interest and involved for example, in workshops and as referees. These groups will include practitioners, researchers and members of outdoor, tourism and nature organizations.

**Scheduled program activities**

Program members will meet at least two times a year for program coordination and seminars; a two day meeting/seminar and a one day meeting/seminar in connection to the reference group meeting and the annual outdoor recreation research conference (total three days). These meetings will be an important tool for program management. Seminars will be arranged on specific topics of high relevance for the program, with the goal of integrating scientific work and synthesizing deliverables. In addition to these meetings, Table 1 below features the scheduled program activities and deliverables. Reports marked with an asterisk (*) will be submitted to per reviewed scientific journals or books. Deliverables in **bold text** are synthesis work from two or more projects in the program (for this purpose, we will especially emphasize the annual conference, the focus groups, workshops and text books). All reports will generate at least one popular science deliverable, such as a report, article, fact sheet, or seminar (not included in table). Electronic newsletters, web site information, media activities and personal contacts (not specified in table) will be provided on a continuous basis, depending on information demand and supply. We are estimating 3-5 newsletters
annually. Program outputs will be coordinated with mid-term and final evaluations by SEPA. The relevance of the activities scheduled below is summarized in the “practical relevance” section of this application.

Table 1a: Scheduled program activities and deliverables (responsible project in parenthesis) 2006 - 2009. An asterisk (*) denotes reviewed scientific articles and bold text denotes synthesis work.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Communication and outreach</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/07</td>
<td>- Web site</td>
<td>Report* visitor monitoring evaluation (A)</td>
</tr>
<tr>
<td></td>
<td>- Information material and graphic profile</td>
<td>Report* hunters and hunting (C)</td>
</tr>
<tr>
<td></td>
<td>- Electronic newsletters</td>
<td>Report* outdoor recreation in Swedish spatial planning (D)</td>
</tr>
<tr>
<td></td>
<td>- Reference group meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Annual outdoor recreation research conference</td>
<td>Database outdoor recreation participation (A,B,C,D,E,F)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report* outdoor recreation participation and non-participation (A)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report* public access (B)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report* outdoor recreation and health (C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data on benefits from CEA (A,C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report* framework for integration in planning (D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report* communicating nature (E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report* conceptual links recreation biodiversity (E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Workshop recreation in biodiversity discourse (B,E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report* demand supply nature tourism (F)</td>
</tr>
</tbody>
</table>

| 2007/08| - Web site                 | Workshop outdoor recreation demand (A)                                      |
|        | - Electronic newsletters   | Report* outdoor recreation statistics assessment (A)                        |
|        | - Reference group meeting  | Report* landscapes for outdoor recreation (A)                               |
|        | - Mid-term outdoor recreation research conference | Report* conservation and outdoor recreation (B, E)                          |
|        | - Mid-term conference proceedings | Report* eco-strategies and outdoor recreation (B)                           |
|        | - Thematic focus groups    | Report* groups in outdoor recreation (B)                                    |
|        | - Mid-term report to the SEPA | Report* ethnicity, socioeconomic groups (B)                                |
|        |                            | Licentiate thesis outdoor recreation planning (D)                           |
|        |                            | Report* good practice cases on local planning (D)                           |
|        |                            | Report* relation regional administration to local planning (D)              |
|        |                            | Workshop communicating nature (E)                                           |
|        |                            | Report case Kinnekulle (E)                                                  |
|        |                            | Seminar integrating recreation and nature conservation (D, E)               |
|        |                            | Report Stenshuvud visitor center (E)                                        |
|        |                            | Report* communicating nature (E)                                            |
|        |                            | Report sustainable management suburban forests (E)                          |
|        |                            | Report* nexus close-to-home recreation and tourism (A,F)                    |
|        |                            | Report* expenditure patterns (F)                                            |

Table 1b: Scheduled program activities and deliverables (responsible project in parenthesis) 2009 - 2012. An asterisk (*) denotes reviewed scientific articles and bold text denotes synthesis work.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Communication and outreach</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009/10</td>
<td>- Web site</td>
<td>Report* outdoor recreation constraints (A,B)</td>
</tr>
<tr>
<td></td>
<td>- Electronic newsletters</td>
<td>Report* landscape perspectives and LNCP (B)</td>
</tr>
<tr>
<td></td>
<td>- Reference group meeting</td>
<td>Report* Place, ecostrategies, planning and LNCP (B)</td>
</tr>
<tr>
<td></td>
<td>- Annual outdoor recreation research conference</td>
<td>Report* trends and conflicts urban proximate nature (C)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report good practice examples (D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report case Kosterhavet (E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doctoral thesis urban proximate nature as generative link (E)</td>
</tr>
</tbody>
</table>

| 2010/11| - Web site                 | Report evaluation and recommendations visitor monitoring (A)               |
|        | - Electronic newsletters   | Report gender and youth (B)                                                 |
|        | - Reference group meeting  | Report* outdoor recreation in urban proximate nature (A,C)                  |
|        | - Annual outdoor recreation research conference | Report knowledge support for planning (D)                                   |
|        |                            | Report* integration nature conservation and outdoor recreation (E)          |
|        |                            | Report* integrating quantitative and qualitative research (A, B, C, D, E, F) |
|        |                            | Tentative: MMV3* - Organize an international conference or session           |
|        |                            | on quantitative and qualitative research in outdoor recreation (A, B, C, D, E, F) |
Program start is estimated to be October 1st 2006. This implies that 06/07 represents the period 2006-10-01 – 2007-09-30, 07/08 represents the period 2007-10-01 – 2008-09-30 etc.

Budget
This application is based on a total budget of 5.7 million SEK annually during a six year period (1 SEK ≈ 0.11€). Looking at the distribution of funding within the program (Table 2): 70 % is allocated to the six research projects including the common empirical arena (CEA) and the national postal survey; 13 % is allocated to program administration (program leaderships 50% of full time, administrator 20% of full time, contingency fund); 10 % is allocated to communication (see detailed budget in appendix H); 7 % is allocated to staff and reference group meetings; The budget is based on a 35% university overhead cost. Total co-funding to the program is estimated at 12.8 million SEK. More detailed budgets are available upon request.

Table 2: Budget

<table>
<thead>
<tr>
<th></th>
<th>06/07</th>
<th>07/08</th>
<th>08/09</th>
<th>09/10</th>
<th>10/11</th>
<th>11/12</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>635</td>
<td>397</td>
<td>649</td>
<td>437</td>
<td>689</td>
<td>1 124</td>
<td>3 931</td>
</tr>
<tr>
<td>Expenses</td>
<td>154</td>
<td>124</td>
<td>98</td>
<td>133</td>
<td>125</td>
<td>139</td>
<td>772</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>310</td>
<td>319</td>
<td>328</td>
<td>338</td>
<td>348</td>
<td>359</td>
<td>2 002</td>
</tr>
<tr>
<td>Expenses</td>
<td>345</td>
<td>158</td>
<td>264</td>
<td>182</td>
<td>182</td>
<td>267</td>
<td>1 399</td>
</tr>
<tr>
<td><strong>Meetings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td>455</td>
<td>470</td>
<td>425</td>
<td>410</td>
<td>366</td>
<td>366</td>
<td>2 491</td>
</tr>
<tr>
<td><strong>A &quot;Activity and place&quot; (CEA)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>881</td>
<td>717</td>
<td>551</td>
<td>480</td>
<td>685</td>
<td>812</td>
<td>4 126</td>
</tr>
<tr>
<td>Expenses</td>
<td>394</td>
<td>381</td>
<td>24</td>
<td>20</td>
<td>28</td>
<td>32</td>
<td>880</td>
</tr>
<tr>
<td><strong>B &quot;Patterns&quot;</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>613</td>
<td>632</td>
<td>838</td>
<td>1 062</td>
<td>796</td>
<td>522</td>
<td>4 463</td>
</tr>
<tr>
<td>Expenses</td>
<td>24</td>
<td>24</td>
<td>32</td>
<td>41</td>
<td>28</td>
<td>16</td>
<td>166</td>
</tr>
<tr>
<td><strong>C &quot;Urban proximate nature&quot;</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>307</td>
<td>272</td>
<td>371</td>
<td>668</td>
<td>590</td>
<td>607</td>
<td>2 815</td>
</tr>
<tr>
<td>Expenses</td>
<td>14</td>
<td>12</td>
<td>18</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>119</td>
</tr>
<tr>
<td><strong>D &quot;Spatial planning&quot;</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>258</td>
<td>464</td>
<td>548</td>
<td>493</td>
<td>508</td>
<td>299</td>
<td>2 569</td>
</tr>
<tr>
<td>Expenses</td>
<td>18</td>
<td>34</td>
<td>36</td>
<td>34</td>
<td>34</td>
<td>18</td>
<td>176</td>
</tr>
<tr>
<td><strong>E &quot;Nature conservation&quot;</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>603</td>
<td>869</td>
<td>680</td>
<td>648</td>
<td>558</td>
<td>476</td>
<td>3 834</td>
</tr>
<tr>
<td>Expenses</td>
<td>38</td>
<td>57</td>
<td>45</td>
<td>41</td>
<td>32</td>
<td>28</td>
<td>241</td>
</tr>
<tr>
<td><strong>F &quot;Nature based tourism&quot;</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>619</td>
<td>734</td>
<td>757</td>
<td>654</td>
<td>674</td>
<td>584</td>
<td>4 022</td>
</tr>
<tr>
<td>Expenses</td>
<td>32</td>
<td>36</td>
<td>36</td>
<td>30</td>
<td>30</td>
<td>26</td>
<td>192</td>
</tr>
<tr>
<td><strong>SUM</strong></td>
<td>5 700</td>
<td>5 700</td>
<td>5 700</td>
<td>5 700</td>
<td>5 700</td>
<td>5 700</td>
<td>34 200</td>
</tr>
<tr>
<td>Estimated co-funding</td>
<td>3 014</td>
<td>3 978</td>
<td>3 177</td>
<td>1 415</td>
<td>627</td>
<td>631</td>
<td>12 842</td>
</tr>
</tbody>
</table>

Co-funding
With regard to co-funding, our strategy is to welcome not overly large complementary projects that deepen and widen the core of research outlined in this application. We will avoid involving the program with large external bodies to minimize the risk of research requested by the SEPA being surpassed by other more established research fields. An important aim of this program is to start
building a comprehensive national scientific network of outdoor recreation research based on Nordic traditions but with relevant international influences. Consequently, present and future co-funding interests are meticulously selected to strengthen the program applied for here – but without losing track of research excellence. An estimate of the economic contribution by the following co-funding projects is available in the budget section:

- Mistra through the research program HagmarksMistra, 2005-2007, funding the two first years of a Ph.D. project on urban proximate nature as generative link (project E, action 4).
- Department of Human and Economic Geography, Göteborg University, co-funding one year in the two Ph.D. projects carried out at the department (project E, action 4 and 5).
- A pilot study on economic impacts associated with outdoor recreation participation financed by FRISAM (depending on approval) will be done during 2006-2007 (project A and F, action 2).
- The National Heritage Board, supporting the research program "Entrepreneurs and Heritage" at CERUM, Umeå University, where Müller is part of the research team (project F).
- University of Karlstad through the Department of Human Geography and Tourism is planning to fund a Ph.D. student in the discipline of Human Geography with a focus probably involving tourism, landscape, planning and outdoor recreation (project B, action 3).
- Mid-Sweden University, Department of Social Sciences and Etour are financing the last two years of a Ph.D. student studying outdoor recreation in the Lapland mountains, including conflicts, wilderness and protected areas (project A and F).
- Blekinge Institute of Technology, Department of Spatial Planning. Complementing salary for project leader and Ph.D. student working on physical planning and outdoor recreation (project D).
- The AGORA network for sustainable tourism development in the Baltic Sea region. Financing two years of Ph.D. student (project D) working on project on planning related to the program.

References


Lindhagen, A. & Ahlström, I. 2005. Visitor studies in nature areas, Swedish National Board of Forestry, report 4


Project leader: Dr Ulla Romild, Mid-Sweden University, Department of Information Technology and Media, 831 25 Östersund, Tel 063-165399, E-mail: ulla.romild@miun.se
Staff: Dr. Peter Fredman, ETOUR, Mid-Sweden University; Dr. Gabriel Bladh, Dept. of Geography and Tourism, Karlstad University; Karlstad University; Dr. Anders Lindhagen, Dept. of Forest Products and Markets, Swedish University of Agricultural Sciences.

Summary
This project will provide a common empirical arena for the entire program by collecting quantitative outdoor recreation data at a national, regional and local level in connection with 5-10 case study areas for which landscape data will be investigated. Research goals are to: 1) analyze outdoor recreation participation, non-participation and constraints, 2) improve outdoor recreation statistics and visitor monitoring methodologies, and 3) describe and analyze cases of Swedish recreation landscapes. Data and results from this project will provide inputs to other program activities.

Project goals and contribution to program goals
This project will develop a common empirical arena (CEA) for the integrative approach underlying this proposal, and it will form a thorough scientific base of knowledge suitable for further intensified and deepened studies within the program. The primary goal of the project is to provide information on outdoor recreation participation, non-participation and constraints, as well as outdoor recreation statistics, visitor monitoring methodology and basic information about selected cases of Swedish recreation landscapes. Data and results from this project will provide significant inputs to other program activities. Thus, the project will form a solid and shared empirical basis to foster multidisciplinary within the program while addressing the fundamental issues of recreation demand and supply.

Practical relevance
This project will improve future management of Sweden’s nature for a broad spectrum of outdoor recreation purposes. It will quantify relevant outdoor recreation parameters in a format useful for both on site management and regional development, it will advance methods for collecting visitor data, and be an important complement to the SEPA’s work on outdoor recreation statistics and monitoring. Through the identification of constraints, management guidelines that diminish or remove some of these could be developed. Through an analysis of the local case studies and local nature conservation projects we will get a good understanding of present state-of-the-art of ongoing outdoor recreation project developments in different parts of Sweden. It will make it possible to identify cases of best
practice, current trends at the municipality level, and gives site specific opportunities to link national policies with practical management.

**Background**

The reasons for visiting natural areas are often just as diverse as the visitors themselves (e.g. Manning, 1999:168), and a wide spectrum of recreation landscapes with very different characteristics could be identified in Sweden. It has long been recognized that visitors’ consumption of recreation goods is the opportunity to engage in a preferred activity at a certain place that provides the settings required to gain a desired experience (e.g. Driver & Brown, 1978; Manning, 1999). To succeed in adequately manage natural areas with respect to outdoor recreation values (and associated costs) it is crucial to collect relevant and accurate information on both outdoor recreation demand and supply (Loomis & Walsh, 1997; Manning, 1999; Pigram & Jenkins, 2006). Recreation demand can be interpreted as an individual’s preferences or desires whether or not he or she has the resources necessary for their satisfaction. So defined, it reflects behavioral tendencies and assumes no constraints on recreation opportunities or access to them. In the real world, this is seldom the case – if outdoor recreation opportunities are less than ideal, people will participate less than their theoretical level of demand would indicate (Pigram & Jenkins, 2006). Actual participation in outdoor recreation activities is thus a function of both demand and recreation opportunities, and research on non-participants is important because it will help to understand the true nature of outdoor recreation demand.

Monitoring outdoor recreation participation typically includes both counting the number of people and surveying their characteristics, attitudes, preferences and behavior (e.g. Watson et al, 2000; Hornback & Eagles, 1999). While visitor counting usually is done on site, more in depth quantitative and qualitative participation data can be collected both on site or as general population surveys. In Sweden, different on-site approaches have been used in several studies in various natural-geographical regions, but with little attempt to establish a standardized methodology (Emmelin et al, 2005). In order to produce useful inputs to management decisions, outdoor recreation data must capture the relevant parameters and be collected by means of high quality (preferably standardized) methods. One current effort in this direction is a project that aims at developing standardized visitor monitoring methods for land managers in the Nordic and Baltic countries (Kajala, 2006). At a national level, outdoor recreation participation has been surveyed four times by Statistics Sweden, starting in 1976, but the identified activities are few and based on ‘traditions’ from previous surveys, not established standards (Statistics Sweden, 2004). Nor has the issue of non-participation been adequately addressed in relation to national and local outdoor recreation data.

A constraint to leisure is something that inhibits one’s ability to participate in leisure activities, to spend more time doing so, to take advantage of leisure services, or to achieve a desired level of satisfaction. Three categories of constraints have been identified in the leisure literature – intrapersonal, interpersonal and structural (Crawford & Godbey, 1987) – and participation is seen as a process of overcoming them (Jackson et al., 1993). Intrapersonal constraints are defined as individual psychological states such as stress, anxiety, attitudes and perceived self-skill that might inhibit one from participating in leisure activities. Interpersonal constraints result from social interaction with friends, family and others. Structural constraints include economic resources, availability of time and accessibility. The constraint model has been applied in studies of different outdoor recreation settings and activities such as angling (Aas, 1995), hiking (Bialeschki & Henderson, 1988), downhill skiing (e.g. Gilbert & Hudson, 2000) and mountain recreation (Fredman & Heberlein, 2005). Understanding why people do or do not travel to different places to participate in certain activities is also fundamental to understand the mechanism of nature based tourism demand (Ryan, 2003).
To address the complex relationship between recreation demand and visitation, to provide recreational experiences, and to integrate recreation management with ecosystem management and resource protection, more detailed understanding of the behavior of outdoor recreationists on the landscape level is necessary (Garber-Yonts, 2005). Outdoor recreation landscapes include natural attributes of the environment as well as facilities and attractions that provide an opportunity to satisfy recreational desires (Pigram & Jenkins 2006). A multidimensional environment description has been a basic point of departure for different types of recreation resource management models and frameworks (e.g. ROS, LAC, VIM, VERP, cf. Pigram & Jenkins, ch. 6). Such models, developed in North America, have been applied in a very modest way in Sweden outside the mountain region (Emmelin et al, 2005). Systematic multidimensional descriptions of landscape recreation resources would be a first step to introduce this kind of thinking in a Swedish context, ultimately aiming at a better match of the supply and demand of outdoor recreation opportunities.

Research plan: Theoretical framework(s) and methods
Quantitative data will be provided by means of a mailed survey to at least 4300 randomly selected Swedish citizens (additional funding can increase sample size). We are planning for a sample of 1500 at the national level, and to provide quantitative data at the regional and local level at least eight municipalities will be over-sampled (at least 500 individuals in 4 municipalities and 200 individuals in 4 municipalities in addition to the national sample). The total population in Sweden is about 9 million and there are some 280 municipalities (of variable size). The municipalities will be selected to cover a majority of the local case study areas (see program plan). Researchers involved in the project all have extensive experience with both general population and on-site visitor studies, and the project will be directed by a statistician. Research tasks will develop new knowledge in the field of outdoor recreation demand and participation studies (e.g. Pouta et al, 2000; Sievänen, 2001; Gray et al, 2003; Cordell, 2004), outdoor recreation constraints (e.g. Jacksson & Scott, 1999), visitor monitoring and survey methodology (e.g. Yuan et al, 1995; Hornback & Eagles, 1999; Watson et al., 2000; Statistics Sweden, 2004; Fredman et al., 2005; Lindhagen & Ahlström, 2005; Kajala, 2006), and landscapes as recreational resources (e.g. Driver et al, 1987; and concepts and references given with regard to the conceptual frameworks of eco-strategies and planning theory in the main application and project B).

Action 1 – Outdoor recreation demand
Quantifying outdoor recreation demand in Sweden, including participation and non-participation at a national and regional level for a broad spectrum of activities, geographical patterns, and changes over time (when possible). Special attention will be paid to urban proximate nature and protected areas. This action is at the core of the common empirical arena (CEA) and will serve as a quantitative input to several other projects in the program.

Deliverables:
- Database on outdoor recreation participation, 2008 (Romild)
- Report on outdoor recreation participation and non-participation, 2008 (Romild, Fredman)
- Workshop on outdoor recreation demand, 2009 (Fredman, Romild)

Action 2 – Outdoor recreation constraints
Identify and quantify constraints to outdoor recreation participation (intra personal, inter personal and structural) at a national and regional/local level with special focus on demographic differences (gender, age and ethnicity) and different outdoor recreation activities. Comparative analyses with similar studies in other countries and recommendations for policies and management to reduce constraints will be identified. This action will be done in collaboration with project B, action 2.

Deliverables:
- Report, 2009 (Fredman, Romild, Karlsson)
Action 3 – Outdoor recreation monitoring
This action will support and improve current “state of the art” outdoor recreation statistics and visitor monitoring in Sweden. Research activities will be connected to ongoing and recently accomplished projects in this respect. Firstly, visitor data from Fulufjället National Park will be analyzed (in cooperation with international expertise) with respect to non-response bias in data collection procedures, aiming at improving on-site visitor monitoring methodologies. Secondly, national statistics on outdoor recreation (collected by Statistics Sweden) will be cross-tabulated with data from the national survey in the program, aiming at a broader analysis and suggestions for new variables to be included in the national census. Thirdly, during the second period of the program, national and local visitor monitoring practices (currently under development) will be evaluated, aiming at recommendations for improved cost-efficiency and use of new technology with emphasis on guidelines for implementations at a local level.

Deliverables:
- Report on non-response bias in on site data collection, 2007 (Fredman, Yuan, Emmelin)
- Report and evaluation on outdoor recreation statistics, 2009 (Romild, Fredman)
- Evaluation and recommendations for improved visitor monitoring, 2011 (Lindhagen, Fredman)
- Workshop on visitor monitoring, 2011 (Lindhagen, Fredman)
- Report on integrating quantitative and qualitative research in outdoor recreation, 2010 (Romild et al.)

Action 4 – Outdoor recreation landscapes
As a part of the joint interest in a selection of LNCPs, the local and regional context of these cases will be studied with regard to general description of the case area, landscape-types and the physical landscape (e.g. with the help of previous investigations of natural and/or cultural “values”); the recreation history of the sites and present use for recreation; current management and type of administration; the related planning process including the role of existing and planned reserves; infrastructure for recreation, including nature information; recreation opportunities and activities among users; present local nature conservation projects. The method for this broad overview serving as a basis for the entire program will include review of documents (including policy and plan material and maps of various types), interviews with key persons and on site investigations.

Deliverables:
- Report on landscapes for outdoor recreation: case studies, 2008 (Bladh)
B: Different patterns of outdoor recreation and nature based tourism – motives, activities and outcomes

Project leader: Prof. Klas Sandell, Dept. of Geography and Tourism, Karlstad University, SE-651 88 Karlstad, Sweden. Tel: +46-(0)54-700 10 00, E-mail: klas.sandell@kau.se
Staff (all Karlstad University): Ass. Prof. Sven-Erik Karlsson, Dept. of Sociology; Dr. Anna-Lena Haraldsson, Dept. of Sociology; Dr. Gabriel Bladh, Dept. of Geography and Tourism.

Summary
This project will describe different patterns of outdoor recreation in Sweden today. Motives, activities and non-activities among different groups will be studied with the help of quantitative and qualitative methods and with special focus upon socio-economic characteristics, gender, ethnicity and youth. The analysis will be placed in a context of landscape perspectives and local planning, as well as of trends that are of special importance for future outdoor recreation policy and management.

Project goals and contribution to program goals
This project will approach the linkages between the policy level and the landscape level with special emphasis on the various social groups, motives, access situations and activities involved (or not involved). The goal is to depict the "arena" of crossing groups, motives and outcomes with regard to different current outdoor recreation patterns in Sweden with special interest for: central-local and urban-rural tensions; socio-economic groups, gender, immigrants, youth, non-users and trends of special importance. With the help of the common empirical arena (CEA) this project will form a broad basis of who are the people currently engaging in or not engaging in outdoor recreation and nature based tourism in Sweden, including a broad focus on motives and activities, but also with more in depth studies according to the actions below. An aspect of the national mail survey (probably with complementary follow up interviews) that is of special interest for this project is the operationalization of the ecostrategical framework. This means that we will assess to what extent the different ecostrategies (so far mainly used for analysis of documents; see e.g. Sandell 2005) are to be found among individuals with regard to attitudes, landscape preferences and activities, and to what extent these ecostrategies are consistent and related to different background variables. This project will link and compare perspectives of landscape and outdoor recreation at different levels and among different groups in society, and therefore will integrate different perspectives scrutinized in the rest of the program. The primary research question is: what do the current important patterns of outdoor recreation and nature based tourism in Sweden look like in terms of actors, activities, motives, access and landscape preferences? Importance will be understood mainly in terms of: (i) size; (ii) planning and management relevance; and (iii) potential future challenges for planning and management.

Practical relevance
This project will present new knowledge with regard to the current "arena" of crossing groups, motives and outcomes that, together with international influences, must be seen as the basic frame of reference for future policy making and management in the field of outdoor recreation and nature based tourism in Sweden. Deliverables will include various scientific articles and reports, as well as a text book in Swedish
to be used in higher education and among authorities, with a focus on "Different Patterns of Outdoor Recreation (Friluftsliv) in Sweden of Today." It also will involve authors and synthesis of results from other projects in the program. This work will form a broad understanding of who are the current (and hopefully a glimpse of the future) groups engaging in outdoor recreation and nature based tourism, as well as their motives and landscape preferences.

Background
The point of departure for our interest in the relationship between various social groups and outdoor recreation is not variation in socio-demographic groups per se (according to e.g. ethnicity, age, sex or the like). Instead, our point of departure is that all people have relationships with nature, if not in any other form than as basic human ecological linkages like food, waste etc. The extent to which these relationships are linked to an interest in being in landscapes characterized by nature and to which they are seen (by participants or others) as "outdoor recreation" is linked to cultural aspects of the society and the group(s) that the individual is a part of. Even though the current situation and the future prospects will be a focus of this project and the entire program, different traditions in the history of outdoor recreation in Sweden, with international influence, is of course of utmost importance when viewing the current situation and discussing trends for the future (cf. Sandell & Sörlin, 2000; Aronsson, 2004; Andkjær, 2005). Of special interest will be cultural aspects and preferences with regard to key-concepts such as: outdoor recreation (esp. the concept of "friluftsliv"), the right of public access, recreation landscapes (esp. the "nature-culture" tensions), places and identity (cf. e.g. Faarlund, 1973; Whatmore, 2002; Tordsson, 2003; Cresswell, 2004). The survey material from the Mountain Mistra program also will be available and will be further scrutinized with regard to co-variations between outdoor recreation activities, demographic characteristics, living conditions, and attitudes to conservation, outdoor recreation and resource management (cf. Fredman & Sandell, 2005). Also included in this project is an expected research overview hopefully carried out in collaboration with the SEPA concerning outdoor recreation and health during 2006-2007. For further discussions and a number of references with regard to barriers and socio-economic aspects of outdoor recreation see our presentation in a special chapter of Emmelin et al (2005) and in Manning (1999) and for a recent example of Swedish research with regard to subcultures in outdoor recreation see Arnegård (2006).

Research plan: Theoretical framework(s) and methods
The theoretical frameworks used for the more general analysis of outdoor recreation patterns in this project will be the "ecostrategies" mentioned in the main application together with the landscape perspectives introduced in action 3 below. With regard to the more in depth analysis of the different groups identified as using (or not using) and having interest (or non-interest) in outdoor recreation (action 2) its sociological theoretical framework is somewhat further outlined below in this extended program version (and its references are listed in the end of this appendix). With regard to methods, this project will rely significantly on the CEA’s national and local quantitative survey material from project A and will deepen this with the help of document studies and semi-structured interviews. This will be investigated further in a framework of: (i) the CEA’s case study locations in terms of a landscape and place perspective (using the basic landscape information from project A as a point of departure); (ii) the national program of local nature conservation projects (LNCP, using the overview from project A as a point of departure); (iii) the cultural history of outdoor recreation and nature based tourism; and (iii) secondary sources like literature, other case studies and material from Statistics Sweden and the MountainMistra program.

The sociological theoretical framework will serve as a base for the empirical studies and the theoretical analyses when it comes to understand and explain different social groups’ outdoor recreational life. This is mainly linked to the work in Action 2 below to be carried out by Karlsson and Haraldsson. It means that as a part of the overall research question for project B concerning what do the current important patterns look like, here we will focus upon why people are (or not are) involved in what type of outdoor recreation
and nature based tourism activities. This theoretical framework is based on a created "personality model" which includes three levels of personalities: (i) the subconscious, (ii) the preconscious and (iii) the conscious. The model also uses a stratified perspective on society, which includes different levels, from the individual to the global international (Brante, 2001; Giddens, 1984; Layder, 1997).

With regard to the personality model, the subconscious level of personality (i, above) is made up of a number of universal needs, e.g. food, beverages and sex, as well as needs like "flow" (Csikszentmihalyi, 1992), self-fulfilment/solidarity (Laing, 1970) and control over ones situation (Layder, 2004). These are all needs and motivations that may be satisfied through different outdoor recreational activities – which of them and in what way is to a large extent influenced by the character of the next level. This, the pre-conscious level (ii, above) includes embodied habits and tastes that have been socialised in to a person, mostly during the years as a child and teenager. These are usually called people’s habitus (Bourdieu, 1999), life form (Wittgenstein, 1978) or practical level of consciousness (Giddens, 1984). We will call these social groups "life forms" and they are based on different social classes, genus, generations and ethnic groups. Several studies of outdoor recreational habits have found connections to different life forms (for an overview over studies in this field see chapt. 2 in Manning, 1999). By analysing the characteristics of the various life forms, these connections can be explained, for example differences between ethnic groups (and this term of course includes "Swedes" as well; Karlsson, 2006). The third level of personality, the conscious, is the level where people make conscious choices, e.g. choosing their life style. There are, within outdoor recreation, a whole range of types of life styles, e.g. downhill skiing and surfing (Karlsson, 2001 and 2006). With these life styles comes a certain type of clothes, music, equipment and so on, that is purchased in various ways. Consumption is thus the base for producing different types of life styles (Bjurström, 1997). This takes us to the second fundamental point for the theoretical framework outlined here – a stratified perspective on society. People exist in a society, which character decides the way needs are satisfied, their embodied habits and tastes, and their choice of life style. The society of today in focus of studies of current outdoor recreational life in Sweden is a consumption society connected to a wider global society, influencing economical, political and cultural structures and content on a local level (Urry, 2003). Examples within outdoor recreational life are: they way the expression of life styles connected to outdoor recreation through clothes and other equipment is influenced by relatively cheap goods from low income countries and the influence of different types of "stories" told by the global mass media industry on choice of activities and motives.

**Action 1 – Intentions, motives and access** (coordinated by Sandell)

The overall pattern of linkages and tensions between: central intentions and local motives, different groups, and activities and motives will be evaluated. A detail of special importance is the role of the new national conservation policy that to a large extent puts forward the social and local aspects (Skr 2001/02), and the following main levels of society will be scrutinized: (i) the national policy level in terms of governmental intentions and the work carried out by central authorities that will be studied with the help of various policy document including the rules for LNCP and the work by the Council for Outdoor Recreation; (ii) the regional level in terms of the handling in the counties and the related planning, regulations, policies etc. concerning the case study areas of the CEA; and (iii) the local level including individuals and groups related to these areas and as seen through the local over-sampling of the national mail survey and including the possibility of qualitative follow up interviews according to themes and groups of special interest (cf. Sandell, 1996f). Issues or particular interest are access, especially the right of public access (cf. e.g. Sandell & Sörlin 2000:84-99; Kaltenborn et.al. 2001), and the interest of operationalizing the ecostrategical framework of landscape perspectives and recreation strategies through the CEA mail survey. **Deliverables:**

- A text book in Swedish to be used e.g. in higher education about "Different Patterns of Outdoor Recreation (Friluftsliv) in Sweden of Today", 2012; Sandell (ed.) plus a number of colleagues in the program.
- Article/report about a discourse analysis of policy documents from international to local level with regard to outdoor recreation in relation to conservation, 2009; Stenseke & Sandell.
- Article about public access and conservation in an international perspective, 2008; Sandell in cooperation with Dr. Annika Dahlberg (Stockholm University) and Dr. Rick Rohde (University of Edinburgh).
- Article/report about the ecostrategical conceptual framework, 2009; Sandell
- Workshop investigating and discussing the role and management of the right of public access in the light of the new rules (mainly the option of compulsory reports in advance from organized users), 2012; Sandell & Emmelin

**Action 2 – Personalities, ethnicity and gender** (coordinated by Karlsson and Haraldsson)

In this action we will evaluate interest/non-interest and use/non-use with regard to outdoor recreation among different groups with the help of literature, the CEA survey and in-depth interviews (see supplement below). Out of this we will look for aggregates on two levels. First, the broad picture, related to project A, in terms of different main patterns of outdoor recreation (according to e.g.: generations, gender, classes, ethnicity and urban or rural identity). Second, special sections of this broad pattern will be further scrutinized with the help of different methods due to e.g.: non-interest among a group prioritized by the government or other policy level; non-activity in a group saying they are interested; activity of a type and/or at a location/landscape so far not identified by planning authorities; groups with special need for contributions by rangers or information. In other words, we will scrutinize groups that could be of special interest from a planning and policy point of view. Just to give two hypothetical examples; perhaps the group of "immigrants" are so diverse that such a category is too simplistic and must be segmented, with some segments potentially overlapping with non-immigrants; or perhaps the question of personal safety in dark forests close to urban areas is a much more important barrier for many women’s interest in outdoor recreation than e.g. the availability of information concerning nature elements.

**Deliverables:**
- Report that gives a broad quantitative picture (even though much more detailed than e.g. Statistics Sweden 2004) of which groups are involved and not involved in outdoor recreation, 2009; Karlsson & Haraldsson.
- Report that details outdoor recreation participation with focus upon e.g. ethnicity; 2009; Karlsson.
- Report concerning a more in depth information about outdoor recreation participation with focus upon e.g.: gender and youth; 2011; Haraldsson.

**Action 3 – Landscape outcomes** (coordinated by Bladh)

The outcome of the policy and planning intervention will in various ways take place and be manifest in the landscape. Here the crossings, crashes and synergies of different strategies, groups and activities could be studied. In order to show that the landscape cannot, in this case, be seen independently of meaning, social relations and human actions, the concepts “landscapes of signification”, “institutional landscape” and “action landscape” will be used as analytical tools alongside (physical) landscape (Bladh 1995). This can be compared to similar relational dimensions used in recreation resource management e.g. the Recreation Opportunity Spectrum (Pigram & Jenkins 2006). An aim of this study is to connect Nordic landscape research, North American outdoor recreation research and the concept of ecostrategies. As a part of the joint interest in a selection of LNCPs, the local and regional context of these cases will be studied (cf. Törnblom & Angelstam 2005) as presented in project A. In addition, special attention will be given to the aims of landscape management and outdoor recreation in the case-areas as presented in management plans of the areas and interviews with local managers. We will evaluate the information users of the areas are given and how they are physically channeled in the landscape, as well as the identities, preferences and activities among the local population, e.g. with the help of the local oversampling in the national mail survey and with the help of on site visitor studies. Those studies will be complemented by using visitor employed photography to assess perceptions of users (see e.g. Haywood
1990) followed up by interviews to triangulate recreational activities and expressed landscape values (Stedman et al, 2004), e.g. categorizations as natural or cultural, reserves, and aspects of democracy (cf. Skr 2001/02). The theme will use different methods including literature/maps, policy documents, field documentation, interviews and surveys (mainly as a part of the CEA) and will benefit from previous experiences, e.g. Almered et.al. (2004), Bladh & Sandell (2003) and Sandell (2000b). The issue of local knowledge and involvement will be further developed in a connected application to Formas.

**Deliverables:**
- Report/article discussing landscapes, outdoor recreation and LNCP, 2010; Bladh.
- Report/article about place, outdoor recreation, planning and ecostrategies, 2010; Bladh & Sandell
- Ph.D. dissertation (university funded student in Human Geography planned to start 2006/7) in the proposed field of tourism, landscape perceptions, planning and outdoor recreation; Sandell & Bladh.
- Chapter about the recreation landscape in a new Atlas about the history about the Swedish rural landscape (skogs och jordbruksatlas i serien av Sveriges National Atlas); Sandell & Bladh.

**Action 4 – Trends of special importance** (coordinated by Sandell)
In dialogue with the whole research program and especially the different themes in this project some aspects will be selected for further investigations. These investigations will mainly be a part of the second phase of the program, and the type of aspects selected could be: subgroups, activities, attitudes, types of landscapes or reserve instrument. The selection will be guided by the potential importance for future policy and management; what seems to be of special importance for the future milieu of policy making in the field of outdoor recreation. Depending on what aspects are selected, the methods will differ, but one question that always to some extent will be studied is the historical parallels in terms of roots, development, inspiration, motives and actors (cf. e.g. Nilsson, 2000; Aronsson, 2004), and documents, magazines and semi-structured interviews will be recurrent materials used. All these aspects selected for further investigations will not necessary be directly related to outdoor recreation in conventional terms, but instead e.g. computer games or indoor climbing could be such aspects due to the interest in how these are related to conventional outdoor recreation activities and groups involved (cf. Sandell 2004b). In other words, here we will take the opportunity to include studies of aspects not necessarily of great importance today, but potentially important in the future arena of outdoor recreation and nature based tourism

**Deliverables:**
- Report/article highlighting groups, activities, motives etc. that are of special importance with regard to outdoor recreation management in the future, 2012; Sandell.
- Report/article discussing the current situation and trends for the future with regard to commercialization and outdoor recreation, 2012; Fredman & Sandell.
Project leader: Associate Professor Mattias Boman, Southern Swedish Forest Research Center, Swedish University of Agricultural Sciences, P.O. Box 49, 230 53 Alnarp, Sweden, Phone: +46-40-41 51 29, E-mail: mattias.boman@ess.slu.se.

Staff: Dr. Anders Lindehagen, Dept. of Forest Products and Markets, Swedish University of Agricultural Sciences.

Summary
The overall objective of this project is to analyze outdoor recreation in urban proximate nature generally, and specifically from a welfare economic perspective. The main objectives are: 1. To develop a framework for systematic measurement of central components related to outdoor recreation in urban proximate nature, and its relation to other types of outdoor recreation. 2. To quantify and analyze outdoor recreation in urban proximate nature, especially from a welfare economic perspective. 3. To quantify and analyze forest recreation in southernmost Sweden, especially from an urban proximate and welfare economic perspective. 4. To analyze the importance of hunting from an outdoor recreation and welfare economic perspective.

Project goals and contribution to program goals
Urban proximate nature represents important environments in the supply of outdoor recreation opportunities in Sweden (Hörnsten and Fredman, 2000; Lindehagen, 1996). This project contributes with an economic perspective to the program, particularly relevant for scarce recreation environments close to urban centers. Combined with the joint efforts of all involved projects, a goal is to provide economic results that are more full-fledged from a general social science perspective than is usually the case. Such results are potentially useful as an input to the outdoor recreation management process. From a methodological point of view, this research will benefit from earlier (e.g. Mattsson and Li, 1994; Boman and Mattsson, 2005; Hörnsten and Fredman, 2000) and ongoing research.

The main research questions of the project are (if not otherwise stated, the focus is on urban proximate nature):

- How do different environments for outdoor recreation contribute to the recreational opportunities for different user groups?
- What is the effect on recreation value from changes in, or maintenance of, different types of recreational services?
- What is the impact of possible constraints among non-users of outdoor recreation environments?
- How can research on urban proximate nature recreation aid the building of a comprehensive picture of outdoor recreation in Sweden for different environments and geographical scales, based on the common methodology of the CEA?
The results can also be used to recognize and understand the importance of conserving natural resources in maintaining and enhancing outdoor recreation participation.

**Practical relevance**
Planning for, and management of, outdoor recreation areas is dependent on the underlying objectives. These objectives may in practice be vague or not clearly defined. Economics offers one way to make objectives more transparent as a basis for decision making, by clarifying two possible inputs to the process: benefits and costs. From a general welfare economic perspective, the key objective is to maximize some function of welfare. Since goals, planning and management are determined from a human perspective, a social perspective on both benefits and costs is of great importance. The relevance of this project primarily lies in the investigation of the benefit side of urban proximate outdoor recreation. The value placed above and beyond the actual expenses incurred to engage in such recreation is considered a consumer surplus (Mitchell and Carson, 1989), which is the difference between total valuation and total expenditures. Such “extra values” often represent significant parts of the total outdoor recreation experience. Decision-makers are often concerned with social welfare issues, and the results from this project will therefore be especially useful when benefits of projects affecting urban proximate nature are to be balanced against associated costs. Improved knowledge on the correlation of measurable factors with the recreation value of different nature scenes makes it possible to predict how management actions affect these factors and thereby recreation value.

**Background**
An economic approach to sustainable development involves non-declining net welfare of current and future generations (Boman and Mattsson, 2005). In practice, there are numerous Swedish policies and policy instruments with the purpose of achieving sustainable development in various dimensions. In terms of environmental quality, 15 broadly defined national environmental objectives were adopted by the parliament in 1999 (Swedish Environmental Objectives Council 2000). Together, the objectives represent substantial components constituting the Swedish natural environment, and they comprise the natural environments where outdoor recreation is conducted.

Expenditures are a useful indicator of the importance of outdoor recreation activities to the economy, but they do not measure the economic benefit to the individual participant or society. The consumer surplus measures the benefits to the primary users of the recreation site and is useful when, for example, benefits are to be balanced against associated costs. The project will deepen our understanding of these benefits, as well as the factors determining participation in urban proximate outdoor recreation. The research will cover different environments (e.g. forest land, agricultural land, beaches along lakes, watercourses and coastal areas) and their recreational impacts. Agricultural land is often only accessible parts of the year, and as more than fifty percent of the Swedish land area consists of forest, it is natural that the forest environment will be an important focus for the research within the project. However, the relative contribution of different urban proximate nature environments to outdoor recreation can only be understood by considering these environments simultaneously in an empirical analysis.

**Research plan: Theoretical framework(s) and methods**
The value of a specific outdoor recreation environment (like a forest) will be dependent on its characteristics, e.g. age structure, tree species composition, walking paths and facilities. Moreover, there is an interdependence with other outdoor recreational environments in the surroundings, as they may be perceived as more or less substitutable to a particular environment. Distance is an important factor to consider, i.e. proximate recreation environments are likely to be preferred from the household’s point of view (Hörnsten and Fredman, 2000). Finally, the preferences and socioeconomic characteristics of the affected population are important determinants of the recreation value. This project will therefore study the attitudes, preferences and valuations held by
different groups of people for which outdoor recreation services are of interest. Given the scope of
the whole program, these groups are not only current users of recreational environments. The
groups who are not currently engaged in outdoor recreation are also of great interest.

Survey-based non-market valuation methods such as the contingent valuation method or other
stated and revealed preference methods (Mitchell and Carson, 1989; Garrod and Willis, 1999) will
be employed to evaluate the preferences and valuations held by the different interest groups. A basis
for the analysis will be the integration of valuation aspects into the program’s common empirical
arena (CEA) and national mail survey of outdoor recreation. Apart from the CEA, recreationists in
southernmost Sweden and hunters will be targeted in separate studies. The general issues addressed
are, for different parts of the country and groups of people:
- The relative economic importance of different landscape types for outdoor recreation.
- The economic importance of different characteristics and facilities (e.g. walking paths or parking
  lots) in each landscape type for outdoor recreation.
- The effect of distance for the recreation value.
- The effects on valuation from the frequency and length of recreational visits.
- The health status and its relation to the valuation of recreational visits.
- The value of hunting for the group paying the annual hunting fee.
Thus, the value of outdoor recreation may be considered along different dimensions. The total value
of urban proximate outdoor recreation can be seen as a function of the different environments in
which recreation is performed. The partial value of a specific recreation environment can be seen as
a function of its characteristics and distance to the site. Irrespective of environment considered, the
value is expected to increase with the frequency of visits. Furthermore, there may be a correlation
between frequency of visits and health status. This also relates to constraints on participation, e.g.
different types of disability.

Outdoor recreational environments can be viewed as becoming more limited with the size of the
community, as the availability of urban proximate nature per inhabitant can be expected to decrease
with the size of the community (SCB, 1993). One feasible alternative is therefore to focus on urban
proximate nature around Sweden’s large cities. For comparative purposes with projects in the
program and associated projects, it is initially proposed that the cities of Stockholm (relevant for
projects B and E), Göteborg (relevant for projects B and E), Malmö (relevant as the third largest
city in Sweden and for projects associated to the program), and Linköping or Norrköping (relevant
for project B) are specifically targeted within the CEA. This targeting can be achieved by over-
sampling or sub-sampling in these regions. Similar questions could be asked as in the
national/regional survey, and the results can be contrasted against each other.

**Action 1 – Assessing the benefits of outdoor recreation in urban proximate nature**

This action will support the CEA by extending the methodology and empirical survey design to
incorporate urban proximate nature. Relevant scenarios will be developed to analyze the effects on
valuation and participation from different combinations of recreational services. The design of the
survey questions will be developed in close cooperation with the other projects in order to enhance
their relevance for the program as a whole. This will also be the case in the subsequent analyses of
the responses. An important general scientific purpose will be to extend the theoretical and
methodological base of valuation research, by addressing relevant contemporary issues in this field.

**Deliverables:**
- Data compiled from the CEA, 2008 (Boman, Lindhagen, Fredman and Romild). Joint with
  project A.
- Report (overview) on trends and/or conflicts, 2010 (Lindhagen, Boman and possible co-
  authors).
- Report (scientific) on trends and/or conflicts, 2011 (Lindhagen, Boman and co-authors).
**Action 2 – Economic values of outdoor recreation participation**

Based on the outdoor recreation participation data collected under Action 1, this action will quantify economic values of outdoor recreation participation with focus on specific activities and geographical regions. The focus will be the values placed above and beyond the actual expenses incurred to participate in outdoor recreation. This action will provide measures of outdoor recreation benefits useful when managers and decision makers are to evaluate the costs of public recreation programs etc. (Rosenberger & Loomis, 2001). Special focus will be on outdoor recreation in urban proximate nature, but other areas will be considered as well (including co-operation with project F). The results are useful for purposes of investigating the appropriate types and amounts of recreational services in different parts of the country.

**Deliverables:**
- Report (overview) on outdoor recreation and urban proximate nature, 2011 (Fredman, Boman, Lindhagen, L. Mattsson and possible co-authors). Joint with project A.
- Report (scientific) on economic analyses of values of outdoor recreation and urban proximate nature, 2012 (Fredman, Boman, Lindhagen, L. Mattsson and possible co-authors ). Joint with project A.
- Workshop: The values of outdoor recreation and urban proximate nature – Economic assessments and people's perceptions, 2012 (Fredman, Boman and Stenseke). Joint with projects A and E.

**Action 3 – Outdoor recreation in southern Swedish forests and health effects**

This action will be conducted in association with the “Broadleaf program” (projects C1 and C2), and will provide additional input to the project and program regarding forest recreation in Sweden’s southernmost counties (Skåne and Blekinge) that can be linked to the program. Skåne is of particular interest as a Swedish “special case”, characterized by a lower share of forest cover than Sweden in general (Boman and Mattsson, 2005). People therefore often have a relatively long distance to a forest area (Hörnsten and Fredman, 2000), and are regionally urbanized. Results will be based on a special mail survey targeting the two southernmost counties in Sweden. An important focus of the project will be on economic health effects of outdoor recreation in forests in these counties.

**Deliverables:**
- Report (overview) on forest recreation and health effects in southern Sweden, 2008 (Boman, J. Norman, L. Mattsson and possible co-authors)
- Report (scientific) on economic analysis of forest recreation and health effects in southern Sweden, 2009 (Boman, J. Norman, L. Mattsson and possible co-authors)
- Report (popular) on forest recreation, health effects, and economic impacts, 2009 (Boman, J. Norman, L. Mattsson and possible co-authors)

**Action 4 – Consumptive and non-consumptive hunting values**

This action will be conducted in association with the program “Adaptive Management of Fish and Wildlife Populations”. The action will provide additional insights concerning a specific types of nature based recreational activity in Sweden. The proximity of hunting grounds to urban areas can be expected to increase the hunting ground rent, indicating the demand for this recreation activity. Results will be based on a special mail survey targeting Swedish hunters. The focus of the action will be on the value of hunting, in terms of non-consumptive recreation value and meat value.

**Deliverables:**
- Report (overview) on hunters and hunting, 2007 (Boman, L. Mattsson and possible co-authors)
- Report (scientific) on hunting values, 2008 (Boman, L. Mattsson and possible co-authors)
- Report (popular) on hunters, hunting and hunting values, 2008 (Boman, L. Mattsson and possible co-authors).
D: Outdoor recreation in spatial planning

Project leader: Professor Lars Emmelin, Department of Spatial Planning, Blekinge Institute of Technology, SE-371 79 Karlskrona. Tel: 0455 385310; E-mail: lars.emmelin@bth.se
Staff: Lena Petersson Forsberg, doctoral student, Blekinge Institute of Technology.

Summary
The project studies integration of outdoor recreation in spatial planning at the municipal level with focus on methods and on the interaction of local and regional planning.

Project goals and contribution to programme goals
To provide an evaluation of the state of the art of planning at municipal and inter-municipal level and of the interaction of this with the regional level. Analyse examples of good practice in integration of outdoor recreation in spatial planning. Analysis of information support to planning, especially the use of user studies and survey data from the empirical arena. Assessment and recommendation concerning spatial planning tools for recreation planning within the context of sustainable development at regional and local level. The research questions are:

• What is the present status of local and regional planning for outdoor recreation/nature tourism and for multiple use of nature conservation areas for recreation and tourism?
• What methods of planning, conflict resolution, impact assessment and management planning for multiple use for conservation, outdoor recreation and nature tourism can be adapted to the Swedish environmental governance system at local and inter-municipal/regional level.
• What can be learnt from analysis of examples of good practice?

Practical relevance
Studies of spatial planning are of direct practical relevance to all levels of the planning and conservation system. For practical planning and management and for regional development the project provides the necessary inputs of empirical knowledge, conceptual planning frameworks, development of tools and examples of good practice. The focus on the interaction of the local, municipal and the regional level will fill an important gap in present knowledge and practice.

Outdoor recreation and nature tourism in municipal spatial planning
Municipalities will have an increasing responsibility for outdoor recreation and nature conservation. Many municipalities have the ambition of promoting tourism, in many cases nature tourism. This necessitates a more concentrated effort in land-use planning, i.e. to develop methods and tools to bring outdoor recreation, nature tourism and nature conservation into the municipal spatial planning. That is the point of departure for this research project.

Planning for outdoor recreation must handle land use conflicts between conservation and exploitation. The municipal spatial planning is one important instrument to handle these conflicts between goals and interests concerning land use. The planning process must initiate
cooperation between outdoor recreation and nature conservation and also be able to promote cooperation between actors within municipalities as well as interaction between municipal and governmental levels. Management and administration of the nature reserves and recreation areas are necessary and the land use planning for outdoor recreation must incorporate actors handling these aspects, containing the whole range from non-profit organisations to commercial tourism. This project, concerning spatial planning, will concentrate on land-use planning that is able to handle outdoor recreation and its need for suitable land in competition with other interests.

In Sweden the municipal Comprehensive Land Use Plan is the only planning instrument covering the whole of the country, also concerning all sectors of society. The Comprehensive Land Use Plan shall show what intentions, concerning use of land- and water areas, the municipality might have. The legally binding Detailed Development Plan should follow these intentions. Today the municipal comprehensive planning is not sufficient. A great deal of Swedish municipalities fails to update the Comprehensive Land Use Plan and the detailed development planning often happens in contrast with the comprehensive planning. The Comprehensive Land Use Plan is therefore a potentially useful instrument at present. The aim with the ongoing revision of the Planning and Building Act has been to revitalize comprehensive planning. To bring outdoor recreation, nature conservation and nature tourism into comprehensive planning could be a part of this revitalizing process.

The Detailed Comprehensive Plan is a potentially useful instrument since it can concern as well as a part of the municipality and a specific public interest. Detailed Comprehensive Plan has been used to solve certain land use conflicts for example in coastal areas or solve specific problems as in the northern parts of Älvdalen. The attempt to solve the conflicts between nature conservation and tourism in southern Jämtlandsfjällen was made within the framework of Detailed Comprehensive Plan on inter regional level. (Vuorio, Emmelin, Sandell 2003) However, there are signs showing that municipalities tend to choose other, less formal, forms of planning (“strategies”, “visions”) One reason is, for instance, the requirement of consultation in spatial planning according to the Planning and Building Act. The tendency seems to be augmented by the Environmental Impact Assessment for plans required by EU-directive. Another reason is that a less formal planning process can provide a faster reaction to questions, but also less strict forms of local public participation. The formal, but relatively moderate, requirement of public participation in the comprehensive planning is set aside and environmental management in general are weakened for example in planning for tourism.

Spatial planning at regional level does not exist in Sweden. However there are several regional actors planning for the interest of different sectors, nature conservation being one of the most important. Increased local support for nature conservation and a better connection between nature conservation, outdoor recreation and tourism will need a growing interaction between county administration, regional authorities, municipalities etc. The interests of outdoor recreation make regional and/or intermunicipal planning necessary. The willingness of the municipality to satisfy intermunicipal and regional interests can be expected to increase if a commercial interest like tourism exists, compared to a situation when there is only the political interest of recreation available.

The arguments for regional land use planning are strong but controversial. At present the basic conditions for regional land use planning, or interaction with municipal spatial planning, varies between regions according to differences in methods of organisation on the regional level. The future system of organisation is at present investigated by the Committee on Public
Sector Responsibilities. This means that the context for the implications, recommendations, development of methods etc. that this project shall deliver is indistinct and unknown at present. Monitoring the development of these changes is necessary and an important contribution to the research programme as a whole. This because development of methods and recommendations of user studies, implications from studies of local nature conservation projects, experience from development of nature tourism as a branch of industry etc are intended to fit in a context of regulation, structure and public actors that will be different from the ones studied. The conditions to monitor this development are set in work for the Committee on Public Sector Responsibilities (Emmelin & Lerman 2006).

There is no spatial planning at national level in Sweden since the National Land Use Planning ceased to exist. However, remains of this national planning are the designated areas of different national interests. The areas of national interest for outdoor recreation seem to have been sketched even more roughly than other national interests. It is unclear to what extent the municipalities take this national interest for outdoor recreation in consideration in their spatial planning and if the county administration monitors this. There are at least two problems with the national interest for outdoor recreation. First, it is often not clearly specified what the core of the interest really is, i.e. what aspects of outdoor recreation shall be taken into consideration in spatial planning. Second, both municipalities and county administration lack systematic knowledge about outdoor recreation, extent, pattern of use, conflicts etc.

In spatial planning, the interaction between different actors on different levels is important. Regarding outdoor recreation and nature conservation such interaction takes place within the municipality, between government, especially the county administration, and the municipality and between the municipality and other regional councils (regional self-governance bodies or statutory joint authorities). It should be noticed that within municipalities actors attitude towards municipal spatial planning differ. For example, the interaction between municipal nature conservation and spatial planning varies between municipalities. Planning for recreation concerning buildings, facilities etc is sometimes performed by other institutions than the municipality. Planning for nature tourism can sometimes be the responsibility of such institutions or bodies of trade and industry.

The comprehensive planning, and the possible future regional planning, must be able to coordinate operators, work as an arena for these actors to present land use claims and perform negotiations. Methods and tools shall also promote public participation and local support. Simplistic models for communicative and participative planning on local level do not automatically work on higher levels. There are several regulations and tools that affect or govern the planning for outdoor recreation and nature tourism. Sometimes they are in conflict with each other or contain conflicts of interest that must be handled in some way. (Emmelin & Lerman 2006).

The Shoreline Protection exemplifies the question of interaction between municipality and county administration with great influence on outdoor recreation and nature conservation. Another question is how the establishing of nature reserves is handled. The recent re-orientation of nature conservation towards local support, local responsibility etc. should be connected to municipal spatial planning. Nature conservation and spatial planning belong to different set of acts and culture of administration, and they also originate from different paradigms. (Emmelin & Kleven 1999; Emmelin 2000a).

Natura 2000 is a tool that in some regions appears to intensify the opposition between municipal spatial planning and nature conservation depending on, among other things, the
opinion that some county administrations have, saying that the protection of Natura 2000-areas is definite and non-negotiable. This is a misinterpretation of the law and the requirement of Environmental Impact Assessment for development in and near Natura 2000-areas is one example pointing out the misunderstanding. The requirement for Environmental Impact Assessment also shows the possibility to increase the quality of planning for nature conservation and outdoor recreation by the help of more developed planning tools. Today there is no understanding how big the “Natura 2000 problem” is¹ or any survey done of good or bad examples. Interest in MAB-areas as a tool seems to be increasing, partly depending on the success of “Kristianstad vattenrike”. There are plans for creating a MAB-area in the eastern archipelago of Blekinge to solve the long-lasting conflicts between conservation and use. This process is monitored by another research project at BTH by a doctoral student also employed by ETOUR. The MAB concept can possibly work as an arena for bringing together the municipal interests with the governmental ones.

Many other countries can present several tools and methods for planning for recreation. Generally, these have not been tested in Sweden och need adaptation to the Swedish context. This concerns regulations and management but also questions like the Right of Public Access that affects the planning and governance of patterns of use e.g. by zoning. These questions are discussed in Emmelin et al. (2005). Both the Environmental Code and the Planning and Building Act contain elements based on different types of planning and planning theory, e.g. synoptic rationalistic elements together with participative ones.

Research plan: Theoretical framework(s) and methods
A relevant all encompassing theoretical framework for planning and management is lacking. Partial and competing theories and schools characterise planning research. This is natural in that planning and management are practice fields where outcomes are determined by a combination of legal regulation, political decision making, professional norms, administrative cultures, interaction of state and local governance etc. (Allmendinger & Tewdwr Jones 2002). The theoretical approach has to be eclectic (Hall 1981). A sound empirical basis emanating from an understanding of the practical working of planning and management can be subjected to the theoretical triangulation approach of evaluation research (Almås 1990; Vedung 1991).

The legislation governing spatial planning and management of environment and natural resources reflects a pragmatic mix of theoretical approaches with rationalist and participatory and deliberative components. The theoretical framework that captures much of the essence of the planning processes of Swedish spatial planning and environmental management is the “mixed scanning” of Etzioni (1967)

Project actions
The project actions (A 1 – 4) in the application must actually intertwine even if Action 1 has a character of being a basic survey. The application holds following actions;

Action 1 Status of outdoor recreation in Swedish spatial planning
Action 2 The institutional and theoretical framework for integrating outdoor recreation
Action 3 Good practice examples
Action 4. Knowledge support for planning and conclusions

¹ Based on several concrete examples and an analysis of principle Emmelin & Lerman (2006) claim that the “Natura 2000 problem” is a potentially extensive problem. Representatives from the secretariat of the Committee of Environmental Code seem not to agree with this as they in a comment to the manuscript express, from a more general point of view, that this is going to be a relatively minor problem.
It should be noticed that action 4 actually consists of two elements that ought to be divided into two separate actions. First, studies of interaction between actors and knowledge support for the municipal planning. Questions of knowledge support must merge with questions of planning methods and this ought to be more obvious in the title of action 4. Second, the conclusion and final reporting of the project as a whole, where the questions concerning new methods for planning are presented. Regarding workload and resource requirement action 3 & 4 will dominate the project and are expected to be going on most of the project time, but will be reported in the latter part. There is a disadvantage in describing research project in "actions" or "work packages". It can give a false impression of discrete sequences where the next does not start until the former is finished. The planned relation between the actions can be schematic illustrated as below:

The above mentioned comprehensive formulation of problems has been made for several reasons:

- show the complexity of the tasks, study and give recommendations regarding methods, tools, structures and possible regulation aimed to improve the situation for outdoor recreation, nature conservation and nature tourism vis-a-vis the spatial planning.

- show that an empirically based and extended survey of the present situation including patterns of behaviour, regulations, methods, experienced problems and possibilities is not a trivial assignment as indicated by the comments of the judgement group.

- show that other projects in the FiF-programme need definite but balanced and theoretically based knowledge and understanding about the conditions for spatial planning to use as baseline for implications and recommendations.
"Deliverables": Three types of reports/articles will come out of this project. First, articles from licentiate dissertation and the thesis of the doctoral student. In some of the articles the supervisor is supposed to be joint author with doctoral student. Second, scientific articles based on cooperation between this and other projects in the programme. Some articles were specified in the application but it will be an important part of the programme to identify more possible articles and to work for the planning aspects to be part of the articles from other projects in the programme. Obvious subject areas are the research reports concerning local nature conservation, recreation close to population centres and recreation in protected areas but also concerning methods for registration of visitors and knowledge support. Third, different forms of internal reports and participation in the final report from the programme. The project leader for this project, Lars Emmelin, will have chief responsibility for the latter two types of articles. Upon these three types of reports/articles, participation in programme seminar, outgoing activities and contacts with receivers will be added to.

Action 1 – Status of outdoor recreation in Swedish spatial planning
A survey of status in municipal spatial planning, especially comprehensive planning, with regards to outdoor recreation and nature tourism is important. This survey will also include pattern of behaviour of the actors, especially the disintegration between spatial planning, nature conservation and promoting nature tourism. The survey is aimed to be a web-based questionnaire in cooperation with The Swedish Association of Local Authorities and Regions (SALAR) to get a reasonably amount of answers. Cooperation with project E. is essential to get a relevant survey of different groups of actors in nature tourism.

Questions concerning the actual cooperation of spatial planning with nature conservation and how conflicts with nature conservation and national interest areas are handled must be illustrated.

An important task is to identify concrete “good practice examples” for action 3. An inventory of examples of explicit handling outdoor recreation in comprehensive planning was made as a foundation for the project planning, but it needs to be completed with, among other things, direct information from responsible municipal planners etc. regarding their opinion of problems and opportunities, need for knowledge support etc.

Action 2 – The institutional and theoretical framework for integrating outdoor recreation
Action 2 is more concentrated on theory and methods than it may have seemed in the short application text. In the application the survey of relevant international literature etc. was accentuated. The theoretical and methodological elements should be pointed out. Three aspects are especially important:

- International experience from methods of spatial planning for outdoor recreation respecting both political and commercial aspects and the conflicts between them. Planning methods like ROS, LAC, Vim and Vamp are discussed in Emmelin et al. (2005). These methods need adaptation to the planning context, e.g. from the Right of Public Access and other “cultures of outdoor recreation” to regulations and distribution of administrative responsibility, which is also pointed out by Emmelin et al. In foreign planning models and methods, mainly the ones developed in the US and Canada, the relationship between planning- and management responsibility looks different from the ones developed in Sweden, which need analysis and development.
The institutional context for planning, as mentioned above, can be expected to change during the programme period and this will affect the analysis and recommendations able to be done. The distribution of responsibility between the restriction instruments in the Planning and Building Act and the Environmental Code and various forms of subsidies affect the relation between outdoor recreation and development of industries etc. New instruments like Natura 2000 and a possible increased use of MAB-areas will, as mentioned, challenge the actors to cooperate in new ways.

Planning theory: The Planning and Building Act and the Environmental Code contain different instruments, point out different actors and express the opinions of different paradigms. The Planning and Building Act also contain an eclectic mix of synoptic planning with hints of formalized participation. The legislation, its development and need for improvement to be able to handle the whole spectrum of outdoor recreation and nature conservation, must be analysed.

As pointed out in the application, a homogenous culture of theory is lacking in this subject area. It may seem as a scientific weakness but in a research programme meant to present recommendations concerning methods, organisation etc. an eclectic approach is necessary, and in planning research not a controversial one –see Hall 1981. Biased focusing on a single set of theories and insufficient understanding about the concrete practical conditions of planning constitute an even greater restriction to the usability of environmental research of social sciences (Emmelin 2000 & 2003).

Action 3 – Good practice examples
Regarding spatial planning responsible authorities i.e. in addition to Swedish Environmental Protection Agency (SEPA) also National Board of Housing, Building and Planning and National Heritage Board, to a great extent, work with “good practice examples” as guidance for municipal planning and conservation. If the project is going to be relevant for exercise of public authorities an adaptation to this model must be done. At the same time, a problematizing of “good practise examples” is desirable; the criteria for “goodness” are in most cases extremely indistinct. In the original application a need for, and an ambition to perform, a systematically evaluation of case studies was pointed out. This seems to be questioned by the evaluation group. Partly this can arise from differences in working methods and goals between basic research and applied research aiming at practical application.

There is a necessity to explicitly evaluate case studies with several different types of criteria to be able to discuss and in the end produce “good practice examples”. This means that the evaluation must identify and elucidate rationalities of different kind in the planning and relate these to regulations, administration cultures etc. i.e. what can be made within the existing framework and what will have to be changed. Planning can appear to be “good” from a goal rationality point of view i.e. with fixed criteria for the planning goal or expected result. Regarding outdoor recreation the vagueness and indistinction of the official criteria is a problem. The operative uses of the criteria are limited to a great extent – i.e. participation, diversity, equality, accessibility etc. For nature conservation criteria exist in different forms and implicit for tourism as well (development of industry, employment, earnings, guest nights etc). At the same time there is a practical interest from the authority to see actual results from planning.
To be of practical relevance the criteria for goal rationality must be discussed; if possible extracted and operationalized out of existing regulations, policies etc. Regarding the case studies the criteria used, explicit or implicit, must be analysed and elucidated. Planning research and planning theory focus a great deal on a different aspect: the planning process concerning participation, balance of power, local influence etc. In extreme cases “good planning” can be equalized with ”good processes” no matter what the actual result might be.

Spatial planning is also demanded to be effective and efficient. These demands can be in conflict. For example, effective methods presuppose that high legitimacy is created by participation, openness etc in direct conflict with demands for efficiency regarding time consumption, use of resources etc. (Emmelin 2006; Emmelin & Lerman 2006). To analyse the planning process explicit criteria are needed.

The tension between goal-oriented evaluation and evaluation of processes is an opportunity of methodological renewal. An overview of planning research show that tendencies to combine the criteria of “good planning processes” and criteria for goal completion actually are a methodological renewal, regardless of what theoretical draught received. The question of goal conflicts between different levels in the planning system, the tiering of the systems, is also important: national goals for nature conservation can be in conflict with local goals for development of industries, to preservation etc.

Central authorities do not normally analyse “bad practise examples” or problems and obstacles in actual cases. A research project does not have to be restrained from such activities. The survey of “planning for recreation” that already has started indicate that case studies possible to identify will give partial elucidation of problems and possibilities.

The theoretical framework for the programme described by Sandell’s ecostrategic model has been successfully used to analyse a number of attempts of establishing national parks. This model is also a useful framework for the analysis of municipal planning.

Action 3 contains:
- The discussion of evaluation criteria aimed to be operative criteria even in recommendations and conclusions.
- Identification of case studies, connection to other projects in the programme for instance the study of local nature conservation projects is essential.
- Analysis of case studies
- Conclusions

**Action 4 – Knowledge support for planning and conclusions**

As earlier mentioned action 4 should have been divided in two parts and given a somewhat different title. The two parts are presented as follows:

4A) Survey of problems connected with knowledge support and planning methodology in municipal and regional spatial planning and,

4B) Work with synthesis, conclusions and recommendations in the project as well as in programme final reporting.

Development of methods is together with insights in possibilities and hindrance the most important result of the project. Because the ambition is a development of methods based on
Planning methods must be able to fulfil several criteria:

- handling of knowledge and knowledge support
- participation: communicative and participative
- activate actors for development and management
- balance conflicts of interest especially between conservation and use

Knowledge support is essential to spatial planning. Today the county administrations have an overall responsibility to provide knowledge to the municipalities. At present methods, expertise and structures for supporting knowledge concerning outdoor recreation is lacking and regarding tourism the focus is set on development of industry rather than spatial planning. In this research programme as a whole methodology for studies of use etc will be applied and developed. Adjustment of methods based on, among other things, the results from the case studies and the analysis i action 1 is an essential part of the development of methods in action 4. The work in this project can in addition to cooperation within the programme, also rely on former research work from among others ETOUR (Fredman et al 2006; Vuorio et al. 2003; Emmelin 1997; Hultman & Wallsten 1998) and ongoing studies of planning in the archipelago.

Participation in synthesis and the final reporting of both project and programme will mainly be the responsibility of the project leader.
E: Outdoor recreation and nature conservation – challenges for management and environmental education

Project leader: Ass. Professor Marie Stenseke, Dept of Human and Economic Geography, Göteborg University, Box 630, SE-405 30 Göteborg, Sweden. Tel. +46 31 773 1389, E-mail: marie.stenseke@geography.gu.se.

Staff: Dr. Cecilia Lundholm, Dept of Education, Stockholm University, Silvia Henningsson, Ph.D. student, Dept of Human and Economic Geography, Göteborg University, Ph.D. student to be recruited to Dept of Human and Economic Geography, Göteborg University.

Sammanfattning
Den övergripande ambitionen med projektet är att generera värdefull kunskap för utvecklingen av strategier och praktiker i fråga om integrering av rekreation och bevarande i naturvården och även rörande naturpedagogik och naturguidning. Syftet är att identifiera möjligheter och hinder och att även bidra till fördjupade insikter i hur värderingar av naturen och erfarenheter av densamma är länkade. Resultaten kommer att dels ge ökade kunskaper om förutsättningarna för att integrera rekreation och bevarande. Projektet kommer också att belysa hur naturskolor och naturum fungerar och ge förslag om hur dessa kan utvecklas ytterligare. Genom att studera hur urbana människor i allmänhet, och ungdomar i synnerhet ser på naturen, och värderar och använder den tätortsnära naturen, bidrar projektet även till att öka förståelsen för hur den tätortsnära naturen kan utvecklas som generativ länk och bidra till ett ökat medvetande om naturkvaliteter, med konkreta implikationer för fysisk planering och förvaltning.

Summary
The main purpose of this project is to provide knowledge that is valuable for further development of strategies and methods for land management integrating recreational aspects and nature conservation, and for environmental education and nature guiding. The aim is to identify possibilities and constraints, and to contribute to a wider understanding of how perceived nature values and nature experiences are related. The results will provide valuable insights for improving the integration of recreational aspects in nature conservation. Furthermore, it will give insights in the functions of nature schools and visitor centers, and result in suggestions for their further development. By providing knowledge about urban people’s relation to nature, with a special focus on youth, the project also will increase the understanding of how urban proximate nature can be improved as a conceptual and communicative link between people and environmental aspects such as biodiversity, and including concrete implications for planning and management.

Project goals and contribution to program goals
The main purpose of the project is to provide knowledge that is valuable for further development of strategies and methods for land management integrating recreational aspects and nature conservation, and for environmental education and nature guiding. The aim is to identify possibilities and constraints, and to contribute to a wider understanding of how perceived nature values and nature experiences are related in contemporary Sweden.

The major research questions are:
– How are recreation aspects conceptualized and integrated in central policies and strategies in nature conservation and in practice in developing nature conservation projects?
– What is the impact of environmental education and nature guiding, with respect to participants’ experience and learning as well as ideologies, pedagogy and concepts of knowledge?
– How do urban people perceive and use urban proximate nature, and how does that relate to strategies and practice in environmental education, in physical planning and in management? The young urban generation is of particular interest.
– What are the implications of the results in the project for future development of nature conservation management and environmental education?
The research project will make a significant contribution to the scientific base of knowledge in the field of outdoor recreation, especially concerning landscape management and planning, and environmental learning and social interaction. In the project, studies will be carried out in several common local case studies of the program, and data from the national mail survey (project A) will be used for comparison with qualitative analyses regarding youth and nature school activities, visitor centers and visitors to urban proximate nature.

Practical relevance
The results will provide valuable insights for improving the integration of recreational aspects in nature conservation, by identifying gaps and conflicting objectives in strategies, and also by presenting good practices and strategic aspects to be considered. Furthermore, by a scientific evaluation of nature schools and visitor centers, it will give insights in their functions and result in suggestions for further development of education for sustainable development (ESD), including how the integrity of people’s own experiences of nature can be acknowledged. By providing knowledge about urban people’s relation to nature, the project also will increase the understanding of how urban proximate nature can be integrated in an urban context and be improved as a conceptual and communicative link between people and environmental aspects such as biodiversity, and including concrete implications for planning and management.

Background
The relation between outdoor recreation and nature conservation has to be regarded as a dynamic relation. Though recreation and nature protection has been intertwined since the inception of nature conservation in Sweden in the beginning of the 20th century (Sandell & Sörlin 2000), societal trends and the institutional framework have varied, as have strategies and focus areas within nature conservation. Some changes and trends of specific pertinence for the contemporary interplay between conservation and recreational use can be identified. During recent decades, biodiversity has become a central objective in landscape management and planning in Sweden (Stenseke in print). The focus on biodiversity is underpinned by international conventions and regulations in the European union. At the same time there is an increasing gap between people and their physical surroundings (Macnaghten & Urry 1998), termed “disembeddedness” by Giddens (1990). Urbanization is a quite recent process in Sweden and may explain why younger generations experience of unsettled land differs from that of their parents. This implies new perspectives on landscape and nature, which might have implications as outdoor experiences as youth affects recreation participation as well as support for conservation. Urban proximate nature is of growing importance for people’s experience of nature, related to use as well as to the perception of “nature”, and the understanding of its qualities and functions. In view of these changes, the ambitions concerning the nature conservation-outdoor recreation interface in contemporary policy strategies, including public participation and public health, implies challenges of how to preserve nature qualities while encouraging use, and how to inform and educate at the same time as allowing people to experience nature on their own terms.

Research plan: Theoretical frameworks and methods
The project includes five actions, of which action 1 and 2 will focus on the integration of recreation and nature conservation and action 3, 4 and 5 will focus on environmental education and nature guiding in relation to perceptions and use of urban proximate areas. The actions are interrelated, also with other projects in the program. Thus, some data collection will be coordinated, as well as analysis and publication of results.

Action 1. Discursive analysis of policies and strategies
The aim of this study is to develop knowledge about how recreation is considered and conceptualized in contemporary central policies and strategies in nature conservation; Convention of Biodiversity, the 16 environmental objectives, Natura 2000, National Strategy for Wetlands, National Strategy for Forests etc. The scientific approach utilizes a critical and discursive
perspective (cf. Mels 1999, Castree & Braun 2001, Hedrén 2002). Methodologically, the study will mainly be carried out as a discursive examination of written documents (Bergström & Böréus 2005), complemented by 15-20 interviews with key actors in the process of formulating the central strategies, mainly at SEPA and the Ministry of Environment. Issues that will be investigated are: What kind of recreation and human use of the land is explicitly and implicitly considered? How are recreational aspects contextualized? The results will give a wider understanding of options and weaknesses, identifying conflicting aims and therefore broadening the horizon when it comes to understanding problem complexes and seeking solutions of how to integrate recreational aspects and nature protection. Joint analysis and deliverable is planned with Sandell (project B).

**Deliverables:**
- Report on the conceptual links between recreation and biodiversity. 2008
- Workshop on conceptualizing recreation in the biodiversity discourse. 2008

**Action 2. Integration of nature conservation and outdoor recreation in practice.**
The aim of this study is to develop knowledge about the conditions for integrating recreational aspects in nature conservation; to provide recommendations for designing successful processes, as for strategies, practices and considerations that have to be taken. The integration of nature conservation and outdoor recreation in some developing nature conservation projects, involving distinct recreational aspects, will be examine and analyzed. The study will be carried out as a “follow research project” (sv: följeforskning) (cf. Svarstad et al. 2006) in interaction with the County administrative board of Västra Götaland, concerning two nature conservation projects; Kosterhavet (plans for national park) and Kinnekulle (Life-project and plans for biosphere reserve). The focus of the research project is on principles for integration of recreational aspects in conservation and management processes in the wake of ambitious conservation goals. In the study, factors such as actors, organization, the institutional framework, communication and conflicting interests, will be studied, and also the influence of zoning concepts such as ROS. Interviews will be carried repeatedly with various stakeholders, and meetings will be attended. Furthermore, documents produced in the processes will be examined, as well as articles in the local media.

**Deliverables:**
- Seminar on integrating recreational aspects in nature conservation, joint with Project D., 2009
  - Working reports on the cases of Kinnekulle and Kosterhavet. 2009 and 2010
  - Scientific article on integration of nature conservation and outdoor recreation. 2011
  - Feedback to the conservation projects through continuous communication. 2006-2012

**Action 3. Communicating nature. Participants' experiences and learning when encountering nature at outdoor centers and nature interpretation**
The proposed project will generate insight about the way participants perceive outdoor activities and what kind of learning is taking place (Öhman 2003). Aspects of affect as well as cognition will be of interest. The main focus is on the participants, but teachers' and guides' conceptions of the purpose and ways of informing about nature is also included. In this study, qualitative enquiries from a constructivist perspective (e.g. Halldén, 1999; Lundholm, 2003) will be carried out. The 'nature schools', at Järvafältet, and the visitor center at Stenshuvud national park are selected for case studies. Järvafältet is chosen with regard to its place near many habitants and the city and also for guiding students with a foreign cultural background. The choice of Stenshuvud nationalpark is due to the fact that it attracts many visitors. Data will be gathered through observations of students/participants and interviews with students/participants and teachers/guides.

**Deliverables:**
- Working report on the case of Järvafältet Nature schools, 2008,
  - Working report on the case of Stenshuvud visitor center, 2008,
  - Scientific article on communicating nature, 2009.
**Action 4. Young people and urban proximate nature.**

The main objective of this study is to develop knowledge about young urban people’s relation to “nature”, and analyze how that relates to strategies in environmental education and physical planning. Theories on children’s relation to nature, e.g. showing the importance of affect as in emotional engagement, serves as points of departure (Kahn & Kellert 2002). More specifically the study aims at increasing knowledge about urban youths and their (i) experiences of nature schools, as for knowledge, impressions, changed behavior, (ii) perceptions of green areas as for values, importance, association, (iii) use of green areas, as for frequencies, activities, company and (iv) intentions and visions in their use of green areas. The study will be carried out as a Ph.D. project, and linked to action 3 as well as the projects C and D. Two case study areas will be chosen, preliminary proximate to Järvafältet, Stockholm and Delsjön, Göteborg. The study will use empirical data from the national mail survey (project A). These data will be complemented by semi-structured interviews with youth in each area. Focus group discussions and nature walks will also be performed. Furthermore, physical plans and strategic documents concerning the green structure and recreation in the area will be analyzed, and interviews will also be carried out with teachers, parents, planners and other actors. The study will give insights in how young urban people relate to green areas, and suggest implications for the future development of environmental education and planning and management of suburban green areas, how to integrate their interests and attract them to increased outdoor recreation.

**Deliverables:**
- Doctoral thesis on Young urban people and “nature”, 2011

**Action 5. Learning about nature by use of urban proximate nature**

The aim of this study is to explore the role of urban proximate nature as conceptual and communicative (i.e. generative) links between man and environment (cf. Lundgren, 2001). More specifically, what will be investigated is their potential function as areas through which an understanding of biological qualities and the exchange of energy and material between the urban and the rural landscape can be conveyed. The research will relate to international research concerning people’s attitudes, values and the role of rural landscape and nature in modern society (cf. Tuan 1990, Machnagten & Urry 1998) as well as to recent Swedish research on perceptions about rural landscapes and green areas out of a recreational perspective (cf. Sandell 2000b, Uddenberg 1995). The action will focus on people’s experience and use of suburban forests. A case study will be carried out in Alingsås, in collaboration with the ongoing project **Sustainable management of suburban forests**, at the Department of Plant and Environmental Sciences, Göteborg University. Furthermore, the study will benefit from and be closely related to the ongoing HagmarksMistra project **Seminatural pastures and the general public**, by forming the second part of a Ph.D. project. The case study will be based on semi-structured interviews with visitors to the areas. Main themes in the interviews will be use, frequency of visits, attitudes and values towards various management regimes, activities and nature information. Data from the national mail survey (project A) will be used for comparing and framing the case study results. Joint activities are also planned with project C.

**Deliverables:**
- Doctoral thesis on urban proximate nature as generative link, 2010.
F: Nature based tourism as tool for sustaining rural communities – assessing impacts on economy and culture

Project leader: Dr. Linda Lundmark, Department of Social and Economic Geography, Umeå University, 901 87 Umeå Tel. 090-786 71 53, E-mail: linda.lundmark@geography.umu.se
Associate project leader (2006-09): Associate Professor Dieter K. Müller, Dept. of Social and Economic Geography, Umeå University. Staff: Dr. Peter Fredman, ETOUR, Mid-Sweden University.

Summary
This project focuses on the commercial dimension of outdoor recreation. The purpose of this project is to assess the role of nature-based tourism as a tool for sustaining rural communities by identifying factors that contribute to employment creation in nature-based tourism and to enhancement of positive socio-cultural processes, both central to sustainable development. The is achieved by (i) mapping demand and supply for nature based-tourism; by (ii) analyzing the socio-economic impacts of tourism development; and by (iii) integrating the interests of tourism entrepreneurs and other stakeholders to contribute to an improved management of protected nature. The methodologies chosen comprise questionnaires, interviews, content analysis, geographical information system analysis, and quantitative modeling.

Sammanfattning
Detta projekt fokuserar friluftslivets kommersiella dimension. Projektets syfte är att analysera naturturismens roll för att skapa hållbara rurala samhällen genom att identifiera faktorer som bidrar till att skapa arbetsställen och positiva sociokulturella processer, båda centrala för en hållbar utveckling. Detta åstadkoms genom (i) att kartlägga efterfrågan och utbud av naturturism, (ii) att analysera socioekonomiska effekter av turismutveckling, och (iii) att integrera turismentreprenörers och andra aktörers intressen för att bidra till en förbättrad förvaltning av skyddad natur. Metoder som används är frågeformulär, intervjuer, innehållsanalys, geografiska informationssystem och kvantitativ modellering.

Project goals and contribution to program goals
The purpose of this project is to assess the role of nature-based tourism as a tool for sustaining rural communities and achieving regional development. The main research questions of the project are:
1. How do demand and supply for nature-based tourism coincide?
2. How does demand for local outdoor recreation relate to demand for nature-based tourism?
3. What are the socio-cultural and economic impacts of nature-based tourism?
4. What is the interrelationship between nature-based tourism enterprises, authorities and other local stakeholders regarding governance and planning of environment and tourism development?
This project focuses on the commercial dimension of outdoor recreation regarding demand, supply and impacts. In so doing, it contributes to our understanding of outdoor recreation’s contribution to regional development and sustainable development in rural communities.

Practical Relevance
The project will provide improved knowledge on demand and supply of commercial nature-based tourism. It will also identify factors that contribute to employment creation in nature-based tourism and to enhancement of positive socio-cultural processes, both central to sustainable development.
Moreover, as tourism enterprises are important actors and facilitators for outdoor recreation, the project provides knowledge on patterns of use and stakeholder interests, which can be used for planning and managing outdoor recreation, not least in protected areas.
Demand for outdoor recreation is undergoing change. Three main reasons for this change can be identified. First, owing to urbanization and immigration, a growing share of the Swedish population has no or at least a fading relationship to countryside and nature. Second, rural recreation is in change. Traditional and rather passive activities such as hiking and cycling have been substituted by modern and active demand as for instance for nature sports or ecotourism aiming at more than just relaxation (Butler 1998). This is for instance shown by Heberlein et al. (2002) showing a shift of Swedish mountain tourism towards the southern skiing resorts. Third, a growing globalization increasingly entails that Northern Europe is seen as one of Europe’s last remaining great outdoors and wilderness offering a global playground for recreation seekers (Pedersen & Viken 1996).

The changing demand for outdoor recreation as well as the need to create new livelihoods for people in rural areas has catalyzed the development of commercial tourism services that facilitate encounters of tourists with nature. The development of nature-based tourism is also embraced by various stakeholder engaged in nature protection (Vilborg & Svanberg 2005). It is argued that nature-based tourism can contribute to a greater appreciation of the environment, and also to raising money for supporting nature protection. Consequently, nature-based tourism enterprises themselves are increasingly key users of protected nature. Against this background, it is important to analyze outdoor recreation as a tool to create sustainable development.

Research Plan: Theoretical framework and methods

Tourism is increasingly expected to contribute to sustainable development also in rural and peripheral areas (Hall & Boyd, 2005). However tourism can generate not only positive impacts, but also environmental decline, economic costs and socio-cultural change (Hall & Page, 2002; Wall & Mathieson, 2006).

The development of tourist services for sale is usually considered to improve the economic multiplier effect in the local community. In contrast, leakage can be caused by external ownership, and non-local supplies are then considered a threat to this development. Also, local inflation caused by tourism development is mentioned as negative economic impact. Finally, tourism affects the local culture and community. This is partly because tourists may compete with local residents in the use of recreational resources (Sandell, 2000b). Moreover, the development of commercial tourism services also threatens to almost privatize areas usually accessible within the framework of the public right of access. Among the positive impacts on local societies, it can be mentioned that a successful tourism development contributes to community pride, in-migration and improved community services (Hall & Page, 2002).

Tourism’s impacts depend on planning and management schemes. Hall (2000) identifies five different planning models aiming at maximizing the positive impact of tourism into a desired direction. In the context of nature-based tourism and sustainable development this implies negotiations among various stakeholders, but not least with tourism entrepreneurs who recently have been neglected within the academic literature despite their increasing importance owing to their role as “brokers”. Hence commercialized tourism services become more central for satisfying incoming outdoor recreation demand on the one hand and for facilitating regional development on the other hand. However, the role of entrepreneurs, the agents for this, is under-researched and thus imperfectly understood (Russell & Faulkner, 1999). Entrepreneurs are “movers and shakers” characterized, for example, as individualistic, flexible, innovative, experimental, and risk-taking. Thus they are perceived as “chaos makers” by regulatory institutions such as planning authorities and agencies striving for risk aversion, consensus, rational decisions and, of course, control.
Hence, the success of an outdoor recreation destination is dependent on how changing demand and supply meet commercially (Action 1), how local recreation generates nature-based tourism (Action 2), how tourism impacts contribute to positive change in the destination community (Action 3), and how tensions between movers and shakers and regulators are intermediated and managed (Action 4).

The project’s objectives are fulfilled in tight cooperation with other sub-projects and by applying various methodologies. The data is gathered through the CEA, additional questionnaires, interviews, and extracted from ASTRID, a comprehensive socio-economic geo-referenced research and simulation database located at the Department of Social and Economic Geography for investigations of labor market and population development.

**Action 1: The demand for and supply of nature-based tourism**
Regional development can only occur where demand and supply meet. Hence, in this action the focus is primarily on the commercial dimension of outdoor recreation. Thus, the supply of nature-based tourism is assessed on a national level addressing quantity, activities and geography. Demand is not evenly distributed in relation to type and spatial structure of supply, and hence focus is on geographical variations in demand which is measured by the CEA. International demand is not covered by this survey and thus available statistics on incoming tourism are reviewed. Moreover, additional information on incoming tourists is collected using a mail survey targeting municipal tourist information offices. This survey is also used to assess the supply of commercial nature-based tourism services not only addressing quantitative aspects, but also perceptual assessments of the supply at offer. Municipal tourism officers are hence key informants.

The collected sample data is analyzed and behavioral rules for certain groups (structured according to sex, ethnicity, age, education, home environment) are elaborated. These rules are then applied to ASTRID-data and integrated with supply-side information allowing for simulating a comprehensive scenario of outdoor recreation demand on a micro scale in Sweden.

*Method*: Mail survey among municipal tourism offices, regression analysis, GIS.

*Deliverables:*
- Reports: Demand and supply for nature-based tourism (2008 Müller & Lundmark)

**Action 2: The interrelationship between “close-to-home” outdoor recreation and nature-based tourism**
Here the links between “close-to-home” outdoor recreation and nature-based tourism are investigated. A hypothesis is that demand for “close-to-home” recreation is strongly interrelated with demand for nature-based tourism. Hence, central research questions are what role do “close-to-home” outdoor recreation opportunities have for travel motivation and participation in nature-based tourism distant from home, and do outdoor recreation participation and opportunities serve as push factors in nature-based tourism?

The data for this study is collected in the CEA’s national survey and analyzed for different groups and locations.

*Method*: Mail survey among Swedish households (CEA), regression analysis.

*Deliverables:*
- Reports: The nexus of close-to-home outdoor-recreation and nature-based tourism (2009 Fredman & Lundmark)
**Action 3: Impacts of nature-based tourism**

This action focuses on the impact of nature-based tourism on local communities. Physical, socio-cultural and economic impacts are addressed. Regarding physical impacts, municipal managers are key-informants, while socio-cultural impacts are surveyed using content analysis of written sources such as newspaper articles and focus group interviews allowing for analyzing also dynamics within and between the focus groups. Empirically cases will address, for example, struggle over predators and recreational resources.

Based on the outdoor recreation participation data in the CEA, this action will quantify *economic impacts* of outdoor recreation participation with a focus on specific activities and geographical regions. The focus will be on expenditures ascribed to participation in different outdoor recreation activities, and measures will provide information on the economic significance of outdoor recreation in Sweden with respect to different user groups, geographical regions as well as the consumption of different products and services.

*Method*: Content analysis of printed material, expert interviews and focus group interviews are chosen to analyze the cases, interviews and questionnaires are used to map spending patterns.

*Deliverables:*
- Reports: National spending patterns of nature-based tourists (Müller, Lundmark & Fredman, 2009), and economic impacts of nature-based tourism in destination communities (Lundmark & Müller, 2012)
- Workshop: Outdoor recreation and nature-based tourism in destination communities (2012 Fredman, Lundmark & Müller)

**Action 4: Managing tourism impacts, 2009-2012**

Here, the relation between “chaos makers” and “regulators” is investigated in order to develop models allowing for handling conflicts resulting from diverging interests and visions, and accounting for quick and frequent changes among the various stakeholders. Interviews are used to assess the interests of tourism enterprises not least regarding their use of protected nature. How do they use protected nature? What possibilities do they see in using protected nature? What hinders them from using protected nature?

The findings of previous actions are integrated in this action and related to other local stakeholders’ interests in outdoor recreation, nature protection and tourism development. The main purpose is to identify ways of combining nature-based tourism development, local community needs and environmental protection.

*Method*: Interviews and questionnaires are used for collecting data. Data are also stored and analyzed in a GIS mapping various stakeholders’ interests.

*Deliverables:*
- Reports: Managing nature based tourism (2012 Müller & Lundmark)
- Workshop: Managing nature based tourism (2012 Lundmark & Müller)
Appendix G: Program matrix

The following matrices show how the common empirical arena (project A) and the five research projects (B-F) develop new knowledge with respect to: i) research areas prioritized by the SEPA in the program announcement, and ii) additional key aspects of contemporary outdoor recreation in the Swedish society.

XXX – Major contribution, XX – Moderate contribution, X – Minor or indirect contribution.

<table>
<thead>
<tr>
<th>Project</th>
<th>Prioritized research areas by the SEPA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planning &amp; management</td>
</tr>
<tr>
<td>A) Activity and Place – a common empirical arena</td>
<td>XX</td>
</tr>
<tr>
<td>B) Different cultures in the field of outdoor recreation</td>
<td>XXX</td>
</tr>
<tr>
<td>C) Outdoor recreation in urban proximate nature</td>
<td>XX</td>
</tr>
<tr>
<td>D) Outdoor recreation in spatial planning</td>
<td>XXX</td>
</tr>
<tr>
<td>E) Outdoor recreation and nature conservation</td>
<td>XXX</td>
</tr>
<tr>
<td>F) Nature based tourism as tool for sustaining rural communities</td>
<td>XXX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project</th>
<th>Key aspects of contemporary outdoor recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban proximate nature</td>
</tr>
<tr>
<td>A) Activity and Place – a common empirical arena</td>
<td>XX</td>
</tr>
<tr>
<td>B) Different cultures in the field of outdoor recreation</td>
<td>XX</td>
</tr>
<tr>
<td>C) Outdoor recreation in urban proximate nature</td>
<td>XXX</td>
</tr>
<tr>
<td>D) Outdoor recreation in spatial planning</td>
<td>XXX</td>
</tr>
<tr>
<td>E) Outdoor recreation and nature conservation</td>
<td>XXX</td>
</tr>
<tr>
<td>F) Nature based tourism as tool for sustaining rural communities</td>
<td>X</td>
</tr>
</tbody>
</table>
Appendix H: Extensions of program communication

Stakeholders and target groups

1. Information
   - The staff of the SEPA (including the Council for Outdoor Recreation)
   - Other authorities – such as the National Board of Forestry, the Youth Council, the Institute for Public Health, the National Housing Board.
   - Outdoor recreation organizations – FRISAM (incl. 19 members’ organizations, such as STF, Friluftsförbundet, Scoutrådet, Cykelfrämjandet, Sportfiskarna etc.)
   - Journalists with an interest in outdoor recreation and nature-based tourism (local, national and specialist media)
   - County administrative boards (persons with responsibilities for outdoor recreation and land use planning)
   - Local municipalities and authorities (persons with responsibilities for outdoor recreation and land use planning)
   - Companies (outfitters, equipment providers, tourism businesses etc)
   - Politicians and departments with an interest in outdoor recreation and nature-based tourism
   - Outdoor recreation educations (teachers)
   - Forest and land managers – Sveaskog, LRF, Skogssällskapet and others
   - Researchers /Research colleges within outdoor recreation and nature-based tourism
   - Schools and nurseries with an interest in outdoor recreation and nature-based tourism
   - National and regional tourism organizations
   - Committed general public

2. Dialogue
   - The staff of the SEPA (including the Council for Outdoor Recreation)
   - County administrative boards (persons with responsibilities for outdoor recreation and land use planning)
   - Local municipalities and authorities (persons with responsibilities for outdoor recreation and land use planning)
   - Outdoor recreation organizations and businesses
   - Outdoor recreation educations (teachers)

3. Collaboration
   - The staff of the SEPA
   - The reference group of the program
   - Individual persons with an additional need for research-based knowledge on outdoor recreation at the county administrative boards, local municipalities, FRISAM, the Council for Outdoor Recreation
   - Researchers/ research colleges
SWOT analysis

Strengths
- Program members have extensive competence and networks from previous research in outdoor recreation
- Several researchers have experience from similar programs including research communication (e.g. ETOUR, FjällMistra, the Landscape as Arena, HagmarksMistra)
- The researchers are geographically spread, i.e. opportunities for communication through large networks
- Experience within the group from working interdisciplinary and multi-disciplinary
- The researchers on the program have different perspectives in factual matters hence complementing each other, and with not to wide disciplinary dispersion
- Communicative researchers.

Weaknesses
- The researchers are spread over Sweden – hinders internal communication
- Inter-disciplinary research is time consuming
- The researchers on the program have different academic perspectives
- Sometimes hard to publish multidisciplinary articles in scientific journals.

Opportunities
- Large interest for research on outdoor recreation and nature-based tourism
- The media deals with research results in a positive and confidence inspiring manner
- Large demand for knowledge on outdoor recreation from ongoing political and administrative processes at authorities and organizations
- Target group is relatively homogenous and easy to identify
- Connection to Mistra Centre for Adaptive Management of Natural Resources
- Connection to national graduate schools in outdoor recreation and tourism
- Establishment of future research structures (networks, centre etc.) in outdoor recreation and nature based tourism.

Threats
- Excessive expectations of the program, may lead to disappointment
- Poor understanding of the conditions for research among target groups – i.e. not all questions asked can be answered and research takes time.
- Large target group.

Communication budget (SEK)

<table>
<thead>
<tr>
<th></th>
<th>06/07</th>
<th>07/08</th>
<th>08/09</th>
<th>09/10</th>
<th>10/11</th>
<th>11/12</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>205 500</td>
<td>72 000</td>
<td>88 000</td>
<td>90 000</td>
<td>90 000</td>
<td>90 000</td>
<td>635 500</td>
</tr>
<tr>
<td>Dialogue</td>
<td>30 000</td>
<td>25 000</td>
<td>55 000</td>
<td>25 000</td>
<td>55 000</td>
<td>55 000</td>
<td>215 000</td>
</tr>
<tr>
<td>Interaction</td>
<td>5 000</td>
<td>5 000</td>
<td>37 800</td>
<td>5 000</td>
<td>5 000</td>
<td>37 800</td>
<td>65 600</td>
</tr>
<tr>
<td>Staff</td>
<td>229 691</td>
<td>236 308</td>
<td>242 924</td>
<td>250 486</td>
<td>258 048</td>
<td>265 610</td>
<td>1 483 067</td>
</tr>
<tr>
<td>Contingency fund</td>
<td>15 000</td>
<td>15 000</td>
<td>15 000</td>
<td>15 000</td>
<td>15 000</td>
<td>15 000</td>
<td>90 000</td>
</tr>
<tr>
<td>Overhead (35%)</td>
<td>169 817</td>
<td>123 658</td>
<td>153 554</td>
<td>134 920</td>
<td>137 567</td>
<td>162 193</td>
<td>871 209</td>
</tr>
<tr>
<td>TOTAL</td>
<td>655 008</td>
<td>476 965</td>
<td>592 278</td>
<td>520 406</td>
<td>530 615</td>
<td>625 603</td>
<td>3 400 876</td>
</tr>
</tbody>
</table>