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Group of Specialists on the European Diploma for Protected Areas

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APPRAISAL REPORT

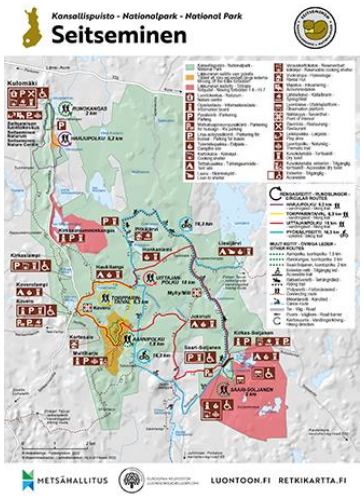
Seitseminen National Park

Kansallispuisto Seitseminen

(Finland)

visited from 21 to 23 August 2023

in view of the fifth renewal of the Council of Europe's European Diploma for Protected Areas (EDPA)



Maurice Hoffmann

INBO (Research Institute for Nature and Forest), Brussels

Contents

Bog and mire landscape at Saari-Soljanen, Seitseminen National Park

Seitseminen National Park (Finland)

1. History of the award and renewals

Award: 19 June 1996, valid until 19 June 2001, on-the-spot-appraisal report by Eckhart Kuijken (visit in June 1995)

First renewal: 17 October 2001, valid until 19 June 2006, on-the-spot-appraisal report by Eckhart Kuijken (visit in July 2000)

Second renewal: 27 September 2006, valid until 18 June 2011, on-the-spot appraisal report by Michael Usher (visit in September 2005)

Third renewal: 6 July 2011, valid until 19 June 2021, no on-the-spot-appraisal organised[1]

Exceptional extension due to COVID-19 pandemic, valid until 19 June 2024, no on-the-spot-appraisal could be carried out due to COVID-19 travel restrictions, without revision of the conditions and recommendations.

Potential fifth renewal after on-the-spot appraisal visit by Maurice Hoffmann (visit in August 2023)

2. General description of the Seitseminen National Park

(based on Kuijken (1995, 2000), Usher (2005), Seitseminen National Park management plan (2020), Hautala & Rautiainen (1995); major source: EUNIS fact sheet (https://eunis.eea.europa.eu/sites/FI940001))

General characteristics of the site

[1] Pekka Vesterinen, present-day site manager of Seitseminen National Park confirmed by mail that since the visit by Michael Usher in 2005 there haven't been any on-the-sport-appraisal visits by experts; he was not aware of the reasons why.

Seitseminen was established as a National Park in 1982. Before that, drainage of waterlogged soils was the dominant management measure, which was installed primarily for economic forestry reasons. Since 1987 major efforts were made to reverse drainage measures and restore conditions for boreal bog forest, bogs and mires. It is an almost 47 km² large park located on a watershed of western Finland in the central boreal forest zone. Some of the state -owned forests in Seitseminen have been under protection since the beginning of the 20th century. The rural area surrounding the park is sparsely populated.

According to the recent management plan, the Seitseminen National Park presently covers an area of 4 668 ha. The forests cover above 50%, the peatlands (bogs and mires) approx. 45% and the cultural heritage landscapes 0,1% of the park. The management plan[2], approved in 2022 (but not yet published), distinguishes three major zones, a recreation zone, a quiet zone, and a restricted zone. There are about thirty small lakes and pools in the park. Eskers (low, long, slightly undulating ridges of stratified sand and gravel) principally oriented north to south, are the geologically significant and geomorphologically structuring landforms.

Qualities

Seitseminen National Park is one of the most important protected old-growth forest areas in southern Finland. In the national park it is possible to preserve the mosaic of forests and peatlands and the natural succession, both of which are typical of the forest of southern Finland. Several efforts were made to restore the boggy nature of the boreal Scots Pine forest after preceding periods of local drainage of the forest floor.

Both flora and fauna show characteristics typical to northern (boreal) nature. Many regionally or nationally threatened species breed in the peatlands and the old-growth forests of the park. Among these are animal species like the European Pine Marten (*Martes martes*), the Eurasian Pygmy Owl (*Glaucidium passerinum*), the Ural Owl (*Strix uralensis*), the Three-toed Woodpecker (*Picoides tridactylus*), the Red-breasted Flycatcher (*Ficedula parva*), and the Siberian Flying Squirrel (*Pteromys volans*). Given the extremely low level of air pollution and the permanently high air humidity, the area is particularly rich in corticolous, terrestrial and saxicolous cryptogamic species (mosses, liverworts, lichens, and other, non-lichenized fungi), among which a large number of *Sphagnum* spp., *Ptilium crista-castrensis, Hylocomium splendens, Pleurozium schreberi, Cetraria pinastri, C. islandica*, several *Cladina* and *Cladonia* spp., *Nephroma resupinatum*. Boreal vascular plant species dominate the herb and (dwarf) scrub layer of coniferous forests, bogs and mires. Examples of these are *Vaccinium myrtillus, V. vitis-idaea, V. uliginosus, V. oxycoccus, Empetrum nigrum, Andromeda polifolia, Scheuchzeria palustris, Rhododendrom tomentosum (Ledum palustre), Rubus chamaemorus, Betula nana, Eriophorum vaginatum, Trientalis europaea, Linnaea borealis, ...* Bog forests are dominated by *Pinus sylvestris* in the tree layer, accompanied by *Betula pubescens, Populus tremula* and *Sorbus aucuparia*. *Vaccinium* species dominate the herb/lower scrub layer. The forest floor is largely covered by *Sphagnum* species, pleurocarpous mosses and large, fruticose lichens, and much dead and decaying wood.

Vulnerability

The area is not especially sensitive to disturbance and erosion. Historical drainage activities did have drastic impact on the bog forest, and hence on its capacity as a carbon sink rather than a carbon source; major restoration efforts are taken to increase the carbon sink/source ratio. By establishing service facilities visitors can be channelled to designated areas. The (increasing) presence of *Ips typographus*

[2] The management plan development was accompanied by a steering group, existing of representatives of the City of Ikaalinen, the City of Ylöjärvi, the Council of the Pirkanmaa Region, the Centre for Economic Development, Transport and the Environment, the Finnish Association for Nature Conservation, and the Pirkanmaa Regional Museum. Official requests for comments on drafts of the management plan were sent to relevant authorities and stakeholders.

was mentioned by the area manager as a potential threat to Spruce, although Spruce is not the dominant species in the area.
As anywhere else in Europe climate change does also show its effects in Finland (see e.g. website of Finland's environmental administration: https://www.ymparisto.fi/en/state-environment/climate-change/climate-change-advances), and quite some research focusses on CO_2 and CH_4 conditions, also in Seitseminen National Park (see Appendix, "Visit to an active research site in an old-growth bog forest site close to Kortesalon leirikoulutila"). At the country level, invasive alien species are also recognized as a potential threat to nature (e.g. https://yle.fi/a/3-8146734), but they are momentarily not of great relevance to the Seitseminen National Park, and were not mentioned as such by the park management.
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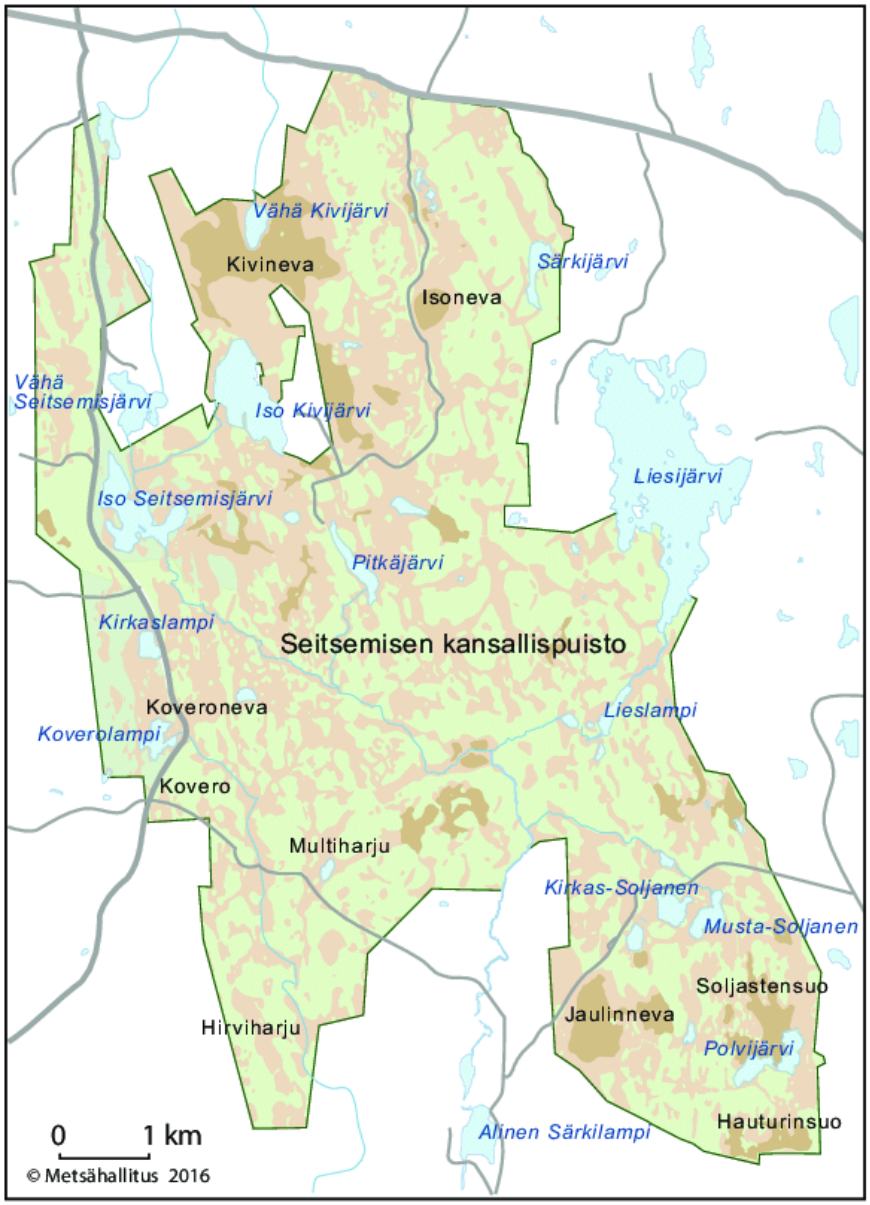
Geomorphology

The bedrock of Seitseminen is barren; it belongs to the intrusive rock area of Central Finland containing, e.g. rock types such as granite and granodiorite. The bedrock is covered almost everywhere with moraine. The most visible marks left by the ice ages are eskers. Towards the end of the ice age the edge of the glacier did not move back evenly but widened twice. As a consequence, soil types lie one upon another. In the Seitsemisharju esker there is sand at the bottom and on top a moraine cover of three metres. The sandy deposits of the Seitsemisharju esker were laid down 9 800 years ago. The moraine deposits are 9 000 years old, dating from the period when the great ice sheet finally melted. The Seitsemisharju esker is part of a 30 km long range of eskers. The top of the esker rises to 185-195 metres above sea level, standing 20-25 metres above its surroundings. The greater part of the Seitsemisharju esker has never been submerged by water.



Topography of the Seitseminen National Park

Educational Interest

Since the creation of Seitseminen National Park several research projects have been carried out by the Finnish Forest and Park Service, the Finnish Forest Research Institute, environment institutes and universities. The monitoring of restoration works and of the management of forests, peatlands, heritage biotopes and small water bodies is continuing. Ad-hoc follow-up surveys on bird and butterfly species are carried out and the territories of threatened animal species are being checked at regular intervals. Also, the vegetation of the Kovero cultural heritage environment is being followed at different monitoring points. Education to increase awareness of the environment is an important part of the activities in Seitseminen National Park. Special information and instruction are given to preschool children and school pupils visiting the national park. Different programmes and educational material have been developed for them. Also plays and days with special themes are being organised for the same audience throughout its more than thirty-year history. During the last few years, the area has been frequently used for general studies on animal ecology and other biological studies. The greatest research challenge has been a several-year programme focusing on the effect of the fragmentation of the forest

and mosaic formation in which the efforts of researchers focused on the ecology of different groups of organisms. The value of the area for research is immense. Seitseminen is of particular importance to the rehabilitation and ecological research on forest, peatlands, heritage biotopes and small water bodies. In projects associated with the restoration and care of biotopes of this kind, Seitseminen is a so-called experimental and intensive monitoring area. The Seitseminen National Park has become highly popular as a place for school and university instruction. In 2022, 43.000 visitors were registered, the number of visitors is expected to further increase. The number of visitors is monitored via the management plan monitoring scheme, first results of the evolvement of numbers will be available in 2026 (see monitoring table below).

Seitseminen Nature Centre

Instructive panels on Outdoor "Etiquette" in the Seitseminen Nature Centre

Cultural heritage

The first people came to Seitseminen in the 19th century. They built their houses on state land and were thus tenants of state-owned farms. In the area of Seitseminen, there have been two tenant farms and one independent estate. The state-owned forests in Seitseminen were largely managed for forestry purposes from the late 19th century to the 1970's. Many cabins were built for forest workers, one of them, called Pitkäjärvi cabin, built in the late 1930's, is located in the national park. Hikers in the national park may rent Pitkäjärvi cabin. One of the best preserved state-owned tenant farms is Kovero. Today, it is managed as a historically interesting building complex and as a cultural heritage landscape. The Pitkäjärvi cabin and the majority of the buildings on Kovero farm are protected by law.

Kovero Cultural Heritage site with surrounding meadows

Sheep grazing (a West-Finnish breed) of meadows around Kovero

Original Birch fencing around the Kovero farm building, covered by corticolous lichens of humid, acid environment

Illustrative information boards at the Kovero farm

Monitoring

Present-day monitoring within the Seitseminen National Park concentrates on three levels:

- ➔ The effects of recreational use and state of ecological and social-economic sustainability
- ➔ Limits of Acceptable Change (LAC)
- ➔ Some specific indicators, e.g. local economic impact of visitors, condition of structures, breeding/nesting success of Osprey, …

The management plan includes 37 indicators (see table below) that are and will be used in monitoring of the implementation and impact of measures foreseen in the management plan; current and target values are defined as evaluation tool. The majority of indicators are evaluating the relation with the

public and economic consequences. A first evaluation is foreseen in 2026. The number of indicators specifically aimed at evaluating the biodiversity response variables is very limited. This doesn't mean that no biomonitoring is happening, but it seems this is less structurally organized and depends on voluntary input.

	Monitoring the Implementation and Impact of Measures (of the management plan)
1	The significance of the area for locals
2	Customer satisfaction at service points
3	Number of accessible sites and routes in the area (pcs, km)
4	State of cultural heritage values
5	Visitor satisfaction index
6	Disruptions experienced by visitors
7	Visitors' assessment of meeting expectations
8	Visitors' assessment of the quality of services
9	Condition of service structures/ Visitors' assessment of the quality of accessible sites in the area.
10	Terrain degradation
11	Visitors' assessment of the quality of recreational environment
12	Visitors' perception of littering
13	Visitors' experience of disturbance caused by the behaviour of other visitors."
14	Visitors' experience of disturbance caused by excessive visitor numbers
15	Overall local economic impact of visitors' spending
16	Local economic revenue impacts of visitors for whom the conservation area is the primary destination of the trip
17	Total employment impacts of visitors' spending on the local economy
18	Employment impacts of spending by visitors, for whom the conservation area is the primary destination of the trip
19	Duration
20	Number of visitors to the site (nature centre).
21	Number of visitors to the site (national park)
22	Visits to the luontoon.fi website
23	Number of followers on Seitseminen's Facebook page".
24	General measure: Sensitive/endangered habitat types (Kovero traditional biotopes)
25	Number of customers guided by entrepreneurs and Metsähallitus personnel (pcs)
26	Participant and organizer numbers in events/Number of events
27	Condition of service structures/Percentage of service structures in poor condition
28	Successful Osprey nestings
29	Visitors' perception of health and well-being effects, 'Health Index'
30	Distance travelled by own means (km/visitor)
31	Satisfaction of entrepreneurs with Metsähallitus' operations
32	Number of tourism cooperation agreements
33	Collaboration with tourism operators/assessment by collaborating companies of the implementation of sustainability principles in their own operations
34	Firewood demand (fire pits + rental cabins), cubic meter (firewood demand, direct consumption or per 1000 visits, 1-3 year average)

35	Toilet waste treatment, capture of septic tank liquids, percentage of total number of toilets"
36	Nature centre's energy consumption (MWh)
37	Arrival to the area by means other than car, motorcycle, or camper

Surrounding areas

The area around Seitseminen is sparsely populated. Tampere (ca. 250k inhabitants; 484 inhab./km²) is the nearest large town, it lies 80 km to the south of the park. Other surrounding communities that advertise the qualities of Seitseminen for its natural beauty and touristic attraction are Ikaalinen (6800 inhab., 9 inhab./km²) and Ylöjärvi (33,6k inhab.; 30 inhab./km²).

At a shortest linear distance of ca. 20 km ENE of the Seitseminen National Park, the approx. 30 km² large Helvetinjärvi National Park is situated, also managed by Metsähallitus. Although also dominated by old-growth coniferous forest, the landscape of the latter differs from Seitseminen by its much stronger relief, its dominating rock outcrops, and its large steep-shored forest lakes. In between both National Parks the landscape is dominated by forest, predominantly state-owned and hence managed by the Finnish State, making physical connection between both National Parks, and melting of both into one National Park structure, possible.

3. Seitseminen National Park, administratively

Owner
The National Park is owned by the Finnish State. The Central Authority is the Ministry of Environment, P.O. Box 380, FIN 00131 Helsinki, Finland. The authority responsible for management of the Finnish National Parks is Metsähallitus Parks and Wildlife, P.O. Box 94, FIN 01301 Vantaa

Managing organisation of Seitseminen National Park
Metsähallitus - the Finnish Forest and Park Service, Western Finland P.O. Box 38, FIN-39701 PARKANO, Finland

Local manager
Pekka Vesterinen, Metsähallitus - The Finnish Forest and Park Service, Western Finland P.O. Box 38, FIN-39701 PARKANO, Finland; pekka.vesterinen@metsa.fi

Staffing and budget
Staff of the Seitseminen National Parks has responsibility for several other national parks and protected areas. Because of this organization format it is difficult to reconstruct the exact staffing for the individual park. There are several kinds of issues to look after, not in the least *structural staffing and funding*. During 2010-2022 staffing and budgeting was experienced as reasonably satisfying, not in the least thanks to (temporal) support from EU Life funding, helping with restoration implementation (on average approx. 5000 euros/year). From the beginning of 2024 onwards, budgets dropped with approx. 30 %, no additional EU Life means are presently available.

Relevant website addresses

URL of the official website of the Finnish National Parks
https://www.nationalparks.fi/seitseminennp

Selection of other relevant web links to Seitseminen National Park (a.o. those of local community sites):

Wikipedia: https://nl.wikipedia.org/wiki/Nationaal_park_Seitseminen
Finnish National Parks ("Kansallispustoissa") https://www.nationalparks.fi/seitseminennp/trails
City of Tampere https://visittampere.fi/en/attraction/seitseminen-national-park/
City of Ylojarvi https://www.visitylojarvi.fi/en/seitseminen-national-park/
City of Ikaalinen https://visitikaalinen.fi/en/kohteet/seitsemisen-kansallispuisto/
Eunis fact sheet https://eunis.eea.europa.eu/sites/FI940001
All Trails: https://www.alltrails.com/nl-nl/parken/finland/pirkanmaa/seitsemisen-kansallispuisto
On Metsähallitus habitat management and restoration: https://www.metsa.fi/en/nature-and-heritage/habitats/
On Beetles Life project https://www.metsa.fi/en/project/beetles-life-eng/
On the WildForestReindeerLife project https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE15-NAT-FI-000881/the-wild-forest-reindeer-rangifer-tarandus-fennicus-of-finland-conservation-and-recovery-of-historic-range

4. Why was Seitseminen National Park awarded the European Diploma in 1996?

Abstracted from Kuijken (1995)
"Considering the outstanding value of the Seitseminen National Park in terms of forest and peatland biodiversity, the presence of undisturbed landforms and historic heritage landscapes with typical semi-natural vegetation, the balance between conservation and environmental education, the required regulations and nature management, we strongly recommend to award the European Diploma in category B."

Since 1996 ongoing restoration efforts are taken to restore bog and mire systems, and other restoration and maintenance efforts are made to at least maintain, and mostly improve the departure conditions of 1996. We conclude that the situation since 1996 has improved, and that the reasons for awarding the Diploma formulated in 1995 still hold.

5. Annual reporting

Since the last renewal preceded by an on-the-spot appraisal visit (2005), annual reports were regularly submitted to the Secretariat of the Bern Convention. Annual reports as of 2013 are available on the Dashboard of the European Diploma(https://www.coe.int/en/web/bern-convention/-/seitseminen-national-park). The last available annual report dates from 2022. Annual reports are structured according to the conditions and recommendations of the last documented renewal documents of the council. Although reports are systematic and standardized, the shared information is quite limited.

6. Conditions and recommendations from the last documented renewal resolution (6 July 2011), how did the park management deal with them, what are potential future prospects?

Conditions and recommendations attached to the third renewal of 6 July 2011 (Resolution CM/ResDip(2011)8; no conditions or recommendations were given in the fourth renewal of 2021) are given below. They are consecutively followed by an overview of the recent developments according to the annual reports 2013-2022, and are supplemented with information shared during the on-the-spot appraisal visit of August 2023. Potential future prospects are the result of the discussion during the visit.

Condition: Implement the new master plan for the Seitseminen National Park and evaluate by 2014 if there is a need of a new updated management plan.

➔ An update of the management plan was drafted in 2022. It was not yet published as such, but was approved by the Metsähallitus authorities after presentation to the Finnish Ministry of Environment.

I conclude that the condition has been dealt with. Given the permanent character of the update and implementation of a management plan, I suggest maintaining it as a recommendation in the forthcoming renewal.

Recommendation 1: Inform the Secretariat of the Bern Convention of the results of the Management Effectiveness Evaluation (State of the Parks Reporting) which will be made on a regular period of every 5 years;

- ➔ Annual report: The Seitseminen National Park is completely overlapping with European Union Natura 2000 site FI0311002 (SAC - Special Area of Conservation). The National Park and the Natura 2000 site are covered by an integrated management plan which takes into account all key values, threats and pressures and necessary conservation and other measures.
  The former site-specific Management effectiveness evaluation (MEE) has been replaced by a formalised Natura 2000 Site Condition Assessment (NATA). This assessment is conducted every 6/12 years, as necessary. The first NATA assessment of Seitseminen National Park/ Natura 2000 site FI0311002 was done in 2010 and the results were taken into account in the subsequent management plan. In the Pirkanmaa regional master plan (2017), an update was evaluated as not being urgent for this site. However, management effectiveness indicators (e.g. habitat management impacts, condition of visitor facilities and trends in visitor numbers, etc.) are followed continuously/annually. The second NATA assessment was done in 2020.

I conclude that the management of the park has fulfilled this recommendation reasonably well, given the new situation of complete overlap with the reporting on the European Union Natura 2000 site FI0311002. Additionally, reports to the Secretariat of the Bern Convention are delivered annually, although shared information herein is limited to the basics. It is advisable that the management plan is published on short notice, and that an English version is made available. Monitoring results (the 37 indicators foreseen in the management plan, but also supplementary biomonitoring results) would also best be included in the annual reports.

Recommendation 2: Continue the restoration plans for both mires and forests; continue arrangements for the appropriate grazing of meadows to encourage their biodiversity.

- ➔ Since 2013 and as far as mentioned in the annual reports at least 52,5 ha of mires was restored (by reversing drainage measures taken in former forestry management), and at least 32 ha of forest managed (controlled burning); meadow management has continued as planned throughout the reporting period.
- ➔ **Comment during discussion**: The maintenance of the meadow habitat (which is very limited in area and surrounds the Kovero farm) becomes increasingly difficult, due to evermore limited financial resources (no farmers are available to do the job, no seasonal workers are available to do the maintenance of the sheep, again due to limited available resources, also maintenance of the stables and other buildings at the Kovero site becomes difficult. ***Lack of resources*** is mentioned as the prime threat for the maintenance of the high standards of the park on all its issues (nature management, restoration measures, infrastructure, education, recreation, …°

I conclude that a lot of attention was given to the restoration and conservation of the dominant habitat types. There are good reasons to maintain this recommendation since restoration efforts are still on-going and necessary. Around the Kovero farm, extension of the meadow habitat, managed by sheep grazing should be considered; it can be expected to make management more efficient.
Attention should be given by the Finnish government to the assurance of sufficient personnel and financial resources to maintain the restoration efforts at an acceptable level. Nowadays limitations on both are experienced by the National Park management as a major threat.

Information on management measures and results shared in the annual reports should be further elaborated, also when problems arise with fulfilling the restoration and conservation measures.

Recommendation 3: Metsähallitus should continue to bring together the community of people with interests in biodiversity so as to foster knowledge transfer and exchange; scientific research should actively continue.

- ➔ The consecutive annual reports since 2018 simply state that the recommendation 3 was complied with "as planned". Only the annual reports of 2015-2017 mention several visits of national and international groups of specialists (Finland, Hungary, Latvia, Estonia), who have visited restored sites. Only in 2015 one research involvement is mentioned, i.e. "greenhouse gas measures were carried out in co-operation with the Natural Institute Research Finland including Peat Land Use Life project". During discussions and visits and from indirect information (websites) it becomes clear though that much more involvement in research is present, e.g. well-illustrated by the on-the-spot visit to the experimental research site at Kortesalo, where the RESPEAT project was illustrated, and the presentation on the Beetles Life project (see appendix below on the visit itself).

I conclude that further initiatives to share management experiences with other European groups would be of significant added value to the Seitseminen National Park management, and to the nature management in Europe as a whole and the European Diploma holding areas in particular. The value and management of old-growth forest remains a hot topic in Europe, and the - typically Finnish - forest burning management are examples that could be given further attention to share with colleagues in Europe.
Again, information shared in the annual reports should be further elaborated, certainly concerning on-going research and research results in which Seitseminen is included. It is advised to further interest researchers in Seitseminen National Park management issues. Recommendation 3 should be maintained and further elaborated.

Recommendation 4: Deepen the cooperation with local stakeholders, especially local nature tourism entrepreneurs

- ➔ From the last annual report 2022, we quote:
  - The entrepreneurs who were educated for the guidance of the nature values and cultural heritage offered guided tours and hiking advices for the visitors.
  - A new entrepreneur took over the Nature Centre and offers more versatile services to the customers. The entrepreneur offers for example guided excursions and courses of outdoor skills. There are rental services of fatbikes, canoes, kayaks, sup-boards, snowshoes and camping equipment. There are also café, restaurant and accommodation services.
- ➔ Also in earlier annual reports initiatives were mentioned on this recommendation

We conclude that major attention was given to recommendation 4. From the discussion with local authorities of the cities of Ikaalinen (Ms. Marjo Heikkilä and Mr. Kauri Kallio) and Ylöjärvi (Ms. Tanja Vuori) it additionally appears that they are very pleased with the cooperation with the park and the park management. They, as well as the larger city of Tampere (see website quoted above), promote the Seitseminen National Park as of great added value to their communities and to their tourism attraction. A continuation of recommendation 4 remains relevant.

Recommendation 5: Provide the necessary funding to continue the refreshment of the recreational facilities; customer services and nature interpretation should be further developed.

- ➔ From the annual report of 2019-2022 I quote the following actions:
  - (2022) The investment project was continuing. Energy renovation of the Nature Centre continued with the installation of water-air-heat-pump. The paths of popular hiking trails were renovated with new path bridges and duckboards. A new, 18 km long, hiking trail was established.
  - (2022) Seitseminen National Park is the development target of a project that develops sustainable ways to travel.
  - (2021) the national park celebrated its 40th anniversary, invited guests were political decision-makers, who were told about future funding needs.

- (2021) The investment project was continuing and will continue to the year 2023. Energy renovation started in the Nature Centre. Several parking places were renovated and expanded and there are charging plugs for electric cars in the parking place of the Nature Centre. More dry toilets, cooking shelters, fire places, path bridges and duckboards were renovated. Part of these new services are made accessible.
- (2021) The amount of visitors has normalized after the corona pandemic year 2020.
- (2020) Visitor Survey of Seitseminen National Park was made in 2019 and it will be published in 2020[3]. The report gives new information of the visitor satisfaction in the area and points out the most important development needs of the recreational facilities and services.
- (2020) There were two funding projects going on in 2020. One in which virtual guidance and digital services were being improved, for example short marketing video about Seitseminen National Park was published and some improvements in the Exhibition of the Nature Centre were made. Another project was an investment project in which several recreational facilities, like dry toilets, rental huts and duckboards, were renovated in the Seitseminen National Park. That investment project will continue next year. The amount of visitors is growing in the area and new improved facilities are needed. During this Corona pandemic year, the amount of visitors was 53 % higher during the period from January 2020 to August 2020 than last year during the same period in the Seitseminen National Park.
- (2019) A Visitor Survey of Seitseminen National Park was carried out in 2019. The report will give new information of the visitor satisfaction in the area and point out the most important development needs of the recreational facilities and services.
- (2019) There were two funding projects going on in 2019. One in which virtual guidance and digital services were being improved and another project was to develop and to improve local products and visibility of the area together with 5 entrepreneurs. That project was finalized in 30.8.2019 and it was funded by the entrepreneurs and European Agricultural Fund for Rural Development. Digital services and virtual guidance project continues also next year.

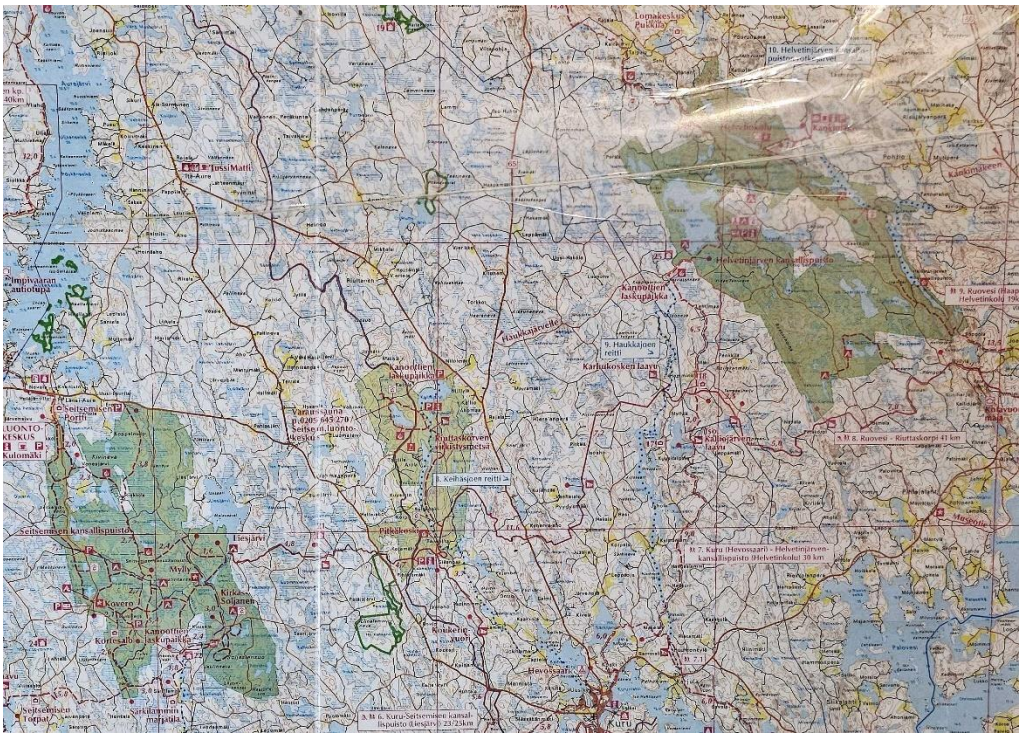
I conclude that a lot (sufficient) of attention has been given to recommendation 5 during the last decade. Also during the on-the-spot appraisal visit the issue of recreational facilities, education and involvement of visitors, behaviour of tourists within the park (see picture in the appendix on outdoor etiquette advertising), responsibilities of the park towards ecology, nature, nation-wide sustainable management, climate change mitigation, etc. was illustrated. During the visit, concern was however also expressed on the continuation of sufficient resources (personnel and financial means) to maintain the high level of recreational, touristic and educational infrastructure in the park.

Further reflections based on the appraisal visit

Further reflections of the appraisal visit and the discussion with the people involved that will be attended in the updated conditions and recommendations (ch. 7) are the following:

- ➔ The regional and local management express concern regarding the continuation of staff and financial resources. Reduction of resources could jeopardize earlier engagements.
- ➔ The combination/connection of the (almost) neighbouring National Parks of Seitseminen (47 km²) and Helvetinjärvi (30 km²) was discussed in depth (distant between both parks approx. 20 km). Connecting both national parks could be of significant added value for the efficiency of management, for several species with large to very large home ranges, for shared educational and recreational infrastructure, for better maintenance of the old-growth forest habitat, etc. The area in between both national parks is predominantly state-owned which is a condition in Finland to be recognised as national park. It is therefore advisable to at least elaborate further on pros and cons of connecting up to merging both National Parks into one National Park. Including the area in between both National Parks would create an area of approx. 280 km² (in-between area is approx. 200 km²) of nature with the highest possible nature conservation protection level.
- ➔ The European Diploma logo is visible through some communication instruments (e.g. on the website of the Finnish National Parks and in the Seitseminen Nature Centre), but could be put forward much better. Also the relevance of the European Diploma and the significance of the network of European pristine natural heritage areas deserves more attention. It was suggested during the concluding discussion to pay more attention to informing the public on the European Diploma. It was suggested to consult other Diploma holding areas on the way they are coping with this, the Krimml Waterfalls Natural Site (Austria) was suggested as an excellent example.

[3] I didn't have the opportunity to look into this report



Seitseminen National Park (green area on the left) and Helvetinjärvi National Park (green area on the right) and the area in between, a potential extension area of a combined Finnish National Park dedicated to boreal old-growth forest, bogs, mire and lake systems and its associated cultural heritage.

7. Updated and new conditions and recommendations for the forthcoming renewal

The preliminary conclusion is that I recommend renewing the European Diploma for Protected Areas to Seitseminen National Park for 10 years since the area is of European interest and is managed in an exemplary way.

For the renewal of the European Diploma the following recommendations are proposed:

Recommendation 1 - Make the management plan of the Seitseminen National Park public, and provide an English version that is also publicly available; make sure that the management plan is implemented fully and regularly updated according to new management insights and new necessities, e.g. concerning climate change measures, invasive species, plague species, forest and bogs and mire management, etc.; strengthen the accuracy of the annual reporting to the Secretariat of the Bern Convention and summarize in it all relevant and concrete information that is available.

R**ecommendation 2** - Continue the restoration management of bogs, mires, lakes and forests; continue arrangements for the appropriate grazing of meadows to encourage their biodiversity and consider extending the sheep-grazed meadow area around the Kovero farm site to gain in management efficiency and effectivity; report more extensively on the annual management measures taken and results in the reporting to the Secretariat of the Bern Convention.

Recommendation 3 - Metsähallitus should enhance efforts to bring together communities of people with interests in biodiversity so as to foster knowledge transfer and exchange; scientific research should actively continue, and be more proactively encouraged by Metsähallitus and the regional and local management among Finnish and international researchers; report more extensively on the results of

(inter)national cooperation, and research in the annual reporting to the Secretariat of the Bern Convention.

Recommendation 4 – Continue and deepen the cooperation with local stakeholders, such as local nature tourism entrepreneurs, municipal government authorities in the immediate surroundings, nature conservation and monitoring organisations.

Recommendation 5 – Improve structural monitoring efforts of all aspects of the park management, such as state and trends in biodiversity, tourism, management results, ecosystem health, effects of climate change, etc.; improve communication to the public and to the Secretariat of the Bern Convention on the integrated monitoring results, and consequences deduced from them.

Recommendation 6 - Provide the necessary funding to continue the refreshment of the recreational facilities, and structurally provide for the necessary personnel and infrastructure to guarantee qualitative nature management measures and tourist and educational activities.

Recommendation 7 – Assess pros and cons of combining the Seitseminen and the Helvetinjärvi National Parks by connecting them via the forested, state-owned area in between both national parks; depending on the outcomes of the assessment, take initiating steps to realize the connection.

Recommendation 8 - Make more use of the European Diploma logo in all information material and brochures, and explain the relevance of the Diploma wherever appropriate, in particular on the website, in the visitors' centre, and on information boards in the park.

8. References

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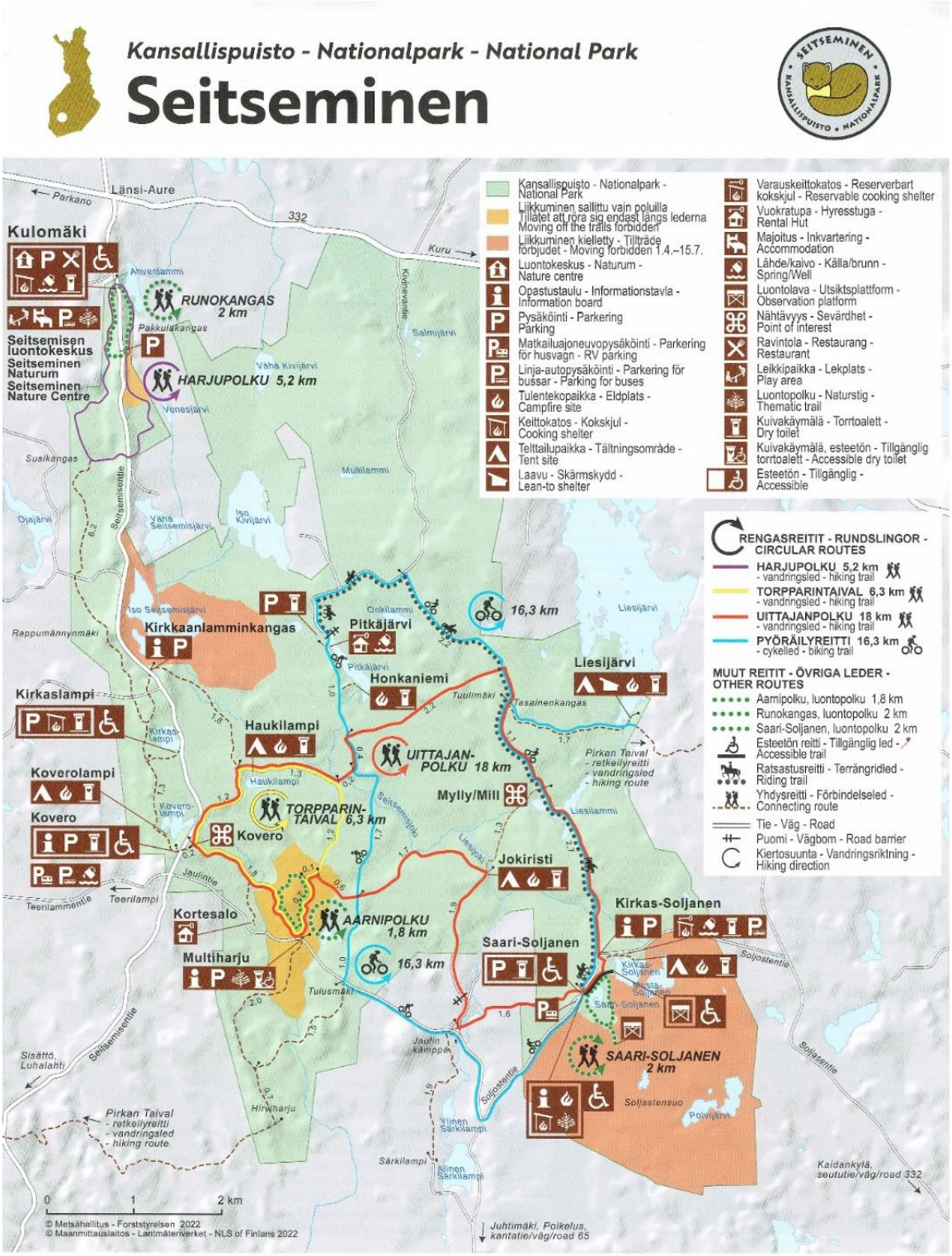
APPENDIX - On-the-spot-appraisal programme, 22-23 August 2023



Visited sites: Seitseminen Nature Centre (northwest), Saari-Soljanen site (south-east), Multiharju site (south-west), the Kovero Cultural Heritage site (west), and the CO_2~CH_4~ground water relation research site close to the Kortesalo site (south-west).

Monday 21.8.2023 (evening)
Arrival to Parkano railway station and accommodation in Hotel Pesti at Parkano

Tuesday 22.8.2023
9:00-11:30 Seitseminen Nature Centre, auditorium
Short presentations by
Ms. Johanna Väkeväinen, Senior Specialist Recreation and Visitor Management
Mr. Pekka Vesterinen, Senior Specialist Nature Conservation
Mr. Teemu Rintala, Senior Specialist Land Use
Subjects:
Nature conservation in Finland and in Seitseminen N.P.
Principles of protected areas planning in Metsähallitus Parks & Wildlife. New Masterplan Seitseminen N.P.

10:15 Coffee break at the Nature Centre café-restaurant

Subjects continued:
Customer service, nature interpretation and nature tourism
Restoration of mires and forests, grazing of semi-natural meadows

11:30 Lunch at Seitseminen Nature Centre Cafe'-restaurant

12:30-15:30 Field excursion to **Saari-Soljanen** and **Multiharju**

During the car trip to the excursion sites, an individual of the **Finnish forest reindeer** *(Rangifer fennicus,* also known as **Eurasian** or **European forest reindeer**[4] was encountered.

Saari-Soljanen site
Nature values of the mires, forests, semi-natural habitats etc., and recreational facilities were illustrated during a walk on a 2 km duckboard trail through a pristine bog-mire-lake ecosystem. At the edge of the mire system modest, nature friendly cooking cabins are available. Within the bog and mire system several lookout posts are present. Illustrative information boards in Finnish and English are present. An impressive bog system is present with many Ericaceous dwarf scrubs, mire vegetation with a.o. *Scheuchzeria palustris.* There is an almost closed, species rich moss layer of *Sphagnum* div. sp. and several large pleurocarpous mosses. *Rhododendron tomentosum* was locally dominant in the bog forest scrub layer.

[4] For the Life project aimed at the conservation of this reindeer subspecies, see: https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE15-NAT-FI-000881/the-wild-forest-reindeer-rangifer-tarandus-fennicus-of-finland-conservation-and-recovery-of-historic-range. Seitseminen NP is involved in this Life project, it ended 31 Dec 2023. See also, the Metsähallitus Annual and Responsibility Reports 2020 (p.87), and 2022 (p. 96).

Some examples of information boards along the duckboard trail at Saari-Soljanen.

Bog, mire and young forest vegetation at Saari-Soljanen

Close to the Saari-Soljanen duckboard track a bog restoration site was visited, where water household restoration measures were taken some 25 years ago, largely by filling and damming former drainage

ditches (drainage efforts at the time were taken for forestry reasons). Restoration measures were taken with quite heavy machinery, while standing trees in the restoration plots were cut down. An impressive restoration result was achieved in which ditches were not visible anymore and bog vegetation beautifully restored.

Next to the bog restoration site a relatively young coniferous (*Pinus sylvestris*) forest stand was visited, where a presentation of the Bugs-Life project was given by Mr. Sampsa Malmberg (Metsähallitus). The project was aimed at facilitating pyrophilous insect species, that depend on old-growth and fire-damaged forests (see https://www.metsa.fi/en/project/beetles-life-eng/ for further information). At the site a controlled forest burning management is achieved, with the purpose of restoring of or offering opportunities to fire dependent beetles. Before a plot of some hectares is burned down, approximately 1/3 of the standing Scots Pine trees are cut down; superficially burned tree trunks remain upright to create suitable habitat for the pyrophylous beetle and other insect species. A vivid discussion followed on advantages but also risks of forest fire management. Fire management is an intrinsic part of forest management in Finland.

Hyvärvinen (2008) says the following about this matter: 'The significance of forest fires for forest-dwelling biota has been shown in several studies. Relationship between beetles (Coleoptera), dead wood and forest fires has been studied quite intensively in recent years in Finland, and it has been shown that not only the pyrophilous species but also hundreds of other species, in particular those dependent on dead wood, benefit from burning. Many of these species are red-listed in Finland. Polypores seem to benefit from burning, also, but their responses need longer term monitoring.

Currently controlled burning is used primarily as a means of forest restoration in reserves in Finland. Forests that are burned are usually rather young and previously used for timber production. Burning is used to initiate natural forest succession and to create habitats for pyrophilous species. By the end of 2006, 880 ha of forest was burned in Metsähallitus reserves of which 559 ha after the year 2003. This increase is largely due to increased resources for forest restoration through EU Life projects. The importance of burning for forest-dwelling biota is now widely acknowledged, however, and Metsähallitus Natural Heritage Services has a target to burn 200 ha of forest annually in Finland."

Young Scots pine forest that was burned to favour pyrophilous (beetle) species; before burning part of the standing trees were cut down. Standing wood was left upright as habitat of bark inhabiting and pyrophilous insect species.

Multiharju old growth bog forest site

A 1.8 km old-growth forest trail on the Multiharju esker was followed, trails are freely accessible to visitors. It is a Scots pine (*Pinus sylvestris*) dominated old-growth forest. Trees are unequally aged and

sized. There is sparse presence of Norway Spruce trees (*Picea abies*), Rowan (*Sorbus aucuparia*), and Aspen (*Populus tremula*). A well-covering under layer is developed of Ericaceae, *Sphagnum* spp., lichens (*Cladina* spp. *Cladonia* spp., *Cetraria islandica*, …) and pleurocarpous mosses (*Pleurozium schreberi, Hylocomium splendens, Ptilium crista-castrensis*, …). Trees trunks and branches are strongly covered by a luxurious corticolous lichen, moss and liverwort flora illustrating the acid conditions (a.o. *Alectoria jubata, Bryoria fuscescens, Platismatia glauca, Cetraria pinastri, Pseudevernia furfuracea, Nephroma resupinatum*, …). A very high cover of dead wood, decaying wood appear. Both are often entirely overgrown by mosses, liverworts and lichens. Several locations of pristine boreal old-growth *bog* forest were present.

Old-growth bog forest dominated by Scots Pine in the tree layer and Sphagnum species in the undergrowth

Undergrowth of the old-growth forest rich in lichens, pleurocarpous mosses and Ericaceae species (left-hand side Ptilium crista-castrensis, *together with* Hylocomium splendens *and* Pleurozium schreberi, *one of the dominant pleurocarpous mosses)*

17:00 Dinner at Nature Centre café-restaurant

Wednesday 23.8.2023

8:30 -11:00 Field excursion with park staff including Mr. Raimo Itkonen (Regional Director) and Ms. Tuula Peltonen (Manager, Outdoor Recreation and Visitor Management)

Semi-natural habitats and cultural heritage values

Presentation of research about soil respiration and methane fluxes in rewetted/restored boreal peatlands. Ms. Roosa Hautala, University of Helsinki

Kovero Cultural Heritage site and meadow site

The Kovero Crown Tenant Farm was visited (photos, see above). It is dedicated to cultural heritage, and surrounded by a relatively small area (ca. 10 ha) of sheep-grazed (approx. 40 individuals during summer of a West-Finnish sheep breed) meadows. Meadow vegetation includes species like Eyebright (*Euphrasia stricta*), Sweet Vernal Grass (*Anthoxanthum odoratum*), White Hedge Bedstraw (*Galium album*), Spreading Bell-flower (*Campanula patula*), and Frog Orchid *(Coeloglossum viride).* Around the farm site an interesting original, well-maintained birch fence is present, it is entirely covered by corticolous lichen species. The farm buildings were visited and individually commented by the site manager. A lot of attention was given to the variety of visitor's activities that are organized here during summer.

Visit to a research experiment in an old-growth bog forest site close to Kortesalon leirikoulutila

PhD student Drs. Roosa Hamtola illustrated one of her experimental research sites in an old-growth bog forest, close to the Kortesalon leirikoulutila along the Jaulintie road (RESPEAD project). The site is installed in a formerly drained bog forest where restoration (ditches filled, trees not removed) was realized. Aim of the PhD is to study the effect of bog (forest) restoration on CO_2~CH_4 household in combination with ground water table effects and interactions. A poster on the first research results was presented in the field.

Experimental site at the Kortesalo location testing CO_2 and CH_4 household together with groundwater dynamics.

11:00 Lunch at Nature Centre cafe-restaurant

12:00 - 13:00 Meeting and discussions with representatives of Ikaalinen and Ylöjärvi towns. Ikaalinen: Ms. Marjo Heikkilä Cultural director and Mr. Kauri Kallio Leading gardener. Ylöjärvi: Account manager Tanja Vuori.

13:00 – 14:00 Conclusions and final discussions with park staff