Twinning Project MK 13 IPA EN 02 17

“Strengthening the capacities for effective implementation of the acquis in the field of nature protection”

STUDY TOUR TO FINLAND

Report D 3.6. - 1

22 - 29 SEPTEMBER 2018

List of participants:

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5	DANIELA KAMCHEVA	Junior Associate in Unit for Biodiversity, MoEPP
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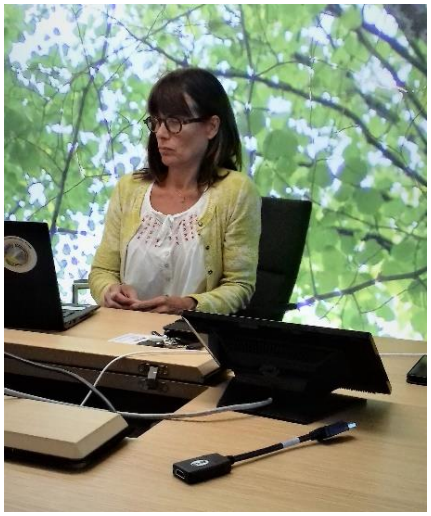
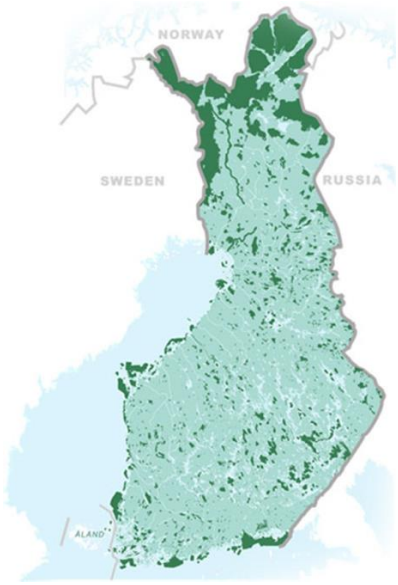
7	VLADO ATANASOVSKI	Advisor in the Unit for Spatial Planning in PA and Geodiversity in the Nature Department, MoEPP
8	NIKOLINA BOSILKOVA	Administrator in Nature Department, MoEPP
9	SUAD ABAZI	Junior Associate in unit for programming and monitoring of tbe implementation under the instrument for pre-Accession Assistance, Department for EU, MoEPP
10	BURBUQE HAXHIJAHA	Advisor in the Cabinet of the Minister, MoEPP
11	AMET AXHIU / ADJIU	Director, National Park Pelister
12	AJMAN AL ALLA	Head of Sector, Prespa Lake – Monument of Nature, Resen municipality
13	PECE CVETANOVSKI	Head of Sector, National Park Pelister
14	BILJANA STEVANOVSKA	Twinning Project RTA Assistant
15	ARTO AHOKUMPU	Twinning Project RTA

Program and key topics:

Date and time ***Place and host***	***Topic***
Saturday 22.9. bus transportation from Skopje to Pristina and flight Pristina - Helsinki, Accommodation in Helsinki	
Day one: Sunday 23.9.2018	
11:35- 15:30 Vallisaari Island, Manager of customer services Pekka Koponen    	11.35, by JT-laine boat to the VallisaariIsland. 15 minutes boat trip from the central market place of Helsinki. Vallisaari and Kuninkaansaari, embraced by the sea, have served as the home and workplace of hundreds of people and as the place of military service for thousands of soldiers for more than a decade. Military use ended some years ago and after that the management of the area was given to Parks and Wildlife Finland with the aim to establish a protected area with recreational services. The island opened for visitors in 2016 and is now hosting ca. 80 000 visits annually, mainly in summer season. Vallisaari is the most diverse nature destination in the metropolitan area. A record-breaking number of species tell a tale of coexistence between humans and wildlife. Before the opening of the area, P&WF conducted an exhaustive nature inventory including habitat mapping. Based on the data, a conservation plan was made which also includes zoning of the area. Active management of habitats was especially oriented towards increasing the open meadow habitats, which are important for butterflies and other insects - one can find more than 1000 butterflies and moths in the island. Big part of the practical work was done by volunteers, partly in co-operation with WWF Finland. Another goal was to protect areas where valuable old dead trees are dominant. A freshwater pond inside the island is a home to numerous bats, which are protected by Habitat Directive. Recreational plan was made taking into consideration the conservation values. In two years time basic infrastructure was built including nature trails (3 and 2,5 kilometres), info boards and signposting, rest stops/picnic sites, water supply, composting toilets and a small pier for boats. Also, sites for cafes and restaurants were built and venues are now rented to private entrepreneurs. The construction work was planned and supervised by P&WF personnel, but the practical work was mainly done by prisoners from Suomenlinna Prison (Castle of Finland - an island next to

	the Vallisaari, also World Heritage Site). Six to eight prisoners have been working constantly in the island for constructing and maintaining facilities. This is part of the social responsibility program of P&WF. Main parts of visitor facilities are made by metal, which fits well in semi-urban areas and is cost-effective solution in marine circumstances. The island has numerous old buildings and fortifications which offer a lot of potential for development of activities in the island - if money for renovation will be available. Right now co-operation with artists is increasing. During the weekend a special event Flash Vallisaari with light art was organized by Flash Finland Association with 1500 visitors. Also other artist groups are organizing events in the island. In 2020 Vallisaari will be the main forum for Helsinki Marine Biennale for Art. This kind of approach increases the number of visitors, local ownership and support among the people in metropolitan Helsinki area. Links: http://www.nationalparks.fi/vallisaari
Day two: Monday 24.9.2018	
7:30 →	Breakfast
9:00, MoE Finland Marina von Weissenberg 	Ministry of Environment Finland, Links: http://www.ym.fi/en-US Presentation on the task of MoE in general and Biodiversity Unit in particular; MoE Strategy 2030 Minister of Environment is responsible for environment, housing and energy issues (energy issues are not in the MoE). It has three departments and a Unit for biodiversity is part of Environment department. The number of staff is 25. Presentation on the MoE strategy 2030, a better environment for future generations. Mission: Building a sustainable living environment and growth. Objectives: 1) Good environment and diverse nature 2) Carbon neutral circular economy society 3) Sustainable urban development



Natura network in Finland

Goals for Objective 1:

a) A good status of the Baltic Sea has been achieved
b) Loss of biodiversity has been halted and a favorable status has been secured
c) Development of the living environment enhances human wellbeing
d) Environmental risks have been identified and they are being managed

The strategy has also clear table of objectives → priorities → Indicators

File: *MoE Strategy 2030.pdf*

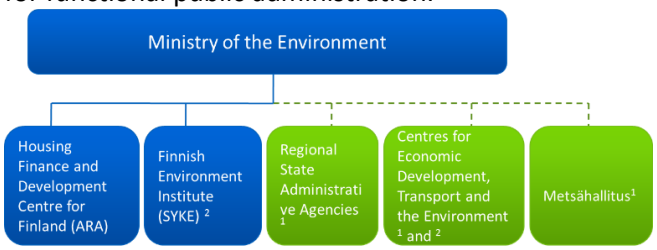
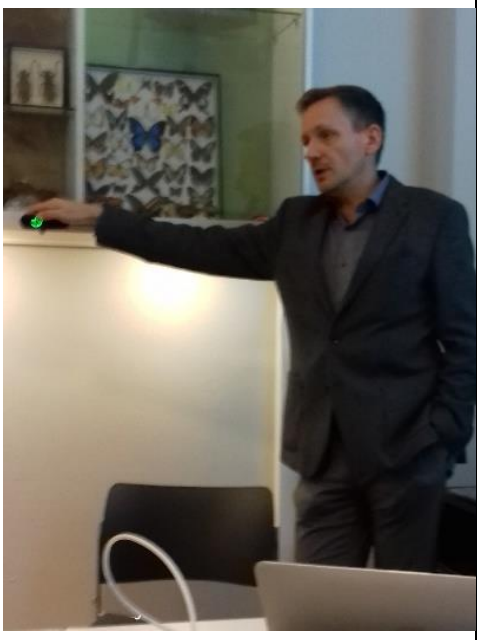
In the presentation "Natura 2000 legislation" basic facts for applying Article 6(3) in the Habitats Directive: impact assessments and permission procedures are presented. According to the Nature Conservation Act "**If a project or plan**, either individually or in combination with other projects and plans, **is likely to have significant adverse effect on the ecological value of a site** included in, or proposed by the Government for inclusion in, the Natura 2000 network, and the site has been included in, or is intended for inclusion in, the Natura 2000 network for the purpose of protecting this ecological value, the **planner or implementing body of the project is required to conduct an appropriate assessment of impact.** The same shall correspondingly apply to any project or plan outside the site which is likely to have a significantly harmful impact on the site." This kind of evaluation is obligatory for all kind and size of activities including planning documents. Finnish experiences can be used in Macedonia when finalising the proposal for a Rulebook for Appropriate Assessment.

File: *Natura 2000 legislation.pdf*

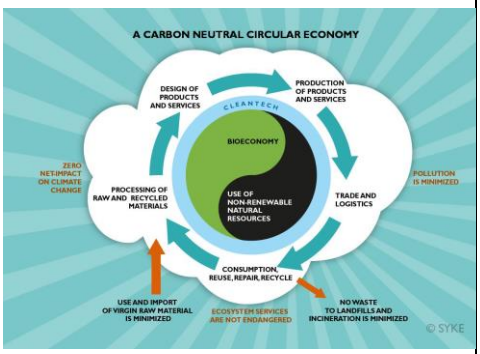
According to the presentation on Natura network in Finland the number of SCI (Habitat Directive) sites is 1280, SPA (Bird Directive) sites 129 and SCI/SPA sites 311, totally 1730 sites covering 14,1 % of the area of Finland. The network is mainly based on existing conservation areas, 10 % of the network are new areas. The identification of these areas was done by the personnel in Metsähallitus P&WF and Regional Environmental Centres. On national level the identification of Natura areas was coordinated by a group where several ministries had their representatives. Nationally the areas are protected by seven different acts, mainly by Nature Conservation Act, Wilderness Act and Water Act. The restrictions and management goals are based on the requirements of these acts.

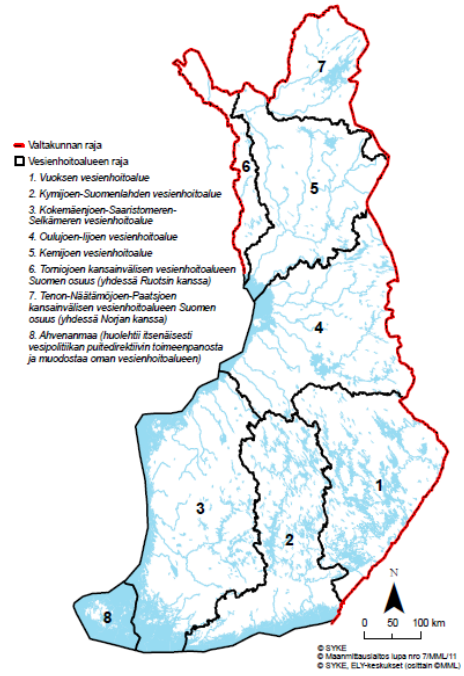
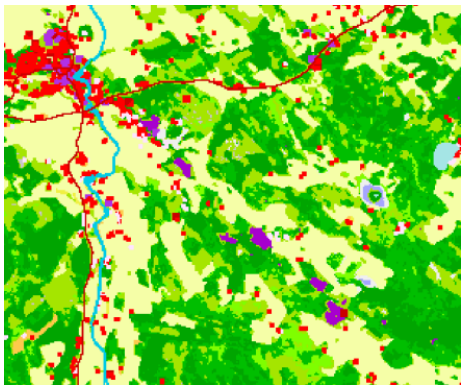
File: *Natura network in Finland.pdf*

Additionally, a Power Point file on Natura management strategy was given (*N2000_management_strategy.pdf*);

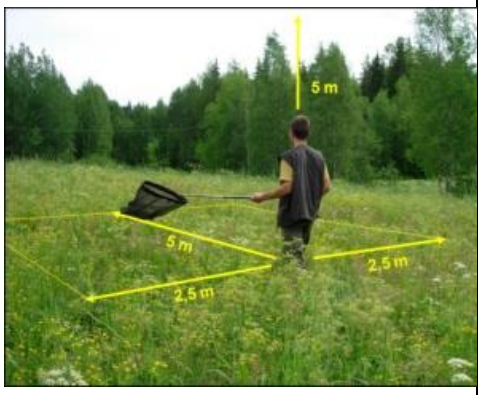
	but its content was mainly presented in Metsähallitus, Parks and Wildlife Finland by Mervi Heinonen.
11:00 Ministerial Adviser, Ph.D Antton Keto 	Antton Keto gave a presentation on Implementation of Water Framework Directive. The presentation also included the overall structure of Finland's environmental administration. The role of different organizations is clearly defined to cover all needed activities, which is precondition for functional public administration.  Water Framework Directive is implemented in Finland by drawing Water Management Plans for eight river base districts. Applying Directive required ten year process, where basic legislation was compiled, a lot of new research was done and several national and regional working groups were involved in the preparation of water management plans. **File:** *Water_manangement_Finland_240918.pdf*
12:00	Lunch and walk to the Natural Historical Museum of Helsinki
13:30 → Natural Historical Museum of Helsinki Professor Leif Schuman 	Luomus, Natural Historical Museum of Helsinki is independent part of Helsinki University. It has units for Botany, Zoology, Natural Science and Biodiversity Informatics. The number of permanent staff is ca. 100, budget 11,5 M€ and it has 13,3 million specimens. Luomus has extremely important role in species conservation in Finland, they do not only maintain collection but also analyse the trends on species distribution and populations. They do research in conservation biology and methodology. They participate in Red List evaluations and their personnel is involved in many important national working groups. Ministry of Environment has provided funds for them to set up the Finnish Biodiversity Information Facility - Laji.fi, which is a national database containing information on all species. That service is open both for conservation professionals in different administrations and all citizens supporting the approach of open data and citizen science. Last but not least, Luomus has important role in environmental education. **File:** *Role of Luomus in sp conservation.pdf* Links: https://luomus.fi/en/natural-history-museum

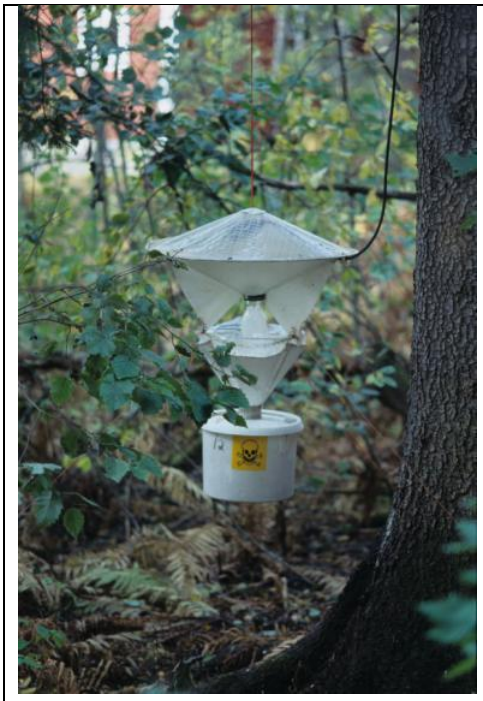
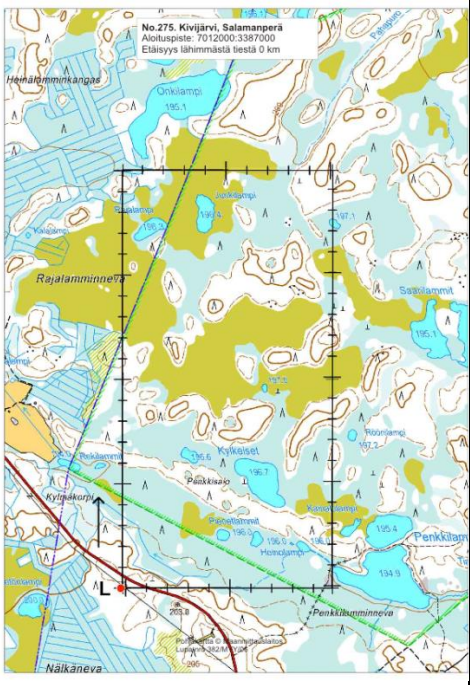
14:10 Kari Lahti  LAJI.FI SUOMEN LAJITIETOKESKUS FINLANDS ARTDATACENTER FINNISH BIODIVERSITY INFO FACILITY 	FinBIF - Finnish Biodiversity Information Facility, LAJI.FI or SPECIES.fi is web based service which has 176 information sources, 31 873 different species and 30 548 415 observations. It compiles Finnish biodiversity information to one single service for open access sharing. Luomus has co-operation agreements with the organizations, which has primary databases, e.g. with Metsähallitus P&WF, Finnish Environmental Research Center, Universities etc. Information from all national collections have been integrated into the system. When these primary databases are updated, the new information goes automatically to the service. Private people can also upload their own findings into the service and they are classified as "unreliable" information until professionals, often volunteers, approve the finding and change the status "reliable". Sensitive data, e.g. nests of Golden Eagle (totally data on 160 species), is classified as sensitive data and it is open only for public authorities. The data in Laji.fi is widely used in decision making, e.g. in natural resource planning, land use planning, species conservation, Red Data books, EU reporting, and in fight against Invasive Alien Species. In research, it is used in species surveys and indicating climate change. Service has also important role in providing education for the schools and universities as well as in raising public awareness. **File:** *Luomus_species_data_service.pdf*
15:10 Satu Jovero 	Satu Jovero presented the exhibition in Luomus. Climate change was chosen as a topic for exhibition and they decided to make and exhibition with big mammals, e.g. mammoth, which disappeared from earth ten thousand year ago. Big animals help to tell an interesting story, on the reasons for which the people survived and mammals did not when temperatures were rising. With a story, people start themselves to think what the consequences of the different kind of decisions might be. Another part of the climate exhibition is a collection were wildlife is presented from different part of the world. It clearly showed that same features of animals are prevailing in similar conditions even though the species are different.
15:50 Jaakko Mattila	The collections in Luomus consist of 3,3 million plant and fungi specimens, 9,8 million animal specimens and additionally some hundred thousands of living strains of plants and geological and paleontological samples. Now 1,2 million specimens are digitalized. Oldest specimens are from early 1800. The museum has special collection halls

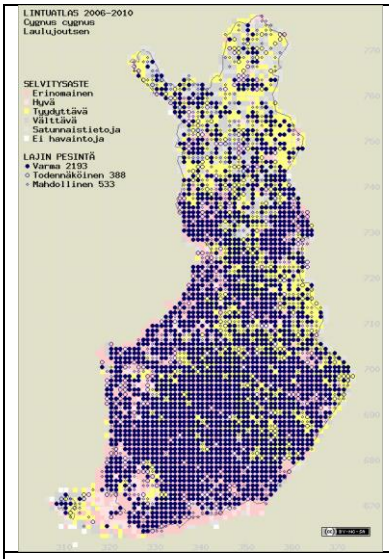
	for optimal housing of the samples. There temperature and humidity are continuously regulated. **File:** *Luomus_collections.pdf*
16:10 Jere Kahanpää 	Presentation on the digitisation at the museum. The aim is to digitalize important part of the history collections. It helps to save the data (e.g. from fire as happened in Rio de Janeiro), to share the data and give an easy access to data internally and externally. The targets are physical specimens, metadata (origin, history etc.), DNA, field notes etc. Distribution maps are also published. All the information is saved with QR code. In practise the work is very time consuming, only 200 000 specimens can be done annually. Automatization is difficult. The group visited "image-factory". It takes one minute to photograph one sample. 3D surface modelling is next step in digitalisation. **File:***Luomus_digitizing.pdf* Link for an example: https://kotka.luomus.fi/view?uri=http://mus.utu.fi/ZMAA.TYPE004
Day three: Tuesday 25.9.2018	
7:30 →	Breakfast
9:10 Finnish Envirnmental Institute, SYKE Dr. Petri Ahlroth 	SYKE, Finnish Environmental Centre is working under Ministry of Environment. Additionally, Ministry of Forest and Agriculture is guiding the work related to water resources management. It has ca. 580 person, of which a third is qualified to doctoral level and annual budget is over 50 M€. Biodiversity center has ca. 80 people. The main working areas consist of water, Baltic sea, climate change, consumption and production, ecosystem services, built environment and environmental information. All key actors in the society are involved as partners - co-operation is part of the working approach. SYKE is also active in international co-operation. Biodiversity projects has been implemented e.g. in North Western Russia, Balkan area and South Africa. **File:***SYKE in brief.pdf* **File:***SYKE_international_referensses_EN.pdf*

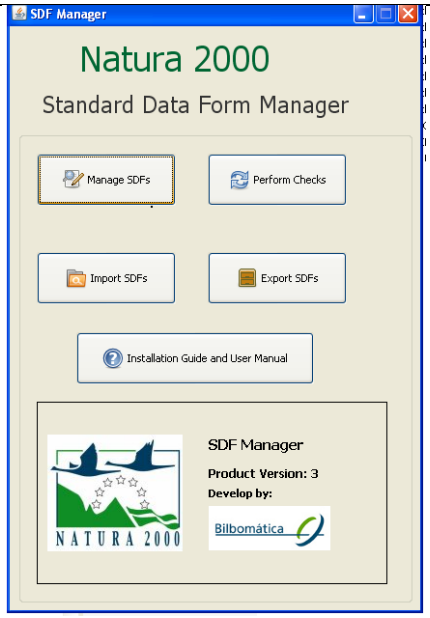
	Links: http://www.syke.fi/en-US
9:35 Sari Mitikka  	Presentation on Monitoring of inland waters in Finland For reporting of Water Framework Directive, Finland is divided into eight river basin districts. The number of monitoring water bodies consist of 4700 lakes, 2000 rivers and 276 coastal sites. 15 Centers for Economic Development, Transport and the Environment (ELY) are responsible for planning of river basin management in their respective districts and coordinating monitoring programs. In practice monitoring is divided into two parts: 1) monitoring carried out by water authorities paid by the government budget and 2) local pollution control monitoring paid with polluter pays principle. Results are integrated into a joint data base, which is maintained by SYKE. They are also responsible for reporting to the EU. Persons working in the field in Finland are able to show their competence by certifying their personal skills based on the international standard ISO 17024. The certification system has been designed to ensure that sampling personnel have enough experience and expertise to do their job well even under difficult circumstances. According to latest results 64 % of rivers, 85 % or lakes and 27 % of coastal waters have high or good ecological status. Main pressures are eutrophication due to nutrient loading especially from agriculture, climate warming, harmful substances from industry, especially from mining and different kind of water works. Finland has 3800 important groundwater areas, of which 350 are classified as risk areas. **File:** *Monitoring of inland waters.pdf*
10:10 Pekka Härmä  20 m raster data	Land monitoring by satellites has a long history in Finland since late 1980's. CORINE Land Cover is land monitoring in panEuropean scale; Finland has done it four times, in 2000, 2006, 2012 and 2018. Land monitoring is based on integration of spatial data sets available from various national monitoring programs: e.g. Forest: National Forest Inventory; Agricultural areas - Land parcel information system and Topographic database from National Board of Survey. Additionally, interpretation of multitemporal satellite images is used. Outputs (products) are high resolution data for national usage; e.g. land cover map and changes in 20 meter raster. Same data serves EU monitoring purposes for reporting on land cover and changes. Data is freely available for all in open data portal of SYKE: www.syke.fi/opendata. For

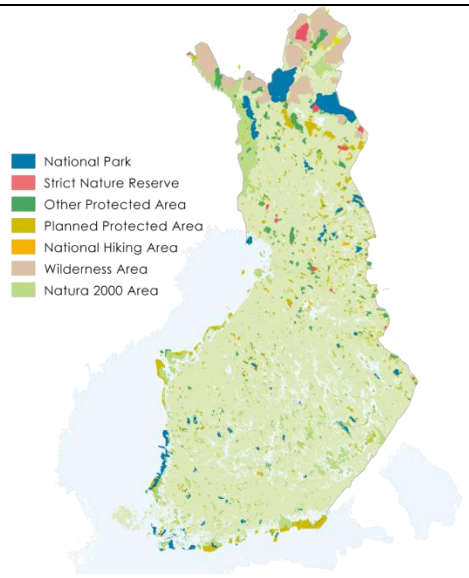
	professional use the data is available via map interface. In the future satellite images will be available more frequently. Airborne Lidar data (full cover in Finland 2019) makes it possible to make 3D models for the land. Lidar data could be the most cost effective monitoring method e.g. in open alpine areas in Pelister NP and other mountain areas in MK. **File:** *Corine Land Cover.pdf*
10:40 Terhi Ryttäri  *Agrimonia pilosa*	Monitoring of threatened and Habitat's Directive vascular plants. The Finnish Nature Conservation Act obliges the environmental authorities to monitor the populations of threatened species. Also, EU requires reporting on the Habitat's Directive species every 6th year. The aims of monitoring are: - To detect trends in populations / species / biodiversity on different geographical scales (international, national, local…) - To identify species which are in most urgent need of action - To evaluate success of conservation measures or management The difference with inventory and monitoring is that the result of inventory is an observation and you can make e.g. distribution maps based on the observations. When you repeat inventories in different years you are able to estimate the trend of the population (e.g. growing or declining) and thus monitor the status of the species. Monitoring is analyzing of inventory data from different places and era. In practice monitoring data is mainly collected by public authorities (ELY-centres and Metsähallitus/Parks and Wildlife Finland specialists) and voluntary botanists. Monitoring is carried out in 1-5-20 years intervals depending on the species and the data is stored in national databases. Data analysis relates to e.g. Red Lists and EU reporting. Analysis is done by specialists groups (in Finland more than 15 groups are responsible for different species groups) where government officials have chairman and secretary responsibilities and members can be experts from universities, research centers. Many volunteers are participating to the work of the groups without compensation. This secures that all the available knowledge is around the table when national analysis is done. There are 334 taxa among the threatened plant species which corresponds to 27 % of all taxa. Main habitats for threatened species are traditional rural biotopes like

	meadows and pastures as well as shores, forests and Lapland mountain area (fells). Main threats are overgrowing, drainage, intensive forestry, land use pressure and climate change. **File:** *Direktive vascular plant monitoring.pdf*
11:15 →	Lunch break
12:30 Sashko Jordanov	MSc. Sasko Jordanov, Head of the Unit on Protection of Natural Heritage and Natura 2000, Nature Department of the MEPP, presented the current state of the natural heritage, with reference to the national legislation, the international conventions, the EU habitats and birds directives, protected areas, activities for identification of EU habitats and species and ongoing nature protection projects in Macedonia for 15 personnel from SYKE.
13:05 Janne Heliölä 	Butterflies as biodiversity indicators in the EU and Finland. Butterflies have many advantages as biodiversity indicator: • Species & their habitats are well known • Sensitive to environmental change • Easy to observe and identify on field • Good methods for monitoring & analysis • Voluntary recorders (often) available ➔ monitoring is cost-efficient • Long time series available in several countries Finland started systematic monitoring in 1999 and 30 - 60 sites are monitored annually. Coordination responsibility is in SYKE and practical work is done by volunteers. The method is transect counting, which gives quantitative, comparable data on the abundance of individual species. In Europe more than 20 countries are doing butterfly monitoring in similar way. **File:** *Syke_buterflies monitoring.pdf*
13:30 Juha Pöyry	Finish moth monitoring scheme (Nocturne) was launched 1993 and since late 90s the focus has been on forest habitats. The method is to use light traps, which are emptied once in a week. Throughout the country 240 trap sites are identified, of which e.g. in 2017 was 60 sites in active use. SYKE is coordinating the work. Maintenance of traps was done by regional environmental authorities until

	2015, but now increasingly by volunteers. Identification of species is done by ca. 90 volunteers. In 1993 - 2015 the data contained a total of 6,6 million specimens with 733 macro-moth species. The report of the main results 1993-2012 (20yrs. In 2016) can be found: https://helda.helsinki.fi/handle/10138/161221 According to the report, several moth species of southern origin have strongly increased in abundance, whereas northern species have declined. Also multivoltinism, i.e. production of more than one generation during the season, has increased with the strongest change in southern parts of the country. Main reason for this is global warming. **File:** *Finnish moth monitoring scheme.pdf*
14:00 Raimo Virkkala 	Finland has a long tradition on bird monitoring starting from 1950's. Winter bird counting includes 500 routes annually, counted in late autumn, mid-winter and late winter. The results are used as national habitat specific indicator. According to the data, the number of forest species is only half now comparing to 1960's and number of urban species is three times higher. Monitoring of breeding bird species is standardized 2006. The method is line transects, 6 km long line (1 x 2 km rectangle). The network of rectangles covers whole Finland in 25 km interval. 200 - 300 routes are counted annually by more than 100 volunteers. Counting takes place in one morning (c. 4-9 am) in the beginning of June. According to the results, central gravity of bird population is shifting towards north east ca. 16 km in decade due to climate change. Monitoring of inland water birds have been done for population status (pair counts) since 1986 and for reproductive output (brood count) since 1989 in cooperation between Natural Resources Institute Finland (LUKE) and the Finnish Museum of Natural History (LUOMUS). Volunteer hunters and bird watchers do most of censuses. Results reported in August before hunting season Finland has published three bird atlases, latest from 2006 - 2010. Bird Atlas describes the species occurrence in 10 x 10 km square and indicates possible, probable or confirmed

	breeding. More than 5000 bird watchers participate voluntarily to the work. Overall information on bird monitoring in Finland. http://www.luomus.fi/en/participate-monitoring **File:** *bird monitoring.pdf*
14:40 Jukka-Pekka Jäppinen 	Jukka-Pekka Jäppinen described other activities in SYKE. 2015 they published a study “Towards a Sustainable and Genuinely Green Economy. The value and social significance of ecosystem services in Finland (TEEB for Finland)”. The project aimed to initiate a systematic national process for the integration of ecosystem services and related biodiversity (i.e. natural capital) into all levels of decision making. https://helda.helsinki.fi/handle/10138/152815?locale-attribute=en Other new “openings” are e.g. studies for evaluating the relationship between biodiversity and health and creating mechanisms for ecological compensations. Already more than 50 enterprises are introduced in models for compensations.
14:55 Riku Lumiaro SUOMEN LUONNONSUOJELULIITTO	Riku Lumiaro is working in SYKE but his is also a board member in The Finnish Association for Nature Conservation. According to him, co-operation between NGOs, government environmental authorities and businesses is needed and in general it is functioning well in Finland. Biodiversity monitoring is not possible without volunteers and NGOs are doing a lot of coordination work for organizing voluntary activities. A lot of expertise is outside of the authorities and they can participate to work through NGOs. However, sometimes NGOs have strong opinions against government institutions, but it does not stop the co-operation. The role of NGOs and government officials is clear for both parties.
15:10 Niko Leikola	Niko Leikola gave a presentation on Natura 2000 databases and Standard Data Form tools. Each Natura 2000 site in the member state has its own Standard Data Form containing site-specific information on • SITE IDENTIFICATION

	• SITE LOCATION • ECOLOGICAL INFORMATION • SITE DESCRIPTION • SITE PROTECTION STATUS (OPTIONAL) • SITE MANAGEMENT • MAP OF THE SITE All the data is collected in European Environment Agency (EEA) and can be openly read by browser. The content of the Natura 2000 Standard Data Form should be updated regularly based on the best available information for each site of the network; Finland started the first exhaustive update in 2014 and the work still continues. National system for updating of standard data forms is nowadays part of Metsähallitus, P&WF databases. **File:** *Natura_2000 Standard dataform update.pdf*
Day four: Wednesday 26.9.2018	
7:30 →	Breakfast
9:00 Metsähallitus, Parks and Wildlife Finland Stig Johansson  HISTORICAL SITES AS TREASURED SIGHTS	Presentation on the role and duties of Metsähallitus, Parks and Wildlife Finland Metsähallitus is a state enterprise governing all state-owned lands and waters. It has business activities like forestry and selling of holiday plots and forest estates. It also has public administration duties and services such as management of protected areas and organizing sustainable hunting and fishing in government lands. It manages 1/3 of total land area of Finland. Parks & Wildlife Finland is a Metsähallitus unit for public duties and it is responsible for • conservation of nature and cultural heritage • management of protected areas, including National Parks • outdoor recreation, promotion of nature tourism • sustainable game and fisheries • fishing and hunting permit sales P&WF´s activities are largely financed from the national government budget. Additional funding is obtained from EU programs and fees paid for hunting and fishing permits. P&WF has staff all over the country: 505 person years in 2017 in central unit and in four regional units. Additionally, it has more than 3000 volunteers annually and prisoners are involved in the work accounting 60 man-years.



P&WF is managing all government owned protected areas, e.g. 40 National Parks, 19 Strict Nature Reserves, 5 national hiking areas, 12 wilderness areas and over 3000 other protected areas. All these are part of Natura 2000 network. Additionally, P&WF is managing 2,000 ancients & archeological sites such as places of worship, trap sites and tar pits and over 300 historic buildings protected by the law. It also coordinates actions in private protected areas.

Promotion of recreation and nature tourism is essential part of the tasks of P&WF. Visits to national parks has increased remarkably in this century. In 2017 3,1 million visits to National Parks generated 206M € to local economies. Main message for decision makers is that one euro invested (state, municipalities) to the services of National Parks, visitors' spending generates 10 € to local economies. Benefits are essential part of the communication.

International co-operation is integral part of the development of the competence of the agency:

- Development of skills and expertise
- Network with colleagues – in other countries
- Projects and project financing

File: *Parks and Wildlife Finland.pdf*

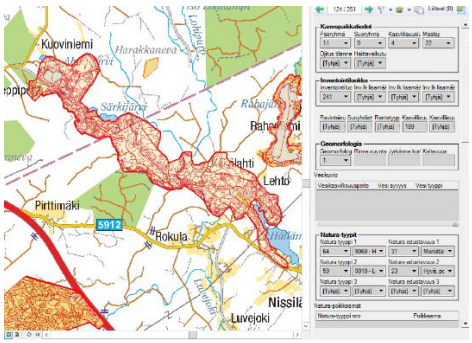
Links:
http://www.metsa.fi/web/en/parksandwildlifefinland

9:40 Päivi Rosqvist

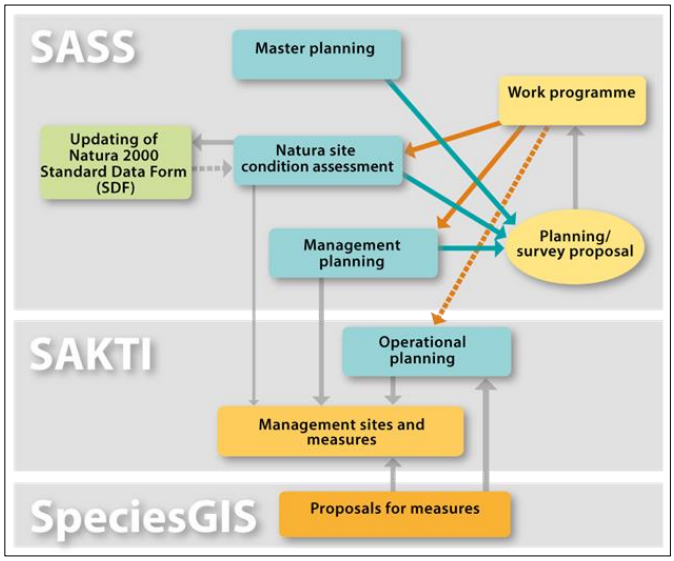
Partnerships & emotions & money; Keys for successful biodiversity communication in P&WF.
Communication has been one of the cornerstones for the success of P&WF. The Agency has a communication manager with a team of 5 persons and regional communication experts with persons responsible for web services and social media in each region.

The role of P&WF in biodiversity communication is to inspire people to go outdoors to nature, and in that way increase their sympathy for nature conservation. The aim is to touch people's feelings, not just give facts. Lots of emphasis has been put on telling about various benefits for society from nature. E.g. "income, jobs and health from National Parks". Communication should be understood widely, it is also customer service, attending meetings, talking with local communities etc.

Key messages (NHS is nowadays P&WF):    	It is important to create alliances and partnerships and thus get others talk on behalf of you - e.g. volunteers and nature advocates. Key results: • Funding is secured in comparison with other state organisations • Numbers of visitors are growing in NP's and Visitor Centres • Nature and "happiness from nature" is a national trend • Lots of support for P&WF, when we have faced cuts in financing or other problems • Through EU funded projects, nature conservation is seen in a more positive light in the countryside Next steps include more emphasis on lobbying, developing new and creative ways to inform about conservation work and intensify co-operation with tourism sector. **File:** *Communications_PWF.pfd* Link: Branding biodiversity by Futerra: https://www.wearefuterra.com/wp-content/uploads/2018/03/Branding_Biodiversity.pdf

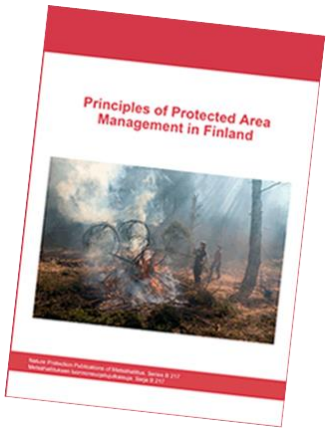
10:15 Johanna Ala-Reini
 	
 
 	
 
 	
	Geographic information system for protected area management = ULJAS integrated geographical information system, which was/is financed by MoE and used by all government nature conservation organisations.
	Uljas subsystems for protected area management are owned by Parks & Wildlife Finland
	• SATJ = Protected area information system (launched into production 9/2014). It contains information on established protected areas (PA) and sites reserved for conservation
	• SASS = Protected area management planning and monitoring system (launched 4/2015). It is used for
	  • Master planning for management of Natura 2000 sites
	  • Natura 2000 site condition assessment (NATA)
	  • Natura 2000 Standard Data Form (SDF) maintenance
	  • Management planning of Natura 2000 sites and other protected areas (e.g. national parks, wilderness reserves)
	• SAKTI = Protected area habitat management system (launched 6/2015). It is used for
	  • management of protected area habitat information from state and private protected areas

- operational planning of management measures
- LajiGIS = Species information management system (launched 11/2015), contains
  - Species nomenclature, taxonomy and conservation status (e.g. national red-list, EU Habitat Directive annex listing)
  - Data from terrestrial, freshwater and marine inventories, surveys and monitoring
  - Threats and pressures on species occurrences
  - Proposed and implemented management measures
  - Inventory/survey needs for annual work planning
- PAVE = System for constructions, routes, trails and archaeological sites (launched 10/2017).

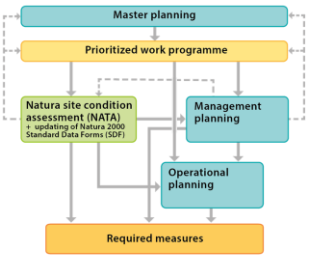


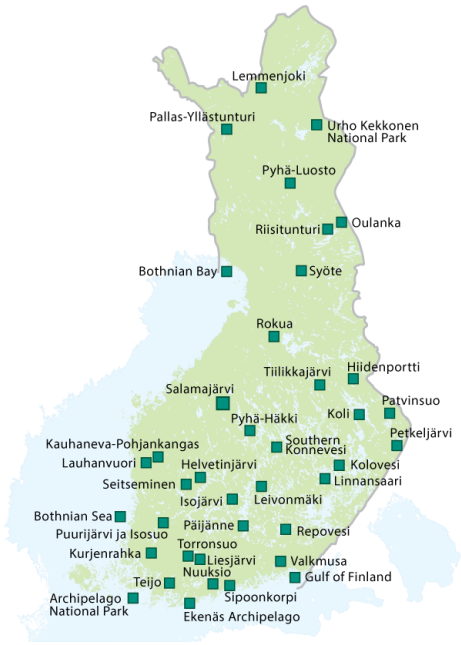
File: *GIS_for_PA_management_PWF.pdf*

11:10 Mervi Heinonen



Management of protected areas in Finland: policy, planning and participation:
P&WF has been publishing “Principles of Protected Area Management in Finland” since the beginning of 1990’s. Latest version is from 2016. It is meant for the personnel of the P&WF, for other environmental organizations and for all stakeholders. It equalizes the management of protected areas and help stakeholders to understand the concept for managing of PAs. It helps to make management plans shorter, because all the principles does not have to be repeated in each of the management plan.
Link to management principles:
https://julkaisut.metsa.fi/julkaisut/show/2005





National Parks in Finland 2018

Main management principles are:

- Primary management aim is biodiversity conservation and maintenance of 'naturalness'
- No inhabitants, no logging in Finnish protected areas
- Wilderness areas also aim to maintain livelihoods of indigenous Saami people in Lapland
- Reindeer herding and subsistence hunting is allowed in the North
- Largely non-intervention management in the North, active restoration and habitat management increasing in the South
- Recreation and nature tourism is growing (focus on flagship destinations, especially national parks)
- Everyman's rights mostly apply: moving by muscle-power, fishing with rod and line, picking of berries is allowed and encouraged
- No entry fees to protected areas

For Natura 2000 sites the special plan called "Natura 2000 Site Condition Assessment (NATA)" is obligatory. It fulfils the minimum requirements of Habitat Directive and has legal status. It includes:

- updating of Standard Data Form (SDF) data
- defining key values and significant threats
- defining conservation and other objectives + needed conservation measures by site, including need for compiling management or other plans

Participatory management plans are usually drafted for those protected areas where multiple use pressures are present or the plans are required by law, e.g. in national parks and wilderness reserves. Main elements are:

Defining area's present status

I. State and land use history

II. Key values and threat analysis

Setting objectives, defining land use zones and planning future activities

III. Setting goals and objectives

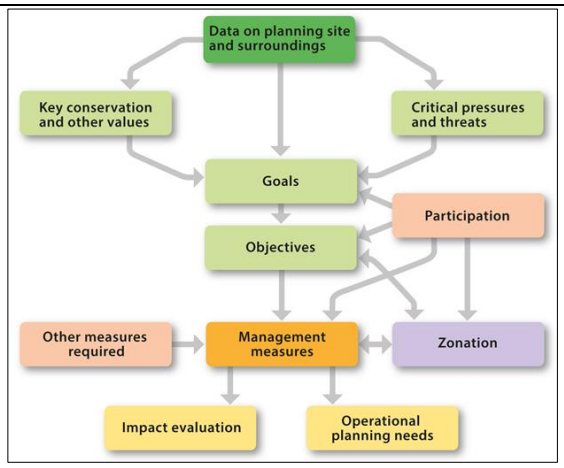
IV. Management strategies and measures

Defining monitoring system

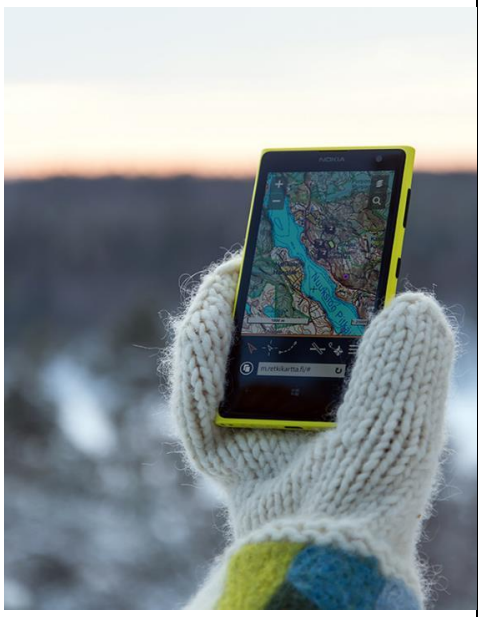
V. Environmental impact analysis

VI. Monitoring

In practice the plan is done by SASS system and it contains 30 standardized planning forms.

	 **File:** *PA Management Planning_PWF_2018.pdf*
12:00	Lunch
	Drive to Haltia
14:15 Haltia, Finish Nature Centre and Nuuksio National Park Tom Selänniemi  HALTIA THE FINNISH NATURE CENTRE	Haltia, Finish Nature Centre was opened in 2013 and has reached annually 180 000 visitors. The idea is to introduce all protected areas in Finland in addition to Nuuksio national park. Operative budget is 1,6 M€, of which incomes cover 600 000 € and the rest is divided to cities of Helsinki metropolitan area (80 %) and P&WF (20%). Metsähallitus, P&WF is in charge of running the nature centre. Main services are nature guiding, exhibition, nature schools and hosting meetings and seminars. Finnish Nature Centre Haltia, designed by Rainer Mahlamäki, was the first public building built from prefabricated solid-wood panels. Everything except the basement is made entirely of wood. It has modern ecotechnology - geothermal heat, solar collectors, a grass-decked roof, self-adjusting air-conditioning and forward looking lighting. The inspiration for the architecture design has come from the culture of Kalevala and its myths. The nature centre got European Museum of the year award on 2015. Haltia has network of 50 partner enterprises, which have more than 100 certified guides. Web: https://www.haltia.com/en/haltia-the-finnish-nature-centre/;
16:00 Nuuksio National Park, Touko Heikkinen	Visiting two kilometers long Lamprey trail in Nuuksio NP. The trails introduces the ecology of flying squirrel, active meadow management, restoration of planted pine forest to become valuable old growth mixed forests and restoration of small streams.

	
17:50 → Drive to Eerikkilä	
Day five: Thursday 27.9.2018	
7:30 →	Breakfast
9:00 Arto Ahokumpu 	Personnel in a regional unit Lakeland MetsähallitusP&WF has a central unit and regional units. As an example regional unit Lakeland is in charge of the management: • nineteen national parks • two hiking areas • four visitor centres and two heritage farms • other state owned protected areas (150) and Natura 2000 sites (783) It is doing the work with 71 permanent and 20 man years seasonal workers in 17 offices or visitor centres. Regional Director leads the organization, Protected area management planning team consist of five person and is in charge of planning activities, giving permissions and making appropriate assessments. Nature and cultural heritage team has 16 conservation biologists, which make nature inventories, monitoring, operational planning and implement management measures. The biggest team is for recreation and nature tourism, of which ca. 50 people are working in the field and in the visitor centres. Additionally, a unit has a communication officer for PR activities and a development manager for projects. Volunteers and prisoners help permanent staff in the field. **File:** *MH_personnel and organization.pdf*
9:30 - Liesjärvi NP, Lakeland region Sari Airas	Customer services in Lakeland area, Healthy Parks Healthy People initiative; digital services Special values of conservation in Western Lakeland:



- Diverse area that consists of mires and raised bogs, esker formations and old forests, coastal areas of lakes and hills
- Traditional forest use and the long history of settlement and cultivation increases species diversity and historical biotopes

Customer service concept:

- Two visitor centres are run by private entrepreneurs, earlier by own staff
- Korteniemi and Kovero historical farms in summer
- Personnel concentrates more on Digital Customer Services
    - phone, e-mail
    - nationalparks.fi
    - Facebook
    - Excursionmap.fi (all nature trails and services in map based system)
- Events together with partners
- Annual meetings with nature tourism partners and associations.

Joint project in Eerikkilä “Generation Z Moved by Nature-project”:

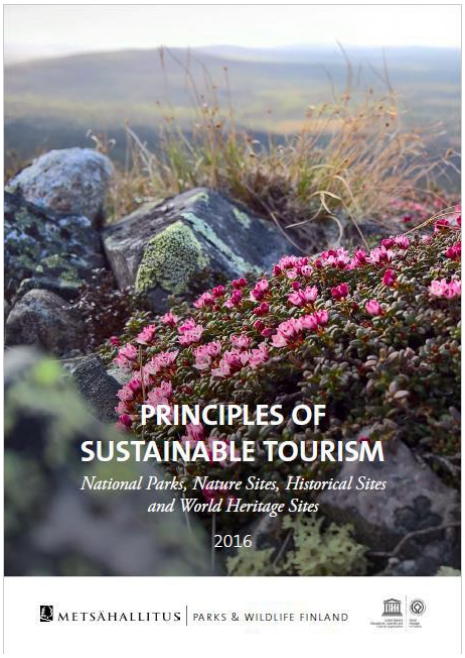
- The objective of the project is to use pilot groups working in co-operation with nature tourism sector and other service providers, to develop a new type of nature centre concept, which meets the needs of today's children and youth in, for example, community, experiences, sports and outdoor gear offering and digital technology, and which can be replicated in other nature centres.
- Another objective is to increase expertise in the proven health and well-being benefits of nature and put research data into practice in nature-based services as well as by developing sports and nature education and coaching.

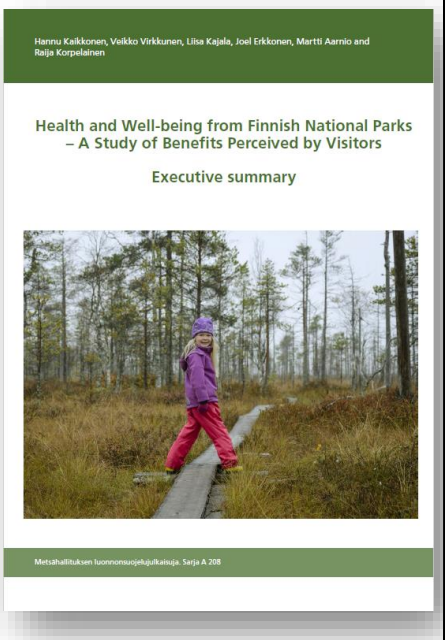
Customer Services in P&WF.pdf

10:50 Olli Pekka Hakala

Eerikkilä, Sport and Outdoor Resort has taken nature as an asset, not only sports:
Eerikkilä and Metsähallitus, P&WF,
Objectives for strategic partnership:

1. **Internationally recognised operating model –** to create an operating model and unity of services that enhance health and well-being of the young.
2. **Increase outdoor activity** – to create positive experiences and feelings for the young that endorse their relationship to the nature through learning and development.
3. **New profile for Häme Nature Center:** ”The first nature and outdoor center in Finland that inspires

	youth to physical activities and recreation in nature" This is good example on business co-operation which combines public interest, nature, youth and health experience. Example of ecosystem services. *Eerikkila, ENG.pdf* Links: https://www.eerikkila.fi/en/
11:30	Walk to the Häme visitor centre& coffee
12:15 Liisa Kajala  	Sustainable Tourism and Visitor Monitoring in Protected Areas Key facts on Metsähallitus visitor services: - 25 nature centres maintained by P&WF or by entrepreneurs - Co-operation with nature tourism entrepreneurs: more than 600 contracts nationwide - Nationalparks.fi: over 12 million page views (all language versions together); more than 2 million unique visitors - Online maps from Excursionmap.fi: 4 million visits, 1,7 million unique visitors Ways of ensuring sustainability in protected areas: - Principles of sustainable tourism, joint national work for protected areas, historical sites and world heritage sites - Plans for sustainable tourism, including indicators for monitoring sustainability, and limits of acceptable change (LAC) - all main tourist destinations has a plan - Cooperation agreements with enterprises operating in or adjacent to the national parks - In some popular tourist destinations quality programs - EUROPARC Charter for Sustainable Tourism (Koli NP, Syöte NP, Pallas-Ylläs NP) Standardized visitor monitoring system across the network of PA: https://www.naturvardsverket.se/Documents/publikationer/620-1258-4.pdf Visitor counting is done constantly in all major PAs like national parks (totally 60 areas). Visitor surveys are done once in a five years. Continuous feedback is collected in visitor centres and in web. All data is stored in ASTA system. P&WF developed a method of estimating visitor spending effects in 2010 based on USA experience. This information has been widely used in communication. Visitor spending effects • Money spent on the management and services of national parks and other PAs comes back many-

 	fold through local private businesses and creates a plenty of jobs • On average, **1 EUR** public investment in the services of national parks results in **10 EUR** return to local economies Results from years 2013–2016: perceived health and well-being benefits: - According to visitor surveys in 2015-2017, 87% of visitors to protected areas and historical sites experienced that the visit had a fairly or very high impact on their health and wellbeing - The average health and well-being effect as perceived by the visitors was 4.36 on a scale from 1 to 5. Conclusions: • Visitor monitoring is not an option, but a necessity • Important to make visitor information visible and tangible for all • Decision-makers at all levels prefer numbers • Using visitor monitoring information data pays back many-fold • Monitoring means inflexibility, if one is to obtain comparable data across areas and time *Sustainable tourism and visitor monitoring 2018.pdf* Benefits from nature: http://www.metsa.fi/web/en/wellbeing-from-nature
13:30	Lunch in Eerikkilä
14:30 - Visit Korteniemi heritagefarm Anne Halla-Aho Marianne Väinämö 	Presentation on the functions of Korteniemi heritage farm The purpose of the heritage farm is to preserve the cultural landscape, old buildings and species reliant on cultural heritage, as well as, to preserve folklore. The grounds, including the buildings, gardens and crops of the former forest ranger estate, have remained almost unchanged for over a hundred years. During summer, life on the estate is very much like it was in the 1910s. During summer the farm is home to indigenous Finnish farm animals: horse, cows, sheep, chickens and a rooster. Old traditionally Finnish crops are farmed in both the estates gardens and fields by traditional methods. Rye is cut with scythes, dried on racks and threshed with flails in the drying barn.

	The farm is open for public, visitors are also welcome to partake in the farm's daily chores, as well as work days during which the whole community helps out at the farm or take part in work demonstrations. Themed tours for groups are available for a fee. Many events are organized during the summer like insemination and harvesting. http://www.nationalparks.fi/korteniemi
20:30 - 21:30	Study tour group internal meeting for discussing the experiences during the visit.
Day six: Friday 28.9.2018	
7:30 →	Breakfast
Drive to Liesjärvi National Park Ari Lahtinen, Teijo Heinänen, Teemu Rintala, Kimmo Syrjänen 	Several sites were visited in Liesjärviin order to introduce • Habitat types as Boreal forests (9010 Western Taiga), restoration of Bog Woodland (91D0) - quality (representativeness) of the boreal forests is mainly defined by the amount of dead wood, min. requirement as significant is to have dead wood more than 20 m3/hectare. • Increasing of dead wood, creating small openings in the tree canopy, using the fire as a management tool; active management is important for improving of the quality of habitats, especially in the areas which have former commercial forestry history. Also many species, especially insects benefit of active management and restoration. • Habitat mapping in practice using GIS system and hand device; Finland conducted exhaustive habitat mapping in all Natura 2000 sites 2001 - 2013 collecting basic data from more than 800 000 compartments. The work was done by the permanent or temporary workers of P&WF. The data form a basis for management planning, operational planning, implementing management measures and conducting appropriate assessments for the projects.
11:50	Lunch in Liesjärvi Wilderness Center
Drive to Komio Natura 2000 site Ari Lahtinen, Teijo Heinänen, Teemu Rintala, Kimmo Syrjänen	three sites to be visited • Species inventory and monitoring in practice; the window traps were used in Komio area for 15 years for invertebrate inventories and monitoring; data is collected once a week and analyzed during the winter time mainly by the staff of P&WF

	• Restoration of eskers, forest ecosystems and sunlit habitats (9060 Coniferous forests on, or connected to, glaciofluvialeskers); Kylmänkukka - pasque flower (Pulsatillssp) is threatened species which has been reintroduced to Komio area. This kind of species conservation projects are possible only by EU Life fund support. Also special program has implemented for reintroducing Harjusinisiipi, Eastern baton blue (Pseudophilotesvicrama) and making habitat suitable for it. The work includes opening of the esker habitat and keeping it open by grazing. EU agri-environment support enable the private farmers to bring and keep cows on the field. More information on Light and Fire Life-project http://www.metsa.fi/web/en/lightandfirelife http://www.metsa.fi/web/en/lightandfirelife/sunlithabitats https://www.youtube.com/watch?v=hJ8qta7hj1s
15:30	Drive to Helsinki - Vantaa,
	Accommodation
Saturday 29.9.2018	
Flight back to Pristina and by bus to Skopje	

Recommendations based on the findings during the study tour to Finland

1) Protected area management and nature conservation should be primarily financed from the state budget complementing with other sources.
2) A competent expert body for nature conservation should be established for developing methods, creating GIS systems and training people for nature conservation, with sufficient funding and personnel.
3) Proper management of protected areas and Natura 2000 sites requires substantial increase in human resources and educated people (natural sciences) to work in the responsible authorities.
4) The role of government institutions should be evaluated and overlapping of responsibilities minimized. Responsibility for management of protected area should be solely in the nominated protected area administration in charge.
5) Competent expert body for nature conservation to be established, should compile national habitat interpretation manual, decide the data content (parameters) for habitat and species inventories and draw protocols for monitoring.
6) It is necessary to invest in new technology, e.g. create national databases on habitats and species with GIS and introduce remote sensing and Lidar technology.
7) It is recommendable to develop a new model for the zonation in management plans for protected areas and Natura 2000 sites using experiences e.g. from Finland and taking into account IUCN criteria and requirements of Habitat and Bird Directives.
8) It is important to increase public environmental awareness with campaigns, events, media, info centres, and better education for the importance of the biodiversity and natural values, starting with the smallest children and decision makers.
9) Voluntary work is common in many countries and special programs should be introduced to encourage people to participate in management and monitoring of protected areas.
10) It is important to recognise and try to measure the benefits that protected areas bring to the society and use that information in communication and in developing schemes for ecosystem service payments.

Presentations during the study tour to Finland 22.9. - 29.9.2018

	PRESENTER	PRESENTATION
Ministry of the Environment, Finland		
1	Marina von Weissenberg	*MoE Strategy 2030.pdf* *Natura 2000 legislation.pdf* *Natura network in Finland.pdf* *N2000_management_strategy.pdf*
2	Antton Keto	*Water_manangement_Finland_240918.pdf*
Luomus, Natural Historical Museum of Helsinki		
3	Leif Schuman	*Role of Luomus in sp conservation.pdf*
4	Kari Lahti	*Luomus_species_data_service.pdf*
5	Jaakko Mattila	*Luomus_collections.pdf*
6	Jere Kahanpää	*Luomus_digitizing.pdf*
Finnish Environmental Institute, SYKE		
8	Petri Ahlroth	*SYKE in brief.pdf* *SYKE_international_referensses_EN.pdf*
9	Sari Mitikka	*Monitoring of inland waters.pdf*
10	Pekka Härmä	*Corine Land Cover.pdf*
11	Terhi Ryttäri	*Direktive vascular plant monitoring.pdf*
12	Janne Heliölä	*Syke_buterflies monitoring.pdf*
13	Juha Pöyry	*Finnish moth monitoring scheme.pdf*
14	Raimo Virkkala	*Bird monitoring.pdf*
15	Niko Leikola	*Natura_2000 Standard dataform update.pdf*
Metsähallitus, Parks and Wildlife Finland		
16	Stig Johansson	*Parks and Wildlife Finland.pdf*
17	Päivi Rosqvist	*Communications_PWF.pfd*
18	Johanna Ala-Reini	*GIS_for_PA_management_PWF.pdf*
19	Mervi Heinonen	*PA Management Planning_PWF_2018.pdf*
20	Arto Ahokumpu	*MH_personnel and organization.pdf*
21	Sari Airas	*Customer Services in P&WF.pdf*

22	Liisa Kajala	*Sustainable tourism and visitor monitoring 2018.pdf*
Eerikkilä, Sport and Outdoor Resort		
23	Olli Pekka Hakala	*Eerikkila, ENG.pdf*