Insights for developing nature and culture trails

based on benchmarking Finnish nature destinations

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Forewords and introduction to project Kurenniemi

This publification presents insights for developing nature and culture trails based on benchmarking Finnish nature destinations. Advices have been collected from 18 Finnish nature destinations, which include national parks, ecological and cultural trails, and ecological education and visiting centers. Most of the presented destinations are located in Eastern, South-Eastern or Southern Finland. After each of the benchmarked destination there is a compilation of lessons learned from that specific location. At the end of the report, recommendations about actions and other things to take into a consideration for developing trails, are presented more specifically.

Insights for developing nature and culture trails based on benchmarking Finnish nature destinations has been written as a part of the project **Kurenniemi – Cultural value of Russia and Finland through M. Agricola trail.** The aim of the project is to establish a nature reserve status on the area and create a basis for developing sustainable ecotourism and related business. The objective of the project is to create an ecological tourist route to the area. The project collects and documents historical and experience information of the territory through which the route will pass. Expertise in developing ecotourism and nature trails in Russia and Finland are collected and exchanged during the project. The project is funded by the European Union, the Russian Federation and the Republic of Finland in the framework of the South-East Finland – Russia CBC 2014-2020 cross-border co-operation program. The duration of the project is 23 months.

All-Russian Society of Nature Protection, Leningrad Region office is developing the area in co-operation with the Directorate of protected areas of Leningrad region, Pushkin Leningrad State University and LAB University of Applied Sciences. LAB will provide expertise in developing sustainable and eco-friendly tourism routes and services based on culture-historical and ecological values of the region. Part of the contribution to the project by LAB University of Applied Sciences is this report which concentrates on the Finnish experience in creating nature parks and hiking trails.

The Cape Kyrönniemi area is located near the Finnish-Russian border in Leningrad Region in Russia. The area is important because of its cultural, historical and ecological heritage. The area plays a part in Finnish history too as Mikael Agricola, the father of literary Finnish, died at the location on the 9th of April 1557 (Häkkinen 2007). In Finnish Kurenniemi translates to Kyrönniemi.

Partners and participants of the project:















Protected areas in Finland

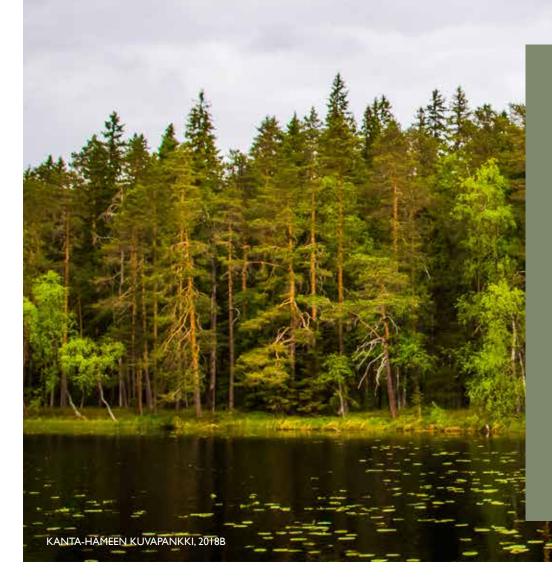
There are several types of protected areas in Finland: statutory nature reserves, wilderness areas, national hiking areas, recreational forests and areas reserved for conservation by Government decision (Metsähallitus 2021a). Almost all the nature reserves, wilderness areas and hiking areas on state owned land are included in the European Union's network of Natura 2000 areas. Most protected areas are situated on state-owned land. Privately-owned protected lands further expand on the state-owned network of protected areas. (Metsähallitus 2021b.)

"State-owned protected areas are managed by Metsähallitus, Parks & Wildlife Finland. The protected area management principles are partly determined directly by national legislation and partly by Metsähallitus as the landowner and site manager. Many of the principles are also national and regional best practices that have been developed and agreed over time." (Metsähallitus 2021b.)

National parks, many nature reserves and other wilderness and hiking areas are open freely for the public. Exceptions from those areas are for example strict nature reserves which are primarily reserved for the nature conservation and research so that researchers are able to compare which changes happening in the nature are caused by the man and which are natural. Three strict nature reserves in Finland out of 19 have a marked trail open for public. (Metsähallitus 2020a.)

Area type	Number of areas	Size of areas (km²)
National parks	40	10 035
Strict nature reserves	19	1542
Mire reserves	166	4761
Herb-rich forest reserves	46	11
Old-growth forest reserves	77	86
Seal reserves	7	188
Other state-owned nature reserves	429	3468
Privately-owned nature reserves	183	94
Protected areas established by Metsähallitus	24	8
STATUTORY NATURE RESERVES (total)	991	20 193
STATUTORY NATURE RESERVES (total) Areas reserved for protection in nature conservation programme	991 s 1530	20 193 5184
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STATUTORY NATURE RESERVES (total) Areas reserved for protection in nature conservation programme Protected forests Other protected sites Wilderness areas National hiking areas Other recreational	991 s 1530 423 1290 12 5 7	20 193 5184 611 3005 14 891 243 915

Number and size of Finland's protected areas managed by Metsähallitus.



National parks in Finland

There are 40 national parks in Finland of which the largest national park is Lemmenjoki (2858 km²) and the smallest Petkeljärvi (7 km²). The national parks are protected areas with primary purpose to ensure the diversity of Finnish nature. There are national landscapes as well as cultural heritage sites in the parks. The parks are a nationally and internationally valuable part of Finnish nature. (Metsähallitus 2021c; Metsähallitus 2021d.)

The parks are natural sights open to everyone and used for outdoor recreation. Rules and regulations ensure that the use does not harm nature. There are marked hiking routes, nature trails and campfire sites in the parks. Visitors can also stay overnight in the national parks at designated camping sites or shelters and huts. Services like guiding, lodging and equipment rental are available by local enterprises. (Metsähallitus 2021c.)

The nature centers nearby some of the parks provide more information about the area and its services. The extensive website nationalparks.fi presents all parks in detail. This report presents four selected areas: Repovesi National Park, Gulf of Finland National Park, Valkmusa National Park and Päijänne National Park.



Repovesi National Park

Repovesi National Park is located about 50 km north of Kouvola, 175 km northeast of Helsinki, and 75 km south of Mikkeli via Mäntyharju. It was established in 2003 and covers an area of 16 km². Repovesi National Park is a popular hiking destination with over 40 km of trails. (Metsähallitus 2020b.)

Repovesi offers trails of various levels of difficulty. Many of the trails are quite demanding, because of changes in altitude. Therefore, hikers are advised to reserve more time than usual for their trips. Hikers can get on to the marked trails at any one of the park's three parking areas at Tervajärvi, Lapinsalmi or Saarijärvi. All the trails are clearly marked with their own symbols and there are signposts along the trails. (Metsähallitus 2021e.)

The easiest trails are suitable for beginners and families, such as the very popular **Lapinsalmi Bridge Trail**. This trail is 700 m long and walking time approximately 20 minutes on one direction. It is not a circle trail, which means that visitors follow the same 700 m trail on their way back. The trail goes from Lapinsalmi parking area to Lapinsalmi campfire site. The highlight on this trail is the Lapinsalmi bridge across Kapiavesi Lake. The new bridge was built in 2019. There are 3 other easy trails: Talas Trail (800 m, 20 min /direction), Sukeltajaniemi Trail (900 m, 20 min / direction) and Määkijä Trail (1.7 km, 45 min / direction). (Metsähallitus 2021e.)

Ketunlenkki is the most popular circle trail of Repovesi (3,5 km, 2-3 hours hike). It is ideal for family outings. The trail crosses the bridge of Lapinsalmi. The other sights and unique experiences along the trail include, for example, the manually operated Ketunlossi ferry. (Metsähallitus 2021e). Ketunlossi is a





A view of Repovesi National Park.

KATI KUMPULAINEN, 2019

Ketunlossi is a manually operated cable ferry which enables crossing Määkijänsalmi Strait.

KATI KUMPULAINEN, 2019

cable ferry, that the visitors use to cross the lake by pulling the cable. If the ferry is on the opposite side of the lake, the empty ferry must first be pulled to the other side by the visitors themselves.

The longer trails include **Kaakkurinkierros Trail** (circle trail, 26 km, a hiking trip for 1-4 days), **Koppelon kierros Trail** (circle trail 8.3 km, a 3-4-hours-hike) and **Korpinkierros trail** (circle trail 4,3 km, a 2-3-hours-hike.) Because the area is so vast, hikes of longer length than a few days are also possible. Short-term camping is allowed in Repovesi beside the campfire sites. (Metsähallitus 2021e.)

Although there are no actual marked water routes for boating and canoeing in the national park itself, there are several maps of the area available for planning such excursions and finding your way around. Biking in the national park is only permitted on the trails designated for this purpose. The biking trails are marked on signposts at trail junctions with their own symbols. They are mainly service tracks and roads. (Metsähallitus 2021e.)

Repovesi offers various types of activities such as walking and hiking, canoeing and rowing, skiing, fishing, rock climbing, cycling and swimming. Guided tours are also organized.

Another way of enjoying the park is by volunteering. Volunteers can contribute to the preservation of the area. The park has its own volunteer organization Pro Repovesi ry. The services in the park include campfire shelters and other campfire sites, five wells providing drinking water, toilets, lean-to shelters, rental cabins and equipment rental. Visitors should note that there are no waste bins on the trails or recycling points in the parking areas. Visitors are required to take their own waste out of the area with them. These are also several enterprises and organizations offering services in the national park. (Metsähallitus 2021f; Metsähallitus 2021g.)

All the activities and services in Repovesi National Park are presented on the Repovesi website. The services are also marked on the Repovesi map. In summertime there is a kiosk in Lapinsalmi parking area where you can get the brochure and map of the park. Vuohijärvi nature and culture house is located in Vuohijärvi village in Kouvola, in close vicinity of Repovesi national park.



TUULI MIROLA, 2017

Lessons learned

Offer something for everyone. Trails of various levels of difficulty and length allow different types of visitors from beginners to experienced hikers to find suitable trails for them. Easy-to-read map with clear symbols and services marked helps visitors to stay on the right path. Maps are available online which makes planning the trip beforehand possible.

The posibility to combine multiple trails on one visit or to take a shortcut on longer trails would be easier if possible shortcuts were clearly marked on the maps and signposts. Marking shortcuts also prevents eroding as visitors will not make their own paths that lightly.



Gulf of Finland National Park

The Eastern Gulf of Finland National Park is located at the sea outside of the inner archipelago in front of the cities of Kotka and Hamina. The best (and usually the only) way to reach the park is by boat. A tidal boat runs from Kotka to the habited islands of Haapasaari, Kaunissaari and Tammio. In addition, islands Koivuluoto, Lansker, Mustaviiri and Suuri-Pisi can be reached by keel boat, if the weather is calm. Islands can be reached also by ordering a taxi boat from Hamina. During the summer few public guided tours are organized to the only sheltered port in the national park, to Ulko-Tammio. Experienced paddlers can move around the waters of the national park, but there are no official water and canoeing trails in the park. (Luontoon.fi 2021b.)

The landscape of the park is dominated by archipelagos and groups of rocky islands. In total, there are about 100 islands and islets in the national park area. Most of the islands are steep, forest-free rock cliffs, but some of them have large forests. The vegetation of the wooded islands is usually low and sparse with pines, cladonia and juniper bushes, but there are also, lush groves on Ulko-Tammio and other larger islands. The greenest of the islands is Ristisaari with ash groves and coastal meadows. You can also find sandy beaches perfect for sunbathing from Pitkäviiri, which is a two-kilometer-long longitudinal ridge rising from the sea. (Luontoon.fi 2021a.)

Sights and activities

The Eastern Gulf of Finland has a long tradition in fishing, small-scale farming, raising livestock and hunting for birds and seals. Exhibitions of the former local way of life can be found from small visiting centers / nature huts in Kaunissaari and in Haapasaari. At Kaunissaari you can explore an exhibition "Tyrsky tuo ja

vie" which presents the surrounding nature, and at Haapasaari you can visit exhibition "The Border Case" which tells about the nature of the outer archipelago and the position of the national park on the border of Fennoscandia. (Luontoon.fi 2021b.)

There are no long hiking or trekking routes in the area since the national park is fragmented into different islands. **Nature trail in Ulko-Tammio** (3 km) presents the nature and history of the area and **Cultural nature trail of Mustaviiri** (1.6 km) introduces the cultural heritage of the archipelago. The fortress in Ulko-Tammio, brings war history to life and the island's lookout tower has spectacular views over the sea. There is also a mysterious troy town (type of labyrinth built on the ground made of stones) on the same island and a tiny world heritage site: the measuring point of the Struve triangulation chain. (Luontoon.fi 2021b.)

You can also enjoy the environment by volunteering to take care of the nature of the national park and taking part to work parties. Camping areas and desert huts can be found from Ulko-Tammio and Koivuluoto. (Luontoon.fi 2021b.)

The Eastern Gulf of Finland National Park It is also known for magnificent seabirds. In May, you can watch the majestic overflight of large flocks from when hundreds of thousands of Arctic waterfowl and waders move towards north for the summer. (Luontoon.fi 2021a.)

Rules and regulations

In the nature park it is allowed to move around by foot, by skiing, by rowing and paddling. Mountain biking is allowed on marked paths with everyman's right. Some islands have a landing ban during the breeding season or throughout the year, for nature conservation reasons. In addition, movement has been restricted in military zones. You can also collect berries and mushrooms and fish or ice fish with a hook and line without permission. (Luontoon.fi. 2021c).



You can take a sneak peek of the nature park by watching a video from the area:

https://www.youtube.com/watch?v=6_ YnqHp6R2k

Lessons learned The power of volunteering. Asking visitors to volunteer in taking care of the surrounding nature gives value to the visit as valuable destination stays cleaner and travelers can feel like they are a part of the bigger picture. Guided tours and exhibition centers give a deeper insight to the area's nature and history.



Valkmusa National Park

Valkmusa National Park consists of the largest and most diverse wetlands in Southern-East Finland. The park was established in 1996 and it spreads to the areas of Pyhtää and Kotka. The area of the park is 19,5km of which the march covers 87%. On the northern edge of the area flows a branch of the river Kymijoki which brings an interesting addition to open landscape. (Metsähallitus 2019). The park is still known only to few, since according to Metsähallitus approximately 18.100 hikers visited Valkmusa in the year of 2019 (Zitting 2020).

The park is famous not only for its swamps and birds but also for its butterfly species (Metsähallitus 2019). With a good luck, travelers can spot the endangered butterfly Idaea muricata which is also the signature animal of Valkmusa National Park (Pylsy-Komppa & Rautavirta 2016).

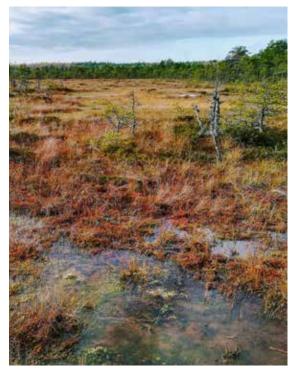
Valkmusa is a great day trip destination around the year for a wide range of nature hikers, like, bird watchers, geocachers, skiers, snowshoers and nature enthusiasts. The untouched wetlands are also a dream destination for photographers, because of the scenery. The park is easy to access whether you are alone or with family or in a group. (Pylsy-Komppa & Rautavirta 2016; Retkipaikka 2021.)

There are two marked routes in the Valkmusa National Park. Hikers can choose either 2.5 km long circular route with duckboards, or a 2 km route leading to **the cottage of Moronvuori**. Both routes are easy to follow and circular route can be walked in both directions (Metsähallitus 2019, Retkipaikka 2021). Along the circular route traveler will find few tables for eating packed lunch and a bird tower for spotting wildlife and admiring the scenery. In the year of 2018 there was also an exhibition of nature photographs in the tower. (Lähtöportti 2018.)

The path is flat and easy to navigate and there is no risk of getting lost. Duckboards have been well restored, and the route can be walked around in an hour even with sneakers. (Koskinen 2016.) During spring, summer and autumn the wateriness of wetlands make difficult to move outside of the covered path, but but during the winter it is easy to explore the entire park area by skiing. (Metsähallitus 2019.)

Cottage of Moronvuori is located on the eastern edge of the national park, at the foot of Moronvuori. A marked route from the Kananiemenharju parking area leads to the hut. Temporary staying overnight is allowed in the cottage and the only permitted fireplace in the national park can be found from here. (Metsähallitus 2019.) The scenery of Moronvuori route differs greatly form the flat views of the wetlands with deep and dark forest. Hidden between rugged stone walls of Moronvuori traveler can also find a cave called Moronreikä. (Retkipaikka 2021.)

There are no services in the small national park except for dry toilets. Nor are there any waste bins so visitors need to take all the rubbish with them. (Zitting 2020.)



Lessons learned

Sometimes less is more. Fancy services and extracurricular ativities are not always needed. Well designed and regularly maintained trails around the untouched nature attract a wide range of nature lovers from nature photographers to geocachers. Of course it helps if the site is a home for rare species and visitors know about that and want to visit the site on nature's terms.



Päijänne National Park

Päijänne National Park was established in 1993 and it covers 14 km² (Metsähallitus 2020c). The park includes fifty islands and islets, most of which are in front of the Padasjoki River. In addition, the park includes few islands or parts of habited islands from the eastern parts of southern Päijänne. (Luontoon.fi 2021d.) Päijänne National Park is one of the most significant sites in Salpausselkä Geopark (Luontoon.fi 2021e.)

The best way to explore the park is by boat, but it is not necessary to own a boat. Several local entrepreneurs offer taxi services by boat and the passenger ship M / S Jenni-Maria III operates from the port of Padasjoki and Karisalmi to Kelvenne according to its route schedule. Some parts of the area (like Pulkkilanharju or the island of Virmaila) can also be accessed by car or public transport along the bridges. (Luontoon.fi 2021d.)

The harbor of Padasjoki is the most common starting point for exploring the park. In 2000, it was chosen as the Guest Port of the Year. Padasjoki has good facilities like a restaurant and a summer shop, barbecue area, washing facilites and drinking water faucet. In addition, there is also a crane for lifting masts of the ships and systems for fuel distribution, bilge water drainage and septic tank drainage. Harbor has a new parking area for long-term parking and boat trailers. There are two boat ramps, one of which is concrete paved. (Luontoon.fi 2021f.)

Full-service port can also be found from Vääksy (Asikkala) at the end of the Vääksy canal. The port has a concrete boat ramp, fuel distribution, shop for boat accessories and a summer shop. Travelers can also order charter boat services. (Luontoon.fi 2021c.) Päijännetalo (eng. The house of Päijänne) near by the canal



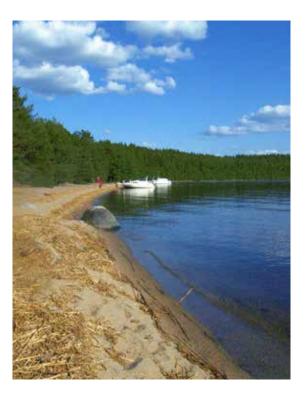
KATARIINA PAKARINEN, 2016

functions as an info center which organizes exhibitions and guided tours to visit Lake Kelvenne. (Luontoon.fi 2021g.)

For those who are heading to the southern parts of the park, Karisalmi on Pulkkilanharju (Asikkala) is an alternative starting point for the trip. Karisalmi has a parking area and a nature trail. Parking area, ship piers and a nature trail can also be found from Päijätsalo (Sysmä). (Luontoon.fi 2021d.)

Travelers can also access the park from Lehmonkärki (Asikkala) holiday resort and info center with a boat ramp, summer café, barbecue area, sauna on request and equipment rental. Entrepreneurs also offers taxi boat service for those who want easy access to Päijänne National Park. (Luontoon.fi 2021d.)

Park also has many natural harbours and guest piers with some facilities. (Luontoon. fi 2021d) There are 17 campfire sites in the national park, which are equipped with a dedicated campfire ring, ax, saw, woodshed and dry toilet. Wickets can be also found from Lammassaari and from Pitkäniemi in Virmaila. There is an outdoor toilet in connection with all campfire sites and camping areas in the National Park. (Luontoon.fi 2021f.)

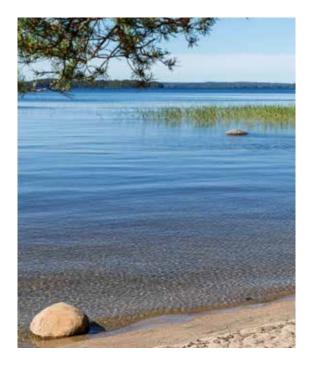


The shores of Kelvenne island. MAKE F. 2009 (CC BY-SA 3.0) There is no waste collection in the islands. Decomposing waste can be placed to an outdoor toilet or composter and small amounts of clean paper and cardboard can be burned in fires. All other waste needs to be carried away from nature. (Luontoon.fi 2021f.)

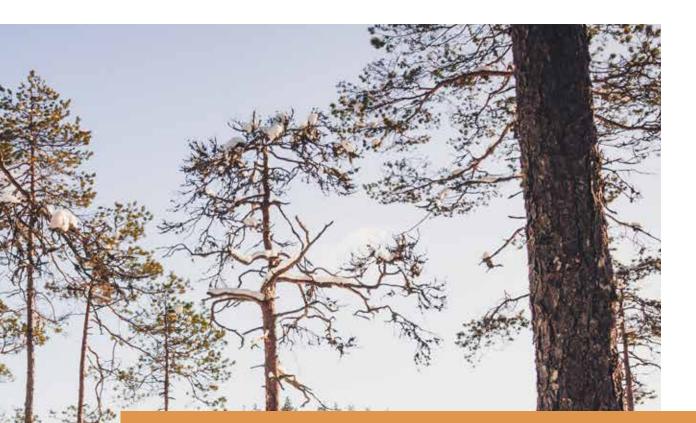
The nature park has several marked hiking trails, varying from easy to medium. The connecting route named **Päijänne-Ilves** departs from the Padasjoki harbour and leads to route towards the Evo hiking area. Length of the route is 12.6 km. **Pulkkilanharju nature trail** is a two kilometers long path that introduces ridges nature and origin. The starting point is next to the Karisalmi bridge. In the island of Kelvenne, a ridge trail leads hikers to the shore of Suppalammi and several campfire and camping sites. (Luontoon.fi 2021g.)

View of Päijänne National Park at the bay of Kelvenne Island.

VERCH, M. 2019 (CC BY 2.0)



Lessons learned Involve locals! Many local entrepreneurs have a cooperation agreement with Metsähallitus. As rules are clear and same for everyone, parties in an agreement implement the principles of sustainable nature tourism when operating in the national park. Involving locals also brings revenue and breathes life into the local economy.



Ecological and cultural trails in Finland

The following examples present various selected culture and nature trails in South Karelia and Päijät-Häme provinces. They are located near or in the towns of Lappeenranta and Lahti where LAB University of Applied Sciences has its campuses.

Multiple other nature trails and spots provided by the province of South Karelia and Lappeenranta can be found and explored via the webpages of South Karelian Foundation for Recreation Areas.



Evo Hiking Area

Evo Hiking Area covers approximately 4700 hectares, and it is located between Kanta-Häme and Päijät-Häme regions, 25 km from the municipality of Padasjoki and 50 km from the city of Hämeenlinna. For decades the area has been popular amongst hikers of all ages, families and scouts. The area is dominated by mesic and sub-xeric heath forests where pine trees are most common tree type, and the soil has low nutrient value. There are great number of small lakes and ponds. Mires and other lush areas are rare. Evo is a home of vast number of different animals including the Canadian beaver, elks, the Eurasian lynx and the Siberian Flying Squirrel. The highest point in the area is 160 meters above the sea level on Syrjänalusenharju Ridge. (Nationalparks.fi 2021a & 2021b;Visit Häme.)

Evo has a long history of forestry. The area has been inhabited since 14th century. In 1856 Evo crown park was established to conserve the forests and in 1862 the first institute dedicated to teaching forestry was founded. For almost 160 years forestry professionals have graduated from Evo. Nowadays Häme University of Applied Sciences (HAMK) has a campus in the village of Iso-Evo in Lammi area, Hämeenlinna. HAMK offers a degree in forest engineering. (Nationalparks.fi 2021c; HAMK).

Good starting points for hiking are Evo center and 13 parking areas located in different parts of the hiking area. Visitors can roam around the area freely or take one of the nature trails. **Lake Niemisjärvi Trail** starts from the kiosk of Niemisjärvi. The length of the trail is 3 km and it goes through an old-growth forest, which is a home for the Siberian Flying Squirrel, commercial forest and a mire. Painted blue circles on trees guide visitors. Services include cooking shelters, a recycling point and drinking water supply. Somewhat hilly **Savottapolku Trail** of 4 km of its length starts at Kelkute. Hikers are guided by signs which resemble



One of the lean-to shelters in Evo Hiking area.

KANTA-HÄMEEN KUVAPANKKI, 2018E

Cottongrass.

KANTA-HÄMEEN KUVAPANKKI, 2018F

lynx paw prints. The nature trail tells about the history of its past solitary inhabitants and of forest works in 1850-1950. Luutajoen taimenpolku Nature Trail (2 km) lets hikers follow the story of a brown trout. Apart from the starting point at the crossroads of Ruuhijärventie road and road 53, the trail is unmarked as it follows the River Luutajoki. Metsätaitorata Trail (4 km) teaches how forest estimation is done and visitors can try their skills at it. For professionals, competitions in forestry skills are held to help preserve their skills. Syrjänalusen Harjupolku Trail, which is currently no in use, is 3 km of length. Trail starts form Syrjänalunen parking area. Trail's specialty are eskers which were formed during the Ice Age. (Nationalparks.fi 2021d.)

In addition to forementioned shorter nature trails **Ilvesvaellus Hiking Trail Network** (established in 1987) offers altogether about 70 km of hiking trails to choose from. Along the trail hikers can take a rest at campfire site and lean-to shelters give cover during the overnight stay. Lynx paw print signs help hikers to stay on trails. Still as the area has a lot of unmarked footpaths, hikers are highly recommended to have the map of Ilvesvaellus Trail with them. Extended predefined hiking trails are **Päijänne-Ilves connection trail** (13 km) and **Aurinko-Ilves connection trail** (30 km). (Nationalparks.fi 2021d.)

Evo Hiking Area has altogether 11 lean-to shelters and 3 reservable lean-to shelters. Each lean-to shelter has a dry toilet, a campfire place with firewood and an axe. Free camping sites are located at Lake Valkea Mustajärvi, Lake Niemisjärvi and Lake Kovero and they have same facilities as lean-to shelters. The area has no waste management. Biodegradable waste can be placed in dry toilets, other waste hikers have to carry with them. For drinking water there are two wells at Evo camp site. Use of natural water is at hikers' own risk, as the quality cannot be monitored. Water from natural springs along Syrjäsenalun harjupolku **Trail and along the trail south of Iso-Tarus** is usually drinkable. The surface water from lakes, brooks and rivers must be boiled before use. (Nationalparks.fi 2021e.)

Besides hiking Evo area enables a variety of other activities all year around for visitors of all ages. Skiing and snowshoeing are possible during winter. Diverse environment is suitable for orienteering. Near the Evo center there is a network of orienteering points to explore. Canoeing gives visitors a new point of view to the surroundings for example explorers can follow beavers at their work of building dams. Areas many lakes and ponds make it an ideal place to try ones luck at fishing. At some fishing sites fishing is only allowed with a permit. (Nationalparks.fi 2021f.)

There are clear rules how visitors should behave when exploring the Evo hiking area. According to Everyman's right visitors are allowed to pick mushrooms and berries all year around. Staying overnight is possible wherever, but it is recommended to camp at the designated areas. People wishing to fish are required to check on the restrictions of the location where they would like to fish. Kalastusrajoitus.fi (in Finnish) website offers important information about the fishing regulations of ponds and lakes in Finland regarding permitted ways of fishing in the chosen location, minimum catch sizes and protection periods. Mountain biking on visible tracks is permitted. Lighting campfires is restricted – if the forest or grass fire warnings are in effect, making campfire is only allowed at cooking shelters. Pets must be on a leash. Damaging constructions and leaving waste in the nature is prohibited. (Kalastusrajoitus; Nationalparks.fi 2021g.)

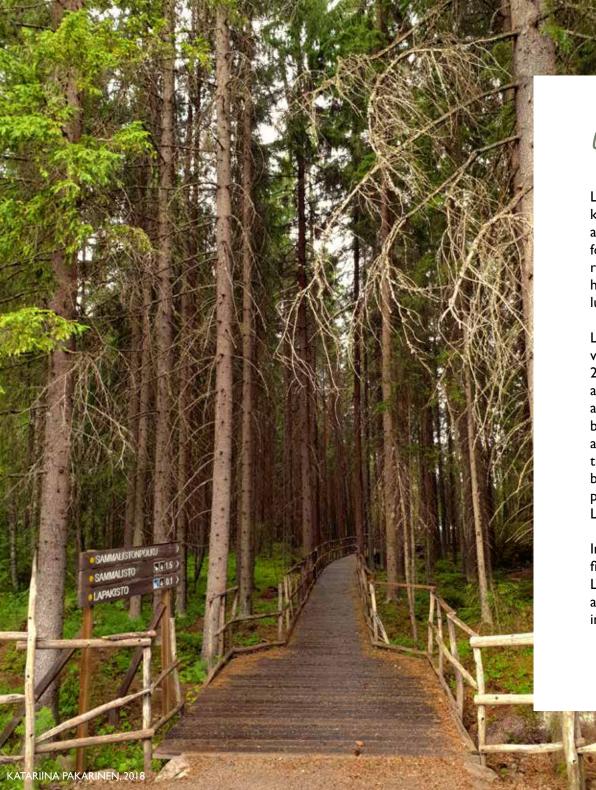




JÄRVENPÄÄ, A. 2018A & B

Lessons learned

Bigger area – bigger variety. If the area is big, it's clever to design several trails, campfire sites and lean-to shelters and offer lots of activities. This will enable more people to come at the same time and enjoy their stay evenhandedly. To make sure that the area stays in the most natural state possible, it's important to educate visitors about the rules of the site.



Lapakisto

Lapakisto is a popular nature reserve located in province of Päijät-Häme, 15 kilometres from the city center of Lahti. Lapakisto consists out of seven different areas with unique specialties. Landscapes vary from old spruce forests, mixed forest and swamps to rocky shores, high cliffs, and blue lakes. The area of the reserve is 230 hectares and 18 hectares of it consists of waterbodies. Lapakisto has been permanently protected nature reserve since 2012. (Lahden seudun luonto 2018a.)

Lapakisto is versatile hiking destination, and it attracts both local and national visitors (Metso 2016). There are five marked nature trails covering all together 23 kilometres (Lahden seudun luonto 2018a). Trails are marked with guideposts and colors, and they are easy to follow. Map of the area can be found online, and sometimes they can also be found ready-printed from the mailbox in the beginning of the path, near the parking lot. Parking space can accommodate approximately 30 cars. There are several dedicated fireplaces and wickets along the routes. Travelers can also find few outdoor toilets along the main paths. The beginning of the trail is also made accessible for wheelchairs with wide wooden path, so that disabled people can access easily the first wicket at the shore of Lapakisto lake. (Kaalikoski 2014.)

In addition, to improve accessibility, a film for the visually impaired people was filmed in the trails of Lapakisto. The film was made in co-operation with the Luonto kaikille -project and the Finnish Federation of the Visually Impaired. The aim of the film was to demonstrate how visually impaired people can be guided in the nature trails. (Aaltonen 2019.)

22





Green markings on the trees mark the path.

KATARIINA PAKARINEN, 2018

Duckboards invite travelers to stay on the path and to not stray from it.

KATARIINA PAKARINEN, 2018

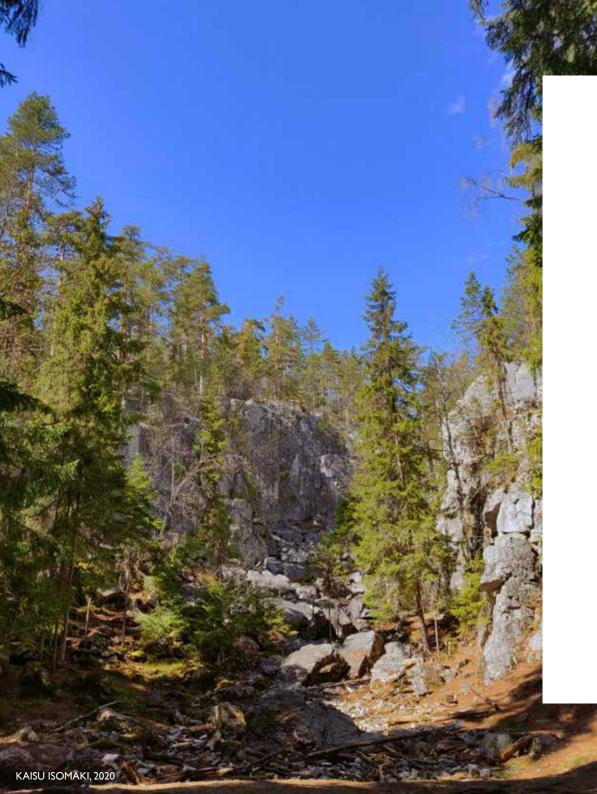
Lapakisto is a popular day-trip destination which can be accessed by car or public transport. The Lapakisto nature reserve is characterized by lakes, cliffs, small bogs and varied forest areas. The speciality of the area are the shores of small lakes, which remind lakes of Northern wilderness. Probably the most spectacular view is the cliff of Pitkänjärvenkallio which rises sharply 154 meters from the shore of Lake Pitkäjärvi. Under the cliff there is also a large boulder which split from the main cliff few years ago and crushed trees along its way. Local wildlife includes few specialties like flying squirrels and beaver, but specially Lapakisto has a diverse birdlife. In 2013 it was a home for 53 different bird species like black grouses, hazel grouses, goshawks, nightjars, black woodpeckers, Ural owls and greenish warblers. (Metso 2016.)

Video about guiding visually impaired people in the nature can be found online from:

https://www.youtube.com/ watch?v=xdX7W7J_cVk

Lessons learned

Accessibility benefits everybody. Making the path or at least part of it accessible is of use to everyone from families with baby strollers to people in wheelchairs, from young kids unable to walk for long distances to old people with heavier feet. Accessible paths lets everyone enjoys nature.



Nature reserve and nature trail of Türismaa

Tiirismaa is the highest point of Southern Finland, extending 223 meters above the sea level. It is located in Hollola, near the city center of Lahti. The habitat of Tiirismaa is nationally valuable, and it consists of three groves, the wetland of Soisalmi and the rocky area of Tiirismaa. Nature reserve is in the eastern part of the rocky area around the Devil's Nest and it covers 245 hectares. (Hämeen Ely-keskus 2014.)

The main trees of the area are spruce and pine, but rowan and birch can also be spotted. Many of the trees are very old. A lot of moss grows on the ground and some of the species are usually found only in marine climates. (Lahden seudun luonto 2018b.) The terrain of Tiirismaa is hilly and rocky and the best way to explore the area is to use readymade paths. (Salpausselkä Geopark -project 2020, 19.)

The most stunning point of interest is Devil's Nest (Pirunpesä) which is a magnificent gorge piercing the quartzite rock of Tiirismaa. The gorge is only few meters wide, but its walls rise to 20 meters. Devil's Nest has attracted tourists from 19th century. (Salpausselkä Geopark project 2020, 19.) The trails in the area are easy to walk, although they are rocky and covered in roots. There is also a campfire site next to the The Devils Nest. (Lahden seudun luonto 2018b.) The area was made as a nature reserve in 1970 and now it is part of the Natura 2000 network. The area covers 34 hectares and it is one of the most significant sites in Salpausselkä Geopark. Camping or climbing in the area is prohibited. (Visit Lahti 2021.)

The nature reserve and the gorge can be accessed, along the **Tiirismaa tour** route which starts from the beginning of the Arvi Hauvonen road. At the

starting point you can find parking spaces and a route map. (Salpausselkä Geopark -project 2020, 19.)

Nature trail of Tiirismaa is 4,5 kilometres long and it offers views to Lake Vesijärvi, Messilä Golf Course and the city of Lahti (Lahden seudun luonto 2018b). The path is marked with orange symbols. Along the route you will find several interesting nature sites with signs presenting the cultural history of the area. In winter, the parts of the route are used by skiers. (Salpausselkä Geopark -project 2020, 19.)

At about 800 meters, there is information about the Tiirismaa television mast, which is located at the top of Tiirismaa. There is also a sign offering information about Arvi Hauvonen who was pioneer of Finnish radio broadcasting. After about three kilometers of walking, at the highest point of the route is a shed called The Martha's hut. It is a small shed, with fireplace, table and benches. (Markkanen 2019.)

The route is classified as moderately demanding and travel time is estimated to be about 2.5 hours. The altitude difference along the route is about 70 meters. (Visit Lahti 2021.)





Lessons learned Taking a break is a part of the hike. The trail leading to Devil's Nest in Tiirismaa is marked well with painted guidemarks close to each other. Campfire site is well planned and wooden bench is big enough to fit 2-4 groups of hikers by the fire at the same time. As the equipment of the site is very good, including firewood, paper, trash bin, sausage sticks, drinking bowl for pets etc. having a good rest with a bigger group of people is possible and makes the stay more memorable.

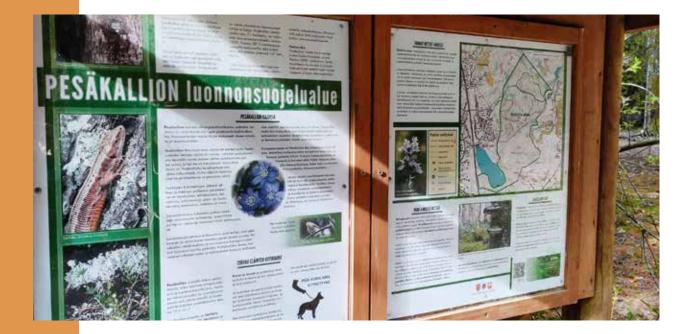


Nature reserve and nature trail of Pesäkallio

The Nature reserve of Pesäkallio is one of the most interesting natural areas in Lahti. It is known for old fairy tale forests, boulders covered with evergreen moss, steep slippery cliffs, and diversity of marshes. Pesäkallio is located in the northern part of the city, near Lake Merrasjärvi. 70 hectares of the area were protected in 1989 and the reserve was expanded to 200 hectares in 2013. The Nature reserve of Pesäkallio is part of the Natura 2000 nature reserve network and the reserve is also one of the Salpausselkä Geopark sites. The southern parts of the reserve are important for the protection of old natural forest and lush groves. There are seven wooded marshes with different habitats in the north and three in the south. (Lahden seudun luonto 2020a.)

Pesäkallio is a perfect destination for occasional visitors as well as for the experienced hikers. It can be explored for example by a light outdoor trail which makes a loop to the Pesäkallio forest. In the southern part of the route there is also a connection to **the trail around Lake Merrasjärvi** and to the nature trail of the nature reserve. In the northern part of the outdoor route, there is a path to **the fitness route of Takkula**. Routes present the special features of the area, flora and fauna with 17 information boards. (Lahden seudun luonto 2020a.) The city of Lahti has also put up signs offering information for example about harmful plant and slug species which should be removed from the nature. Signs offer helpful information of how to differentiate between native and invasive species, how to get rid of the invasive species and to whom to inform about them.

The nature trail of Pesäkallio is one of the most demanding nature trails in Lahti because of the terrain. A successful hike requires enough time and



suitable footwear, such as boots, as the trail also runs through marshy terrain. Hikers must be careful especially on slippery cliffs. The five-kilometer-long nature trail is marked with yellow paint markings to the trees, and it can be accessed from the northern end of Lake Merrasjärvi near the parking area by the beach. (Lahden seudun luonto 2020b.) Visitors need to walk first along the fitness trail, past the first intersection towards Takkula ja Pesäkallio. The beginning of the nature trail can be found from the left after the first hill.

Due to the popularity and number of visitors the path has already worn a little too wide in some places with exposing the roots of the trees (Savelius 2021). That's why is also important to remember to avoid any kind of harm and disturbance to nature, since the area is a home for rare plants, birds and insects. It is advisable to stay in the ready-made paths in order to reduce the wear and tear of the vegetation. Specially during the breeding season of the animals, it is important to move in a way which won't disturb the animals. Disturbance caused by visitors may prevent birds from nesting, like it has happened in Pesäkallio, where nesting attempts of ospreys have failed. (Lahden seudun luonto 2020a.)

It is forbidden to dig ditches, drain or dam waters or harm the waters or terrain in any other way. It is also forbidden to disturb or hunt animals or destroy nests. Dogs must always be kept tethered. Collecting plants is also prohibited with the exception of



Infoboard has a lot of information about the area's nature and species.

KATARIINA PAKARINEN, 2021

Markings on the trees guide along the deeper parts of the trail.

KATARIINA PAKARINEN, 2021

plant and insect sampling in the context of biological teaching and research and berry and mushroom picking. Visitors are not allowed to camp in the area or make campfires. It is also forbidden to move around with motored vehicles or organize social events. It is not allowed to make new paths, roads or any other structures to the preservation area. Small small-scale forest management measures are allowed if they are justified for the preservation of the natural values of the nature reserve. Also placing nature conservation signs in the area is allowed. (Lahden seudun luonto 2020a.)



Signs helping visitors to differentiate between harmless Limax cinereoniger and invasive Spanish slug (Arion vulgaris).

KATARIINA PAKARINEN, 2021

Lessons learned

Protecting area together! Visitors can be of help in protecting the area. Besides letting people know about the native flora and fauna, it is good idea to tell them about the ways they can protect the site against the invasive species. If it can be done safely, visitors can even be asked to participate in getting rid of the harmful species. At Pesäkallio people are told about the differences between two very similar looking slug species, of which other one is invasive and should be wiped out from Finnish nature.

Unclear guidance confuses. At Pesäkallio, fitness / ski trail is marked very well, but at the same time finding the nature trail requires investigation. There is only one sign pointing towards the trail and even that might get unnoticed. If visitor is able to find the trail, the second time they might get confused is after few kilometers when the trail divides in to two different unmarked paths. The main path will continue around the wetlands. But if the visitor takes the other one, in the end they will end up in the same intersection. Especially with travelers exploring the area without a map, this kind of experience is probably not a positive one.



2 RANTAKALLIO

Libbeinen Salmaalle ernatzen ratuikallo eikoitas tyytälistä Euello-Saomen paaludekalliott, jolla menerityvät vast kaiviin olouulueinin erikoistaopet karvit.

Korvaktektereritie on kehiteynet lakunta arperatus nakkaan vedemaantiin. Kavääteynäimöön lehteti reut possi, johkon haihdunean paken lehteti vetti vaitaa karpanatukan ja ukontullisukan paken lehteti vetti vaita. Kalvamakaaruokien tuos, maarpanano, reytäätään kerviniipi on kuistana ja malanna ole edhettise olekiitinen. Isarrak aaneekse paoleettaan vetteetti edhettise olekiitinen. Isarrak mina vetti palise paken seelle. Koivekkiitianent tuomaaruo vettis seelle.





Pappilanniemi peninsula is a valuable and versatile 28,8 hectares Saimaa lakeside forest area. The area is a permanently protected nature reserve since 2017. (Lappeenranta 2017). It is located near the center of Lappeenranta. Therefore, it is a very popular nature destination for the local people as well as for tourists looking for original, unspoiled nature with easy access from the town by car, bicycle or foot.

The peninsula has an exceptionally lush vegetation, and it is lined by expansive mica gneiss rôche moutonnées lapped by Lake Saimaa (Saimaa Geopark 2021). The area provides opportunities for both leisure and recreation. A 1,8 km long accessible nature path with informative signs winds around the Pappilanniemi peninsula (South Karelian Foundation for Recreation Areas 2021a).

The nature trail in Pappilanniemi follows mostly the wide and accessible exercise trail on the area. However, along the trail you can also take detours on narrow foot paths deeper into the forest or to the rocky shores. The exercise trail is suitable for walking, Nordic-walking, jogging, cycling and during winter also for skiing. The ski trail is maintained by the city of Lappeenranta. It is open for everyone, but in winter 2020-2021 the trail has been reserved for skijoring two evenings every week (Lappeenranta 2021a). Skijoring is a winter sport in which a person on skis is pulled by a dog. Using motor vehicles is not allowed on the trail, but there is a parking space right next to the beginning of the trail.

Along the nature trail there are 11 info points with information (in Finnish) and pictures available on the web page of Pappilanniemi. The info points introduce for example the landscape, vegetation, birds and butterflies as well as warns



Pappilanniemi nature path info sign.

TUULI MIROLA, 2021

The training facilities of Pappilanniemi nature path are used even during wintertime.

TUULI MIROLA, 2021

the visitors about the poisonous plants on the area. The visitors should also be aware that since the 2000s there have been tics carrying the Lyme borreliosis and Tick Borne Encephalitis (TBE) in Pappilanniemi area. These diseases are transmitted to humans by the bites of infected ticks. Therefore, it is recommended to wear clothing to cover the arms and legs and do a check-up of the body after visiting the risky areas (THL 2021).

Because of its lush vegetation Pappilanniemi is also a very popular birdwatching site where you can see and hear woodpeckers and other small birds such as nightingale and Eurasian wren (Ekly 2021). The local association Etelä-Karjalan lintutieteellinen yhdistys (Ekly) organizes birdwatching events in Pappilanniemi and maintains a bird feeding site on the peninsula during winter.

Along the exercise trail there are traditional wooden training/exercise facilities available. Thy provide the visitors versatile physical training opportunities. Yet, as wooden structures they are rather plain and blend into the landscape.



Lessons learned Observing wildlife is exciting in every season. Informative signs introducing local vegetation, birds, butterflies and plants are interesting. Birdwatching events and birdfeeding sites make observing into a communal activity.

Placing training facilities along the trail invites for a quick workout.

Mica gneiss rôche moutonnées formed by the Ice Age in Pappilannniemi.

TUULI MIROLA, 2021



Rantaraitti lakeside route in Lappeenranta

The beautiful **Rantaraitti lakeside route** traces the shores of Lake Saimaa and is within easy reach from Lappeenranta city center. The 14.8 km route (to and fro) can be accessed from various points, and the route takes the occasional detour away from the shoreline. The Rantaraitti main route from Myllysaari beach to Tervahaudanpuisto park in Skinnarila next to the university campus is about 10 kilometres. (Visit Lappeenranta 2021a). There is a presentation video available on Rantaraitti (Greenreality 2020).

The lakeside route is a highly unique natural attraction, where the visitor can admire magnificent views over Lake Saimaa and experience diverse and lush groves with areas of stony shore walls. The route covered with stone dust is accessible to all and partly lit. Many animal species live along the route, such as the flying squirrel, the white-backed woodpecker, the lesser spotted woodpecker, the golden oriole, as well as different bat species. Information on the natural features of the area the Rantaraitti Lakeside Route is available along the trail. There are 13 nature-themed signboards along the route, providing information on the area's forest, trees and vegetation. (Visit Lappeenranta 2021a; South Karelian Foundation for Recreation Areas 2021b.)

A mobile guide about the route tells 14 stories and history about some interesting sites along the route (Etelä-Karjalan museo a). The stories introduce the history of Lappeenranta as an old garrison town; presents the old and current industrial activities along the route; tells about the camping site and former hotel services on the area; offers facts about the former sports activities such as the ski jumping hills along the trail; and presents the nearby islands on lake Saimaa.

From Myllysaari to Pallo, the route is mainly covered with asphalt. This part of the route follows the streets and can be travelled by car. The seven kilometers





long stretch from the Pallo roundabout to Skinnarila is mostly covered with finely crushed stone. This part of the route is not allowed for motor vehicles. There are many ways to explore the route by walking, running, or using a walker or a wheelchair. The route is suitable for people of all ages and levels of fitness. (Visit Lappeenranta 2021a.)

On the Rantaraitti route there is a long wooden bridge, which crosses a line of rocks. The rock area is the remnants of an ancient shoreline, formed in the Ice Age. The bridge makes the entire lakeside route accessible. (Visit Lappeenranta 2021a.) Without this construction, people would find their own ways around the rock formations making the area vulnerable to erosion. It would also create a risk of injuries.

There is a natural spring along the Rantaraitti route next to the wooden bridge. The water is fresh and safe for drinking. Visitors may fill their water bottles on the spring. Some local residents even use larger canisters and take spring water home. Water from lakes, rivers and brooks in Finland should be boiled before drinking it, as the quality of these waters varies from one area to another. That is why, even if there may not be natural springs available on the destination, wells have been built on some routes. For example, in Repovesi national park, there are five wells along the routes (Metsähallitus 2021f). The water on these wells is tested regularly and the water quality information is updated on the national park webpage. Map of Rantaraitti. TUULI MIROLA, 2021

Water from the spring of Rantaraitti is fresh and safe to drink. TUULI MIROLA, 2021

Facilities and activities along the Rantaraitti lakeside route

Stops for resting and viewpoints

The lakeside route is also ideal for longer excursions and picnics, as there are several resting places with tables and benches along the route (Visit Lappeenranta 2021a). Toilets are also available on the beaches.

Beaches

The starting point of the Rantaraitti route is in Myllysaari. The Myllysaari Family Park is a popular recreation area near the city center, on the shore of Lake Saimaa. The facilities in Myllysaari include a beach for swimming with diving platforms and a sledding slide, a shallow sandy beach for children with playground equipment, work out facilities, parkour facilities and a street basketball court as well beach volley courts. The grass areas are ideal for relaxing, sunbathing and having a picnic. In addition to this there is a lakeshore café and a public sauna. (Visit Lappeenranta 2021b.)

Myllysaari public sauna is located next to the beach. Tickets sold on the premises in the ticket office. In 2021 the price of a single ticket is 6,80€. There are separate days and times reserved for male and female in the sauna. The sauna can be reserved also for private use. During winter, there is an ice swimming possibility on the sauna's peer. (Lappeenranta 2021b.)

In the winter, there is also another ice swimming spot at Myllysaari next to the diving platforms. It is free of charge and open for everyone. A key is needed use the warm changing rooms. With the key (about $8 \in$) the ice swimmers area allowed to use the changing rooms at any time during wintertime without any additional payment.

A base for rowers and canoers is located on the eastern edge of the area.

The walkways in Myllysaari offer a convenient route for getting around and they are also wheelchair accessible. Recording surveillance cameras cover the whole area. They help prevent mischief and littering and enhance safety in the area. (Visit Lappeenranta 2021b.)





TUULI MIROLA, 2021







There are several other beaches on the Rantaraitti Lakeside Route. Korkkitehtaanranta beach offers fitness equipment and a children's playground next to the public pier for small private boats. On Huhtiniemi beach there is also a pier for small boats. At the Sammonlahti beach there is a playground for the children, but you have to be aware of the risk of ticks carrying the Lyme borreliosis and Tick Borne Encephalitis.

Traditionally, people in Finland have washed their carpets on the beaches and piers. Nowadays, in order to protect the lakes and sea from pollution, there are carpet washing basins built on many beaches and harbors with running water and sewage system. There are also scaffolds available to dry the carpets outside also. On Rantaraitti, these facilities are provided on Korkkitehtaanranta and Sammonlahti beaches.

Dos parks and beaches

Dogs must always be kept on leash from March 1st to August 19th according to the law in Finland (Metsästyslaki 28.6.1993/615). On urban areas they must always be on leash. On nature reserve areas dogs must be on leash at all times, all year around (Järjestyslaki 27.6.2003/612). Thus, dogs cannot run free on the nature and culture trails either. Therefore, there are separate fenced-in dog parks also on Rantaraitti, one in Pallo and the other in Skinnarila. These parks offer separate sections for small and big dogs to run freely. Children's playground at Rantaraitti. TUULI MIROLA, 2021

Facilities for washing carpets. TUULI MIROLA, 2021

Fenced-in beach for dogs. TUULI MIROLA, 2021 Dogs are not allowed on public beaches at all in Finland (Järjestyslaki 27.6.2003/612). Therefore, there is a separate fenced-in swimming place for dogs next to the Myllysaari Family Park (Visit Lappeenranta 2021b).

Outdoor exercise facilities

For those who enjoy more strenuous exercise, there are outdoor fitness facilities and fitness stairs along the Rantaraitti route. (Visit Lappeenranta 2021a). There are gym equipment available along the route on Myllysaari beach, on Korkkitehtaanranta beach and in Huhtiniemi. The fitness stairs with 100 steps in Huhtiniemi are also very poplar for exercising and physical training. There is also a frisbee golf (also known as disc golf) course on the area with wooden teeing platforms to start throwing a disc from toward the targets.

Activities along the route

In addition to the activities organized by the town of Lappeenranta, also individuals, schools and other organizations create different types of popup activities along the route. These include for example walking events, orienteering courses on different themes and codehunting. The town organizes one-hour walking events open for everyone on the route every Monday during spring 2021 (Lappeenranta 2021c, 11). There are also QR-codehunting destinations along the Rantaraitti route on two code-hunting trails in spring 2021. The idea is that the code hunter searches for the QR-codes located on the trails, completes the given activity task of each code and is then guided to the next code. (Lappeenranta 2020; Lappeenranta 2021e.)

Pumppuhuone - old water pump house

Rantaraitti is connected to the history of Lappeenranta as an old garrison town. Part of Rantaraitti follows the shoreline of the Rakuunamäki garrison area. Construction of the garrison started in 1889 after the emperor of Russia, Alexander III established the Finnish Dragoon Regiment in 1887. For the new garrison, there was a need to ensure the needed water supply for the men and their horses by building a water pump house on the shore. The pump house construction was finished in 1892. Since 1960s the pump house was not used regularly, and the building fell into decay. Later it has been listed, which means that it is under protection. (Etelä-Karjalan museo a.) Since 2017 the pump house building on Rantaraitti has been restored and maintained by the association Rakuunamäen





Fitness stairs of 100 steps. TUULI MIROLA, 2021

Pumppuhuone – old water pump house. TUULI MIROLA, 2020 Pumppuhuone ry. The facilities can be rented for different types of functions. There is also a pier for visitors arriving by small boats. (Rakuunamäen Pumppuhuone.)

Since the Rantaraitti lakeside route has been completed in 2018, it has become very popular among the locals as well as visitors. Lappeenranta has decided to construct a similar type of trail also to the eastern part of the town. The construction is planned to get started during summer 2021. The eastern lakeside route will combine the existing network of cycling routes and paths into an approximately 8 km long continuous route. (Lappeenranta 2021c, 8-9.)

Using built-in structures prevents eroding. Fences, handrails, bridges, platforms, duckboards, stairways etc. ensures accessibility and safety on difficult and challenging terrains as well as minimize the chances of people straying from the path.

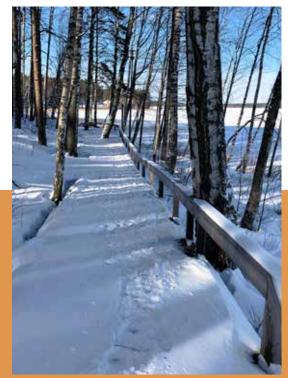
Lessons

learned

Local legends and tales engage the visitors' imagination and bring the area alive. Stories can be based on the local history, past events and activities and people related to the site.

Enabling local traditions can be done in a way that doesn't harm nature. If the locals have been using the area for certain activities, creating sustainable and environmentally friendly solutions for these activities is better than forbidding them. For example building facilities for washing carpets prevents people from washing them in the lake in secret and fenced-in dog beaches prevent people from letting their pets swim use beaches meant for people only.

Inform visitors and local residents about the rules and legislation regarding dogs on the trails. Also, in some areas, horse riding is popular, but not always allowed on all trails. Especially the local residents who use the trail more often, will appreciate if there are other activities available in addition to the nature sights.







The nature and culture trail in the Fortress of Lappeenranta

The town of Lappeenranta was founded at the site of the present Fortress in 1649 by the Swedish queen Kristina. The Fortress of Lappeenranta was originally constructed as a border fortress. It was a part of the chain of fortresses between Finland and North-Western Russia. Over the centuries, the Fortress was alternately held by the Swedes and Russians. (Lappeenranta 2021d.)

The present Fortress structures, renovated by Finland's National Board of Antiquities, are mainly based on the fortifications built at the end of the 18th century. The oldest buildings, such as the Orthodox Church and the Former Commandant's House, date from the 1770s, the wooden buildings from the 19th century and the brickbuilt military garrisons from the early 20th century. The Fortress area's old buildings are protected by building preservation law. The Fortress is a valuable part of the Finnish, Russian and Swedish cultural heritage (Lappeenranta 2021d.)

Today, the Fortress of Lappeenranta, also called the old town, is an active part of the town of Lappeenranta. The Fortress is a popular tourist destination. There are several museums: The South Karelia Museum, the Lappeenranta Art Museum and the Cavalry Museum, the Kehruuhuone Center for Culture and Events with a restaurant, Linnoituksen krouvi restaurant, Majurska House café and several artisan's shops. The oldest Orthodox Church in Finland dating from 1785 is located on the Fortress. (Visit Lappeenranta 2021c.) There are also multiple residential buildings in the area.

Events are organized at the Fortress throughout the year. Before Christmas, there is an oldfashioned Christmas market at Katariina's Square and in August,







it is time to celebrate Old Town Days. Cavalrymen dressed in their traditional uniforms and their horses can be spotted around the Fortress during summer.

The nature and cultural trail in the Fortress

There is a guided recreational route in the Fortress. **The nature and cultural trail around the fortress** is about 1.8 km long. There are 11 signposts along the trail telling the story of the area's buildings and cultural history, as well as its distinctive vegetation. The nature and cultural trail's guide is connected to the Fortress's virtual guide where the fortress can be explored online via a mobile walking tour. The QR code and website link on the signposts provide more information about the Fortress also in English and Russian. (Visit Lappeenranta 2021c.)

The trail with its stories has been created by experts from Lappeenranta. The signposts have been built by the local blacksmith, the illustrations painted by an artist and the text written by an author/journalist with the help of experts on local history and botanists. (Greenreality 2020).

An infoboard presenting different species appearing on the Fortress nature and cultural trail.

TUULI MIROLA, 2021

Cavalrymen can sometimes be spotted in the harbour and fortress area.

TUULI MIROLA, 2020

Infoboard at the cobblestone path. TUULI MIROLA, 2021



Drama tour at the Cavalry museum. TUULI MIROLA, 2019

Buildings around the Catherine's Square. TUULI MIROLA, 2021

The history and culture of the Fortress is brought alive by the drama tours organized in the Fortress. The drama tours offer reenactments related to the historical events, places and people. In addition to these types of guided history tours, there are for example, birdwatching tours and tours presenting the vegetation and rare plants on the area.

Lessons learned

Engaging local experts enliven the trail. Local experts, craftsmen and organizations can be a big help in the planning and building the trail as their knowledge about the area and its history is usually great and has a unique point of view. Involving them in the process lets them feel that they are making an impact on the area they live in. Local contribution should be mentioned on the materials provided to the visitors.

Local knowledge and labor can be of help in creating other activities too such as guided tours and summer theater. Different types of activities presenting the area and its history from various points of view attract different types of visitors.



Nature trail of Hukkavuori

The Nature trail of Hukkavuori is probably one of the most inspiring nature paths in the South-East Finland. It is located in the northern part of municipality of Ruokolahti and the path takes visitors to the top of hill of Hukkavuori, which offers a spectacular view over the surrounding forests. However, the biggest attraction of the route isn't the scenery, but exeptionally huge number of fun and informational signs, resting places and installations made to educate and entertain small and big hikers. (Mennään metsään 2015.)

Paths of Hukkavuori were designed and build by local resident Matti Päivinen in the year of 1996. Hikers can choose a route between two, five, eight or ten kilometers. Three longest routes are demanding and it is a good idea to reserve a couple of hours even for the five-kilometer route. Routes are marked in a way that traveler simply cannot get lost. There are dozens of official and unofficial info signs with information on the routes and surrounding nature. Hikers are also greeted by installations and sculptures presenting imaginative characters like a seal on a dry land. Travelers are also instructed to respect the nature. For example, as traveler approaches a tree with an osprey nest, signs remind to speak in a low voice. (Mennään metsään 2015; Ruokolahti 2021.)

One of the most interesting spots along the route is a place for collecting ant eggs (in finnish muurahaisten munituslaani). After the wars, especially in the 1950s collecting ant eggs was a big business, especially in the Karelian region. Ant eggs were a valuable product for export, and they were used as an ingredient to make medicines or to make protein powder. The trick was to collect eggs and ants at night from ant nests and clear them from the biggest debris, and then move them with a cloth on top of the rock under brushes. The area was surrounded with tar as to prevent ants from moving the eggs elsewhere. On









the next day ants sorted and cleaned the eggs, and you could collect even 20 kg fresh eggs. (Siiskonen 2014.)

There are several resting places on all routes and there is a small hut on the top of Hukkavuori, and a rain shelter in Kaunitlampi (Ruokolahti 2021). Hukkavuori can be reached using the wooden stairs of Jacob, but they are not for the faint hearted or people with disabilities in moving. (Mennään metsään 2015). Hukkavuori is particularly a great experience for adventurous families.

Singpost guiding to Savonlinna, Haukkavuori and Oritsuo. MINNA MATIKAINEN, 2020

Wooden installation of the village elder Onni and Piku the dog.

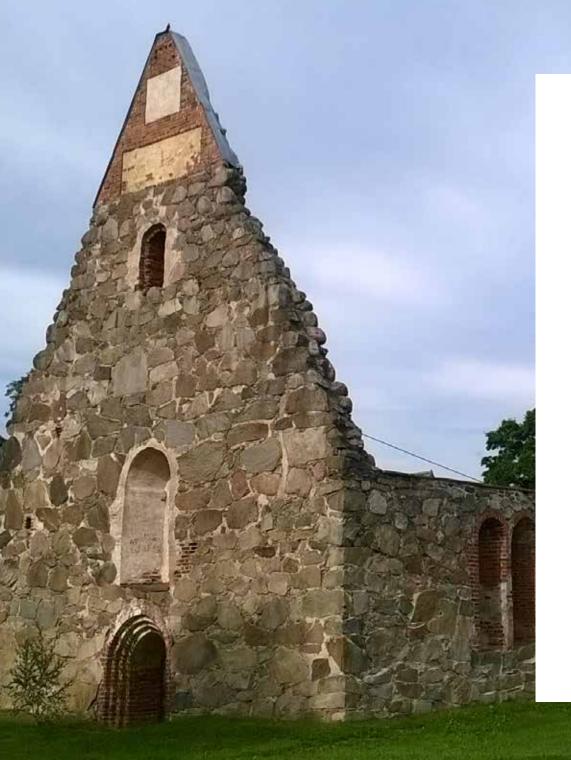
MINNA MATIKAINEN, 2020

Singpost pointing towards overgrown swamp pond.

MINNA MATIKAINEN, 2020

String with which visitors can announce their arrival to others at the resting hut. MINNA MATIKAINEN, 2020

Lessons learned Only the sky is the limit. Solutions do not always have to be expensive or bombastic. With enough devotion even one person or a small group of people can design and produce a big experience. Little details in the nature brought alive with fun signs and small activities can make the visit memorable.



Pälkäne Culture Routes in Pirkanmaa region

Pälkäne is a municipality in Pirkanmaa near the city of Tampere. The region has a vivid cultural history, and many historical sites can be found from the area. (Visit Pälkäne 2021.) These sites and their stories were collected and implemented to nature paths of the area, in an EU funded project "Pälkäneen kulttuurireitit". (Visit Pälkäne 2020, 2.)

Project created four different culture routes with unique themes in collaboration with local associations, companies, residents and regional networks. Every route has its own fictive story based on true events and real people. By collecting local stories and historical facts project also preserved local knowledge for future generations. Routes offer pretailored travel opportunities with services and guided tours for both residents and visitors. Routes are planned to be ecological and friendly to the environment. Guidance along the route emphasizes travelers' responsibility and green values. (Visit Pälkäne 2020, 2.)

The cultural route of Laipanmaa has 10 different points of interest. The route starts from the parking area next to the Rajala lodge (Rajalan kämppä). Travelers can listen stories from the history and legends of the area. Stories are related to for example to the hermit Nestori who lived alone in the woods or to Matti from Verkkojärvi who was afraid of fire and frogs. The length of the route is four kilometres, and it wanders in the hiking area of Laipanmaa, which is the largest integrated forest area in the Southern Finland. The route is easy to walk, but there are few climbs where terrain can be slippery during rain. In the halfway of the trail there is also a wicket with fireplace. (Laipanmaa, Visit Pälkäne 2020, 4.)



The cultural route located in Onkkaala takes travelers to the city center of Pälkäne with 9 points of interest. Length of the route is 1,5 kilometers and the level of difficulty is easy. The route runs from the monument of the Battle of the Kostianvirta through Pälkäne downtown along with idyllic Kankilantie and towards the Church of St. Michael. The estimated construction time of the Church of St. Michael is at the end of 1400s. The roof of the church was made of wood. Nowadays the roofless ruin church makes a unique place for different kinds of events like weddings. Two virtual soldiers act as guides. (Pälkäneen rauniokirkko, Visit Pälkäne 2020, 3.)

The cultural route of Luopioinen starts from the shores of lake Kukkajärvi. It is a 3-kilometer-long route, which tells about the history and significant events of the area. Route is guided by virtual characters Liisa and Lauri telling stories from the past and Mikko from the present (Visit Pälkäne 2020, 6.)

The culture route of Laitikkala wanders through the landscapes of Pirkanmaa and presents stories, poems and musical elements, all of which aim to open the senses to the

Interior of the ruined Church of St. Michael. SALO,A. 2011 (CC BY-SA 3.0)

Rajalan kämppä. AHUTILA, 2005 (CC BY-SA 3.0) experiences that the taste village of Laitikkala produces. The length of the route is 1,5 kilometers and is accessible. for people with moving disabilites (Visit Pälkäne 2020, 5.)

Stories from the routes can be listened with a smart device by downloading a story player application from the Appstore and scanning QR-codes from guideposts along the route (Visit Pälkäne 2020, 2). Other option is to listen stories from the web from the following addresses:

- The Culture route of Onkkaala: https://tarinasoitin.fi/onkkaalankulttuurireitti
- The Culture route of Laipanmaa: https://tarinasoitin.fi/laipanmaankulttuurireitti
- The Culture route of Laitikkala: https://tarinasoitin.fi/laitikkalankulttuurireitti
- The Culture route of Luopioinen: https://tarinasoitin.fi/luopioistenkulttuurireitti

(Pälkäne Kulttuurireitit. 2021a-d)

Lessons learned Local history and stories are a part of nature experience. Virtual stories enliven events and people, and at the same time they work as a new reason for travelers to visit the area. Stories can be told in various forms, such as writings on the signposts, virtually through VR or AR applications or told via audio guides, and each of them bring their own flavor to the experience. Culture routes of Pälkäne is a good example how different parties, project partners and residents can work together in preserving local knowledge.



Ecological education and visiting centers of Finland

There are 25 nature centers maintained by Metsähallitus together with local towns and organizations in Finland. Many of these nature centers are located near National Parks or other nature trails. Additionally to the centers maintained by Metsähallitus, there are many other nature-themed visiting centers around Finland.

The centers offer diverse exhibitions and nature films on the natural attractions in Finland. Guided tours are organized for groups of visitors. They provide information on the natural parks, nature trails and other services available. They sell maps, publications about the nature destinations and other nature-related products. Some of the Customer Service Points manage reservations for rental huts and sell Metsähallitus fishing, hunting and off-road permits. Many nature centers have facilities suitable for a lunch break or rest, and some have a café or a restaurant. (Metsähallitus 2021h).

Admission to the nature centers is usually free, but some nature centers have exhibitions with an entrance fee. The contact details and opening hours for each nature center are available on their respective pages. (Metsähallitus 2021h).

In addition to these Metsähallitus Nature centers, there a numerous other ecological education and visiting centers and nature centers all around Finland. They are maintained and administered by the local municipalities and other organizations.

Next in the report, following education and visiting centers in Finland are presented: the Finnish nature center Haltia, Saimaa Nature Center Riihisaari, Vuohijärvi nature and culture house, Nature and Science Center Saimaarium in Lappeenranta and Aarni nature center.

Nature centers in Finland



Finnish Nature Center Haltia

The Finnish Nature Center Haltia is the gateway to all national parks in Finland. Haltia is situated in Espoo, adjacent to the Nuuksio National Park within a half an hour's drive from Helsinki. The services available in Haltia include exhibitions, equipment rental, a hiking equipment and gift shop, restaurant Haltia, meeting and sauna facilities, as well as an accessible lookout point, campfire sites and courses and events customized for each season. (Haltia 2021a.)

Haltia arranges programs for groups of all sizes both indoors and outdoors. Events such as meetings, conferences, occupational well-being or recreation events, and parties can be arranged. The facilities for rent include for example a multifunctional 200-seat auditorium and a meeting cabinet with a sauna and other meeting rooms for smaller meetings. Haltia also rents equipment for excursions and hikes. The rental service covers tents, backpacks, camping stoves, sleeping bags, rubber boots, open fire pans and much more. (Haltia 2021a.)

The permanent main exhibition at Finnish Nature Center Haltia showcases Finnish nature. The main attraction is the Five Seasons virtual wall with an eighteen-meter-long animated landscape panorama that invites visitors to step right into nature. It takes visitors from the Finnish Archipelago to the fells of Lapland and to all of Finlands 40 national parks. There is also a virtual tour to 12 national parks landscapes. Tickets to the exhibitions are sold online also. (Haltia 2021b.)

Guided tours of various themes are available for groups in Haltia. Specially designed guided tours for children and school groups of different ages are also provided. (Haltia 2021c.)



Finnish Nature Center Haltia. HARRIAH 2013 (CC BY-SA 3.0)

A view from the observation tower of the Haltia Nature Centre.

JIP 2015 (CC BY-SA 4.0)

Lessons learned Educate and equip! The southern location of Finnish Nature Center Haltia makes it a convenient gateway to all national parks in Finland. In addition to its own attractions, Haltia educates visitors about the other interesting areas in Finland, making it possible to learn about them and to inspire people to visit them. Equipment rental enhances sustainability as rarely used equipment such as tents and backpacks can be of use for many people during the season and not everyone needs to buy their own equipment.



Saimaa Nature Center Rühisaari

Lake Saimaa Nature and Museum Center Riihisaari is operated together by Savonlinna Provincal Museum and Metsähallitus. It is situated in the old town of Savonlinna, next to Olavinlinna Castle. Riihisaari is a meeting place and an exhibition center, providing experiences and information on cultural history and natural landscape of the region year-round. (Metsähallitus 2021i.)

Saimaan sylissä (In the heart of Saimaa) exhibition tells the story of man and nature since the last ice age. A large part of the exhibition is dedicated to the Saimaa ringed seal with short films included. The exhibition also offers information about the city of Savonlinna and its history. The exhibition opened in the summer of 2018 and is produced together by Metsähallitus and Savonlinna Provincial Museum. (Metsähallitus 2021k.) There are also visiting art, nature and culture exhibitions at Riihisaari. In the summer, museum ships are moored at the pier by Riihisaari and open to visitors. (Metsähallitus 2021i.). The museum shop at Riihisaari sells maps, books, posters, souvenirs and other products. The tourist information at the museum shop offers free brochures and a wifi. Information on nature tourism services in the Savonlinna area is also available.



Riihisaari – Savonlinna Museum. MIKKOAU 2016B (CC BY-SA 4.0)

Lessons learned Rarity brings value. Highlighting rare species of the area is a good way to educate people about the status and ways of protecting those said species. In Saimaa Nature Center Riihisaari the endangered Saimaa ringed seal is the focus point. Other information such as history and nature of the area can be build around that.



Vuohijärvi nature and culture house

Vuohijärvi nature and culture house is located in Vuohijärvi village near Kouvola, in close vicinity of Repovesi national park. It is about 35 km from the city center of Kouvola and 165 km from Helsinki. (Vuohijärven luonto- ja kulttuuritalo 2021a.)

Nature and culture house's program includes art exhibitions in the summertime as well as different events and concerts year around. There is also a cafe, a boutique, lovepark, gallery and information point in the same premises. Maps of Repovesi National Park and other brochures of the area are available in the information point. Nature and culture house's premises are available for private functions outside of the exhibition season. (Vuohijärven luonto- ja kulttuuritalo 2021a.)

Rakkauspuisto lovepark is an experience for the friend of nature and art. The garden combining sculptures, stone structures and flower beds has been open since 2016. The vegetation in the garden comprises of various roses, perennials, garden plants and 5000 bulb flowers. There is a changing sculpture exhibition in the garden every year. There is also Koivu ja tähti (Birch and star) sculpture in the courtyard of the Vuohijärvi nature and culture house allowing friends and lovers to hang the locks symbolizing their friendship and love. (Vuohijärven luonto- ja kulttuuritalo 2021b.)



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In summer 2021 an exhibition called
1000-vuotinen valtakunta (1000 years
old kingdom) presented works of three
artists. The sculpture named Šikaani
in front of the Vuohijärvi nature and
culture house is a work by Finnish artist
Miina Äkkijyrkkä.
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KAISU ISOMÄKI, 2021



The garden of Rakkauspuisto combines sculptures, stone structures and flower beds.

HÖÖK, J. 2016.



Koivu ja Tähti sculpture for love and friendship locks. Locks and engravings can also be bought from the Vuohijärvi nature and culture house.

KAISU ISOMÄKI, 2021

Lessons learned

Change interests! Changing exhibitions lures in different visitor profiles as well as invites people to visit the center again to see the new exhibition. Close vicinity to a famous national park, makes Vuohijärvi nature and culture house an excellent pitstop before entering the park to get a map Repovesi or to ask for guidance. After the visit to the national park the house with its small café works well as a place to get some refreshments.



Nature and Science Center Järvimaailma Saimaarium

Järvimaailma Saimaarium nature and science center is located in Lappeenranta harbor. The overall aim of Saimaarium is to turn knowledge into action in order to preserve the viability of environment and the entire planet. (Saimaarium 2019a.) Saimaarium combines the means of environmental science, nature and environmental education and communication to solve the global environmental problems. They want to promote environmental awareness and sustainable solutions. (Saimaarium 2019b.)

The services offered by Saimaarium include exhibitions, nature schools, and individually planned workshops and courses. These also include interactive demonstrations and VR simulators (Saimaarium 2019c). The main nature and environment exhibition is called Success stories of Lake Saimaa. The main exhibition hall also includes the Saimaa Theater with changing nature movie contents.

Saimaarium also provides a wide range of events in environmental education and training, such as Nature Schools, Science Clubs and the Family Lake Days. These events include versatile activities on researching the nature; learning the structure and function of the ecosystem, taking samples, use microscopes, taking pictures and conducting tests in the lab and in nature. Seminars and lectures on various themes are organized on a regular basis as well as events on themes such as nature photography with photographers sharing their expertise and experiences. The center is also a venue for tailormade meetings, parties and other types of events. (Saimaarium 2019c.) The events open for everyone are announced on the Saimaarium web pages and in Facebook.

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Research and expert services such as environmental impact assessment, restoration of damaged ecosystems, water protection and biological surveys are also available in Saimaarium. Saimaarium is developing the SAIMAA SOLUTIONS concept which is a research and development network for the Finnish environmental research. (Saimaarium 2019c.)







Järvimaailma Saimaarium main exhibition. TUULI MIROLA, 2021



Ticket counter and museum shop. TUULI MIROLA, 2021



Saimaa Theatre's changing exhibition. TUULI MIROLA, 2021

Wall of climate actions. TUULI MIROLA, 2021

Perheen ilmastoteot

Lessons learned Be the change you want to see! Not everyone can be a follower, someone must lead and show how things shuold be done. Järvimaailma Saimaarium has an important mission, in which the center promotes environmental awareness and sustainable solutions. By arranging a wide range of events in environmental education and training, such as nature schools, science clubs etc., the center can educate people and inspire them to live more ecologically. Environment related research and expert services and surveys offered by Järvimaailma Saimaarium again can be of use for companies who want to lessen their burden on the planet.





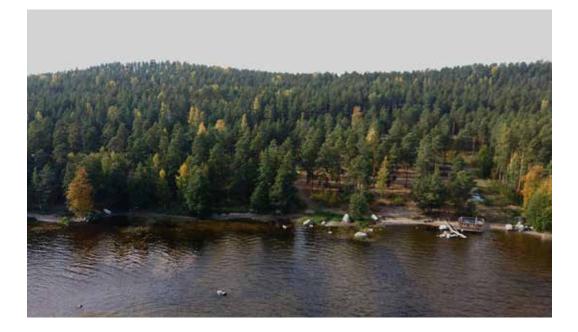
Aarni Nature Center (in planning)

An international nature center Aarni is being planned to Padasjoki to the shores of Päijänne. The area reserved for the center and other facilities is 3.3 hectares. It has building right for 10,000 square meters to support tourism activities. Center is planned to be an architectural and ecological trendsetter which will focus on lake nature. The theme of the center is the nature of South Päijänne from the Stone Age to the present day. It is estimated that the regional impact of the project will be 5 million euros and the project will create 100 jobs. The construction project is in the general design phase. (Aarni Finland 2021a.)

Behind the project are the municipality of Padasjoki, tourism companies operating in the area, Kullasmarina Oy, Päijänteen Loma Oy, Lahti Region Development Company LADEC and LAB University of Applied Sciences. (Aarni Finland 2021b.)

LAB University of Applied Sciences is responsible for leading a preliminary study and concept project of Aarni Nature Center funded by European Union. Project produces a study and a concept of the nature center. The aim of the project is to identify key stakeholders, engage a network of actors and create a service and operational concept for an advanced nature center. (LAB University of Applied Sciences 2021.)

According to the plans, the nature center will act as a gateway to Päijänne National Park. Center is targeted for tourists and nature enthusiasts, and it is meant to act as an example of a new modern visiting center. Aarni will bring together information of forest and waterways and turn it into products and concepts with digital virtual solutions, user-oriented design, experimentalization





and gaming. Nature Center connects also to the overall planning of the guidance system in Salpausselkä Geopark area. (LAB University of Applied Sciences 2021.)

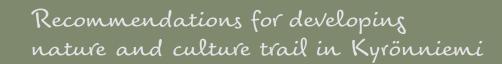
Area of Aarni Nature Center from air. VESA VÄHÄMAA, 2019

Project also strengthens the development of nature tourism in Päijät-Häme and accelerates the development of Aarni tourism service center to be built. The project brings novelty value by utilizing and piloting augmented reality in nature and routes in a way which increases experience and enables distinctive and immersive exhibition and experience environment. Nature center with good facilities and services will increase and direct tourist flows of the area. (LAB University of Applied Sciences 2021.)

It is possible to spend the night at the area and experience the unique Stone Age sauna which has been excavated into the ground.

KALEVI PORVARI, 2019

Lessons learned Modern technology belongs to nature. To excite people of this era to visit nature sites, utilizing technology such as virtual and augmented reality might be the triumph card needed. Extended reality brings new viewpoints to traveling and exploring nature and creates new interesting ways to learn about the curiosities happening around us.



Understand the travelers

Few years ago, Visit Finland produced a segmentation analysis from travelers and attractions in Finland. Segmentation was created to help businesses to understand different types of national and international travelers and the motives why they travel. Study was based on online interviews in England, Germany, Japan and China. As a result, three core traveler segments (nature wonder hunters, nature explorers and activity enthusiast) and three supporting segments (authentic lifestyle seekers, comfort seekers and city breakers) were found. (Visit Finland 2017.)

In developing Kyrönniemi area, understanding the first three core segments can be useful. They provide more deeper information from traveler's motives, needs and behavior, than traditional traveler segmentation based on age or the number of travelers. Nature wonder hunters are looking for unique nature experiences, that happen once in a lifetime. Nature explorers want to rewind in nature and enjoy peaceful and beautiful surroundings. Activity enthusiasts are looking for active holiday in nature. These segments can be divided into more smaller units like solo travelers, families, couples, school groups, pensioner groups, local inhabitants, volunteers, authorities etc.

Information from the segments will help us to understand which are the main traveler groups who will visit the Kyrönniemi area, how are they going to use nature trails, and what kind of services trail should have. Segmentation also helps us to plan right channels for distributing information and collecting feedback from the travelers. Collecting feedback from visitors, operators and other stakeholders is necessary to improve satisfaction and operations (Metsähallitus 2016).





For example, nature explorers like hikers, prefer clean original surroundings, and they are more likely to visit places without infrastructures, sound of the passing traffic or other activities. (Räsänen & Saari 2011, 7). For urban travelers who are accustomed on hectic city life, peacefulness of the nature and green lush surroundings are strong experiences. Feeling being in wilderness can be experienced already few kilometers away from settlements. (Räsänen & Saari 2011, 4).

Visitor surveys provide valuable information about the different visitor profiles and the changes which happen over the years (Metsähallitus 2020, 12). The most common types of surveys are those which measure the number of visitors and the amount of customer satisfaction. In addition, it is possible to study how much money visitors leave to the area and how it effects on employment. At its simplest, the number of visitors can be calculated along the route with the help of physical guestbook to which visitors can mark the date and time they visited and leave comments. Visitors can also be monitored with an infrared counter, which sends realtime information to the Internet. Metsähallitus also monitors customer satisfaction through visitor surveys and makes corrections and improvements based on feedback. (Räsänen & Saari 2011, 25.)

Find and map the specialties

Appeal of the route depends highly on the scenery, quality of the observation points, number of nature wonders and the level of local history and culture presented. (Räsänen & Saari 2011, 21.) A map, created with nature specialists, which highlights the special characteristics, can increase the attractiveness of the destination. A map can include the most interesting views, geometrical formations, places of special plants and maybe places to spot local wildlife. Usually, the best experience forms out from a combination of small and big findings. Map should also inform travelers about qualifications of the routes, lengths and time needed for walking, safety instructions, rules and available services in the area (Räsänen & Saari 2011, 33).

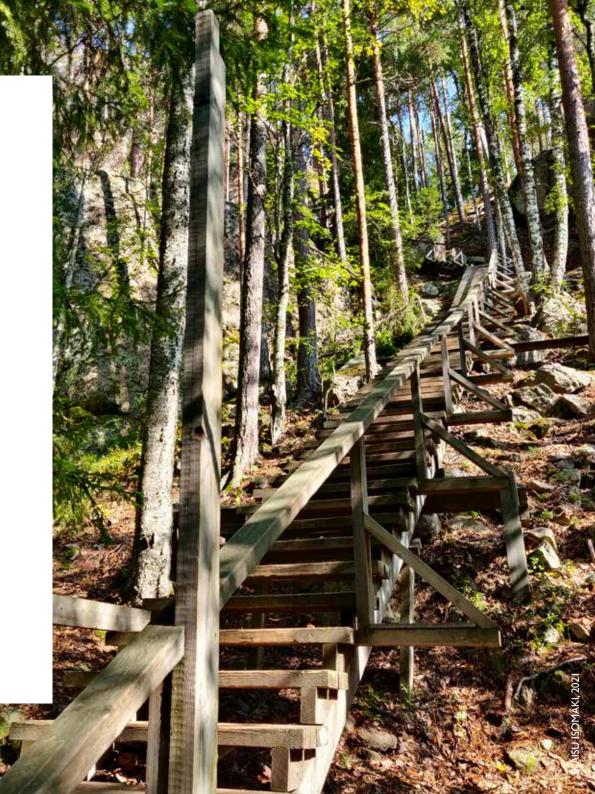
Map helps travelers to arrive to the destination and plan their journey. Map can be used in many contexts, like as a part of the area info signs and as a part of the marketing material. It is important to notice that traditional topographic map is not always the best option for travelers, and sometimes they benefit, if information has been simplified. (Räsänen & Saari 2011, 3). All the travelers are not accustomed on reading maps or compass, and they appreciate if the map highlights clearly and safely the most interesting details.

In the era of digitalization, information should be also made available online in few different languages. Travelers are using more and more their own personal digital devices to locate nature paths and that's why digital maps should include GPS-data (Räsänen & Saari 2011, 33). It is also a good idea to create few different maps with paths for different type of users. Some travelers prefer to move around with bikes instead of walking, while others use kayaks.

While mapping the key points of interest it is crucial to make sure, that they don't disturb local wildlife, like birds during their nesting season.

Define the level of usage and services of the area

While planning and redesigning the use of Kyrönniemi area, it is first important to study and understand what kind of destination it is now. Which are the main characteristics or the most interesting points in





the area? What kind of history does the area have? How the area is used now and who is mainly using it?

Next, we can start to define what we want the area to be in the future. Where will the new tourist hiking route pass? How long it will be? Is it one straight route or many routes making loops? What are the main keypoints along the way? Who is going to visit the area, and how much infrastructure it needs?

It is important to decide the level of services along the nature trails. Services usually mean accommodation or restaurants, but in this case, term needs to be understood more widely. Nature trail services also include the route network, guidance system, structures along the path (like bridges, duckboards and benches), lay-by-sites (like places for campfires, tents and wickets) and info centers with possibilities for renting equipment (Räsänen & Saari 2011, 20).

Project Outdoors Finland created a manual for planning nature and hiking trails in the year 2011. Project was coordinated by Visit Finland and Lahti University of Applied Sciences. According to the manual, nature routes and destinations can be divided in to four different categories based on attractiveness, services, accessibility, and traveler profiles. (Räsänen & Saari 2011, 8-9).

Local nature trail offers residents a path which they can use for walking and exercising. These trails are usually part of public areas and close to city centers. Typically, routes are used for walking during the summer and for skiing during the winter. It is common that these trails form a circle. Usually there is some parking space and info sign in the beginning of the route, and some benches along the way. Regionally interesting nature route offers different options for daytrips. Routes are usually used by national and international travelers and residents, like school groups. Lengths of the routes vary, and they can be explored in parts over a few days.

Nationally known nature route is usually part of camping or recreation site. It forms out of longer hiking trails, meant to be used over many days. There is typically lot of services along the way, like camping sites, shelters, guideposts, outdoor toilets etc.

Internationally significant routes are usually close to traveling centers or holiday resorts. In Finland they are located mainly in the Northern national parks. Destination offers many route options with varying lengths, and a lot of information is available online. A good example is National Park Oulanka with Karhunkierros.

Enhance co-operation and involve locals

Metsähallitus' nature services and UNESCO World Heritage Sites in Finland have common principles for sustainable tourism. These principles should be considered in all actions and co-operation with tourism entrepreneurs. (Metsähallitus 2016.)

By the principles of sustainable tourism, parties need to work together and offer residents and visitors' opportunity to participate to the care and development of the area in a way that promotes local economic growth and improves living conditions in the area. Businesses and organizations should reinforce local knowledge, experiences and culture while offering services. Parties should try to prolong the visits and encourage visitors to use diverse, self-sustaining and guided nature experiences while promoting





the health benefits of the sites. Organizing training and cooperation events between actors of the region is also encouraged. (Metsähallitus 2016.)

Nature routes are usually planned by municipalities or city departments which are accountable of developing leisure sites and activities. When developing comprehensive, accessible and safe nature experience it is also important to involve more widely other partners and stakeholders, like travel organizations, environmental authorities, business owners and associations. Environmental authorities and organizations focused on nature preservation can provide lot of valuable knowledge about the most vulnerable places or species in the area. (Räsänen & Saari 2011, 10.) Residents, schools and volunteers should be also considered as an important asset.

Local business owners are usually more than happy to share their ideas of the developing the area. They might have hopes for route planning and ideas for required facilities or services. Business owners have usually the best insight for commercial opportunities of the area. They might also have knowledge from the most common needs of the travelers or special information about the history of the area. Accommodations, restaurants, tourist attractions, guided tours and equipment rentals of good quality will highly increase the usability and the attractiveness of the area. For example, bed and breakfasts or restaurants offer food and drinks, but at the same time they are places where travelers can meet each other, share experiences and advice. In some cases, the restaurant may be the most important reason to travel to the area. (Räsänen & Saari 2011, 10.)

Preserve nature while designing the paths

Parties that work by the principles of sustainable tourism need to support the preservation of the area and nature. Parties should operate in an energy and material efficient manner and the services they provide should be developed according to the nature of the destination and the level of usage on the area. **Impact on environment should be minimized and negative effects of tourism should be actively forecasted and prevented.** Ready-made routes and existing service equipment should be used, but if the area requires building new infrastructure, it should be done in a way that supports local natural and cultural values. Travelling to the destination with low-emission and public transport should be promoted. (Metsähallitus 2016.)

Nature trails offer visitors a way to admire the diversity of nature, but at the same time trails make changes to the scenery. If the paths are wrongly designed or used, they can wear out vegetation, ground or disturb the local wildlife (Räsänen & Saari 2011, 16). To prevent visitors damaging the nature, routes should follow the natural land shapes, and they should be laid on areas that can withstand the wear. It is also important to consider how paths should be arranged so that travelers will stay on them while moving between points of interest. If there are some old paths on the area, it is a good idea to follow them if possible. It is also important to ensure, that routes don't disturb local wildlife.

Wear can also be prevented by positioning campsites, outdoor toilets and fireplaces close to each other (Räsänen & Saari 2011, 16). Safe and dedicated fireplaces prevent bushfires, and a supply of chopped wood keeps travelers from ripping branches from live trees. Garbage collection is also a key element. Firstly, visitors should be advised to take all the trash with them, but if trash bins are used, it is important to determine how often they should be emptied and who is going to do it.

Finnish Metsähallitus has centralized trash collecting to the main entrances while reducing trash bins near camping sites. Metsähallitus has also increased waste education along the paths and in printable





trail maps. This has helped reducing mixed waste collected from nature destinations, while the number of travelers has increased. (Metsähallitus 2021j).

Diverse network of trails helps distributing travelers more widely to the area. Those who seek peacefulness and tranquility prefer longer routes and day-trippers stay more likely in the shorter paths. When travelers move in a vast area social contacts are reduced, as well as the feel of overcrowding, which is already problem in the most popular Finnish routes like Karhunkierros. Good planning of the routes will help with estimating the parts of the nature park which are usually the busiest. Main paths and intersections, parking spaces, campsites and attractions are used more than other parts. (Tunturihullu 2018.)

Create consistent suidance system

Guidance usually consists of four different signage levels: 1) big welcoming info sign offering information about the whole area, 2) signposts pointing different route options, 3) medium info signs offering detailed information about single points of interest and 4) small "stay-on-the-route-signs" marked with symbols or colors (Räsänen & Saari 2011, 18). Welcoming info sign usually presents map of the whole area and informs visitors of route options by their lengths (distance and time needed) and classification (how difficult the route is). Available services are also presented in the welcoming sign. If possible, the area information should be placed under a shelter so that it is easy to study despite the weather. Safety is also an important factor and that's why safety instructions need to be presented clearly to the visitors (Invalidiliitto 2021b).

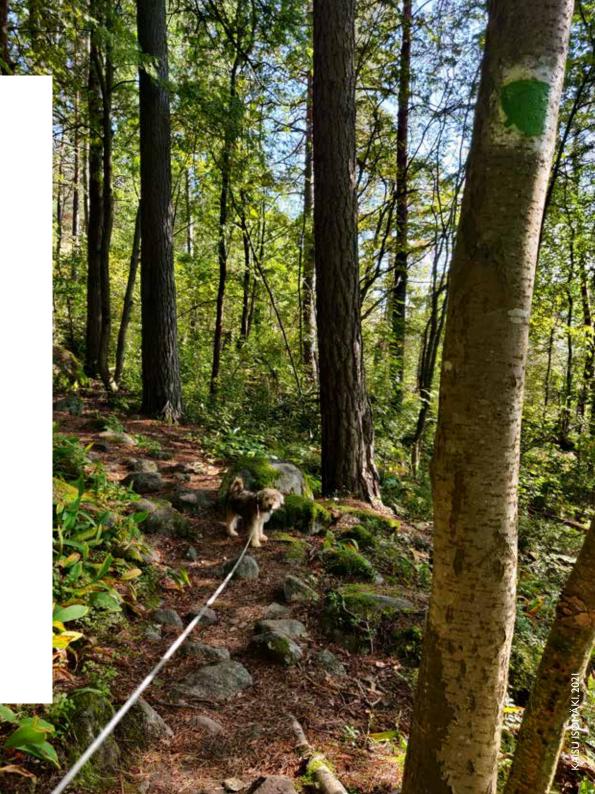
Information should be presented in short sentences and accompanied by distinguishable and internationally understood icons and symbols (Invalidiliitto 2021b). For international travelers information should be in two to three languages, but if this is not possible, other option is to offer language options online by including for example QR-codes to the signs.

While planning the guidance system it is important to make sure that all individual guideposts form one consistent system, which is logical to use and easy to follow. Signs should merge into nature, but at the same time they should be visible enough and easy to spot. Signs should be easy to mount and simple to maintain.

It is important to acknowledge how weather conditions and different seasons are going to affect the visibility. The natural forces like sun, rain, and wind will slowly destroy the materials, and autumn leaves, or heavy snowing can hide the guideposts from sight. Corroding can be slowed down with the right material choices and with the deposition of signs. Posts can be positioned facing away from the sun or sideways from the usual direction of the wind. The weakest spots are usually parts that get wet when raining or parts which touch the ground. (Räsänen & Saari 2011, 19.)

The most common signpost material is wood, since plastic or metal wont blend as easily to the nature. Usually, wood is impregnated with chemicals or heat treated to last longer. Because in this case wood is meant to be used safely in nature, it is important to choose the right preserving method. (Räsänen & Saari 2011, 19.) One good option could be oiling the wood with natural pine oil.

Chosen materials have also an effect to the way how travelers evaluate the route. Overall impression matters. If the signs are damaged or missing, traveler might worry that here is also something wrong with the whole route: "If no one is taking care or the signs, maybe I get lost or maybe there is fallen trees on the route"? Sturdy signs with clear





markings can help travelers' decisions and make the whole journey more enjoyable.

When defining the actual places for signs it is essential to make sure that they are close enough to each other. In best case traveler should be able to see the next sign from the previous one. This rule applies also if the traveler needs to turn around and head back. Adequate number of signs creates a safe feeling and helps traveler to move around confidently and quickly if needed. Signs should be placed to the beginning of the path and close by to every intersection. It might be a good idea to add even a small reflector to the signs to help visibility during dusk or bad weather. (Räsänen & Saari 2011, 19.)

If traveler misses the right intersection, she might think that the best option is to use shortcut and cross through wilderness to get to the right path. In the long run, if many travelers think alike, this might lead to new disruptive routes or to traveler getting lost. Hikers will also appreciate if there is midway information of the distances in the longer routes. Knowledge will help to make decisions related to the next destinations. (Tunturihullu 2018.)

From safety perspective, nature routes should avoid areas where is a high risk to accidents. If this is not possible, travelers should be informed clearly about the dangers. Build structures like stairs or fences on a steep hill, prevent hikers from falling. At the same time, they protect land from corroding. (Räsänen & Saari 2011, 19).

Organize maintenance

Good route planning also includes organizing and funding the maintenance. **Trails and facilities require regular upkeep** and if the destination attracts a lot of visitors, sometimes upkeep needs to be done weekly during the high peak seasons. In Finland the condition of the routes and facilities of nature parks are checked regularly. Metsähallitus also makes improvements based on customer feedback. (Räsänen & Saari 2011, 22).

Costs of upkeep depend mostly on the number of visiting travelers and the way the route is used. Maintenance is usually agreed with municipalities. Few years ago, the city of Lahti decided to renovate all campfire sites, fireplaces and wickets along the nature trails and recreation areas. In total, 60 destinations needed fixing. Especially the wickets were in poor condition. In most cases the log walls were in pretty good condition and only the parts closest to the ground needed replacing. In some cases, roofs had to be rebuilt completely. The aim was to create a vast network of wickets which are easy to access and use. Responsibility of renovation and maintenance of the wickets was divided for three parties: Lahti Sports Services, Department of Urban Environment and Technical and Environmental committee. (Lahola 2017.)

It took about a week and roughly estimated 5000 euros to fix one wicket and fireplace. First wicket was updated in 2017 near the Lake of Kaarlammi and it functioned as an example how other sites should be updated. Wicket and nearby woodshed were painted gray while the roof of the wicket was remodeled. The former stone-assembled fireplace was replaced by a larger and sturdier campfire site with a barbecue stand made from a well ring. In some destinations the gravel under the firepit needed changing. In addition, "Ilves-axe" for chopping the logs was added to the site. Regular supply of firewood was also organized. (Lahola 2017.)





Inform and educate visitors

By the principles of sustainable tourism, visitors should be informed about the value of the site and instructed, enabled and encouraged to act responsibly in an environmentally friendly manner. Information about destinations and services should be available in advance, in an easy and interesting way through various communication channels. Informing can help preserve the site as well as ensure the safety of visitors and its residents. (Metsähallitus 2016.) Excursion etiquette applies to, for example, lighting fires in nature and litter-free hiking, camping respecting nature general. Most of the things are self-evident such as never leave garbage in nature and never cause damage to the nature. (Metsähallitus 2021k.)

Rules and regulations may vary from area to area, so **visitors should have an easy access to the guidelines of the specific location**. Information about outdoor etiquette may be presented for example on information boards and other signs along the nature trail and on the area's website. Signs can be instructional but also educational so that people are able to learn new things during their visit, for example plant names and basic information. Websites should offer enough information to help visitors plan their visit and keep site intact. For example www.nationalparks.fi/destinations website gathers all national parks, hiking and wilderness areas and many other destinations in Finland and gives specific area-related guidance to visitors.

Remarks mentioned under are outdoor etiquette examples of what is expected from visitors and what they are allowed to do when exploring sites and nature in general in Finland.

Everyman's right

In Finland everyone is allowed to enjoy nature regardless of land's ownership. This concept is called "Everyman's Right" and it basically means extended

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freedom to roam but it comes with some serious responsibilities. One of the most important things is a mutual respect for nature, people, and property. The common goal is to preserve and protect the unspoiled beauty and wonder of nature for generations to come. **These rights enable that everyone is allowed to walk, cycle, ski or horseback ride freely in nature as long as they keep a sufficient distance to homes or other private buildings.** Everyone is also allowed to camp out, fish with rod and line in most places, use boats and pick wild berries, mushrooms, and most flowers. (Metsähallitus 2021I.)

In order to protect the nature, the rights mentioned above may require certain restrictions in some areas such as nature reserves and national parks. These restrictions may apply to activities such as camping and hunting. All possible restrictions are listed online for each area, so it is important to check them before the trip. Regardless of the area it is always prohibited to cause any kind of damage to trees and nature, to disturb people or damage property, to disturb animals, to light open campfires without permission, to leave litter, to drive motor vehicles off road without the landowner's permission, to hunt without relevant permits or to fish with nets and traps without relevant permits. (Metsähallitus 20211.)

Spending the night in nature

Spending the night in nature can be an exciting and interesting experience. There are few things that are good to know before planning an overnight stay in a nature. First thing to take into consideration is to choose the location spending the night. **Camping should be done in authorized locations:** in a hut or in a designated camping area. Some of the huts are open and free to use at any time and others may be subject to a charge and have to be booked in advance. (Metsähallitus 2021m.)



KOIRA PIDETTÄVÄ KYTKETTYNÄ TAAJAMASSA

JÄRJESTYSLAKI 14§ (KOIRAKURI)

Campfires and litter

Making a campfire might be one of the highlights of visiting a national park. It is good to remember that there are some rules that limits the freedom to light a fire. **Making a fire in national parks is allowed in designated spots but in other areas landowner's permission is needed to start a fire.** Making sure that no grass or forest fire warnings are in effect is critical. Most designated campfire spots have free-to-use firewood, but firewood should be used sparingly since it is expensive and usually hard to transport to the site. (Metsähallitus 2021n.)

One of the most important things to keep in mind while planning a trip to national park is **never to leave any litter behind.** Visitors should be prepared to carry out all the garbage they may create during the trip since not all campsites have waste collection bins. Small amounts of clean paper or cardboard can be burned but never burn packaging that contains foil or plastic. If the campsite doesn't have toilet facilities, required practice is to dig a hole away from all water sources and trails and cover it afterwards. Staying away from water sources also when washing dishes or "bathing" and using only biodegradable soaps keeps waters clean. (Metsähallitus 2021j.)

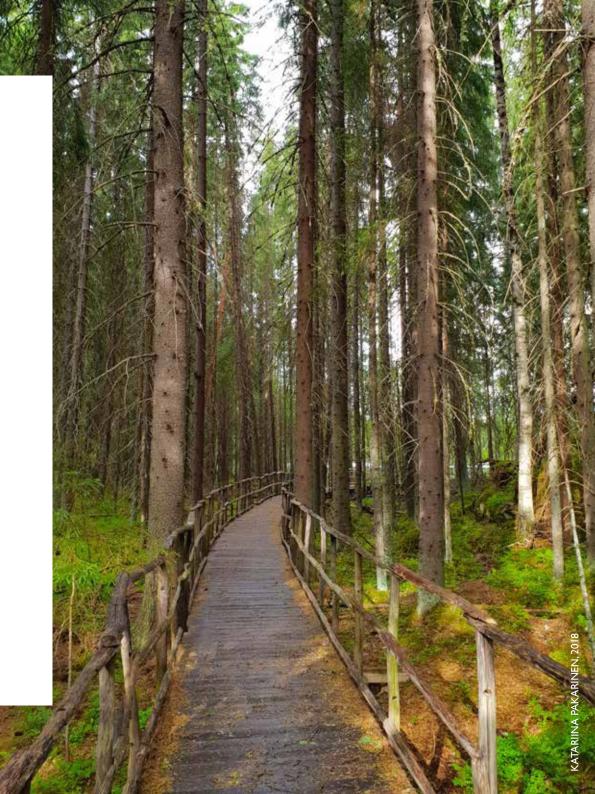
Protected and harmful species

To help keep nature in its natural state and to keep visitors from harming themselves, it is important to inform about protected and possibly dangerous species and rules at the site in general.

To prevent from bothering wildlife, it is good to remember to keep pets on a leash and observe animals from a sufficient distance. Feeding wild animals is prohibited as well as collecting plants in protected areas. Building rock piles is harmful to nature and disrespectful of cultural values. This kind of harmful activity might be a threat to ancient monuments and might damage the nature soil patterns and change the natural landscape. Flying drones is prohibited in strict nature reserves, other restricted areas, and key bird nesting areas. (Metsähallitus 2021k.) As rare species of birds, for example, can be a big motive for people to come to the site, it is good to remind visitors how they can make sure that these species will be there for years to come.

By telling people which species must be left untouched because of their protection status, it is possible to preserve these species. By informing which species are poisonous for example and may cause harm to people and pets, accidents can be prevented. Sometimes though it is necessary to ask visitors to help get rid of some invasive species that threaten the biodiversity of that site.

A couple of cities in Finland are trying to engage local people to help get rid of the Spanish slug – invasive species in Finnish nature. The Spanish slug can cause major damage in gardens and farms and spread diseases like heart worms to dogs, if not actively prevented from reproducing. To fight against Spanish slugs, few cities in Finland, including Lahti, have introduced trash bins made specially to collect these slugs. Residents are the key factor in this fight in the areas where the number of slugs would otherwise be uncontrollable. (Leppänen 2021) Because differentiating between the Spanish slug and harmless native slugs might be difficult, the City of Lahti, for example, has put up informational signs to help identify different species and offer information how to get rid of them. According to Markus Niemelä, Forest specialist at the City of Lahti, getting rid of Spanish slugs in Lahti is still possible, if residents step up in helping to stop them from spreading. (Suomi 2021).





Invest in accessibility

Accessibility plays an important role in nature destinations. Accessibility can refer to different aspects, like how easy it is to find information from the destination, or how easy it is to reach the destination. Accessibility refers also to the way nature destination considers and welcomes different groups of people with different needs. With investing in accessibility nature path can offer equal and safe experiences with good quality to all travelers. **Accessibility benefits everyone,** not just people with disabilities in moving, sight, hearing, understanding, or communicating (Invaliidiliitto 2021a).

In practice some parts of the trail can be made wider and easier to move for people with small children or pets, or for people who need to carry equipment while maintaining the paths. Senior citizens benefit also from numerous resting places and sturdy high benches. Resting places should be positioned outside of the path into pleasant surroundings. By Finnish regulations accessible wooden trail should be at least 1,2 meters wide and 1,8 meters wide in places where people need to pass each other. (Invaliidiliitto 2021b.)

Important part of accessibility is also marketing. Informative and comprehensive materials which are available before hand, help travelers to prepare for the journey and choose the best route options.

Productize the trails

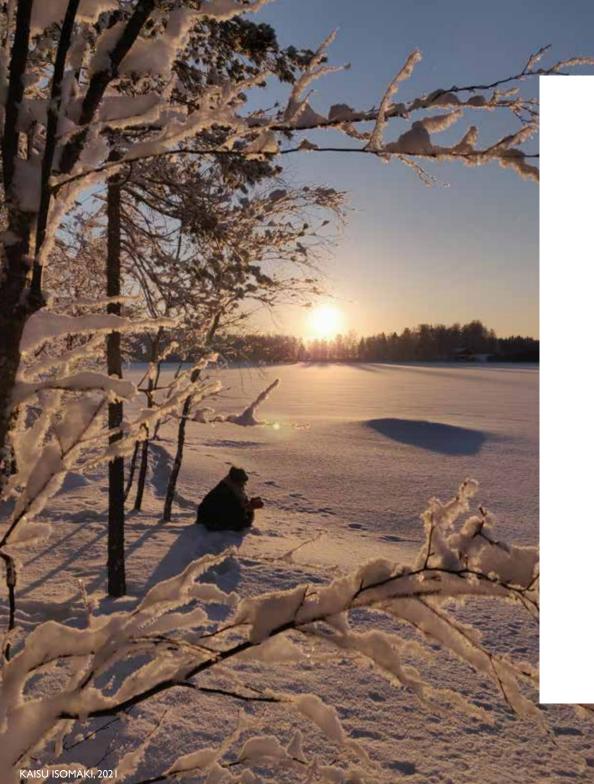
Travel products are often combinations of different experiences and services. Travelers think and review their experience as one big journey, instead of small individual moments. (Kumpulainen & Pakarinen 2019, 42.) A well-planned and implemented network of trails will increase the attractiveness of the area and extend the holiday season from winter to summer. A wellproductized route which is marketed to the right target group offers quality experiences and prolongs the stay of visitors. Longer stay will more likely increase the region's tourism incomes. (Räsänen & Saari 2011, 2.)

Travelers are more and more seeking for experiences and that's why routes should be impressive. This is easy to accomplish when route passes significant natural and cultural sites, but the question is how to maintain interest when the scenery isn't that spectacular? One trick is to plan routes in a way that they enable travelers to experience nature with all their senses - sight, smell, sound, feel and taste. Some of the most ordinary parts of the route can help travelers to get lost in their own thoughts or focus on listening birds signing. Organizing special activities like cooking classes or yoga retreats are becoming more and more popular. Adding information about the nature with funky signs (like it is done in the nature trail of Hukkavuori at Ruokolahti) lets visitors spot the hidden wonders.

Both local and national travel organizations can help with productization of the route. Travel organizations have collected wide database from number of visitors in the area and they also have knowledge from the needs and behavior of the travelers. Travel organizations also have online marketing networks which can speed up distributing information to right target groups. (Räsänen & Saari 2011, 10.)

Nature trail can be productized for a specific target group, or it can have a specific universal theme. Theme can be based on for example historical events and persons, local culture and cuisine, unique wildlife, breathtaking scenery, or creative architecture. Route





can also be themed for activities like cycling, canoeing, or riding. Trail can also offer once-in-a-life-time experiences and help visitors overcome themselves while accomplishing something they have always dreamed of. Theme can be found also from the everyday life since travelers are more and more interested of the residents and their way of life.

Increase attractiveness with stories

Historical facts and events can be used in many ways in the development of nature destinations. Sometimes the most interesting historical facts are not related to big events, buildings or monuments, but to cultural activities and stories of famous people. In the case of Kyrönniemi one of one interesting theme can be found from the area's history and link to Finnish writer Mikael Agricola.

Stories are the key element in travelling. Story of the place can be the whole reason for traveler to visit the place. Experiences often take the form of a story and ideas and materials are obtained not only from the different parts and destinations of the trip, but also from the stories heard on the spot from other travelers. (Isoaho et al. 2020, 2).

One good example is Rural Explorer -project which collected stories related to interesting locations from Southeastern Finland. The purpose was to find less known destinations and make them more appealing for travelers and travel businesses with storytelling. Project was coordinated by HUMAK University of Applied Sciences between 2017 and 2020. The Rural Explorer project produced a guide called "Tarinareitti" which was designed to activate and help tourism entrepreneurs use stories as part of their own business and service packages. (Iso-Aho et al. 2020).

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Links

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