



# North Karelia Biosphere Reserve

## Nature Tourism Plan 2020–2025

SATU NAUMANEN (AUTHOR) | DAISY SILVENNOINEN | TIMO J. HOKKANEN (EDS.)







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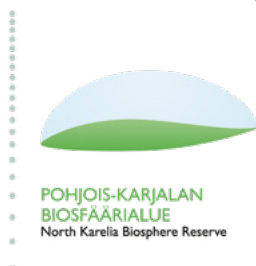
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[Edited and translated version of the Metsähallitus publication  
”Kolin biosfäärialueen luontomatkailusuunnitelma  
– Metsähallituksen luonnonsuojelujulkaisu. Serie C 166; Satu Naumanen”]



Sustainability Under Pressure:  
Environmental Resilience  
in natural and cultural heritage  
areas with intensive recreation



**RAPORTTEJA 41/2020**

**NORTH KARELIA BIOSPHERE RESERVE NATURE TOURISM PLAN 2020–2025**

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**Pohjois-Karjalan elinkeino-, liikenne- ja ympäristökeskus**

**Taitto: PunaMusta Oy**

**Kansikuva: Retkeilijöitä Ikolanaholla. Kuva: Saara Lavi.**

**Kartat: Metsähallitus**

**Painotalo: PunaMusta Oy**

**ISBN 978-952-314-887-1 (PDF)**

**ISSN 2242-2854**

**ISSN 2242-2854 (VERKKOJULKAISU)**

**URN: ISBN: 978-952-314-887-1**

**[www.doria.fi/ely-keskus](http://www.doria.fi/ely-keskus)**



## Table of Contents

<b>1 Why nature tourism plan for the biosphere area?</b>	<b>2</b>
<b>2 Biosphere Reserve area</b>	<b>4</b>
<b>3 Current and future operating environments</b>	<b>5</b>
<b>3.1 The current state of tourism and megatrends shaping nature tourism in Finland</b>	<b>5</b>
<b>3.2 Tourism in North Karelia</b>	<b>7</b>
3.2.1 Tourism associations of the biosphere reserve	8
3.2.2 National strategies and programmes affecting nature tourism development	8
3.2.3 Regional programmes affecting nature tourism development	9
3.2.4 International programmes affecting nature tourism development	11
<b>4 Biosphere reserve as a nature tourism destination</b>	<b>12</b>
<b>4.1 Key attractions across the biosphere reserve</b>	<b>12</b>
4.1.1 Koli National Park	12
4.1.2 Ruunaa hiking and conservation area	13
4.1.3 Patvinsuo National Park	13
4.1.4 Petkeljärvi National Park	13
4.1.5 Other biosphere reserve attractions	14
4.1.6 Nature and culture values	14
<b>4.2 Nature tourism impact on the local economy</b>	<b>15</b>
<b>4.3 Nature tourists across the biosphere reserve</b>	<b>16</b>
<b>4.4 Recreational and visitor uses of the National Parks and Hiking Areas of the BR</b>	<b>22</b>
4.4.1 Service structures	22
4.4.2 Outdoor activities and programme services	26
<b>4.5 Metsähallitus nature services and cooperation between the tourism actors</b>	<b>27</b>
4.5.1 Cooperation agreements	27
4.5.2 cooperation with regional organisations in North Karelia	28
<b>4.6 Current state of nature tourism in the biosphere reserve</b>	<b>28</b>
4.6.1 SWOT – analysis	28
4.6.2 Realising sustainable nature tourism – perspective of entrepreneurs	28
<b>4.7 Management principles of nature reserves</b>	<b>29</b>
4.7.1 Operational guidelines and guides	29
4.7.2 Laws governing the operation of National Parks and Hiking Areas	29
<b>5 Nature tourism target state</b>	<b>31</b>
<b>5.1 Target state of nature tourism in North Karelia</b>	<b>31</b>
<b>5.2 Defining Biosphere Reserve nature tourism target till 2025</b>	<b>31</b>
5.2.1 Profiles	32
5.2.2 Koli's National Park brand 2025	32
<b>5.3 North Karelia Biosphere Reserve target state to 2025</b>	<b>38</b>
<b>6 Sustainability of nature tourism</b>	<b>40</b>
<b>6.1 Principles of sustainable tourism</b>	<b>40</b>
<b>6.2 Sustainability assessment of nature tourism</b>	<b>40</b>
<b>6.3 Current state of Koli National Park's sustainability &amp; target 2025</b>	<b>41</b>
6.3.1 Ecological sustainability	41
6.3.2 Social sustainability	42
6.3.3 Economic sustainability	44
<b>6.4 Annual sustainability monitoring</b>	<b>45</b>
<b>7 Action plan</b>	<b>46</b>
<b>References</b>	<b>57</b>
<b>Appendices</b>	<b>59</b>
Appendix 1. Koli National Park sustainable tourism monitoring metrics 2020–2025 (In Finnish)	59
Appendix 2. A SWOT – Analysis of North Karelia Biosphere Reserve as a destination (In Finnish)	61
Appendix 3. Koli–Ruunaa Hiking Area nature tourism plan 2010 monitoring and implementation plan	63
Appendix 4. Metsähallitus principles of sustainable tourism	63

# 1 Why nature tourism plan for the biosphere area?

Koli, Patvinsuo and Petkeljärvi National Parks, as well as the Ruunaa Hiking Area are key for nature tourism in North Karelia biosphere reserve. The National Parks and Hiking Area together with other nearby conservation areas consists a diverse and pristine natural environment that attract visitors to the region. On the other hand, recreational use of nature reserves need not conflict with the site's conservation objectives. The aim of the nature tourism plan is therefore to ensure that the management and use of natural environments align with the objectives of establishing the area, and that the principles of sustainable tourism are realized in protected and hiking areas within the biosphere reserve.

North Karelia biosphere reserve was established in the year 1992 as part of UNESCO Man and Biosphere Programme (MAB) as a tool to enhance the preservation and development of cultural and natural heritage of its designated area (North Karelia ELY-Centre 2019). The BR consists – officially – Lieksa city, Ilo-mantsi municipality, and Joensuu city's Tuupovaara district. Activities extend across the whole province.

The core areas of the biosphere reserve consist protected areas of Koli, Patvinsuo and Petkeljärvi National Parks, the Koivunsuo strict nature reserve, as well as Kesonsuo and Ruunaa nature reserves. Metsähallitus state-owned enterprise, is responsible for the management of protected areas of the biosphere reserve. Even though the biosphere reserve includes conservation and protected sites, it does not only consist of protected areas. The area of the biosphere reserve that is not protected is called the area of cooperation; it is inhabited, and economic activities take place. The aim is to develop regional practices that consider nature, the economy, culture and communities in both protected and inhabited areas of the biosphere reserve (North Karelia ELY-Centre 2019). The biosphere reserve activities are directed by the Ministry of the Environment and the North Karelia Centre for Economic Development, Transport and the Environment in line with sustainable development goals.

Annual visits to the protected areas managed by Metsähallitus across North Karelia province account approximately 340,000. The visits take place mainly across environments of Koli, Patvinsuo and Petkeljär-

vi National Parks within the biosphere reserve, with no exception of Ruunaa Hiking Area. Koli is the most visited site among these, even though the number of visits to Petkeljärvi and Patvinsuo have also been on the rise.

The diversity of protected and hiking areas of the biosphere reserve hold a significant value for the whole province, thus the key purpose of this nature tourism plan is to link these nature tourism sites that are located within the biosphere reserve. Of all the sites, Koli National Park (Koli NP) is the most susceptible to visitor pressures, simply because it is the most popular with visitors. Therefore, in order to limit potential threats to environments of Koli i.e. capacity to handle the side effects of visitor pressure, it is deemed appropriate to direct visitors more evenly to all nature tourism destinations across the biosphere reserve, encourage longer stays over increasing visitor amount, and to encourage visitors to favour the area also during the low season.

A nature tourism plan for Koli- Ruunaa area was prepared by Metsähallitus ten years ago (Laukkanen 2010). Its goals were set to be achieved by 2018 and these have generally been realised or even exceeded (Appendix 1), which is why a preparation of a nature tourism plan covering the entire biosphere reserve was from that point of view considered topical.

Conservation initiatives and sustainable nature tourism planning for protected and hiking areas are part of biosphere reserve activities. North Karelia biosphere reserve is also actively involved in the development of the Green Belt of Fennoscandia, an instrument for developing research and nature conservation cooperation for existing and planned protected areas along and across the borders of Finland, Norway and Russia. The Green Belt of Fennoscandia refers to the network of protected areas on both sides of the border from the Gulf of Finland to the Barents sea and related projects. Nature tourism planning and Koli NP visitor survey have been realised under the ENI Karelia CBC SUPER project, funded by the European Union, the Russian Federation, and the Republic of Finland.

The Biosphere Reserve Nature Tourism Plan focuses on the central significance of biosphere reserve's protected areas in nature tourism development. The protected areas are managed by Metsähallitus' Parks

& Wildlife Services Finland, Lakeland. One of the goals of the nature tourism plan is to increase the awareness of the biosphere reserve's sites, thereby also increasing the interest of visitors for the diverse nature tourism opportunities in the entire region. The various hiking and nature protection areas across the biosphere reserve form a diverse whole as each site holds distinctive features. Therefore, the aim of the plan is to highlight the profiles of all these biosphere attraction sites. Koli particularly holds a special feature borne from its status as a national landscape. Its profile is also clarified through branding, which has thereafter been used in regional development and in the coming years will be used as a common guideline for the region's actors.

North Karelia Provincial Program 2018–2021 (North Karelia Regional Council 2017) states that the province's National Parks and nature hiking destinations as well as the diverse cultural offering provide a strong basis for the development of nature and cultural tourism and that this should be promoted. As a state-owned enterprise tasked with the management of protected areas, Metsähallitus' Parks & Wildlife Services strives to promote the local economy that considers the principles of protected areas and is also an active public actor for nature tourism. Metsähallitus services are mainly within protected areas e.g. National Parks. These include structures that support and guide mobility within and across the sites, as well as customer communication and information dissemination aimed at increasing awareness and understanding the values of natural and cultural heritage of the areas and related protection efforts.

On the other hand, the North Karelia biosphere reserve's role is to promote responsible tourism development and sustainability mindset for all users of environments, meaning also outside the protected areas but within the biosphere reserve. This is because actions outside the protected areas (i.e. due to every man's rights policy, economic development, etc), can concurrently impact protected area environments. These are realized through exchange and transfer of ideas and knowledge on sustainability, creating awareness that helps focus on sustainability actions, and projects e.g. in cooperation with key regional actors.

The key decisions for the use of the areas are made in accordance with the management and use

plans, and the nature tourism plan serves as a complementary plan for the development of recreational use and nature tourism within the biosphere reserve designated area. Visitor surveys of Koli National Park 2019 (Naumanen, 2020), Ruunaa Hiking Area 2017 (Paulus, 2019), Patvinsuo National Park 2013 (Lampinen, 2016) and Petkeljärvi National Park 2018 (Pääkkölä, 2020), in addition to the biosphere reserve business survey 2018 have been used (Naumanen, 2020) in drafting the plan.

Regional actors and local people were involved in the preparation of the nature tourism plan. The first workshop was held in Koli on September 18, 2018, during which a complementary branding workshop open to the public was also held. The second discussion was cancelled due to low registration. A smaller discussion and consultation event were held on 13 November 2018 for the registered representatives of the local nature conservation association. The second branding workshop for Koli NP was held in Koli on November 6, 2018. The planning process was guided by Metsähallitus' Parks & Wildlife Services Finland, Lakeland working group and the Koli cooperation group that includes the tourism actors of Koli tourism association, and a representative from Centre for Economic Development, Transport and Environment.

During the workshop, the region's development needs, opportunities and areas of potential cooperation for the region's tourism actors, and defined actions for the coming years were brainstormed. The constraints for nature tourism in protected areas were also set, such that they define the indicators for sustainable tourism and the target and limits. The indicators are used in accessing the sustainability of nature tourism and recreational use of areas. In addition, the plan clarifies the role of Metsähallitus' Parks & Wildlife Services Finland in the local tourism sphere.

The nature tourism plan was approved by Metsähallitus' regional director of Parks & Wildlife Finland, Lakeland on 2.1.2020. The plan will be updated with the next update of the management and use plans or earlier if, for example the operating environment changes significantly or in instance that there are urgent issues to address. The sustainability indicators of the nature tourism plan are monitored similarly to the monitoring of the status of protected areas, which is the responsibility of Metsähallitus' Parks & Wildlife Services Finland.



## 2 Biosphere Reserve area

North Karelia biosphere reserve consists – officially – Lieksa city, Ilimantsi municipality, and Joensuu city's Tuupovaara district. Activities extend across the whole province (North Karelia ELY-Centre 2019). The core areas of the biosphere reserve consist protected areas of Koli, Patvinsuo and Petkeljärvi National Parks, the Koivunsuo strict nature reserve, as well as Kesonsuo and Ruunaa nature reserves. Even though

it includes conservation and protected sites, it does not only consist of protected areas. The area of the biosphere reserve that is not protected is called the area of cooperation; it is inhabited, and economic activities take place. However, this plan focuses mainly on protected areas of the biosphere reserve under Metsähallitus' management; Koli, Patvinsuo and Petkeljärvi National Parks and Ruunaa Hiking Area.

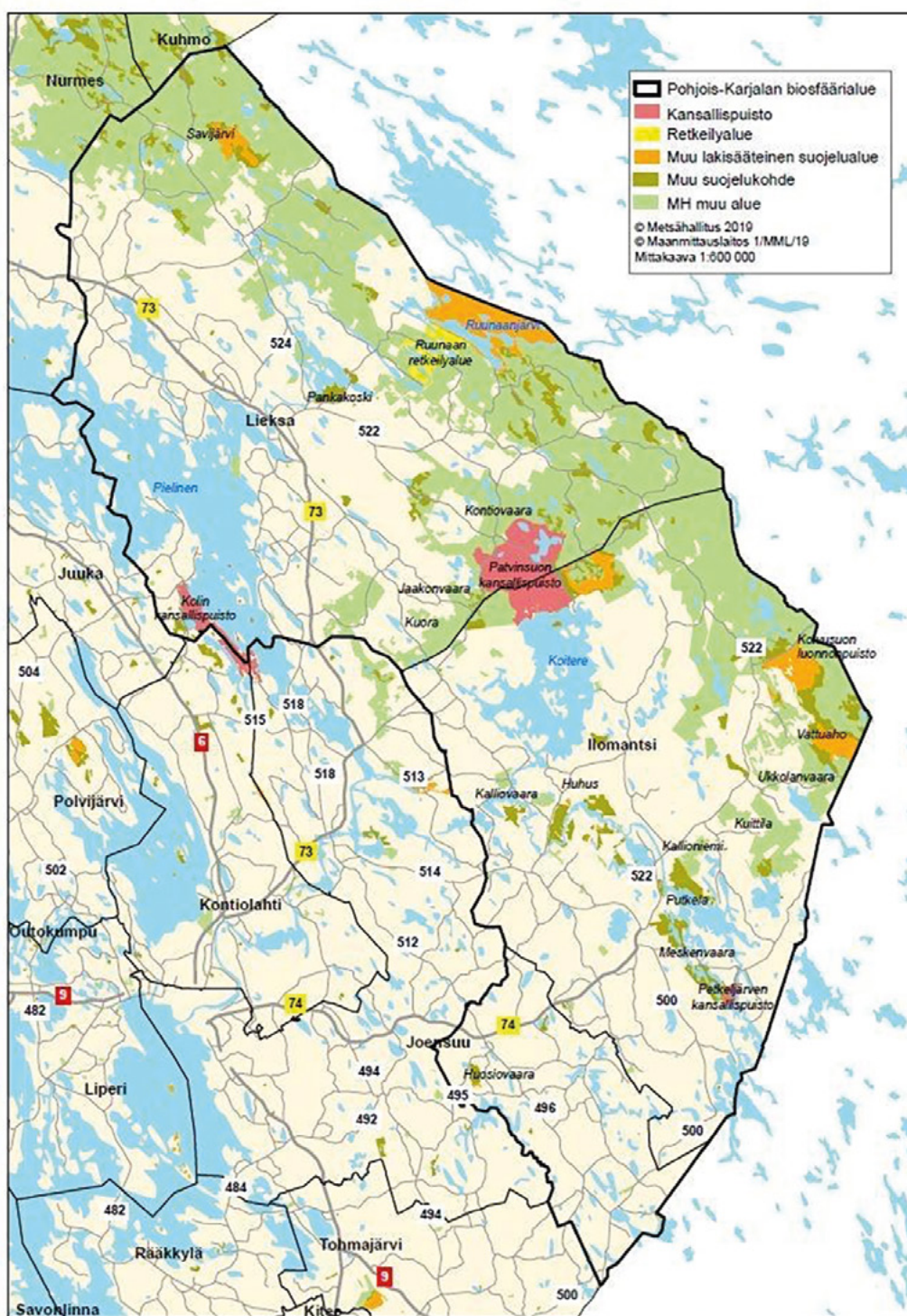


Photo 1. North Karelia biosphere reserve (bold black border on the map) consists – officially – Lieksa city, Ilimantsi municipality, and Joensuu city's Tuupovaara district.



# 3 Current and future operating environments

## 3.1 The current state of tourism and megatrends shaping nature tourism in Finland

Finnish tourism industry has grown to the same size as the forest industry and is larger than the food industry (Business Finland 2019). The total turnover from domestic and foreign tourism in 2017 was EUR 15 billion. Although Finnish tourism industry is still dominated by domestic demand, the share of foreign visitors in Finland has increased in recent years. Spring 2019 tourism sector report by the Ministry of employment and the economy states that even though improving accessibility is crucial for the tourism industry, it need be kept in mind that sustainable development is a prerequisite for long-term sector stability (Jänkälä 2019). The report notes that balancing between economic growth and environmental protection will be challenging. It also states that the development of digitalisation of the industry is fundamental.

There is a rise in both domestic and international visits in Finland. Of the 22 million overnight stays recorded in 2018, 70 percent of overnight stays were domestic while 30 percent were by international visitors (Jänkälä 2019). The largest groups of international visitors originated from neighbouring Russia, Estonia, and Sweden.

According to Visit Finland's 2018 visitor survey, the main driving forces of Finnish tourism are nature, culture and entertainment. Nature, which included forests, lakes, rivers, National Parks, snow, ice, northern lights, and the midnight sun were the main pull factors for Asia and continental Europe visitors to Finland. In addition to nature, the visitors were also drawn by the local culture and way of life, termed as the "living like local tourism trend" (Visit Finland 2019).

The popularity of Finnish nature tourism is also influenced by the tourism megatrends. The literature review "New business opportunities in sustainable nature tourism and recreation" has collected the megatrends affecting Finnish nature tourism (Konu et al. 2017). The effectiveness of megatrends varies from region to region and their effects are either directly or indirectly. Below are some examples:

## Key market demographics

### Silver hair tourists

As the population ages, a significant tourism segment "silver hair tourists" emerge and are one of the fastest growing groups of tourists. The segment consists a diverse group that includes both employed and retired people. The segment has relatively more persons with limited mobility than the general population. It is projected that this segment will spend more money and time on tourism in the future, but on the other hand they are also keen on price and quality equivalence.

### Generation Y and Z

Generation Y refers to those born in Europe and the United States between the early 1980 s and the mid-1990 s, also referred to as the internet generation and millennials. Z-generation (born between mid- 1990 s and early 2000 s) differs significantly from the previous generation as they are strongly influenced by technology (IGEN generation). What the Y and Z generations have in common is a desire for adventure and an interest in unique and authentic experiences while traveling. For them, the recommendations given by others about travel destinations are particularly important and they also openly give feedback to companies. These generations are best reached online, company's visibility in the digital environment is therefore critical. The information provided is assumed to be current and clearly communicated with concise texts and images. It is estimated that by 2025, half of all tourists will be representatives of Generation Y.

### Growing middle class

The share of the middle class in near future will grow mainly in Asia and Pacific regions. Part of the income will be used for education e.g. for learning English language, which concurrently affects the "independence" of tourists. In the future, tourists are less dependent on group trips offering translation services, and thus, from the direction of Asia, individual tourism by middle-class segment is expected to increase.

## **Family travel**

As life expectancy increases, grandparents are more often included in holiday trips. The fragmentation of housing has led to favour of intergenerational tourism during leisure time. The expectation is to be together and make memories that arise from them.

## **Safety**

Security in tourism does not only mean terrorist attacks and epidemics, but also more mundane issues such as water purity, efficient transport systems, well-organized tourism services and good healthcare facilities. Safety and its consideration are especially important, especially in nature and adventure tourism. For example, excessive use of technology in nature tourism can lead to unnecessary risk situations. However, taking safety considerations into account earlier on while designing and marketing program services increases the safety and competitiveness of nature tourism areas and services in the market.

## **Responsible, sustainability and environmental awareness**

Increased environmental awareness is reflected in tourism choices. Responsible tourism considers all aspects of sustainability, its local and global ecological, economic, cultural, and social impacts. Sustainability is also increasingly reflected in the increase of short-distance tourism options, where the carbon footprint of tourism is reduced.

## **New technologies**

The technological changes in nature tourism mainly affects the way visitors travel, seek information and experience travel. The use of mobile devices, the significance of social media, sharing economy, automation systems, new digital services and platforms, and data collection and analysis tools is advancing rapidly. One technological trend of interest for nature tourism is new types of services that enable public transport and the shared car use (carpool). This could be beneficial in remote nature tourism destinations with poor access public transport or public transport connections.

## **Digital communication**

The opposite of continuous digital communication is digital detox/tech-free, which is part of countering the continuous digital communication that burdens every-

day life. This means entering a period where one isolates from technology — no texting, emailing or social media use — with the aim to lower stress levels, take up 'real world' activities and concentrate on quality, physical socialisation or quality self-isolation. The lack of internet connection in a tourist destination can thus act as an attraction. On the other hand, digital communication can also work for the benefit of the tourist operator when the visitor communicates the destination to own acquaintances, for example through social media.

## **Sharing economy**

Well-known examples of the sharing economy are the Airbnb accommodation service, and the Uber taxi service, where individuals can offer similar services as companies. The philosophy of sharing economy is that the service providers are not obliged to release the full information on what they own, nor the customers what they buy, but solely what the person intend to share or rent out. In destinations suffering from seasonality of nature tourism, or tourism related pressures, Airbnb accommodation services could be utilised to promote year-round activities and reduce the need for additional construction to increase accommodation capacity.

## **Visitor motivations**

Majority travellers long for unique or once in a lifetime experiences when traveling, which is over time increasing the niche tourism. Finland's nature tourism destinations are still unknown to international visitors and are hence fascinating with their authenticity. For example, activities related to berry picking, mushroom picking and fishing offer meaningful nature experiences for both international and Finnish visitors.

## **Volunteer tourism**

Little is known about volunteer tourism in Finland, even though volunteering is commonly organized in National Parks for example, which is considered to be part of voluntary tourism. These include projects related to the maintenance of cultural landscapes and the restoration of the environment.

## **Health and wellness**

Wellness effects of nature tourism. Experiences and research results show the positive effects of nature on human well-being, for example, the mood eleva-

tion benefits as resulting from recreation in clean nature. As part of visitor surveys of protected areas, Metsähallitus investigates the health and well-being effects experienced by visitors in different parts of Finland. In addition, the health and well-being effects experienced by Metsähallitus' licensed customers during hunting and fishing trips have been investigated through surveys. These results indicate that these trips produce holistic social, mental, and physical well-being effects.

### **Connection to nature**

The time spent outdoors and in nature is consequently reduced as people increasingly spend time indoors and/or in vehicles. This has been thought to negatively impact health. The trend that combines nature and health can be seen in various tourism and wellness services that utilize nature. For example, the use of local berries, herbs and mud in natural cosmetics and treatments has increased and the trend projected to grow.

### **Cleanliness**

Cleanliness of nature, air, water and food are the images of Finland that come to mind of foreigners, and more and more people travel to Finland in pursuit of cleanliness. Among other things, Finland's organic collection area certified forests are of interest to visitors from Asia. Presently, Finnish forests account for about a third of the world's organic harvesting area and about 40 % of Finnish forests have an organic certification. In addition, the quality of Finnish lake waters is either in good or excellent condition according to European standards. For the visitor, this means a holistic experience of cleanliness, as you can swim in the same body of water, catch a fish to eat and possibly also take water to drink.

### **Climate Change impacts on nature tourism**

Weather conditions in the northern regions are projected to become increasingly unstable as result of climate change, with increase in extreme weather conditions and rise in average temperatures. This has a direct impact on nature and, indirectly, also on nature tourism. In Finland, this will be reflected especially in winter tourism and large regional differences in the changes are forecasted. For example, the popularity of Lapland may rise further if it remains a snow-sure area, while further south, for example, the late arrival

and early departure of ice can cause changes in nature tourism program services. This leads to the development of new services.

### **Networking of product and service providers**

Nature tourism experiences can consist of simple things like snow, silence or simply swimming in natural waters. However, tourism is made possible by infrastructure, and technology is increasingly used to satisfy or develop the needs. In addition, equipment and rental facilities are of great importance in nature tourism, especially hiking and adventure tourism. The experience of a tourist is thus the collection of activities and services from many different fields. The service sector and those who maintain the infrastructure and technology are the backbone of the tourism sector since their cooperation affects the safety of the trip. In addition, the products and service enhancement in various industries need be developed for the benefit of nature tourism. Tourism actors have a key role to play in this know-how and can help find local solutions.

## **3.2 Tourism in North Karelia**

To implement the objectives of the North Karelian Tourism Strategy and Implementation Program 2014–2020, a tourism growth program project was launched. The region's tourism industry was actively developed between the years 2015–2017, as a step towards increasing the region's tourism sector turnover, employment and investment opportunities by focusing actions and resources on improving international marketing and sales, promoting event tourism and developing nature and cultural tourism. The North Karelia Regional Program 2018–2021 states that the development project has done an excellent job in expanding international tourism demand from central European and Asian markets. International tour operators are stated to have gained interest in North Karelia as a destination.

The province's National Parks and hiking destinations, with no exception of the diverse cultural environment, creates a strong foundation for nature and cultural tourism in the area. The clean and versatile nature of the area is seen as the basis for developing tourism products related to wellness tourism. Hiking routes extending beyond the National Parks and connecting one park to the next are important develop-



ment targets for tourism companies as activities also extend to areas outside the National Parks.

The North Karelia Tourism Thematic and Operational Program 2014–2020 target of 700,000 registered overnight stays by 2020 may unfortunately not be realized considering the global epidemic and state of the economy at this time. In 2018, 470,000 overnight stays were registered in the province, and the number has remained at just under 500,000 for a long time. International visitors accounted for about 15 % of these overnight stays in 2018 with dominant segments as Russians 5 % and Germans 2.1 %. Even though conditions exist for year-round tourism in the province, more than 60 % of overnights are currently registered between May and October. In 2018, the busiest of the summer month was July (85,500 overnight stays) while winter month was March (39,000 overnight stays). Overnight stays in North Karelia had increased by 9 % between January and September 2019. The largest increase was in the Pielinen Karelia region.

Karelia Expert tourism services is the key organization tasked with joint marketing of the province. In 2018, the company divested its Visit Karelia sales operations, and since then Karelia Expert's operations have focused on increasing tourism demand and monitoring related operations in North Karelia. The company participates in tourism development work through various projects, expert roles, and strategy work. Karelia Expert serves visitors under the name Visit Karelia.

### 3.2.1 Tourism associations of the biosphere reserve

**The biosphere reserve is influenced by actions of three tourism associations.**

**Koli tourism association** actively develops tourism together with its members. The association has tourism operators from seven different municipalities. In 2019, there were more than eighty members registered to the association. The association aims, among other things, to increase the attractiveness of the area as well as overlook the common interests of the tourism operators. Koli tourist association owns Koli travels Ltd, in Finnish "Kolin matkailu Oy", which is responsible for general marketing of the area, tourism development projects, as well as marketing and advisory services and other tourism-related sales activities. The most visible part of the Koli tourist associa-

tion to visitors is the area's tourist information office located in Koli village and the service website Koli.fi. Metsähallitus is a member of the Koli tourism association and participates as a board member.

**Carelia Eastpoint association** brings together entrepreneurs from the Ruunaa and Lieksa regions (more than sixty members). The main goal of the association is to develop tourism and service provision in the Lieksa region in cooperation with the City of Lieksa, Metsähallitus, companies and other key stakeholders. In addition, a growing part of the association's activities is the organization of the Finnish championship level Eastpoint and Ruunaa Race dog sled competitions.

**Ilomantsin tourism association** promotes cooperation between tourism companies and communities of the Ilomantsi region, seeks to increase the region's international and national attractiveness and visibility, in addition to securing and monitoring the common interests of tourism companies and property owners. In the summer months, the association has an information centre in Mesikka animal museum located in the Parppeinvaara bardic village. It offers visitors information about the area and the region's tourism offers, also sourced from the visitilomantsi.fi website. The association has more than thirty members, among them Möhkö village association which operates in Petkeljärvi National Park area.

### 3.2.2 National strategies and programmes affecting nature tourism development

#### Finland's tourism strategy 2019–2028

The roadmap for the growth and renewal of Finnish tourism 2015–2025 was updated in the spring of 2019 as the Finnish tourism strategy 2019–2029. The vision of the tourism strategy is that the authenticity and curiosity for Finland makes it most desirable tourist destination in the Nordic and the first choice for visitors come 2028. The strategy's mission is that tourism demand is the fastest growing service sector that brings year-round revenue and well-being, as well as creates employment across whole Finland (Ministry of Economic Affairs 2019).

#### Visit Finland thematic partnership cooperation

Visit Finland coordinates tourism networking within the larger travel clusters (Helsinki, Lapland, Finnish Lakeland, Coastal and Archipelago areas). It also de-

velops and guides cooperation on smaller themes or regional tourism, or with existing business networks. Visit Finland's three main travel themes are Silence please, Wild & Free and Culture Beat which emphasizes Finnish tourism once in a lifetime experience.

### **Tourism 4.0 Travel resources**

The aim of the Tourism 4.0 Operational Program (Matkailu 4.0 in Finnish) is to ensure the continued growth of the industry by investing in tourism sector marketing, strengthening the digital competence of tourism companies, and offering year-round product development.

The M4.0 Tourism resources project section develops the nature tourism destinations' marketing contents in such a way that they support the tourism businesses increase the attractiveness of nature tourism destinations and strengthen the role of nature in the Finland brand. The project produces visual material, destination specific photos and product specific cards.

### **Metsähallitus nature and wildlife services; health and wellness 2025 programme**

"A healthy nature - a healthy person" is a health promotion program extending to 2025 (Metsähallitus 2018), that Metsähallitus uses to respond to future challenges in cooperation with its partners. The health and well-being 2025 program will serve as a strategy guiding the measures and development guidelines for nature services in the coming years, with the aim being to promote health and well-being benefits that derive from pristine nature.

The body tasked with managing Finnish state's hiking and nature conservation areas is responsible for the maintenance of hiking and service structures used for recreation and related communications. Thus, nature services promote mobility in nature and the users' relationship with nature, which further increases the growth of health and well-being effects provided by nature.

The themes of the health and well-being 2025 program are: from nearby natural environments to National Parks, bravely to nature, as well as visibility and cooperation. The target visions and measures of the themes are applied to the practical implementation on a regional basis. The action plan for the nature tourism plan implements some of the measures set by the biosphere reserve. In addition, other national strategies by Metsähallitus that are important for nature tourism are the principles of sustainable tourism, the

principles regarding management and use of protected areas, and Metsähallitus' environmental and quality manual. National guidelines for tourism cooperation are additionally drawn up.

### **3.2.3 Regional programmes affecting nature tourism development**

**North Karelia Regional Program 2018–2021** states one of tourism development goals in the region as the enhancement of nature and culture tourism. The regional program states that North Karelia Tourism Growth Program 2015–2017 project has carried out significant work in expanding international tourism demand for Central Europe and the Asian market. This was implemented on the basis of the Tourism Thematic and Operational Program 2014–2020. The regional program emphasizes that the work started during the growth program must be continued. At the same time, there is a need to invest more in development cooperation of Lakeland and Visit Finland.

**North Karelian Tourism Strategy and Implementation Program 2014–2020** states how nature tourism and related framework has developed in the province and how regional economic impact of tourism is growing. Accessibility has been improved in Ruunaa Hiking Area and Petkeljärvi National Park, and that National Parks are significant attractions, among other, in increasing the international visibility of nature tourism. It is hoped that the international visibility of nature tourism in North Karelia will increase with enhanced productization, marketing and sales operations for new demand trends.

There is enough to be developed in the field of nature tourism. However, to increase the visibility of the key actors, nationwide service content development is needed as this is currently missing. According to the action program, nature and culture tourism should be promoted among other, through development of the following products and activities: nature photography, canoeing, cycling, orienteering, wildlife viewing and photography, ice-dipping and fishing. Development of accessibility to sites and across sites and seeing the proximity to the border as potential competitive advantages in nature tourism for North Karelia should also be considered.

Proximity to the border is a key factor in cultural tourism, where cross-border services are seen as unique factors and as having a competitive edge in the international market. Products based on local culture, lifestyle and food culture should also be market-

ed for international visitors. Special features are Karelian culture, Koli karelianism, war history, food culture and handicraft traditions. The renewal and modernization of Karelian-inclusive content of the Bomba region, the enhancement of Koli's cultural heritage and its national as well as international cultural significance also for regional events. The province theatre offering already present in the region should be utilized especially in the marketing of group travels with possible year-round product development.

The North Karelia Regional Council is responsible for the tourism strategy and operational program, and Karelia Expert tourism service is responsible for guiding operations and monitoring the implementation of the program. Tourism companies, Karelia Expert, regional tourism associations, regional business, tourism financiers and Metsähallitus are mentioned as responsible for the development of nature and cultural tourism in North Karelia.

**Koli's big picture** 2050 study on development plan seeks growth, utilizes Koli's attractiveness and has considered Koli National Park and other actors affecting its development (Sweco Environment Oy 2017). In addition to the core area of the plan, ie. Koli village, Juuka's Ahmovaara and Loma-Koli, Nunnanlahti, Paalasmaa and the regions of Juuka and Lieksa considered to influence the plan are also contemplated.

Decision makers from Lieksa and Juuka, with no exception of key stakeholders, such as local people, tourism entrepreneurs and actors, representatives of the North Karelia Ely-Centre, North Karelia Nature Reserve, and potential investors, have participated extensively in the Koli's Big Picture 2050 process. Koli's big picture development vision was based on the strategic goals of the city of Lieksa and the municipality of Juuka from which it was further developed in cooperation with stakeholders.

A plan was borne from the vision: "Increasing the tourism potential in Koli a tenfold by 2050 from the current numbers and, with it, a significant development of the area of influence; positive impact on jobs and the population in Lieksa and Juuka " (Sweco Environment Oy 2017).

#### **The following targets by 2050 are clarified in the report:**

- 2 000 jobs in travel, services, shops, transportation, and education, as well as small factories
- Improving the accessibility to the attraction sites and across the sites

- Ensuring all-year round activities
- Preserving the basic and upper secondary education
- Koli-institute
- Triple the permanent and part-time housing in the planning area
- With growth in Koli, development of Juuka, Paalasmaa, Lieksa and Vuonislahti areas
- 25 000 bed places by 2050
- Development of Koli's operations to be all year-round for the international customer base

Koli's Big Picture 2050 report was presented to the representatives of the Ministry of the Environment and Metsähallitus in 2018, and both parties backed the content and implementation of the plan. Lieksa City Council and the Municipality of Juuka approved the plan in the spring of 2018, and at the same time the municipalities decided that the planning for Koli-Ahmovaara will progress in the form of partial master plan work.

The sustainability of the project will be ensured through the land use, tourism, logistics and village association groups who together form the Koli coordination group. In addition to Lieksa city, Metsähallitus, the Municipality of Juuka, North Karelia ELY-Centre, North Karelia Regional Association, invest in Finland and the Finnish Association for Nature Conservation have been appointed as responsible parties for promoting the goals.

Ruunaa Master Plan; the master plan for land use and nature tourism in the Ruunaa Hiking Area was completed in autumn 2019 (Finnish Consulting Group 2019). The plan's growth targets for 2030 are:

- Increase total visits from 83,800 visits to 180,000 visits per year
- 30 % of Ruunaa's visitors are outbound tourists
- Increase employment effect from 52 person-years to 104 person-years
- Increase revenue effect from EUR 4.8 million to EUR 16.4 million
- Four new investments to be realised in the area
- An additional 460 beds to the area

Qualitative goals for the region include among other, service products available all year round, state of infrastructure and service structure are able to meet the expectations of international visitors, improved networking between entrepreneurs (within the North Karelia biosphere reserve and locally), improved accessibility, and implementation of joint marketing with product purchases available via digital channels locally and internationally. Metsähallitus, Lieksa city and



entrepreneurs from the region, North Karelia Regional Council, Koli Tourism Association, Karelia Expert travel services and Lieksa development organisation “ Lieke” are responsible parties for implementing the measures in the plan.

### **3.2.4 International programmes affecting nature tourism development**

#### **EUROPARK & North Karelia Biosphere Reserve**

Koli National Park became a member of the European Charter Network in 2006. In order to continue operations, membership must be renewed every five years. Koli National Park’s membership is not currently renewed, but the focus shifts to improving sustainability networking and raising the profile of the North Karelia biosphere reserve (UNESCO’s Man and Biosphere, MaB program).

The biosphere reserve activities managed by the Ministry of the Environment and the North Karelia Centre for Economic Development, Transport and

the Environment (ELY-Centre) are in line with sustainable development goals. Sustainable nature tourism planning and development in protected and hiking areas is part of the activities of the biosphere reserve, done under the coordination of the biosphere reserve steering committee. Metsähallitus is represented in the steering group of the biosphere reserve and takes part in regional projects, where the well-being of the residents is strengthened without compromising on biodiversity. The aim is to develop regional practices that consider nature, the economy, culture and communities (North Karelia ELY Centre 2019).

One of the goals of the biosphere reserve’s nature tourism plan is to link the biosphere reserve’s conservation camping sites more closely by increasing co-operation and networking between the regions come 2025.

## 4 Biosphere reserve as a nature tourism destination

### 4.1 Key attractions across the biosphere reserve

The National Parks of the biosphere reserve, the Ruunaa Hiking Area and other protected areas form a significant nature tourism complex. The province's hiking and protected area network consist areas of diverse nature, which also enable a wide range of nature-based activities. Approximately 340,000 visits are made to the protected areas managed by Metsähallitus in the province every year. Most of these are realised in attraction sites of Koli (leading site i.e. most visited), Patvinsuo and Petkeljärvi National Parks, as well as the Ruunaa Hiking Area. North Karelia recorded 279,949 overnights in North Karelia in 2019. In comparing the total visitor arrival to North Karelia province and total numbers to just one site (Koli National Park) for the year 2019 (201 800), it is evident that at least 72 % of visitors arriving to North Karelia also visit the Biosphere Reserve during their stay.

#### 4.1.1 Koli National Park

Koli's tourism history dates to the 19th and 20th centuries, when Karelianism; Karelia and ancient Finns cultural phenomenon that began in the late 19th century, gained interest mainly among artists who then came to the area. Koli's geology, its diverse habitats of endangered fauna and flora, meadows and other traditional landscapes left behind by traditional subsistence farming make Koli an important protected area and tourist destination that preserves both cultural and natural heritage. Koli has a long history as a wilderness holiday destination, with the first tourist lodge and nature trail opened in 1896. However, it was not officially designated as a National Park until 1991.

Koli lies in the far north-east on the border of boreal and semi-boreal forest zones. The tops of the dominantly fir-covered hills represent the boreal taiga-forest qualities. The consistent taiga-forest is easily visible in the north east horizon from the scenic points on top of the hill. The summit of Ukko-Koli hill is the highest summit in South-Finland, rising 347 meters above the sea and 253 meters above the lake Pielinen (the

fourth largest lake in Finland). Wellness, sightseeing, hiking, skiing, and sports are among other nature outdoor activities, important motives that attract visitors to the destination.

Koli's most popular site for visitors is the summit of Ukko-Koli hill that opens to Finland's most famous national landscape. Since its designation in 1991, notable increase in visitor numbers to the National Park has been experienced and the visitor impacts are becoming more visible mainly during the peak summer months. In 2017, during Finland's 100th anniversary, a record 203,400 visits were recorded in Koli National Park, of which 80,700 also visited the Koli Nature Centre Ukko. In 2019, the number of visits to Koli National Park decreased slightly from the Finnish anniversary year, to 201,800, even though the number of recorded visits to the Koli Nature Centre Ukko doubled at 99,500 from average 50,000/year visits.

Koli National park's 80-kilometer-long marked trail network offers excellent hiking opportunities. Trails suitable for day trips can be found largely in the vicinity of the park. Overnight hikers often head to the southern end of the park, winding a 30–60-kilometer trail in the rugged terrain surrounding Lake Herajärvi. About 6,600 hikers opt for the route every year. The western part of the Herajärvi trail extends outside the National Park and by-passes the city of Joensuu and municipality of Kontiolahti. The park's trail network connects north to the UKK national hiking trail, which continues south through the Kolinpolku trail to Joensuu. Koli National Park ski trails are part of Koli's extensive trail network and the park's special features include the ski slopes within the park. In 2013, Koli was chosen as the excursion destination of the year.

Koli National Park is located about 70 kilometers north of Joensuu near Road 6. The National Park can be reached either by car or by taxi. Other public transport connections to Koli are however problematic. In winter, the ice road over Pielinen to Vuonismaa forms a connection to Lieksa, and in summer, the Suvi Express hydrofoil transports tourists across Pielinen. Car ferry traffic in Pielinen also started operating again in the summer of 2019.

### 4.1.2 Ruunaa hiking and conservation area

The key natural feature of Ruunaa Hiking Area is lake Lieksanjoki, through which rapids flow. The Ruunaa Hiking Area is a popular fishing, canoeing, and hiking, and is located on the east side of the Joensuu – Lieksa – Nurmes road, about 30 km east of Lieksa.

The Ruunaa area is home to a diverse fauna. There, one can spot all the large carnivores of Finland, with bear as the most common. Wildlife stocks have been growing recently. There is also a small number of deer herd in the nearby environments. The forests and water bodies of the region are home to a diverse species of birds.

Ruunaa rapids are the most important recreational fishing environments in Southern Finland, with regular stocking of rainbow trout and lake trout populations. In addition, the site has an excellent setting for rafting, both for experienced paddlers looking for a challenge and for beginners looking for a guided experience. By the end of February, there were about 30 km of maintained trails across Ruunaa. There, one can go on short cross-country ski runs or multi-day wilderness walks with overnight stay in tent or shed. About 80,000 visits are made there every year, most of it during the summer season.

An unobstructed 650-meter-long boardwalk takes one from the Neitikoski car park to the lake Neitikoski, with an unobstructed access also to the hiking centre in the area. Ruunaa hiking centre offers a wide range of hiking advice and guidance. The centre has a restaurant and provides accommodation services. In addition, one can buy fishing permits, camping equipment and maps from the shop.

There is a total of about 50 kilometers of trails across Ruunaa attraction site, and the lengths of the ring routes vary from three to thirty kilometers. The 133 km long provincial hiking trail Karhunpolku leads one from the border of Lieksa and Kuhmo to Patvinsuo National Park through the Ruunaa Hiking Area and the western part of the Ruunaa nature reserve. The Ruunaa Hiking Area was chosen as the excursion site of the year in 2009 and was the first excursion site of the year managed by Metsähallitus.

It ought to be noted that there are no roads leading to the Ruunaa nature reserve located east of the hiking area, so getting there is best by boat or canoe. The Ruunaa nature reserve, mostly located in the border zone, consist mainly unspoilt environments whose large areas are well suited for year-round exploration.

However, movement along the border area requires a permit issued by border guards.

Ruunaa, like other Finnish hiking area, is currently under massive development. The development plan “Ruunaa Master Plan” was completed in the autumn of 2019, hence the implementation of mountain bike routes and repairs to service equipment have begun. Ruunaa’s digital services are also being developed. The forests in the camping area are managed in accordance to the management and use plan and Metsähallitus’ environmental principles. In 2019, 78,000 visits were made to the Ruunaa Hiking Area.

### 4.1.3 Patvinsuo National Park

Patvinsuo, located 105 km<sup>2</sup> north of Koitere, is the largest National Park in North Karelia. Its extensive marshland with long wooden boardwalks offers an excellent opportunity to get acquainted with the bog typical to southern Finland as well as the open north wilderness setting.

Patvinsuo is well suited for self-guided hiking and wilderness nature observation. Suomunjärvi with its sandy beaches offer a great kayaking destination, with possibility to rent canoes and boats from the nature centre. The nature centre is located at the heart of Patvinsuo National Park. It has a hiking information point and a free exhibition about the site’s nature. One can also order paid guided tours for groups. Food services, a small kiosk and accommodation can be easily sourced from the nature centre. There is a camping area close to the centre, and in summer, the Suomu beach sauna is available for rent.

The park has about 80 km of marked trails and 3–25 km of nature paths, most of which are easy to navigate. In the marsh and wetland areas, one can hike along the boardwalk. Along Suomunkierro and Patvinkierro trails that surround lake Suomunjärvi, one has the possibility to stop at Teretinniemi bird tower or the Lahnasuo bird stage to view the various species of vertebrates. The number of visits to the Patvinsuo has been slowly increasing and in 2019 16,600 visits was recorded.

### 4.1.4 Petkeljärvi National Park

Petkeljärvi National Park was founded in 1956. It is located on the east side of Joensuu - Ilomantsi road, near the village of Möhkö close to the Finnish-Russian border. The ridges and clear lakes formed during the ice age are outstanding characteristic features of



Petkeljärvi, Finland's easternmost National Park. This attraction site hubs ridge formations, which extends from lake Koitere to the Russian side of the border. Enchanting views of the clear lakes and forest ponds open above the narrow ridges. Stunning view of striking, shield bark covered pine trees dress its pristine forests. The black-throated diver, the park's flagship animal, nests in the wilderness lakes, and in the terrain one can spot the traces of a beaver.

Petkeljärvi also consists bodies of water and wild ridges. The wild nature of the area is underlined by animals that thrive in the park, such as beavers, ravens and the black-throated diver (the emblem bird of the park). The park's forests have remained untouched by the forest industry with 150-year-old shield bark covered pines as the oldest trees in the park area. Species that need dry, warm conditions thrive in this National Park, with fen meadows preserved as part of the traditional landscape.

The National Park is well suited for day hikes or as starting point of longer hiking journey. Petkeljärvi camping centre is located in the middle of the NP. It provides accommodation, food, sauna and equipment rental (canoes, boats). The park consists nature trails, cross-country skiing trails, and canoe and boating routes.

There are two ring-marked trails in the National Park; 6.5-kilometer long Kuikan kierros trail leads through the mires along the boardwalk with varying landscapes up and down the ridges. The formation of the ridges can be explored by taking the 3.5 km harjupolku trail. The oldest hiking route in North Karelia, 31 km long Taitajan taival, also starts from Petkeljärvi and ends at Mekrijärvi village. It needs to be however notified that the deterioration of the terrain on the ridges of the park can prove problematic, since the flora of the dry heath soil easily suffers when it is stepped on. Apart from hiking, one can also paddle and row in the National Park. From Petkeljärvi it is possible to paddle all the way to lake Koitere and Patvinsuo National Park along river Koitajoki; a 200 km long river that meanders back and forth across the borders of Finland and Russia. In 2019, a total of 19,400 visits were made to Petkeljärvi National Park.

#### **4.1.5 Other biosphere reserve attractions**

There are other significant conservation sites within the North Karelian biosphere reserve. Kesonsuo nature reserve, which is valuable bird habitat, and the

Koivusuo nature park in the municipality of Ilomantsi are some examples. In both destinations, movement is only allowed along the marked hiking trails. One can also get acquainted with the mires of North Karelia at the Reposuo mire conservation program, a valuable bird habitat area located near the Ruunaa Hiking Area. There are also several hiking trails maintained by various actors across the biosphere reserve. The lengths of these vary from few kilometers ring routes to long routes that need several days. The border area nature is also a very important and unique strength of the biosphere reserve. Erä Eero, an internationally known wildlife watching actor, is situated within the biosphere reserve close to the Russian border and Patvinsuo National Park, and an hour drive to ruunaa rapids and Koli National Park. Wolverine is the most observed animal at the site and it can be spotted all year round. Other are bears, wolves and fox.

#### **4.1.6 Nature and culture values**

In North Karelia biosphere reserve, nature tourism areas also hold significant cultural values hence the two are interconnected. North Karelia Tourism Thematic and Operational Program 2014–2020 describe nature and culture tourism as key regional attraction for both domestic and international visitors.

In addition to the local cultural heritage, Koli is also known for Karelianism and national romance cultures. Koli continues to build on these cultural values for example through the art at Koli Ryyänen's artist residency. The site is also a venue for many annual cultural events. Pielinen also plays a key role in connecting the region's culture, since lake Pielinen connects to Vuonisaari on the opposite shore of Koli, where Paateri and the artist's house Hupeli reinforce the region's cultural identity. In Lieksa, Pielinen museum offers comprehensive information on, among other things, the area's traditional log transportation methods, that highlights the Ruunaa Hiking Area's cross-border tradition.

The proximity to the border is also strongly felt in the Ilomantsi region. Karelian culture lives in the parpeinvaara bardic village in Ilomantsi; where one can get acquainted with traditional karelian dishes, kantele music, handicrafts, and orthodox tradition. Ilomantsi is the oldest orthodox region in Finland. In addition to the main Pyhä Elian church, the parish has five small shrines across Ilomantsi. Key objects of military history are also present in Ilomantsi, for example, the Hattuvaara taistelijatalo (Fighter's house in English),

and the Rajakenraali maja (The field headquarters of Major General E. J. Raappana, the commander of the 14th Division during the second World War) which was moved to Parppeinvaara in 1984. The battle trenches and grounds of Oinassalmi and Taivallampi are other world war sites that can be seen in the area. Some of the battle trenches are also inside Petkeljärvi National Park. War exhibitions at Ruukki's Möhkö (Möhkö ironworks museum) in the village of Möhkö tells about the events of the war in the Möhkö area, while the Öykkösenvaara war history route familiarizes the visitor to the 1944 battles fought in the area.

The significance and uses of waterbodies in shaping regional history has been quite limited. However, the topic was considered during the drafting of the North Karelia Tourism Thematic and Operational Program 2014–2020, as well as in the Visit Finland tourism themes. North Karelia biosphere reserve projects and partnership networks have also helped raise the profiles of the region's nature and culture values. A good example is the SHAPE NPA project (Sustainable heritage areas: Partnership for Ecotourism), where entrepreneurs from the Ilomantsi region have collaborated to create a SLOW triathlon product "Koitajoki Nature Triathlon", which celebrates the wilderness nature and culture of the Koitajoki River. The nature triathlon connects five major natural, cultural, and military history sites in the area; Kesonsuo, Koitere; Mekrijärvi, Möhkö village and Petkeljärvi National Park. Pielinen, Ruunaa Lieksanjoki and Jongunjoki, among others, are also potential top attraction sites

for nature and culture water tourism in the biosphere reserve. Some program services are already available for these waterways, but companies in the area also have much more to develop. The current trend is promising for both nature and cultural tourism.

## 4.2 Nature tourism impact on the local economy

Metsähallitus' nature services creates conditions for the sustainable recreational use of protected areas by providing a framework and guidelines for visitors, as well as conducive operating conditions for nature tourism companies in the area. Nature tourism in protected areas hold great economic potential for local economies. Well-known conservation and hiking areas are also important for the entire region's image. Areas and routes maintained by the municipalities, associations and other actors of North Karelia complement the areas managed by Metsähallitus.

The most significant nature tourism sites of the biosphere reserve (Koli, Ruunaa, Petkeljärvi and Patvinsuo) have been assessed by the total income and employment effects of visitors' spending, that amounted to EUR 25.5 million and 204 person-years in 2019 (Metsähallitus 2019a, Table 1).

As part of the assessment of the local economic impact of recreational use of Metsähallitus' conservation and camping areas, the amount of money spent by visitors during their visit is also mapped. The over-

**Table 1. Koli National Park, Ruunaa Hiking Area, Patvinsuo National Park, and Petkeljärvi National Park visitor numbers and economic impacts. Sources: Lampinen 2016, Paulus 2019, Pääkkölä 2020, Naumanen 2020 ja Metsähallitus 2019a.**

	Koli National Park	Ruunaa Hiking Area	Patvinsuo National Park	Petkeljärvi National Park
Annual visits (2019)	201 800	78 000	16 600	19 700
Economic impact of visitor spending (2019)	19 500 000 €	4 600 000	300 000	1 100 000
Average spending per visit by domestic visitors	107 €	75 €	30 €	69 €
Average spending per visit by residents	73 €	17 €	8 €	8 €
Average spending per visit by international visitors	69 €	69 €	16 €	10 €
Local economic impact of visitor spending on accommodation services per visit	76 %	43 %	38 %	49 %
Local economic impact of visitor spending on restaurant services per visit	35 %	21 %	23 %	28 %
Overall economic impact of visitors' spending on the local economy (2019)	150 py	41 py	3 py	10 py

all local economic impacts of nature tourism sites across the biosphere reserve vary greatly according to the number of visits (see data in Table 1). Another influential factor is the service provisions and structures in the area. Income to local economy is higher in tourist areas where visitors stay longer and in areas with wider range of tourism services. Thus, the overall impact on the local economy is mainly influenced by the area's service structures and range of services, as well as the visitor profiles of the site.

The richness of the biosphere reserve's network of National Parks and hiking areas is the diversity and uniqueness of each attraction site. The average spending by visitors in Koli National Park is the highest in the biosphere region. The average spending of all visitors is 100 €/visit, while in the Ruunaa Hiking Area, Petkeljärvi National Park, and in Patvinsuo National Park, the distribution is 66 €, 62 € and 26 €/visit respectively. In each site, the largest share of local revenue per visit came from accommodation, followed by cafe and restaurant purchases. The visitors' spending in Patvinsuo is significantly lower than in Koli, possibly because common accommodation choices for visitors at Patvinsuo (consisting of 48 % of overnight park visitors) is by own accommodation, i.e. in tent or shed contrary to hotel accommodation choice in Koli National Park, where 33 % of the park's visitors spend overnight.

In all National Parks of the biosphere reserve and in the Ruunaa Hiking Area, the average spending by domestic visitors is higher than that of international visitors. In Koli, the overall spending by all visitor groups (domestic tourists, residents, and international tourists) is higher than in other parks and hiking areas. Domestic visitors spend significantly more than any other visitor groups in Petkeljärvi. In Ruunaa, Patvinsuo and Petkeljärvi, the average spending of international visitors is more than residents, contrary to Koli where residents average spending is more than that of international visitors.

## 4.3 Nature tourists across the biosphere reserve

Visitor data is collected every five to ten years through continuous visitor count across National Parks and the hiking area, and by undertaking of visitor surveys. Even though the visitor profiles of the top nature tourism sites of the biosphere reserve vary, the recreational motives are rather similar in all four areas ex-

amined. The main reasons that attract visitors to all these sites are landscapes, experiencing nature and relaxation.

The favourability of activities in each site are influenced by the natural features of the parks and hiking area, and by the history of the area. In Koli, the emphasis is on getting to know the cultural heritage and skiing, in Ruunaa fishing and rafting, in Patvinsuo camping and camping activities in nature such as berry picking, kayaking and bird watching, and in Petkeljärvi visiting the coffee shop, renting a sauna and to some extent also kayaking.

The following factors highlight the visitor profiles of the National Parks and the Ruunaa Hiking Area:

- Koli is an all-year round destination. The number of day visitors and overnight stays as well as their average stay in the National Park remain similar during the summer and winter seasons. Summer day visitors stay a little longer (just over 30 minutes) than winter visitors.
- The share of overnight stays at Ruunaa is significantly higher than at other nature tourism destinations in the biosphere area.
- Patvinsuo is mainly visited by group of friends and day visitors stay in the National Park an average two hours longer than in other parks or hiking areas across the biosphere reserve.
- In Petkeljärvi, the share of domestic visitors is considerably higher, and one-fifth of the area's visitors come from nearby Joensuu city. Petkeljärvi is also an important recreation area for the residents of Ilomantsi.

The latest visitor surveys are of Koli National Park 2019 (Naumanen2020), Ruunaa Hiking Area 2017 (Paulus 2019), Patvinsuo National Park 2013 (Lampinen 2016) and Petkeljärvi National Park 2018 (Pääkkölä 2020). Basic data on visitors by region are visible on tables 2–5.

### Koli National Park visitor profile

According to a visitor survey conducted in 2019 (Naumanen 2020), the most popular activities in the National Park are enjoying nature, landscape watching and hiking. Little over a fifth of the visitors also got acquainted with the cultural heritage in Koli. During their visit, visitors hiked for about 10 kilometers or skied for about 6 kilometers. Many have also calculated the distance "skied" on the ski slopes. Within the biosphere reserve, downhill skiing is only possible in Koli National Park, a feature that makes it stand out

**Table 2. Visitor profile for Koli National Park (Naumanen 2020).**

	Female	Male
Gender	55 %	45 %
Average age	42 years	45 years
Level of education	55 % a bachelor's or master's degree	

Visitor types	Feb-Sept	Winter	Summer
Domestic	76 %	69 %	77 %
Local residents	14 %	23 %	9 %
International	10 %	9 %	14 %

National Park area and hiking area	Day visits		Overnights	
Share and average stay in winter	56 %	3,8 h	44 %	3,1 nights
Share and average stay in summer	55 %	4,4 h	45 %	2,6 nights

Length of overnights at and near the camping areas	Average	6,1 nights
Average overnights	Own cottage	8,7 nights
	Rental cottage	4,3 nights
	Friend or Relative's place	3,5 nights
	Own (tent, lean-to etc.)	3,3 nights
	Hotel	1,8 nights
	Caravan or mobile home	1,4 nights

Group size	2–5	81 %
	Over 6	15 %
	Traveling alone	4 %
Segment type	Family	69 %
	Friends	17 %
	Students	5 %
	with relatives	4 %
	Work colleagues	1 %
	Other	1 %

Purpose of visit (scale 1–5, whereby 5 is highest)	Landscapes	4,86
	Enjoying time in nature	4,77
	Relaxation	4,47
	Time with travel companions	4,39
	Wellness	4,26
	Away from noise and pollution	4,21
	Experiencing the area	3,91

Repeat visits	Visited before	56 %
	First visit	44 %



**Table 3. Visitor profile for Ruunaa Hiking Area (Paulus 2019).**

	Female	Male
Gender	43 %	57 %
Average age	47 years.	46 years.
Level of education	34 %: a bachelor's or master's degree	

Visitor types	Summer
Domestic	81 %
Local residents	12 %
International	7 %

National Park and hiking area	Day visits		Overnight stays	
Share and average stay during summer season	37 %	4,1 h	63 %	2,9 nights

Length of overnights at and near the camping areas	Average	3,8 nights
Average overnights	Own cottage	9,7 nights
	Hotel	5,0 nights
	Friend or Relative's place	3,5 nights
	Caravan or mobile home	3,1 nights
	Rental cottage	2,5 nights
	Own (tent, lean-to etc.)	1,5 nights

Group size	2–5	80 %
	Over 6	12 %
	Traveling alone	7 %
Segment type	Family	68 %
	Friends	21 %
	with relatives	5 %
	Students	1 %
	Work colleagues	1 %
	Other	4 %

Purpose of visit (scale 1–5, whereby 5 is highest)	Enjoying time in nature	4,71
	Landscapes	4,68
	Relaxation	4,58
	Away from noise and pollution	4,38
	Wellness	4,3
	Time with travel companions	4,33
	Experiencing the area	3,83

Repeat visits	Visited before	72 %
	First time	28 %

in popularity from the activities of other parks (10 % of visitors).

77 % of arrivals to Koli National Park were domestic, 14 % residents, and 10 % international visitors. Domestic visitors mainly arrived from Helsinki (13 %), Joensuu (8 %) or Kuopio (5 %). The largest number of foreign visitor arrivals were from Russia (3 %) and Germany (3 %). About half of the visitors were day visitors most of which go to the peak of Ukko Koli to view the scenery. Day visitors stayed an average of four hours, while overnight stays in the National Park were an average 2–3 days. Most of the park guests stayed either at a hotel or in their own accommodation (tent, etc.). Those with accommodations closer to the park seemed to stay for an average of 6 days, while those in their own cottages stayed the longest in the area.

Koli attracted more women (55 %) than men (45 %), with more than half of the visitors possessing a university degree. In winter, the share of visits from residents was higher than in summer. In summer, the share of domestic tourists was slightly higher than in winter. The share of international visitors was higher in summer than in winter.

The larger proportion of visitors (81 %) arrived in Koli in groups of 2–5 people and almost 70 % with their own family. 17 % of visitors travelled to Koli with friends. 57 % of the visitors had Koli as the sole or most important destination of the trip and more than half of the visitors had visited Koli before.

### **Visitor profile for Ruunaa Hiking Area**

According to Ruunaa 2017 visitor survey (Paulus 2019) the main activities in the attraction site are hiking on the boardwalk, enjoying nature and landscapes, and fishing. Over 35 % of visitors considered fishing the most important activity during their visit. During their stay, visitors hiked an average 10 kilometres, cycled 30 km, kayaked 20 km, or canoed 10 km. Ruunaa's specialty is rafting, which is a very popular experience in the hiking area (18 % of visitors).

Of all Ruunaa arrivals, 81 % were domestic visitors, 12 % residents and 7 % international visitors. Majority domestic visitors arrived from Joensuu (12 %), Helsinki (7 %) or Kuopio (7 %) cities. More men (57 %) visited Ruunaa than women, probably due to the popularity of fishing in the hiking area. 35 % of visitors had a degree.

37 % of all visitors to Ruunaa visited daily and the majority (77 %) visited Neitikoski. Day visitors stayed average four hours, while overnight stays (63 %) were

mainly at the camping area for 2–3 days. The most favoured overnight in a camping area was at a rental cottage (45 % of respondents). Visitors with accommodation closer to the park stayed in the area an average of four days, while those in their own cottage stayed the longest.

The larger proportion of visitors (80 %) arrived in Ruunaa in groups of 2–5 people and almost 70 % with their own family. 21 % of visitors travelled with friends. To 66 % of the visitors, Ruunaa was the sole or most important destination of the trip and 71 % of the visitors had visited Ruunaa before.

### **Visitor profile for Patvinsuo National Park**

According to a visitor survey conducted in 2013 (Lampinen 2016), the most popular activities for visitors in Patvinsuo are enjoying nature and hiking. Wildlife watching is also exceedingly popular at this attraction site. In Patvinsuo, birding is more prominent than in other areas (15 % of visitors). In addition, berry picking, kayaking, and swimming are other important activities.

80 % of arrivals to the National Park were domestic visitors, 8 % residents from the surrounding area and 12 % international visitors. Domestic visitors arrived mainly from Joensuu (28 %), Lieksa (7 %), Kontiolahti (7 %) or Helsinki (6 %). The gender distribution of visitors was even, though more women than men visited Patvinsuo. Less than half of visitors held a college degree.

In Patvinsuo, 42 % visited the area daily and majority visited the Suomu nature centre (63 %), the shores of Lake Suomujärvi (62 %) and Kurkilahti (46 %). Day visitors stayed for an average of six hours, while overnight stays in the National Park averaged 2–3 days. The most common mode of stay in the National Park was by own accommodation (48 % of visitors), in a tent or shed. Those with accommodation close to the park stayed an average of 5.1 days in the area and those in their own cottage stayed longest in the area.

The larger proportion of visitors (62 %) arrived in Patvinsuo in groups of 2–5 people and 41 % travelled with their own family. 33 % of visitors travelled with friends. Ruunaa was the sole or most important destination to 63 % of the visitors, and 52 % of the visitors had visited Patvinsuo before.

**Table 4. Visitor profile for Patvinsuo National Park (Lampinen 2016).**

	Women	Men
Gender	54 %	46 %
Average age	45 years.	46 years.
Level of education	47 %: a bachelor's or master's degree	

Visitor types	Summer
Domestic	80 %
Local residents	8 %
International	12 %

National Park and hiking area	Day visits		Overnights	
Share and average stay during summer season	42 %	6,2 h	58 %	2,5 nights

Length of overnights at and near the camping areas	Average	5,1 nights
Average overnights	Own cottage	11,7 nights
	Friend or Relative's place	10,6 nights
	Own (tent, lean-to etc.)	3,4 nights
	Rental cottage	3,4 nights
	Hotel	3,0 nights
	Caravan or mobile home	2.1 nights

Group size	2–5	62 %
	Over 6	28 %
	Traveling alone	9 %
Segment type	Family	41 %
	Friends	33 %
	Club, association, etc.	10 %
	Students	6 %
	with relatives	4 %
	Work colleagues	3 %
	Other	3 %

Purpose of visit (scale 1–5, whereby 5 is highest)	Enjoying time in nature	4,8
	Landscapes	4,7
	Relaxation	4,5
	Away from noise and pollution	4,63
	Wellness	4,5
	Time with travel companions	4,12
	Experiencing the area	3,87

Repeat visits	Visited before	52 %
	First time	48 %

**Table 5. Petkeljärvi National Park visitor profile (Pääkkölä 2020).**

	Female	Male
Gender	52 %	48 %
Average age	51 years.	49 years.
Level of education	55 %: a bachelor's or master's degree	

Visitor types	Summer
Domestic	89 %
Local resident	7 %
International	4 %

National Park and hiking area	Day visits		Overnights	
Share and average stay during summer season	56 %	4,3 h	44 %	2,2 nights

Length of overnights at and near the camping areas	Average	3,2 nights
Average overnights	Own cottage	9,7 nights
	Own (tent, lean-to etc.)	3,0 nights
	Rental cottage	2,4 nights
	Friend or Relative's place	2,4 nights
	Caravan or mobile home	1,7 nights
	Hotel	1,3 nights

Group size	2–5	79 %
	Travelling alone	11 %
	Over 6	10 %
Segment type	Family	66 %
	Friends	17 %
	with relatives	8 %
	Club, association, etc.	3 %
	Other	3 %
	Work colleagues	2 %

Purpose of visit (scale 1–5, whereby 5 is highest)	Enjoying time in nature	4,82
	Landscapes	4,81
	Relaxation	4,54
	Away from noise and pollution	4,4
	Wellness	4,37
	Time with travel companions	4,15
	Experiencing the area	4,06

Repeat visits	Visited before	43 %
	First time	57 %



### Visitor profile for Petkeljärvi National Park

According to a visitor survey conducted in 2018 (Pääkkölä 2020), the most popular activities by visitors at Petkeljärvi are walking and enjoying nature. Landscape viewing and wildlife watching are also popular activities in Petkeljärvi. Activities at this site include visiting a café, renting a sauna and, to some extent, kayaking. During their visit, visitors hiked about 9 km, cycled 50 km, paddled 9 km, or rowed 4 km.

Of all National Park arrivals, 89 % were domestic visitors, 7 % residents of the surrounding area, and 4 % international visitors. Domestic visitors mainly arrived from Joensuu (21 %), Helsinki (13 %) or Ilomantsi (7 %). The gender distribution of visitors was even with 55 % of holding a university degree.

56 % of Petkeljärvi's visitors visited the park daily. 60 % of the visitors visited the Petkeljärvi hiking centre, and just over half hiked the Kuikan kierros trail. Day visitors stay for an average of four hours, while overnight stays in the National Park was about two days. In the National Park, majority visitors stayed overnight in a motorhome or caravan, the Petkeljärvi centre or in their own accommodation (tent or shed). Those residing close to the park stayed in the region an average 3.2 days, while those in their own cottages stay longest in the area.

The larger proportion of visitors (79 %) arrived in Petkeljärvi in groups of 2–5 people and 66 % travelled with their own family. 17 % of visitors travelled with friends. Petkeljärvi was the sole or most important destination of the trip to 14 % of the visitors, and 43 % of the visitors had visited Petkeljärvi before.

## 4.4 Recreational and visitor uses of the National Parks and Hiking Areas of the BR

### 4.4.1 Service structures

The service structures of each National Parks and Hiking Area of the biosphere reserve are described below.

#### Koli National Park

The service structures of Koli National Park are maintained by Metsähallitus' nature services, though some of the properties in the National Park are rented out to

entrepreneurs. Local entrepreneurs also provide variety of services in the National Park area.

#### Nature Centre

In addition to maintaining biosphere reserve values, Koli Nature Centre Ukko is also responsible for the National Parks in the Eastern Finland park area, and the protected areas managed by Metsähallitus and the hiking area. There are other information points for Metsähallitus' nature services, the municipality and entrepreneurs of the area, and whenever these are closed, the Koli Nature Centre Ukko is responsible for advising on all areas.

Koli Nature Centre Ukko offers visitors and companies visiting the area information about the area's nature and culture. In addition to a permanent exhibition, the site also has in place short-time exhibitions, exhibition guides, meeting room, auditorium "Vaarasali", cafe Vakka, a shop, a film about the National Park, teaching materials and events as part of the Nature Centre's diverse services. It is also easy to develop joint events around the activities of the Nature Centre together with stakeholders.

#### Fireplaces and camping shelters

In the National Park, open fireplaces, and camping shelters (11 in total) are available for use by both hikers, and by entrepreneurs using the area with own customer groups. However, entrepreneurs do not have the option of reserving fire pits and are charged a contract fee for usage.

#### Rentals and camping areas

There are 10 accommodation shelters in the National Park area that can be rented for an overnight stay. There are additional tent sites (7 in total) open to all campsites with basic services (toilets and a campfire site). Camping in the National Park is only allowed in designated camping sites.

#### Hiking trails, nature trails, ski tracks, and ski-lift

The 80-kilometer-long marked trail network in Koli National Park offers excellent hiking possibilities. Trails suitable for day hiking can be found largely in the vicinity of peaks of Koli, and overnight hikers often head to the southern end of the park, circling a 30–60 km long route in the rugged terrain surrounding Lake Herajärvi. The ski trails in the Koli National Park area

are part of Koli's extensive trail network and the park's special features include the areas ski slopes.

### **Cycling, canoeing, and boating**

Cycling is allowed on the National Park driveways. Waters suitable for canoeing and boating are lakes Pielinen and Herajärvi. Five of the islands in Pielinen have a fireplace and it is possible to camp in two of them. In summer, guided boat and canoe trips to the islands are arranged.

### **Enterprises and services**

Properties owned by Metsähallitus in the National Park are rented by four companies who offer accommodation, food, event organization, advisory, program and equipment rental services. Program services include guided hikes, cross-country dining, snowshoeing, boat trips, kayaking, horseback riding, downhill skiing, and a scenic lift experience. In the village, the Koli tourist association provides tourist information and provides rental cottage services. In the area, one will also find the village shop Sale and port services. Companies operating within the National Park have a cooperation agreement with Metsähallitus and thus implement the principles of sustainable tourism in their operations.

### **Ruunaa Hiking Area**

The service structures of the Ruunaa camping area are maintained by Metsähallitus' nature services, but some of the camping area properties are rented out by an entrepreneur. Local entrepreneurs also offer a wide range of program services at Ruunaa.

### **Ruunaa Hiking Centre**

Ruunaa Hiking Centre in Neitikoski offers hiking advice, nature guides, accommodation, and catering services. In addition, one can buy fishing permits, camping equipment and maps, among other necessities.

### **Fireplaces and camping shelters**

Ruunaa Hiking Area has a total of 18 fireplaces and 12 log shelters available for short stays. Temporary accommodation in tents is also allowed.

### **Camping area**

In the hiking area, one can camp or stay overnight in temporary tent accommodation, even though using the already existing structures is preferable. It is also possible to rent a space for camping from the Ruunaa Hiking Centre.

### **Hiking trails and nature paths**

The hiking trails in the hiking area are altogether about 57 kilometres. These partly follow the Lieksanjoki river and offer the hiker varied landscapes. Neitikoski has Närelenkki nature trail, which is about two kilometres long and has in place information boards along its route about nature and the history of the area. The nature trail fits well also for families with children. Part of the hiking trails follow the same route as the Karhunpolku that is part of the province's Karjalan Kierros and maintained by the city of Lieksa.

### **Fishing**

Ruunaa rapids are popular with those seeking fishing experiences. In summer, salmon and trout stocks are added in the water almost every week. In addition, trout and grayling thrive in Lieksanjoki. Pike, whitefish, pikeperch, pike and perch can also be caught.

Ruunaa rapids (no. 7525) is Metsähallitus' 'free fishing area, meaning Metsähallitus' fishing permit and fish management fee is required in order to fish. The exceptions are Neitijärvi and Kattilampi, where the so-called general fishing rights apply, i.e. free angling and ice fishing, and also fishing with a permit and with Metsähallitus' Southern Finland fly-fishing permit ([www.eräluvat.fi](http://www.eräluvat.fi)). Elsewhere than in Neitijärvi and Kattilampi, the so-called general fishing rights are revoked.

Fishing by boat is allowed in the whole area. Fishing with motorboat, and the use of an anchored boat in rapids and stream areas is prohibited. The fisherman must check the fishing restrictions at [kalastusrajotus.fi](http://kalastusrajotus.fi) webpages.

### **Ski-tracks and ski-mobile**

Ruunaa has well-maintained cross-country skiing trails in winter, and approximately 35 km long snowmobile trail maintained by the Pohjois-Karjalan virkistysreitistöyhdistyksen association (in English: North Karelian association of hiking routes). Motorized snowmobiling is only allowed on snowmobile designated areas. For the safety of hikers, skiing with a snowmobile is not recommended.

## **Kayaking, rafting, boating, and cycling**

Ruunaa rapids offer challenges for both enthusiasts and newcomers to the sport. According to the international rapids' classification used in Finland, Ruunaa rapids belong to classes I – II (easy – difficult). On rafting trips organized by local tourism entrepreneurs, one can experience the white rapids on a raft boat or by rubber raft. There are four landing and lifting points in the area for boats. Some of the routes in the area are also suitable for mountain biking.

## **Services for people with mobility restrictions**

From the Neitikoski car park, which is close to the Ruunaa Hiking Centre, one can use a 650 m long boardwalk that leads to the magnificent Neitikoski and admire the rapids, fry sausages and fish for trout and rainbow trout. The parking area has an easily accessible dry toilet.

There are several rafting entrepreneurs in the area who have the capacity to offer boat services to customers with mobility restriction. The traditional rafting with a wooden boat through the entire 30-kilometer-long Ruunaa rapids route takes about 4 hours and this includes a lunch service.

Ruunaa Hiking Centre, with a restaurant suitable for the disabled and an accessible toilet, is located at the Ruunaa Hiking Area.

There are two rental cottages in the area suitable for people with mobility restrictions, both of which have accessible toilets. Both cottages have space for two wheelchair users and their assistants. One of the cottages is rented by Ruunaa Hiking Centre and the other by Ruunaa Matkailu.

## **Enterprises and services**

Services offered by entrepreneurs at Ruunaa attraction site include program equipment rental, café and restaurant, accommodation, sauna and space rental services. Among other things, the entrepreneur of the Ruunaa Hiking Centre offers guided tours of the area, maintains café and restaurant services, offers accommodation, rents equipment, and sells fishing permits. The companies have a cooperation agreement with Metsähallitus and implement the principles of sustainable tourism.

## **Patvinsuo National Park**

The service structures of Patvinsuo National Park are maintained by Metsähallitus' Nature Services, but the properties in the National Park are rented by an entrepreneur. Local entrepreneurs provide various services across the park's area.

## **Suomu Nature Centre**

Suomu Nature Centre offers camping advice and nature guidance services in Patvinsuo. In addition to the free Patvinsuo-themed exhibition, the centre sells maps, fishing permits, coffee, soft drinks and desserts. Catering service are also available upon request. In addition to canoes, boats and beach sauna rental, the National Park has a rental building for hikers.

## **Fireplaces, camping shelters, cooking shelters**

There are nine open fire sites within the National Park, one of which is located at the Teretinniemi shed. The cooking shelters are located in Kaunisniemi and in the Kurkilahti parking area.

## **Rentals and camping areas**

Indoor accommodation for nine persons is available for rent for summer use, and the Suomu building next to the nature hut can accommodate a total of twenty people. There are eight camping sites in the National Park area that have basic services (toilet & campfire site) and they are all available for visitors' use. Camping in the National Park is strictly allowed at designated camping sites.

There is an additional small lean-to in the park along the path near the Teretinniemi bird tower that can accommodate about four people. There is also a lean-to maintained by the municipality of Ilomantsi on the shore of Suomujärvi, by the Susitaival hiking trail.

## **Caravan services**

A caravan can be parked in the Surkanpuro car park. However, it is to be noted that here is no electricity distribution or other special services for motorhomes and caravans in the car park. A dry toilet and a rest table can be accessed in Surkanpuro, located about 2 km from the Suomu Nature Centre.

## **Hiking trails, nature paths and skiing**

Patvinsuo has about 80 km of well-marked trails. The route marking is mainly an orange-yellow circle and the trails are mostly easy to navigate. There is in place a boardwalk for hikers for about 20 km navigation along marshes and wetlands. There are two ring trails across the park. The most popular hiking trails are the 15 km long Suomunkiertö trail and the 25 km Patvinkiertö trail, from where one can stop by the Teretinniemi bird tower or the Lahnasuo bird-watching stage. In addition, Patvinsuo has three nature trails. Kuusipolku (3 km) exhibits mixed forest landscapes and birds of mixed forest, Lakkapolku (3.3 km) bog landscapes, and Mäntypolku (4.5 km) meadow landscape flora and fauna.

Patvinsuo is immensely popular site for skiers who want to create their own trails. There are no actual trails, but there are two maintenance runs usually skiable from late January to March.

## **Canoeing and boating**

Lake Suomunjärvi with its sandy beaches makes Patvinsuo a great site for kayaking. There, one can start kayaking trip from Suomu Nature Centre and paddle from one camping area to the next. Suomujärvi also has good rowing opportunities. Canoes and boats can be rented from the Nature Centre.

In early summer, when the water level is high, one can also paddle on Suomu river, which descends from lake Suomunjärvi to lake Koitere that winds near the park's border area. However, paddlers may have to lift and slip the canoe over dozens of beaver dams and fallen tree trunks - thus the river is suitable for adventurous persons. One should set aside at least one day to paddle the entire river.

## **Cycling**

Mountain biking is allowed for everyone under every man's right policy. Cyclists are however instructed to stay on clearly distinguishable paths and to consider other users on the paths.

## **Birding**

During the bird migration, the openings of Patvinsuo teem with wading birds. Spring and autumn are the best times to take a birding tour to the Teretinniemi bird tower or the bird bird-watching stage of Surkan-suo and Lahnasuo. In Patvinsuo one can also spot swans, cranes, geese and other swamp, water, wood pigeons, and other birds of prey.

## **Berries and mushrooms**

Patvinsuo offers blueberries, lingonberries, lacquers, and cranberries, as well as edible mushrooms.

## **Services for people with mobility restrictions**

Suomu Nature Centre is wheelchair accessible with own assistant to the shores of Lake Suomujärvi. The distance is about 200 m. There is an accessible toilet by the parking of Suomu Nature Centre.

## **Enterprises and services**

The following services by entrepreneurs are available in the Patvinsuo National Park area: guided tours, equipment rental, food services, accommodation, and space rental. The companies have a cooperation agreement with Metsähallitus and implement the principles of sustainable tourism.

## **Petkeljärvi National Park**

The service structures of Petkeljärvi National Park are maintained by Metsähallitus' nature services. The Hiking Centre in the park as well as the motorhome and camping area have been rented to an entrepreneur. The local entrepreneurs provide services in the National Park area.

## **Petkeljärvi centre**

Petkeljärvi centre offers Petkeljärvi area hiking advice. Services offered by the entrepreneur include café and restaurant services, accommodation in a camping and caravan area, a tour to the town centre, as well as canoe, boat, and beach sauna rental. In addition, the hiking centre has a nature house dedicated to exhibition about the Petkeljärvi area. Among other things, the exhibition tells about the formation of its ridges.

## **Camping shelters, cooking shelters**

There is a grill shed in Petranieimi behind the nature hut. Elsewhere, lighting of fires is prohibited. There is a camp kitchen for those staying at the designated campsite.

## **Accommodation and camping area**

Petkeljärvi centre has plenty of accommodation options. Petkeljärvi camping site is located at Petranieimi, by the Petkeljärventie road. There is a fee for an overnight stay at the campsite that caters for shower



and toilet facilities in the service building as well as the cooking and dining facilities in the camp kitchen available to the visitor.

### **Nature paths, hiking and skiing**

The starting point of the routes is along Petkeljärventie, near the hiking centre's beach sauna. There are two ring routes in the park area, which are marked in orange along the terrain. Ridge landscapes and nature, as well as the ice-age related formations can be explored on a 3.5-kilometer-long ridge trail. The 6.5-kilometer-long Kuikan kierros trail goes around the Kuikkalampi pond. Both trails run mainly on gently sloping, easy-to-reach ridge landscapes and are suitable for day trips. In addition, there is the Korkeakärkä trail, which runs partly along the Kuikan kierros trail, after which it continues on own path about 2-kilometer along a narrow ridge surrounded by water.

A longer trail termed Taitaja taival, also the oldest hiking trail in North Karelia, starts from this National Park. The 30 kilometres trail to lake Mekrijärvi goes through the Petkeljärvi-Putkelanharju Natura area along the ridges.

There is a connection path from Taitaja trail, Kulkijan trail, to Susitaival. The Kulkija hiking trail was completed in 2015, and it connects the old trails to the Taitaja Trail and the Susitai val from Kallioniemi to the Särkkäjärvi open fire stopover place. The border trail, which runs between Petkeljärvi and Möhkö in turn connects the trails of the National Park to Susitaival trail. About 95 kilometres long, Susitaival is full of ridges, forests, and bog landscapes from Ilomantsi Möhkö village to Patvinsuo National Park.

Skiing is allowed in the park terrain, but there are no trails within the park. A trail runs on the west side of the park during the Pogosta Skiing event ([www.pogostanhiihto.fi](http://www.pogostanhiihto.fi)), a mass skiing with thousands of participants and several routes and series.

### **Canoeing, Kayaking, and boating**

There are no marked water hiking trails within the park. Still, the water trail descending to the Koitajoki river near the park offers good opportunities for boating and kayaking experiences. Koitajoki is a well-known kayaking river stretching more than 200 km. Koitajoki flows across the eastern border and back into the northwest side of Nuorajärvi park. There is also a kayaking possibility from Petkeljärvi to Koitere, next to Patvinsuo National Park. The distance between

Petkeljärvi and Koitere is about 80 km, and about 20 km from Petkeljärvi to Mutalahti in the south.

Petkeljärvi also has good environments for boating and canoeing. The closest boat landing site is a boat ramp maintained by the municipality of Ilomantsi along Möhkö road in Oinassalmi. One can travel by motorboat in Petkeljärvi and Valkiajärvi.

### **Cycling**

Mountain biking is allowed for everyone. Cyclists are however instructed to stay within clearly distinguishable paths and to take into account other users on the paths.

### **Services for people with mobility restrictions**

Petkeljärvi Nature Centre and the hiking centre's café-restaurant are wheelchair accessible. The café also has in place an accessible toilet. The campsite also has an unobstructed campfire area.

### **Enterprises and services**

Entrepreneurs offer guided tours, equipment rental, food services, as well as accommodation and space rental services in the Petkeljärvi National Park area. The companies have a cooperation agreement with Metsähallitus, and they implement the principles of sustainable tourism.

## **4.4.2 Outdoor activities and programme services**

The nature tourist destinations of the biosphere reserve's diverse natural environments and service structures provide an excellent framework for moving around in nature. The pull factors being good hiking trails suitable for hiking and mountain biking, cross-country skiing, downhill skiing, as well as canoeing and boating in the stunning waters of Eastern Finland. An extensive service network of entrepreneurs spread across the entire area and opportunities for guided tours can be found at each site. For example, guided hiking, snowshoeing, skiing, skating, kayaking, biking, fishing, rafting, horse riding, snowmobiling and dog sledding are services offered by entrepreneurs in the area.

The biosphere reserve offers plenty of accommodation options, from camping to overnight stays at the hotel. B&B accommodation is also available both close to the border in the direction of Ilomantsi and on the western shore of Pielinen in the Koli area.

Food culture and responsible production is especially important in Eastern Finland and is also reflected in the food services of entrepreneurs, most of which choose the ingredients carefully. There is a rich selection of local food with entrepreneurs increasing the variety of options and aiming also for quality.

Tourists arriving in the area have an excellent opportunity to get acquainted with the local culture. A rich selection of events, such as music, theatre, film and other art events, as well as various sporting events are organized by the region's entrepreneurs and clubs in the Koli biosphere reserve.

In all seasons, it is possible to enjoy nature and the culture close to the border in the biosphere reserve. The further development of year-round tourism is one of the biggest opportunities for the region.

Contact information of biosphere reserve's Patvin-suo and Petkeljärvi National Parks and the Ruunaa Hiking Area can be sourced from Luontoon.fi pages.

## 4.5 Metsähallitus nature services and cooperation between the tourism actors

### 4.5.1 Cooperation agreements

According to everyman's rights policy and the rules of the area, business activities are allowed in protected areas without a permit or agreement. Movement in the area is allowed subject to following of restrictions laid down under the everyone's rights policy and the rules of the area. The exception is the use of serviced fire-places and toilets, which are not part of everyman's rights. The utilization of these sites for company's operations requires a permit or agreement and are subject to a fee (Metsähallitus 2019b).

Metsähallitus strives to enter into a cooperation agreement with companies that operate within the protected areas, and those that bring visitors to the protected area. This way companies commit to the principles of sustainable tourism and provide annual reporting on their activities. Metsähallitus, on the other hand, commits to ensuring the quality of its services and communicating the companies' services through the Luontoon.fi website, among other things. Companies operating in villages and tourist centres outside National Parks and Hiking Areas may also enter into a cooperation agreement with Metsähallitus if their op-

erations are in some way connected to Metsähallitus' managed sites.

Metsähallitus has currently 66 cooperation agreements with companies operating within the biosphere reserve, although not all of them are engaged in tourism-related business activities, since local associations and companies outside the tourism sector are also involved. The goal is that all companies operating within National Parks and hiking areas have a cooperation agreement with Metsähallitus.

The basis for business cooperation development through tourism cooperation agreements is that it creates the basis for strengthening the region's business network. The aim is to increase communication with entrepreneurs about current activities, changes and other news about conservation and camping areas of the protected areas. In addition, the aim is to produce informative materials about National Parks and the hiking area together with entrepreneurs.

Cooperation agreements are always drafted together with the entrepreneur, and the agreements are initially made for a fixed period of about three to five years. Thereafter, the contract may be renewed for a fixed or indefinite period.

#### Cooperation agreement benefits:

- Permission to use the National Park or Hiking Area symbol
- Access to Metsähallitus material bank
- Visibility on luontoon.fi website and on the area's nature centre in form of brochures, and other visibility materials
- A guide that introduces the principles of sustainable use of nature in protected areas
- Newsletters dedicated to partners' actions
- Invitations to regular meetings to exchange information, keep up-to-date and provide opportunities for regional development.

#### According to the agreement, the partner company is also obliged to:

- Implement the principles of sustainable tourism in their own activities
- Provide annual feedback on their cooperation with Metsähallitus
- Participate in the orientations given by Metsähallitus
- Participate in annual Metsähallitus cooperation meetings
- Provide current company contact information to Metsähallitus
- Develop a security plan

**Concurrently, Metsähallitus is required to enable the above mentioned matters for the partners, with which Metsähallitus receives:**

- Certainty that companies and their customers operate in a more environmentally responsible manner in the region
- Feedback from companies to be used in the development of operations and service structures
- Information on the number of corporate customers and the customer profile.

#### **4.5.2 Metsähallitus cooperation with regional organisations in North Karelia**

In addition to cooperation with the biosphere reserve, Metsähallitus' nature services cooperates closely with other actors in the area. Across the biosphere reserve, Metsähallitus cooperates with, among others, the City of Lieksa and the municipalities of Juuka, City of Joensuu, Ilomantsi city, Nurmes city, and municipality of Kontiolahti. The maintenance and planning of routes and structures require cooperation with various boards, development organizations and associations. Metsähallitus is involved in the Koli coordination working group, where the goals of the Koli's big image 2015 project is promoted in a sustainable way in cooperation with other responsible parties.

The project work is carried out in cooperation with local actors such as the North Karelia ELY-Centre/ biosphere reserve. A nature services protection and hiking areas management staff is represented during joint trainings on development and planning events of the municipalities and the tourism organizations in the area. Marketing cooperation is carried out in the area with companies, tourism associations and the North Karelia joint marketing organization Karelia Expert Matkailupalvelu Oy.

### **4.6 Current state of nature tourism in the biosphere reserve**

#### **4.6.1 SWOT-analysis**

The strengths, weaknesses, opportunities, and threats of nature tourism in the Biosphere Reserve were identified in a business survey conducted between April and November 2018 (Appendix 2). The company survey (Naumanen 2019) involved 48 com-

panies and associations, 29 of which reported that they had used the area's camping or conservation areas in their operations. Appendix 2 lists the views of regional entrepreneurs on the attractiveness factors of the biosphere reserve, current challenges, future opportunities, and threats.

Nature clearly stood out as the key strength of tourism in the area, mentioned by 16 entrepreneurs. In addition, the area's waterways, cultural and natural history, outdoor trails (incl. downhill slopes, ski trails and hiking trails) and National Parks were key attractions for the area's tourism.

Entrepreneurs perceived the inadequacy of services as the major weakness feature of the area, i.e. the most important thing to be developed. Parking in Koli National Park and the accessibility of all sites in the biosphere reserve (including lack of public transport) were also considered in extremely poor situation and needing developing. It was additionally felt that there was room for improvement in the condition of service structures, road network and cooperation.

Cooperation between the various actors, the distinctive features of the region (nature, culture, tradition, and history), sustainable tourism development and accessibility were deemed important aspects to consider and invest on in the near future. In addition, small-scale tourism was deemed an opportunity and improving parking arrangements in Koli National Park as essential.

The key threats in the study area were perceived as unsustainable tourism development, lack of cooperation, climate change, environmental threats, and infrastructure degradation.

Despite the special features of each tourism attraction site across the biosphere reserve, the regional entrepreneurs and tourism operators still face remarkably similar challenges in their work. Increasing the range of services and lengthening of season e.g. to all-year round through closer cooperation and better communication seemed to be the main goals of entrepreneurs in developing tourism in the region. In addition, accessibility was considered as needing significant improvement, which is thought to strengthen the sustainability of tourism in the region.

#### **4.6.2 Realising sustainable nature tourism – perspective of entrepreneurs**

The business survey (Naumanen 2020) asked companies' opinions on the principles of sustainable tour-

ism and the ability to implement those in region's nature tourism. Assessing the implementation of the principles proved difficult, but overall, the entrepreneurs considered the Metsähallitus' principles of sustainable tourism acceptable.

Most entrepreneurs are already operating in a sustainable way and would like to further develop sustainable tourism in the area in cooperation with Metsähallitus. Entrepreneurs understand silence, peace, and well-being values of tourism for the international market and these values seem to be important for entrepreneurs in the region. Sustainable tourism is thus believed to play a major role for the international market and to many entrepreneurs, these' issues already form key part of their actions. The companies in the North Karelia nature tourism industry organized themselves at the end of 2018 and began to actively promote their sustainable practices in services and communications.

The companies felt that the principles of sustainable nature tourism are implemented a little better than average in the area. In particular, the company and its customers were considered to have succeeded fairly or very well in implementing the principles of sustainable tourism. Metsähallitus also received praise, but there was the most dispersion: Almost 90 % of the respondents felt that Metsähallitus implemented sustainable nature tourism very well or fairly well, but on the rest of respondents rated Metsähallitus' implementation of sustainable tourism principles as mediocre, very poorly or rather bad. 75 % of business stakeholders and 78 % from business networks were thought to implement the principles fairly or very well.

## 4.7 Management principles of nature reserves

Metsähallitus (2014) has drawn up principles for the management and use of all nature reserves. According to the principles, the recreational opportunities offered by protected areas must be accessible to all visitors.

The nature services, which manages Metsähallitus' protected areas, builds structures in the protected areas that facilitate movement and reduce natural wear and tear. It also provides visitors guidance that increases knowledge of the area's natural and cultural heritage and understanding of its protection. Paid services on state lands are regulated by the Payment Basis Act and payment regulations issued by ministries.

For services to be accessible to all, the possibilities of accessibility need to be developed.

In the National Parks, everyone's rights, like movement and camping, are restricted by the National Park's founding law and bylaws. The plans for the management and use of the parks and development of the service structures are carried out in line within the framework permitted by the National Park founding laws.

Nature tourism is an important tool for many protected areas. It promotes the local economy and employment and can through those impact positively on attitudes towards nature conservation. Metsähallitus promotes nature tourism in suitable protected areas, and the aim is to provide companies in the field with opportunities to operate without compromising conservation objectives and other establishment objectives. Commercial services that do not require significant construction and do not change the natural state of the area or cause disturbance to other visitors to the protected area are suitable for nature reserves.

### 4.7.1 Operational guidelines and guides

Metsähallitus produces various publications, which also contain support material for actors and entrepreneurs in the nature tourism industry. Publications concerning the activities of National Parks and the hiking area can be freely downloaded from [julkaisut.metsa.fi](http://julkaisut.metsa.fi).

#### **Publications include:**

- Sustainable tourism in protected areas- guides for tourism entrepreneurs
- Sustainable tourism guide - Land of National Parks
- Principles of Sustainable Tourism - National Parks, nature and historic sites, and World Heritage Sites
- Visitor survey analysis for the key attraction sites across the biosphere reserve
- National Parks and recreation areas maintenance and land-use plans
- Rules regarding the various National Parks and recreation areas

### 4.7.2 Laws governing the operation of National Parks and Hiking Areas

Metsähallitus' general task is to use, manage and protect the state lands and water assets in a sustainable manner and to operate profitably. Metsähallitus'



operations are defined by the Act on Metsähallitus 234/2016.

By region, the following laws determine the management and use of areas:

- Koli National Park; Law 581/1991
- Ruunaa Hiking and Recreation Area; Government decision 368/1987
- Patvinsuo National Park; Law 1981/674
- Petkeljärvi National Park; Law 634/2956.

In addition, activities in National Parks and Hiking Areas are affected by general legislation and other specific legislation.

The Nature Conservation Act governing the management and land-use plans for National Parks is approved by the Ministry of the Environment. Additionally, rules of procedure are drawn up and approved by the director of Metsähallitus nature services. The nature tourism plan specifies and sets in cooperation with regional actors, concrete common rules on the use of National Park for tourism purposes. Management and use plans and rules of procedure are drawn up for the camping areas pursuant to the Outdoor Activities Act (606/73).

## 5 Nature tourism target state

### 5.1 Target state of nature tourism in North Karelia

In the North Karelia Regional Program (North Karelia Regional Council 2017), the development of nature and cultural tourism has been raised as one of the development goals of provincial tourism. Furthermore, the North Karelia Tourism Thematic and Operational Program 2014–2020 (North Karelia Regional Council 2014) 2020 Vision contains a strong message on the importance of nature and cultural tourism for the region: North Karelia is an internationally attractive nature, cultural and event tourism area, where the tourism industry, based on its own strengths, constantly creates new opportunities for sustainable growth and investment in the sector. In addition, the thematic and operational program in North Karelia's image communication is based on the following strengths and values:

- Unique Koli
- Karelian hospitality and quality services
- Happiness, hospitality, closeness, and authenticity
- Enchanting nature and culture
- Finland's most event-friendly province

Nature tourism can be seen for example in the development of the province's tourism strategy (North Karelia Regional Council 2014). In the tourist areas of North Karelia and Joensuu, service structure investments related to National Parks. These include:

- Hiking routes
- Hotel, ski services and camping area investments in Koli
- Ruunaa hiking and recreation area development
- Ilomantsi region National Parks service structure development and related investments
- Utilization of Pielinen and Lieksa river in development of tourism services

In addition, promoting accessibility, increasing international attractiveness and national visibility, developing programme services' content, strengthening the visibility of the border proximity and local cultural heritage are other objectives of developing nature tourism in the region (see section 3.2.3). The productization of the "Living villages of Karelia" tourism service pack-

age is no exception and thus an essential part of the plan for cultural tourism development.

Development plans for Koli and Ruunaa have been drafted, also termed Koli's Big Picture 2050 (Sweco Environment Oy 2017) and Ruunaa's land use and nature tourism master plan (Finnish Consulting Group 2019) respectively.

The Koli Big Picture 2050 plan identifies Koli National Park and the national landscape's natural values as a key attraction for Koli tourism. The main guidelines for the development of tourism in Koli include increasing length of stay, developing services, utilizing Pielinen and other water bodies in the area, developing external accessibility and internal transport. These are promoted by enabling the land use that enhances tourism, controlled risk-taking by entrepreneurs and cooperation between actors.

At Ruunaa, development goals include year-round services, infrastructure that better services for international visitors, developing cooperation between entrepreneurs, improving accessibility, more multi-channel joint marketing and promoting digital and international sales.

### 5.2 Defining Biosphere Reserve nature tourism target till 2025

The goals of nature tourism in the protected and hiking areas of the biosphere reserve have been drafted in accordance with the provincial nature tourism objectives and regional plans, and in cooperation with nature tourism entrepreneurs, and other actors and local people, taking into account also the protection provisions of National Parks and the hiking area and the sustainability of tourism to the areas (see nature tourism sustainability monitoring chapter 6).

The goals have been created for the entire biosphere reserve, but in the action plan, the measures themselves, have been targeted differently for each park. Both the goals and the park-specific measures are influenced by the individual profiles of the parks and the hiking area. The profiles were designed for the National Parks and hiking areas by Metsähallitus in 2014 so that service development is developed around each site's strengths. A clear profile makes it easy for customers to choose the most suitable nature

tourism site, which further increases customer satisfaction. On the other hand, an organization commits itself through the promise of a profile to provide the service.

The profiles utilized in this plan for the Ruunaa Hiking Area and the Patvinsuo and Petkeljärvi National Parks were formed in Metsähallitus' workshops in 2014, but in connection with the nature tourism plan. The profile of Koli National Park, which is the area's flagship, was sought to be clarified. The branding was done in two workshops with the help of nature tourism entrepreneurs, other actors, and local people in the area. The branding of Koli National Park was based on the profile made for the National Park in 2014, but now the goal is to clarify the 2025 vision of the site by looking at different aspects of the brand.

## 5.2.1 Profiles

### **Ruunaa – The enchanting rapids by the border**

One can enjoy the splashes of the Ruunaa rapids by rafting or fishing from its shores. An experienced rafter can enjoy the rapids as self-guided activity, while the inexperienced can get a stunning but safe ride with a guided tour ordered from local service providers. In the evening by the campfire, the excursion can be crowned by eating the freshly caught supplies.

### **Patvinsuo – In the boggy – sandy footsteps of a bear**

From over the heels, one can see the king of the forests, Kontio, without disturbance by human presence. From the nature tower one can admire the spring rhythm of the swamp, the nightless summer and the landscape interspersed with autumn fog. The trip can

be crowned by a dip in the lake from the silky sandy beaches or the shore sauna at Suomunjärvi.

### **Petkeljärvi – Karelian border war history amidst ridges and ponds**

The war history of the area and the Karelian border culture of the village of Möhkö speak to those who are interested in the topic. Furthermore, even on a day trip, one can fully feel part of and connect to the nature, when the perennials flutter and hum, the ponds flicker and the steps goes along the more than 10,000-year-old ridge.

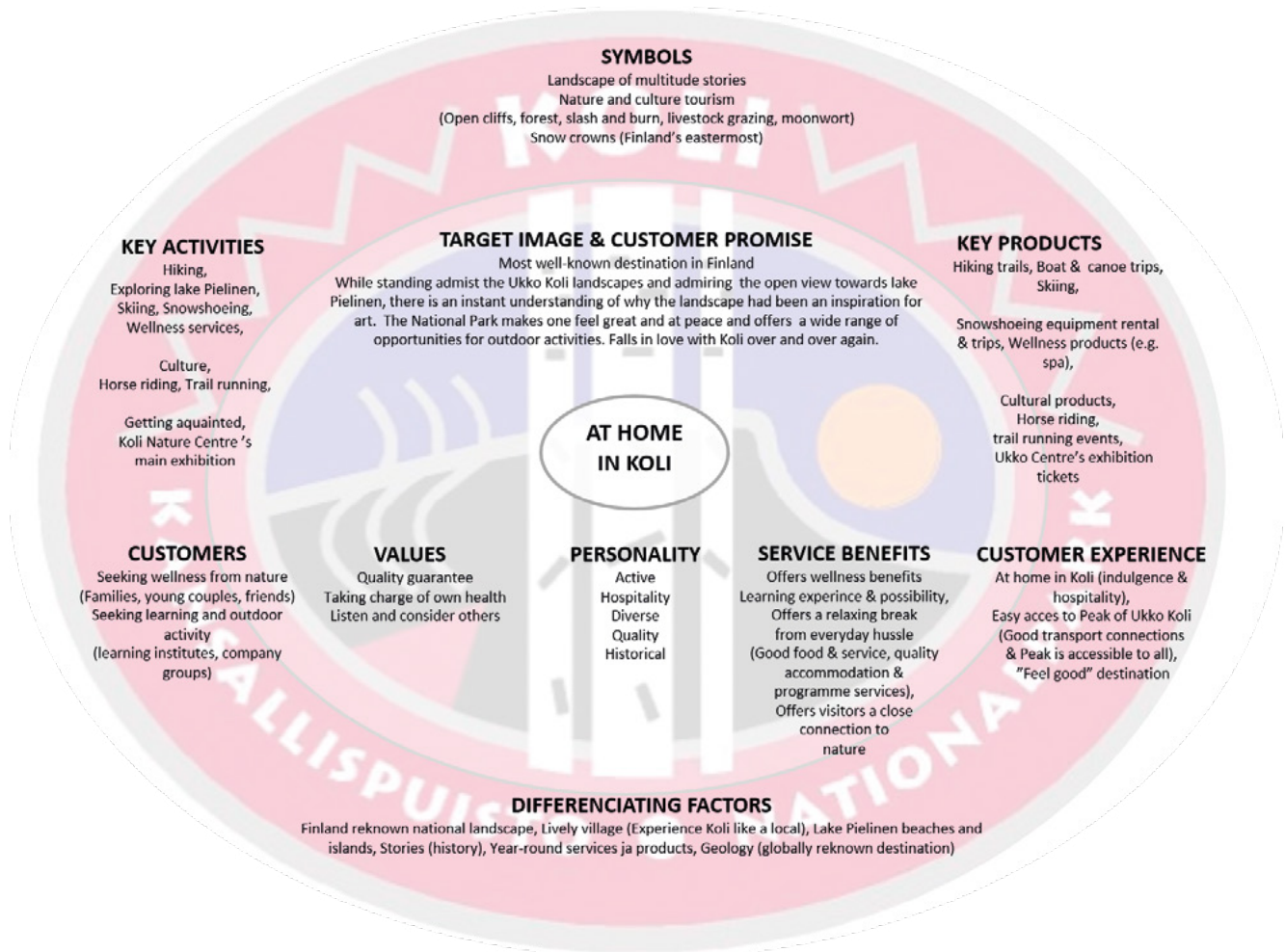
## 5.2.2 Koli's National Park brand 2025

### **Koli National Park 2025 vision – at home in Koli**

Standing on the ancient cliff of Koli and overlooking the national landscape make visitors feel as though they have arrived home. Koli's richness is its unique cultural and natural heritage. The site is a model area for the national park management and sustainable nature tourism, as well as the heart of the entire North Karelia tourist area, where people - from near and far - visit again and again to be refreshed and empowered.

In Koli National Park, actions are implemented in close collaboration with both local and international partners. The natural and cultural experiences and diverse sport opportunities at Koli make it a major attraction in North Karelia. The year-round services are seamlessly combined with the rest of the region's tourist offers, and the National Park has excellent route connections to the entire North Karelia biosphere reserve, with the park's Nature Centre Ukko acting as a guide. Koli National Park cherishes human well-being as part of nature.

## BRAND WHEEL OF KOLI NATIONAL PARK



## WHAT DOES KOLI NATIONAL PARK BRAND WHEEL CONSIST OF?

### CUSTOMERS

The brand wheel customer segments for 2025 reflects on the current situation, which is based on the 2019 visitor survey of Koli National Park and data collected by the Koli Tourist Association.

#### 1. Seeking well-being from nature (families, young couples & friends)

Families, young couples, and groups of friends come to the National Park to spend time and create experiences while moving around together in nature.

Families and groups of friends focus on self-guided nature trips around the park, choosing a suitable day route and appreciating easy-to-reach stop-over rest areas. The opportunity to spend time together, slowness and peace in nature are especially important in the park for these segments.

Young couples come to Koli to enjoy a wide range of nature sports opportunities and high-quality food, accommodation, and wellness services. What is important for them is a successful detachment from everyday life and relaxation in nature. Cultural services are of somewhat of interest.

#### 2. Information-seeking and outdoor activities enthusiasts (study & business groups)

Information-seeking study groups include camp schools, schoolchildren, university groups as well as other study tour visitors. They appreciate customized guidance services and light-guided hiking tours in nature. For them, basic services such as a place to enjoy their own snacks in a peaceful surrounding is important. Business groups are interested in conference services, guided tours both in the Nature Centre and in nature and are ready to buy program services for groups.



## 1. CUSTOMER EXPERIENCE AND DESIGN GUIDELINES

In combining Koli's strengths, the expectations of already existing customer base and current nature tourism trends, the key services can be defined, which also serve as guidelines for the development of Koli's nature tourism. This also shapes the desired customer experience - the ideal customer experience. However, for these themes to enhance customer experience, brainstorming of themes of service development must guide customer communication and service production. Thus, they serve as design guidelines.

### **It is easy to get to the peak – Koli has good transport connections and the peak is accessible by everyone**

- Koli is easily accessible, both by public and private transport
- One can get to Koli either by road or by water (by train to Vuonismaa and by water / in winter along the ice road over Pielinen to Koli):
  - The train-boat connection will be strengthened by better marketing
  - Carpool to be encouraged
  - Public transport (other than carpool) until the Koli village
  - Light traffic route Ahmovaara - Koli & Harivaara intersection- parking lots
- Koli's main attraction, i.e. the national landscape opening from the top of Ukko-Koli, is easy to reach. One cannot get to the top completely unhindered, but Koli's main attraction is within reach of most tourists.
- Independent hikers can easily pre-source information about Koli National Park on the internet and from customer advisors, which makes the planning of their trip smooth and departure and arrival to the site comfortable. The routes are clearly marked on the terrain and the service structures are well maintained, such that hiking is straightforward and respects nature environments.
- An international traveller can easily find information about Koli on the internet and is able to plan the trip in advance based on comprehensive and up-to-date information also in English. Information on general issues related to Koli tourism offers, as well as current events for international tourists are easily visible.

- Key routes (huippujen kierros, sataman polku and mäkrän kierros) are made into comprehensive product cards that contain information on route-related services such as meals, guided tours, equipment rental and transportation. Product cards make it easier for the customer to choose a route of interest.
- Some of the day routes are also suitable for small children and seniors (family path near the substation)
- A weekly program for different seasons /holiday weeks (Koli Tourist Association) is compiled from Koli's service offers. Like the Koli excursion week program, including suggestions for current events and activities, but also excursion destinations and routes within the national park. The weekly program provides tips for both self-guided tour of the area, but also suggests available services such as transportation, dining offers, and guided tours. The spring season lacks activities, as it becomes more difficult to navigate the terrains of the sites during this time when snow is melting.

*The target is all visitor segments in the area.*

### **At home in Koli – small talk and hospitality**

- Karelian hospitality is felt in Koli. Koli residents warmly welcome visitors to get acquainted with the nature of Koli as well as its diverse, year-round and local services.
- Locality is visible in Koli. At Koli, tourism know-how is based on local knowledge and this is clearly visible on the offered range of products (food, services, events, souvenirs, and accommodation).
- Karelian hospitality is part of Koli. When moving around the village of Koli, stopping at a restaurant or hiking, Koli residents and tourism workers are always happy to help.
- Koli's services are built around a homely atmosphere and hospitality.
- Nature Centre Ukko's café Vakka is a peaceful oasis where one can enjoy local snacks and delicacies (customers listen to stories and get information of product development). In the stable, one can also enjoy own packed lunch, sit on the couch to relax and marvel at the world going by.
- In the communication of the National Park, productization emphasizes the homeliness of Koli and the living village with its local inhabitants, in accordance with the brand guidelines, as a

differentiating force of Koli (reflected in the events of the National Park, for example)

*The target is all visitor segments in the area.*

### **Koli a good place to be - nature impacts us all**

- Koli's phrase is feel good - you can feel it when you arrive in the village of Koli, when you step onto a forest path, when you silently wonder about the life of the forest or when you sit by the open lake and pristine landscapes
- The Nature Centre's main exhibition tells about the effects of nature's health and well-being
- The well-being aspect is also highlighted in the production of hiking routes' content
- Guided excursions of the park's nature senses, authentic nature experiences and relaxing in nature are key
- Natural experiences in the National Park such as mushroom picking, berry picking and fishing (as program services and on self-guided) are important way for both the local population, and visitors to relax.
- Nature trail signs tell interesting information and stories about Koli. If one wishes, he/she can also deepen own experiences at the exhibition about Koli National Park in Koli Nature Centre Ukko.
- Volunteering for nature protection and management actions also impacts positively on one's health! In the National Park one can take part in shepherd's weeks or even pop-up mowing campaigns. By choosing responsible hiking principles, the traveller carries his or her card in the pile and ensures that clean and comfortable hiking environments are preserved also for future visits.
- The atmosphere is familiar and friendly in the Koli village
- The communication of the National Park emphasizes the effects of (responsible) nature mobility and the well-being of local services, both on the visitor, the workers and on nature itself. Intermittent nature & wellness communication campaigns.

*Target segment is those seeking well-being activities and services*

#### **Desired customer experience:**

**It is easy to get to the peak of Koli.** Comprehensive and clear information about Koli is available pre-travel. Customer travel plan to the site is easy; choosing what suits one's wishes and suitable accommodation. Versatile routes and services strengthen the customer's communicated image of **homeliness and well-being in Koli**. The experience is deepened by **local knowledge and stories**. At Koli, the visitor's **relationship with nature is closer** and this is how a person in natural environments of Koli **falls in love with Koli repeatedly**.

## **2. MAIN ACTIVITIES – ALL YEAR ROUND KOLI**

The top activities are formed based on the strengths of the nature tourism site and the target customer segment. This way the quality of the services and the profile of the area also stands out from other destinations. Despite the top activities, it would be good to have other recreational opportunities in the wider tourist area to diversify the offer. However, in terms of customer satisfaction and brand reinforcement, it is important to focus on cutting-edge activities in communications, productization and the development of service structures.

Koli's main activities are:

### **Hiking**

Getting to know the routes of Koli National Park in advance (online /Nature Centre) and navigating the trails should be smooth. Easy-to-find and comprehensive information on the internet, clear markings of nature trails in the terrain and well-maintained service structures enables successful self-guided hiking in the National Park.

### **Activities on lake pielinen- summer & winter**

In summer, there is more demand than supply for activities in Pielinen and its islands. From Midsummer to the beginning of August, it is possible to go on a trip

to Hiekkasaari by boat or canoeing across lake Pielinen. Boat trips have been more popular over the years and would hence be necessary to arrange more boat trips. Fishing is also increasing on the program service side. Hence there is additional demand for rental equipment among self-guided, and services targeted at paddlers (e.g. island camping sites and a service points) should be advertised and made more visible.

Ice skating on lake Pielinen has grown in popularity as a winter activity, and skiing in the nearby islands of Koli has been a favoured sport by self-guided hikers in the winter. There would be a demand for winter fishing products, especially on the side of international tourism. Dog sledding is available at Merilänranta. When the weather allows kick sledding (with non-slip) on the ice of lake Pielinen, it could be highlighted seasonally.

### **Down-hill skiing**

Downhill skiing is a popular winter pastime in Koli National Park, and Koli is much closer from the capital city Helsinki, than the ski resorts of Lapland. Especially in Koli National Park, downhill skiing opens the scenery of lake Pielinen.

### **Snowshoeing**

Snowshoeing is already a well-known and popular form of winter sports in Koli. Snowshoes can be rented from the Koli Nature Centre Ukko, and there are marked routes at the peak, and from the peak to the harbour and the village. The marking of these and new routes (e.g. Uuro & Mäkrä) in the future should be done so that snowshoeing remains one of Koli's top activities. In particular, the environmental friendliness of snowshoeing (in winter, the snow cover protects the forest floor) and the opportunities to move more freely in the National Park than in summer are strengths of the hobby and should be highlighted even more strongly.

### **Wellness services**

When hiking in the National Park, program services and the services and facilities of the Nature Centre and Break Sokos hotel, with no exception of the effects of nature's well-being are clearly highlighted. Services and wellness products are developed around authentic nature experiences, well-being and living culture. For example, berry picking, mushroom picking and fishing are interesting and authentic expe-

riences that can be offered to international travellers as part of the program services.

### **Culture**

Koli has been of interest to cultural tourists for over a hundred years and in many places across Koli, one can still feel the vibrance of the cultural history. The living culture in the area is represented by the artists living in Koli, the artist residency under the Koli cultural society, and live culture events such as e.g. Koli jazz and ruskablues. The history of Koli can be explored both in the village of Koli and in the vicinity of the peak in the Nature Centre. The Nature Centre in Ukko under Metsähallitus is responsible for the museum activities of Koli National Park, and in the village, Koli kotiseutuyhdistys (Koli village association in English) is responsible for the Koli regional museum. Depending on the funding, the Nature Centre's main exhibition will be updated from 2022 to 2023. More events will take place to the Nature Centre, which will be implemented in cooperation with the Koli cultural society. The purpose of the cultural events is to enrich Koli's year-round cultural service offering and thus become a significant part of the living village of Koli.

### **Horse riding**

In Koli National Park one can go horseback riding on herdsman's excursions. Located in the heart of the National Park, the stables offer year-round horseback riding and accommodation.

### **Trail running**

The Marathon of Dangers has achieved a classic reputation among Finnish trail running events. In this, amateur runners arrive on the Koli trails in hopes of challenging training and exploring the stunning scenery. Koli's unique trail running opportunities should be advertised for those who require demanding training or challenges.

### **Getting acquainted with the main exhibition of the Koli Nature Center Ukko**

The experimental main exhibition of the Ukko Nature Center, to be renovated by 2023, invites one to get acquainted with the history and experience the nature of the National Park irrespective of the weather.

### 3. KEY PRODUCTS AND TRAILS

Great trails allow one to engage into top activities. The productization of routes is a long-term task and under increasing visitor pressure requires versatile planning. The target status of Koli's route product offering for 2025 is presented below, after which the target status should be updated to meet current needs.

The development of the routes presented below begun in 2019. In addition, communication plays a major role in the implementation of the necessary developments. Communication (e.g. luontoon.fi) must be renewed for several routes when new nature trails are completed. Routes require constant maintenance, which should be considered when planning routes. Topical maintenance measures are presented as part of the nature tourism plan's action plan.

### 4. DIFFERENTIATING FACTORS

Based on Koli's strengths, characteristics and vision, Finland's most famous national landscape, the living village of Koli, Pielinen and its islands, as well as Koli's services were selected as the various key factors for the region's future.

**The landscape that opens from the peak of Koli** to Pielinen and the eastern hill is the best known of Finland's 27 national landscapes. Many travel to Koli to see this landscape and relax by it.

**Koli slash and burn agriculture** has been practiced in Koli for almost three hundred years ago and thus the village is still located in the heart of the National Park. The village of Koli symbolizes year-round nature of activities and thus, with its services, is also the basis for four seasons of nature and cultural tourism.

**An excursion to Pielinen and its islands** almost makes time stop. A boat trip to Hiekkasaari or paddling along Pielinen shores opens a new perspective on Koli. The popularity of boat trips is rapidly growing, and this would result in a demand for silent waters tourism. Skilled paddlers can hike overnight on the islands, but it is good for a beginner to explore the water from the vicinity of the shores, as the open waters of Pielinen to wind is equivalent to open sea kayaking. By 2025, Pielinen will offer a diverse selection of boat trips, more rental kayaks, canoeing-related program services, and information on the services and rentals are easily obtained.

**The cliffs of Koli, slash and burn heritage and the living village** merge stories from the past and the present. Nature and traditions live in the stories, and

#### Koli National Park hiking route service offering 2025 – moving in nature

##### Short hikes

Day trips to the peak of Koli and surrounding environments

1–3 h/ visitor & family:

- The Trail of The Tops
- The Kolinuuron Kierros Nature Trail
- Harbour trail
- Kasken kierros Nature Trail
- Koli Summer Café Tour

2–5 h/ half day hike:

- Mäkrän polku Trail
- The Herajärvi Trail
- Shepard's Trail

##### Wandering through danger

Overnight hikes

- 1–3-night hiking route
- Herajärven route towards north 35 km
- 1–3-night hiking route
- Herajärven route towards south 30 km
- 3–5-night hiking route
- Herajärven longer route kierros 61 km

##### Snowshoeing in nature

Marked routes:

- The Trail of The Tops
- To the harbour
- To the village
- Uuron icefall
- Mäkrä

##### Hiking across the scenery

- Ukko-Koli ski track
- Scenery hiking trail (March)
- Hiking and skating on lake Pielinen

##### Other activities

- Trail runners dream trail
- Day kayaking along the shores of Pielinen & more demanding kayaking to Iso Korppi or southwards to sand island for an overnight trip
- Storytelling route (story filled day trips (Mäkrän story trail, the Devil's church, Tappi visible from the peak, Paha-Koli & Käräjä stones, inscriptions). A map of these destinations with short stories for visitors
- Walking paths in winter (To the village & harbour, minimi peaks)

through them, the visitor can truly immerse oneself and experience Koli in depth.

**The services of Koli village and the National Park** invite one to **year-round tourism**. Camping areas, rentals and the hotel allow for a variety of tourism and accommodation within the National Park. Ensuring and increasing the current services in the village of Koli will improve customer satisfaction. There is special development in spring and autumn services and events. Adding cultural products, especially in the spring, would be a good addition to the diversification of Koli's nature event services at challenging times.



## **Geology – Koli is a major geological site worldwide**

A short journey for a person,  
a great leap to the cliffs of Koli!

At Koli, a short series of geological developments can be seen in a short distance, from the bedrock of the ancient Archaic continent (over 2,600 million years) to younger rock species, as well as the interface separating them as an ancient rift. Although the ancient eruption is modest in appearance, it represents a major change between the two geological periods. The development series is easily observable on nature trails (Uuro kierros) and is nationally and internationally significant.

## **5. SERVICE BENEFITS & KOLI VALUES**

### **Enhance wellbeing**

- Koli's nature impacts wholly in various ways. Both fitness enthusiasts and those interested in well-being, either looking for alone time or spending time with friends / family.
- The National Park is communicated as the cradle of well-being, both through living culture, self-movement in nature and program services
- The experiences from the National Park, such as mushroom picking, berry picking and fishing, are an important way for both the local people, and visitors to relax.
- Volunteering for nature protection and management actions also impacts positively on one's health! By choosing responsible hiking principles, the traveller carries his or her card in the pile and ensures that clean and comfortable hiking environments are preserved also for the future visits. For example, Koli shepherd weeks in Koli is one way to relax with a friend or family
- Nature Centres disseminates information about the benefits of health and wellness

### **Make possible learning experiences**

- Koli National Park offers an excellent framework for experiential learning. pre-schoolers, school children and learning journey visitors from universities to companies come to Koli nature environment as the best possible environment for learning with service structures in the National Park that support this.

- Nature Centre Ukko's auditorium is one of the most popular meeting places in the province, and by 2025 the renovated main exhibition is a great place to get acquainted with nature and its phenomena in addition to the forest landscapes and ecosystems of the National Park.
- Local entrepreneurs provide program services for campers, learning journey visitors and meeting groups

### **Provide a rejuvenating break from everyday hassles – Koli values (where the visitor experiences come from)**

- Relaxation in nature is crowned by local and high-quality culture, food, services, and accommodation. Get the best quality.
- Sustainably thought and provided services increase the well-being of nature, local people, and visitors. Take responsibility for your well-being.
- One feels at home as the locals are happy to help. Listen and hear others.

### **Brings people closer to nature**

- Responsible nature tourism improves connection to nature thereby increasing the relevance of the trip.
- Moving in nature leaves an emotional imprint on the tourist - awareness of the importance of nature's well-being and one's well-being improves
- Koli Nature Centre Ukko communicates the importance of responsible tourism and litter-free hiking. By doing so, the tourist can return to Koli's nature as diverse and clean as before.

*Visitor loves Koli again and again!*

## **5.3 North Karelia Biosphere Reserve target state to 2025**

The goals of nature tourism for the conservation and hiking areas of the biosphere reserve are classified under five headings. The objectives that specify the goals can be found in Chapter 7 of the Action Plan.

### **1. DISSEMINATION, MARKETING AND COOPERATION**

- Dissemination is done through regional, national, and international networks

- Metsähallitus actively markets the region both locally and nationally
- Content to be communicated is of good quality, up to date and targets the necessary visitor segments
- Regional communication is coherent and coordinated with parks and actors within the camping area
- Information about BR National Parks and the hiking area can be easily found online
- Nature services serve as a source of information on protected and hiking areas for nature tourism actors within the biosphere reserve
- National Parks and the hiking area enhance the value of the area's tourism and are visible in the area
- The biosphere reserve is communicated as a tourist destination for authentic nature experiences
- Dissemination guides visitors on best practices while using the National Parks and hiking areas for recreation

## **2. HIKING TRAILS AND SERVICE STRUCTURES**

- The special features of the areas are displayed on the routes
- The routes serve the target groups in the area.
- The routes support year-round tourism in line with key activities.
- The trail networks of the National Parks and the hiking area link to other recommended attraction sites and developed trail networks in the area
- There are effective parking arrangements across the conservation and hiking areas of the biosphere reserve.
- Promoting accessibility of nature tourism
- The services provided by Metsähallitus (structures & routes) also serve corporate operations
- The structures, routes and services of the protected and hiking areas are safe

## **3. REGIONAL HIKING ADVICE**

### **KOLI NATURE CENTRE UKKO**

#### **– FULL-SERVICE NATURE CENTRE**

- Koli Nature Centre Ukko is a full-service Nature Centre strengthened by partnership activities.
- The Nature Centre is an interesting place to visit all year round, and attracts visitors again and again
- The Nature Centre is a respected partner that actively cooperates with other actors in the area

- For its part, the Nature Centre is building the Koli National Park brand

### **SUOMU NATURE CENTRE, PETKELJÄRVI HIKING & CAMPING CENTRE, RUUNAA HIKING CENTRE**

- Securing the operating conditions of entrepreneurs running the customer service points

## **4. BIOSPHERE RESERVE – A PIONEER IN SUSTAINABLE NATURE TOURISM**

- Tourism to protected and hiking areas do not threaten natural and cultural values
- The conservation values of the National Park are well communicated and visible
- Sustainable tourism is planned in cooperation with tourism actors and locals throughout the North Karelia biosphere reserve
- The biosphere reserve is profiled as a tourist destination whose attraction is based on nature and sustainability
- The health and well-being benefits of nature tourism destinations in the biosphere reserve are known and are part of the region's tourist attraction
- Nature tourism destinations in the biosphere reserve can be accessed in an environmentally friendly way
- The sustainability of structures is guaranteed by allocating resources correctly
- Active involvement of actors in planning
- Enhancing locality & regional economy
- Securing the habitat conditions for native fish species in the Lieksa River

## **5. CREATING BUSINESS OPPORTUNITIES**

- National Parks and hiking area are well-known nature tourism sites in North Karelia
- The biosphere reserve is an attractive destination for international nature tourists
- The nature tourism attraction sites of the biosphere reserve are profiled as sites offering authentic nature experiences
- Diversification of services and consideration of year-round events and happenings
- Consideration of new activities in the planning the use of areas
- Prolonging the overnight stays locally and throughout the biosphere reserve
- Merging individual regions into a larger regional entity

# 6 Sustainability of nature tourism

## 6.1 Principles of sustainable tourism

In 2004, Metsähallitus introduced the principles of sustainable nature tourism in protected areas, through which operations would strengthen the coordination of nature tourism in line with conservation objectives. Metsähallitus' principles for sustainable nature tourism were renewed in 2016 when the name was changed to -principles of sustainable tourism- so that it would be more suitable cultural destinations as well. The earlier used nine principles were condensed into six principles that consider all dimensions of sustainability: ecological, social, cultural, and economic sustainability. The principles are in line with the principles of sustainable tourism of Finland's UNESCO World Heritage Sites (Metsähallitus 2016).

Across protected areas managed by Metsähallitus, sustainable tourism is promoted in cooperation with partners so that they...

1. Support the preservation of the values of the sites and promotes their protection
2. Minimize load on the environment
3. Strengthen locality
4. Promotes the well-being and health effects resulting from use of the sites
5. Promote local economic growth and job creation
6. Communicates the values and services of the area

The six main principles state the guiding principles set for operations (Metsähallitus 2016).

The partner companies of the protected areas of the biosphere area commit to operating in accordance with the principles of sustainable tourism. The co-entrepreneurs who participated in the 2018 business survey of the biosphere reserve (Naumanen 2020) were positive about the principles and considered them feasible. Entrepreneurs rated the success of local actors in implementing the principles as at least good.

## 6.2 Sustainability assessment of nature tourism

The environmental impacts of nature tourism are assessed in Metsähallitus' protected areas using the LAC (Limits of Acceptable Change) method. The method set limits for acceptable change for the metrics being monitored. The indicators selected for monitoring describe the implementation of Metsähallitus principles of sustainable tourism in the region. As with the principles of sustainable tourism, ecological, social, cultural, and economic impacts are considered during the monitoring.

A target is also set for each LAC meter selected for monitoring. If the target value has not been reached by the target year, suitable means are sought to achieve or maintain the desired state. The measurement work on sustainable tourism seeks to utilize as much as possible, the information already collected from regions, visitors, and stakeholders. The instrument panel is part of the monitoring system of the status of protected areas.

The sustainable tourism metrics of Koli National Park have been renewed as part of the biosphere reserve's nature tourism plan, since Koli's visitor pressure and thus the potential environmental impacts are the largest in the region. The renewed LAC metrics for Petkeljärvi and Patvinsuo National Parks and the Ruunaa Hiking Area will be completed after the publication of the nature tourism plan.

Sustainability assessments of nature tourism in the biosphere reserve and in cross-border context are also undertaken by the biosphere reserve through discussion forums, projects and research. These are realised together with regional governance agencies (e.g. Karelia Expert, Tourism associations, Regional Council of North Karelia, City of Joensuu, Metsähallitus), regional actors (e.g. tourism companies), international partners (e.g. from networks of biosphere reserves, Green Belt of Fennoscandia), and through biosphere reserve projects (e.g. cross-border and EU projects).

## 6.3 Current state of Koli National Park's sustainability & target 2025

As part of the plan, the sustainable tourism metrics of Koli National Park were updated. Sustainability assessment and goal setting for this specific site are described in this section by the dimensions of sustainability and the principles of sustainable tourism. The LAC metric table, which describes the current status and the 2025 target status, can be viewed in its entirety in Appendix 1. This chapter also describes targets and trends other than those related to LAC barometers.

### 6.3.1 Ecological sustainability

The aim of sustainable development is the preservation of biological diversity and the functioning of ecosystems, as well as the long-term adaptation of human economic activities towards sustainable use of nature (Ministry of the Environment 2017). In the management and use of protected areas, this means considering the diversity of the environment, carrying capacity and recovery from recreational use. Careful planning, appropriate service structures and effective customer communication aim to reduce the impact of tourism and recreational use in protected areas. Restrictions on movement may also be imposed to protect the species.

Ecological sustainability is reflected in the first two principles of sustainable tourism in Metsähallitus' protected areas.

#### **Principle 1. Support the preservation of values of the sites and promote their protection**

The monitoring of the *Diplazium sibiricum* fern species population along the path and the Natura habitat representativeness indicators of the silicate rocks were introduced in 2019, thus the monitoring of the impact of hiking on the population has only just begun. The aim is that their status must not be impaired by hiking.

The wear and tear of the terrain is monitored through a visitor survey and is reflected in the visitors' opinions of the terrain. In 2019, visitors to Koli National Park (on a scale of 1-5, 1 = very disturbing and 5 = not disturbing at all) averaged the tear and wear at 4.24. Due to the steepness of the terrain, the Koli trails are quite erosive, so the growing visitor pressure

creates a great challenge for the maintenance of the routes now and in the future.

The hiking route areas of impact will be measured once a decision on the required map review is made.

#### **Principle 2. Minimizing the load on the environment**

In 2019, the average given by visitors (on a scale of 1-5, 1 = disturbing very much and 5 = not disturbing at all) for cleanliness (from litter) was 4.4. The target for 2025 is 4.6, so measures are still needed to reach the target. In Koli National Park, litter-free hiking is mainly well implemented, but to foreign visitors, the principle must be communicated more clearly. During 2019, the National Park will invest in the communication of litter-free hiking in the terrain, both at the starting point of day hiking trails and at the rest/stop-over places.

Efforts are being made to reduce firewood consumption, even though visitor numbers are growing. About 170 stacked cubic meters of firewood is currently consumed and the target for 2025 is set at 100 m<sup>3</sup>. The aim is to reduce the consumption of firewood, for example, through better communication on the sustainable use of firewood. The hikers are increasingly making firewood also by recycling frames delivered to the rest areas, which significantly reduces the waste of firewood.

Koli Nature Centre Ukko and Break Sokos hotel Koli's transition from oil heating to geothermal energy in 2019 was a significant investment in reducing the site's and overall destination's carbon footprint. The transition to geothermal means a reduction in oil consumption by about one-tenth annually. Furthermore, the dangerous passage of oil tankers during slippery weather to the upper yard of the Koli Nature Centre Ukko and Break Sokos Koli hotel has almost completely stopped.

Year-roundness strengthens the sustainability of tourism ecologically, socially, and economically. Visual profiling of Koli National Park was launched in 2018 in the Tourism 4.0 project that aims to increase autumn and winter tourism to ease the summer tourist pressure and extend the tourist season. Movement around in the National Park during the snow cover period protects the forest floor from wear and tear, and in addition, winter can be of special interest to travellers seeking peace and quiet, thus promoting their health and well-being. Economically, the local economic impact of tourism would be more evenly distributed throughout the year with better support for the economic well-being of the local community. In

addition, the development and maintenance of snowshoe routes in cooperation with a local entrepreneur, among other things, increases the attractiveness of winter tourism.

### 6.3.2 Social sustainability

Socially sustainable tourism considers the needs of the local community and the tourism industry without endangering the natural environment. The aim is to achieve social equality, by improving the living conditions of local people through economic initiatives, while at the same time taking into consideration the preservation of local culture and values. In social and cultural sustainability, it is essential to guarantee the preservation of the conditions for well-being from one generation to the next (Ministry of the Environment 2017).

The goal of social sustainability also includes the realization of the experiences that tourists seek in the area (Hemmi 2005).

In Koli National Park, social sustainability is reflected in four principles:

#### **Principle 1. Support the preservation of values of the sites and promote their protection**

In the 2019 visitor survey of Koli National Park, the importance of getting to know the cultural heritage as a tourist's motivation for visiting the area received an average of 3.58 on a scale of 1 to 5 (1 = not important at all and 5 = very important). This shows that visiting for the cultural heritage is not the most important recreational motive, but it is much more important in Koli than in any other protected area in the biosphere reserve.

Koli has a long cultural history dating back to the Stone Age. The permanent settlement brought about by slush and burn heritage, and other traditional landscapes significantly enrich the species of the area. Koli maintains the Kask tradition and the fields are cared for by mowing and grazing woodlands and meadows.

Metsähallitus rents the upstairs of Koli Ryynänen, located in the village of Koli, to the artist residency of the Koli cultural society, which further enriches the cultural offer of the area. Koli's cultural history is significant, so nurturing and communicating it is important for the region.

In 2019, the erosion of inscriptions as result of visitors is being monitored and the aim is that their condition does not deteriorate because of tourism. A hand-

rail has been installed in front of the monitoring area to improve the protection of the site and the safety of visitors.

Visitors to Koli National Park consider experiencing nature particularly important (average 4.77 on a scale of 1-5) when entering the National Park. This indicator is already almost at the 2025 target level (4.8), so the aim is to keep informing about Koli's natural values at current state. For the coming years, there are plans to raise conservation work in the National Park better during communication. This will enhance visitors' interest in natural values. Koli is one of the top destinations in the Tourism 4.0 project with Ruunaa, so nature tourism in the area is actively developed.

Visitors rated Koli National Park's services as average between average and fairly good. The current average of 3.77 (on a scale of 1-5, 1 = very bad and 5 = very good) is far from the target of 4.5 for 2025, meaning more work needs to be done on this. The route marking renovation of the National Park started in the summer of 2019 and will continue in the summer of 2020. The Prime Minister's campfire site has been completely renovated, and the old campfire sites in Pitkälampi and Havukankorvi have been replaced with dining shelters.

The route classification has been done for the National Parks and hiking area of the biosphere reserve. Solar panels have been installed in Koli Metsähallitus' electric huts, the sites have been renovated and the occupancy rate of the sheds has increased significantly. The objectives of the previous nature tourism plan for 2010 (Laukkanen 2011) have been well achieved (Appendix 3), but there is still lots of work to be done. More significant repairs to the National Park's service structures are planned for the coming years, thus it is hoped that improvements will also be promised in the visitors' experiences.

The number of visits is monitored at the Koli Nature Centre in Ukko monthly. In 2019, about 99,500 visits were made to the nature centre, which is an all-time record. Koli Nature Centre Ukko operates as the leading Nature Centre in the Eastern Finland park area and answers customer inquiries from the entire park area. In addition, Ukko makes online communications and produces materials that serve visitors. In 2014, the Nature Centre's main exhibition was restructured and the short film *Mustarinta* produced for the centre. In 2018, Koli shop *Retkitupa* moved to the premises of Koli Nature Centre Ukko under rental agreement, which significantly diversified the services of the Nature Centre and deepened cooperation with the entre-



preneur. Metsähallitus has also purchased additional services from the company for the centre's camping advice. As the number of visits increases, service level requirements will also increase. Koli Nature Centre Ukko plans to incorporate more exhibitions in the next few years and, among other things, renew the information desk. The purpose of the updated Nature Centre is to arouse visitors' curiosity about moving and learning in nature, as well as to make the facilities at bay for those who need a break.

### **Principle 3. Strengthen locality**

National Parks are important recreational areas for locals. In 2019, about 39,100 visits by local visitors was counted in Koli National Park. The goal by 2025 is to increase the number of locals to 52,000 visits. It is important to consider the needs of residents in the operation and communication of the National Park.

### **Principle 4. Promote well-being and health effects resulting from use of the sites**

Social sustainability in Koli National Park under this principle is examined from several different perspectives. These elements tell how a National Park contributes to the well-being of the visitors. It is therefore marked in the National Park brand as one of the park's service tasks. The visitor health index of 4.22 (on a scale of 1-5, 1 = strongly disagree and 5 = strongly agree) indicates that visitors somewhat agree that their social, mental, and physical well-being has increased during their visit to the National Park.

According to the 2019 visitor survey, 14 % of visitors are local, thus the area is also important for the well-being of nearby residents. The National Park is used mainly for hiking, but also for skiing. Outside the National Park, the 30-kilometer extension of the Herajärvi southwards has been popular with hikers. Attention must be paid to the maintenance of the trail and routes such that visitors can move safely in the National Park also in the future.

Service structures in poor condition (14 %) and boardwalks (16 %) will be repaired in the park in the coming years. The goal for 2025 is to get all the service structures and boardwalks of Koli National Park in order. This will have an indirect effect on the well-being of visitors.

The number of visits to Koli National Park has been increasing in recent years, although the number of visits decreased slightly in 2019 compared to the all-time

high 2017 during Finland's 100th anniversary. In 2019, there were about 201,800 visits to the park area. The target for 2025 is 250,000 visits. If the number of visits surpasses the hoped values, the welfare effects of the park on visitors are likely to diminish as well. This is monitored by visitors' assessment on impacts caused by other visitors and the number of visits. According to the 2019 visitor survey, an excessive number of visits caused relatively little inconvenience to visitors. At the same time, the behaviour of some visitors caused disturbance to other visitors using same environments.

### **Principle 6. Communicate the values and services of the area**

The communication of site values and services sustainability communication is measured by several indicators, which include various satisfaction indices, visitors' assessments of the fulfilment of pre-expectations and visits to the National Park's Luontoon.fi website.

The visitor satisfaction index of 4.08 (on a scale of 1-5, 1 = very poor and 5 = very good) for Koli National Park indicates that, on average, visitors feel that the park's service and service structures are quite good. According to a 2018 business survey of the biosphere reserve, Metsähallitus' services are, in the opinion of entrepreneurs, average or fairly good (average 3.6). The study also found that entrepreneurs estimate that sustainability is implemented fairly well in their own company. Visitors to Koli Nature Centre Ukko are currently quite satisfied (average 4.0) with service offers. The role of the Nature Centre as a meeting and event venue has grown significantly in recent years. It is hoped that the 2025 target (4.5) will be reached through the renovation of the Nature Centre.

Visitors' expectations of the National Park currently materialize quite well on average (average 4.45). The branding of the National Park and the subsequent measures in line with the profile of the National Park are hoped to further meet the visitors' expectations. Currently, the Luontoon.fi website is the most important communication channel for visitors to Koli National Park, and about a third of visitors use it. Metsähallitus has been well involved in the local and regional media, and in 2016 Metsähallitus received the Antti provincial award for regional events dissemination.

Local communication is carried out in co-operation with entrepreneurs of the area, the tourism association, and the joint marketing organization Karelia Expert Oy. Communication still needs developing, harmonization and more intensification of joint

**Table 6. Summary of the overall income and employment effects of Koli National Park visitors' spending**

Annual visits (2019)	201 800
Impact of visitor spending on the regional economy (2019)	19 500 000 €
Visitor impact on employment (2019)	150 person years
Revenue impact, whereby the National Park is the main target	9 300 000 €
Employment impact, whereby the National Park is the main target	72 person years

communication through strengthened networking. Metsähallitus' co-operation partners are already better displayed on the Luontoon.fi website with the renewal of the website.

### 6.3.3 Economic sustainability

Financial sustainability is growth and balance of content and quality, which is not based on long-term indebtedness or the destruction of environments (Ministry of the Environment 2017). Income to the area improves the livelihoods of the local population and thus economic sustainability is also intricately linked to social sustainability.

#### Principle 5. Promote local economic growth and job creation

The number of visits to Koli National Park and, consequently, the local economic effects of the National Park have increased. The services of the National Park and its Nature Centre aim to promote the positive development of the local economy and employment.

The local economic impacts of Finnish National Parks and Hiking Areas are calculated annually using a method developed by Metsähallitus and the Finnish Forest Research Institute (Metsähallitus 2019a). These calculations describe the cash flows and related jobs generated by the visitor spending by protected area visitors.

Based on the number of visits in 2019, the total income impact by visitor spending to Koli National Park was approximately EUR 19.5 million and the employment effects were approximately 150 person-years.

#### Principle 6. Communicates the values and services of the area

Economic sustainability can be promoted by raising the profile of the region and closer cooperation with entrepreneurs. Metsähallitus strives to enter into a cooperation agreement with all companies that use the service structures of National Parks or other protected areas. The current number of agreements with Metsähallitus' partners in Koli National Park or its vicinity is 34.

Metsähallitus has successfully entered into agreements with new entrepreneurs in the region and deepened the cooperation of existing partnerships. The partner entrepreneurs are more visible on the renewed Luontoon.fi website, and during the biannual entrepreneur meetings, the entrepreneurs and Metsähallitus' local representative of nature services plan their activities and review the functioning of the cooperation. Entrepreneurs have wished for more training, which is planned in cooperation with entrepreneurs. In addition, the summer information provided by Metsähallitus to Koli's summer employees introduces new employees of Metsähallitus and entrepreneurs to the actors of the National Park and the principles guiding the National Park's operations.

The success of the cooperation is also reflected in the increased services of entrepreneurs in the National Park area. The services of Alamaja in the Port of Koli, Mattila (Kolin Keidas Oy) and Break Sokos hotel Koli, among others, have increased significantly. In addition, right next to the National Park, in Kolin Ryyinänen, accommodation, restaurant and event services has grown considerably and diversified.

In addition, Metsähallitus is active in Koli tourist area operations. As a member of the local travel as-

sociation Koli ry, Metsähallitus' Nature Services plans to develop the area in cooperation with the members of the association. In addition, the municipalities in the neighbouring area, the North Karelia ELY-Centre, clubs in the area and other actors are invited to participate in the planning processes of the National Park, and Metsähallitus reciprocally participates in other planning processes in the neighbouring areas. An important cooperation group for the responsible development of the region is the Koli coordinated group, whereby Metsähallitus develops the sustainable development of the Koli's big picture 2050 project, in cooperation with the city of Lieksa, the Municipality of Juuka, ELY-Centre, the Regional Council of North Karelia, and the Finnish Association for Nature Conservation.

The development of a sustainable tourism monitoring metric in connection with this nature tourism plan and on the luontoon.fi website of the National Park will be, among other things, communicated to stakeholders.

## 6.4 Annual sustainability monitoring

The implementation of sustainable tourism is monitored annually with the selected indicators, as part of the monitoring of the status of protected areas. Metsähallitus' nature services is responsible for monitoring.

## 7 Action plan

In the coming years, nature tourism in the North Karelia biosphere reserve will focus on increasing and communicating the region's sustainable service offering. The development and communication of services takes place in close cooperation with actors in the region. The accessibility of the sites, the development of a route network connecting the area's nature and cultural tourism attraction sites, and the rehabilitation of service structures are an essential part strengthening the biosphere reserve's nature tourism. The development of nature tourism is based on cooperation across the entire region.

In recent years, Metsähallitus has spent an average of approximately EUR 1.2 million annually in organizing public services for the Koli, Patvinsuo and Petkeljärvi National Parks and the Ruunaa Hiking Area. The task includes planning the use of camping in the areas, service productization, customer service development and improving of communication. About 35 % of the funds are budgeted by the Ministry of the Environment. This level has been insufficient for the maintenance of basic services, not to mention replacement investments. The Ministry of Agriculture and Forestry's financial contribution (approximately 20 %) has been allocated mainly to the management of the Ruunaa camping area. Revenues has signifi-

cantly accounted as part of the operations and maintenance costs of the Koli Nature Centre Ukko and the entire National park properties.

Various additional funding has been useful both for the management of the support structures' repairs and for the monitoring and planning of recreation. These additional funding have been received from both the state supplementary budget and the ENI CBC SUPER project. In 2020–2021, the Ministry of the Environment's future investment funding will enable more investments for the sites. Project-based funding will be needed in the near future for the necessary development of tourism, when considering the Koli's big picture 2050.

The objectives of the action plan have been set for 2025, and the measures planned to be executed in the coming years. The measures listed in the action plan are color-coded according to the area of responsibility (grey = Metsähallitus, green = Metsähallitus and / or its cooperation network), and by resources (yellow = project funding and grey = Metsähallitus core funding). In addition, measures framed in red have the highest priority level. The progress of the action plan will be reviewed annually during the meetings of the cooperation group, where it will also be possible to update the measures.

# Koli biosphere action plan 2020–2025

## I. COMMUNICATION, MARKETING AND COOPERATION

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
Communication is done regionally, nationally and internationally in cooperation with necessary actors. The three National Parks and the Hiking Area in the region are communicated in a way that they are part of a larger nature tourism entity of North Karelia Biosphere Reserve, yet each attraction site stands out due to own strengths. Biosphere Reserve/ ELY-Centre	Forums by the Biosphere Reserve: Biosphere Reserve Steering Group and working group meetings	Continuous	Metsähallitus & companies
	Metsähallitus' visual profiling supports the regional actors' actions	2020	Tourism 4.0, Metsähallitus
	International networking is carried out in cooperation with Karelia Expert (e.g. supplier visits)	Continuous	Metsähallitus & Karelia Expert Destination-project
Metsähallitus actively informs about the regions both locally and nationwide. When informing about the regions, tourism cooperation partners are also visible	The cooperation partners are even more visible on the Luontoon.fi website, as well as the Koli Nature Centre in Ukko. On FB, customer communication of partner events within the National Park.	Continuous	Metsähallitus
	Entrepreneurs at customer service points within the park can update the Facebook pages of the National Park and Hiking Area themselves.	Continuous	Companies
	Utilization of friendship associations in a social media channels (e.g. Patvinsuo)	Continuous	Friendship Associations
The communication material is high-quality, up-to-date and reaches the intended target groups	Updating the electronic communication materials	2020	Metsähallitus
	Brochures/tear map from Koli National Park	2020	Metsähallitus (& companies) FGB-project
	Brochure of Herajärven kierros trail	–2025	Municipality & Metsähallitus, project works
	Clarifying customer segments suitable for the sites' profiles, and communicating to those to ensure customer satisfaction: – Koli's brand – Visual profiling:	Realised in 2019 2020	ENI SUPER-project/ Metsähallitus, companies & Koli ry Tourism 4.0/ Metsähallitus
	Metsähallitus internal communication: Ruunaa Hiking Area	Continuous	Metsähallitus
Local communication is mutual and coordinated between parks, and with actors across the camping area.	Metsähallitus' active participation in Koli ry's marketing	Continuous	Metsähallitus, Koli tourism association
	Metsähallitus' participation in Karelia Expert's North Karelia sustainable development workshops and morning coffee meetings	Continuous	Metsähallitus & Karelia Expert
	The hiking and Nature Centres within the biosphere reserve actively promote each other's events and services. Distribution of key brochures & event posters to camping information points across the area.	Continuous	Metsähallitus & companies



Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
	Koli: Increasing co-operation, e.g. in the development of seasonal theme weeks and the harmonization of those with related marketing	Continuous	Tourism association & companies
	Koli: The unified communication of the area supports the National Park brand. The brand is designed in cooperation with Koli NP's core entrepreneurs and actors and communicated in a unified manner	Continuous	Tourism association & all Koli service providers
Information on National Parks and hiking areas can be easily accessed online. Development of nature services' communication, versatile and visible	Luontoon.fi – pages updated	2019–2020	Metsähallitus
	Luontoon.fi & Instagram-page use for making visible actions and provisions across the BR	Continuous	Metsähallitus
	Customer experiences of hiking and camping areas are utilized to achieve visibility: - The customer is actively encouraged to share experiences on social media. The content produced by customers is utilized in marketing and the service development	Continuous	Metsähallitus
	Redistribution of nature photographers' images and videos taken from the area e.g. in FB and Instagram and blog publications (e.g. exploiting the growing popularity of autumn nature photography to increase the attractiveness of autumn tourism)	Continuous	Metsähallitus
	There is also visibility about the services and events of entrepreneurs for international visitors: -Increasing customer communication in English about available services by regional entrepreneurs	Continuous	Companies
Nature services serve as a source of information for tourism operators across the Biosphere Reserve nature conservation and hiking areas. Tourism partners have up-to-date information to support communication  Koli National Park is prominently displayed on the area's electronic tourism portals.	Annual meetings with contract companies.	Continuous	Metsähallitus
	Actively informing regional entrepreneurs on the region: In completing the communication guide plan, the opening discussion with companies on the content to be raised.  Training and theme days when studies, etc. are completed	Continuous	Metsähallitus
	The organization of seasonal workers information at the beginning of the summer continues in Koli	Continuous	Metsähallitus
	Regular electronic newsletters to partners on current issues across the areas, such as major renovations and demolition of service structures	Continuous / yearly companies' feedback	Metsähallitus
	Ensuring the visibility of Koli National Park on sites that share tourist information in the area.	Continuous	Metsähallitus
	Visibility of Koli National Park on the Wellbeing Karelia site	Finalised in 2019	Metsähallitus & Wellbeing Karelia-group

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
The National Parks and hiking area attract significant added value to the area's tourism and are hence visible. The National Parks and the hiking area are clearly visible at the partners' premises.	Conservation work and biodiversity are clearly communicated externally in social media (Karelian old growth forests and traditional landscapes and environments)	Continuous	Metsähallitus
	Koli National Park mini brochure for Break Sokos Hotel Koli	2020	Metsähallitus, Break Sokos Hotel Koli
	Increasing the visibility of National Parks and hiking areas on the premises of partner entrepreneurs - "Sizes of National Parks in companies" (roll up, poster, etc.)	–2025	Metsähallitus & companies, business ventures
The Biosphere Reserve is praised as a tourist destination for authentic nature experiences	Considering new winter products & real experiences in visual profiling	2020	Tourism 4.0/ Metsähallitus
	Used as selling points for the Tourist Area in the Central European market (nature, space, silence, culture & products around these themes)	Continuous	Karelia Expert, tourism organizations, companies
Communication guides the behaviour of visitors while in conservation and hiking areas. Visitors understand and follow the rules for protected areas. Communication guides the movement of visitors in the area, prevents conflicts and ensures sustainability of tourism.	Info boards guide visitors on litter-free hiking and benefits: E.g. communication on rental villa	Continuous	Metsähallitus
	Koli: – Information on the use of alternative parking spaces – Information about snow load situations	Continuous	Metsähallitus
	Clearer visibility of sustainable nature tourism in communication materials	Continuous	Metsähallitus, tourism association, companies

## II. HIKING ROUTES AND SERVICE STRUCTURES

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
The special features of the areas are incorporated in the routes. The routes are attractive and rewarding in content. Each route has its own theme and story. The routes present the characteristics of the area according to the profile guide, telling about the natural environments, local traditions, people, events, stories, history and the present day.	Productization of Koli routes in accordance with the spirit of the furnished brand. Route signs highlight the stories and conservation values of the area	2020	Metsähallitus, Tourism 4.0
	Enhancing needed services and the less used services development rethought	Continuous	Metsähallitus
The routes serve the target groups of the area. Route development support peak activities according to the profile of the area.	Route development and productization is done with customer experience and the expertise of entrepreneurs in mind	Continuous	Metsähallitus, ENI-SUPER-project
The routes support year-round tourism according to main activities.	Marked snowshoeing routes in Koli	2020	ENI/ SUPER-project, Metsähallitus
	Development of hiking trails	Continuous	Lieksa city

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
The trail networks of the National Parks and the hiking area are linked to other popular and trail networks being developed in the area. The routes along terrain are clearly marked, both for the route and for the transition route. The information obtained in advance from the route is comprehensive and easy to find. The map markings correspond to the markings on the terrain.	Koli trail mapping-project	2019–	Koli tourism association
	Strengthening cycling routes of Koli and Juuka regions. Juuka municipality route survey project.	2019–	Juuka municipality, Koli tourism association
	Ruunaa as part of Karhunpolku	Continuous	Lieksa city
	Patvinsuo as part of Karhunpolku and Susitaival	Continuous	Lieksa city, Ilomantsi city
	Petkeljärvi as part of Susitaival and Pogostan Kierros	Continuous	Ilomantsi city
	Ensuring the quality of actions in Koli	–2025	Koli tourism association
The Biosphere Reserve has protected parking and hiking facilities with well-functioning parking arrangements. Koli National Park parking area development.	In co-operation with the City of Lieksa and other actors, the parking space will be increased and the necessary light traffic connections to the scenery lift and the park's routes will be developed.	Continuous	Metsähallitus, Lieksa city, Koli tourism association
	P1 & P2 space arrangements to increase parking spaces	Finalised in 2019	Metsähallitus
	Alternative parking spaces and shuttle bus in Koli are clearly communicated	Continuous	Metsähallitus, Koli tourism association, PKO
Developing accessibility for nature tourism	Especially Ruunaa & Petkeljärvi accessibility is reassessed and necessary developments made and communicated	Continuous	Metsähallitus, Business ventures
The services provided by Metsähallitus (structures & routes) also serve businesses	The fireplace of the old sauna in Koli NP. HKS confirmation letter: to be developed as a natural learning environment	–2025	Business venture/ Metsähallitus
	Involving entrepreneurs in design process	Continuous	Metsähallitus, companies
The structures, routes and services of the protected and hiking areas are safe. Customer safety is taken seriously in the area, and this is enhanced by establishing active co-operation with area operators and emergency services.	Safety and rescue plans are kept up to date. Service equipment is also kept in order.	Continuous	Metsähallitus
	Ensure that the guidance along the terrain is functional and corresponds to the electronic and printed material	Continuous	Metsähallitus
	Arranging safety training for the staff of protected camping areas and co-operating entrepreneurs	Continuous	Metsähallitus
	Keep bridge inspections up to date	Continuous	Metsähallitus
	Involve entrepreneurs in the area in the maintenance of some commonly used service structures (e.g. opening of the Koli Prime Minister's campfire site in winter)	Continuous	Metsähallitus, companies

### III. REGIONAL HIKING ADVICE

#### KOLI NATURE CENTRE UKKO – NATURE CENTRE SERVICES

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
<p>Koli Nature Centre Ukko is a full-service Nature Centre that strengthens partners' activities.</p> <p>The Nature Centre acts as a guidance centre for the Biosphere Reserve, providing customers and other tourism operators in the area with information on the conservation values, special features, services and recreational opportunities of the parks and hiking area.</p>	<p>The upcoming excursion exhibition at the Koli Nature Centre in Ukko presents the nature tourism destinations managed by Metsähallitus in the entire Biosphere Reserve and their values</p>	2020–2021	Metsähallitus, Business ventures
	<p>Clarifying the basic tasks of the Nature Centre:</p> <p>The Nature Centre serves as a guidance centre for nature attractions in the Biosphere Reserve (and more broadly as the Eastern Finland Park Area).</p> <p>The staff of the Nature Centre provides only services related to their core mission; other services are directed to partners.</p>	Continuous	Metsähallitus
	<p>The nature centre's building technology is updated (plumbing, air conditioning, doors, etc.)</p> <p>Coating wooden interior stairs</p> <p>Replacing of wooden doors</p> <p>Conversion of glass roofs into sheet metal roofs and renovation of the supporting columns of the roofs.</p> <p>Repair of air conditioners.</p> <p>Replacement of heat glass elements as needed.</p> <p>Oblique glass wall alteration work.</p> <p>Renovation of hot water pipes.</p> <p>Underfloor heating repair / adjustment work.</p> <p>Renovation of the lighting control system.</p>	–2025	Metsähallitus, Business ventures
<p>The Nature Centre is an inviting place to visit all year round and attracts visits again and again.</p> <p>The activities and content of the Nature Centre are developed in a customer-oriented manner, taking into account also families with children.</p>	<p>The Nature Centre provides expertise for the National Parks and the hiking area and receives feedback from both entrepreneurs and customers about the park:</p> <ul style="list-style-type: none"> <li>– The Nature Centre encourages customers to give feedback on the services they use.</li> </ul>	Continuous	Metsähallitus
	<p>Koli Nature Centre Ukko and the preparation of an info guide plan for the top sites of the biosphere reserve.</p> <p>The info guide plan directs MH customer to support partnership activities within the Nature Centre (Clear nature messages - several actors).</p>	2020	Metsähallitus
	<p>Development of the operation concept for the Nature Centre (customers, partners, products):</p> <ul style="list-style-type: none"> <li>– Renovation of the information desk</li> <li>– Updating the main exhibition area</li> <li>– Outsourcing of art exhibition activities</li> <li>– Children's exhibition and play corner</li> <li>– For Café Vakka: outsourcing of operations</li> <li>– Auditorium rental</li> <li>– Meeting services: through partnership catering activities</li> <li>– The staff represent Karelian hospitality</li> </ul>	–2025	Metsähallitus, Business ventures

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
The Nature Centre is a respected partner that actively cooperates on a practical level with other actors in the area. In addition to established partnerships, the Nature Centre is open for cooperation with new interested parties.	Cooperation with companies and village association in organising Nature Centre activities. Represented in other regional activities	Continuous	Metsähallitus, companies, associations
	New partnership agreement for Catering services	Carried out in 2019	Metsähallitus & partners
	2019 summer theatre cooperation with Koli kulttuuriseura ry (Koli cultural association)	–2024	Metsähallitus & Koli cultural association, Kulttuuriseurien grants
	The area's partner entrepreneurs and their products get visibility in the Nature Centre's premises and through communication channels (luontoon.fi)	Continuous	Metsähallitus
For its part, the Nature Centre builds the Koli National Park brand. Locality and the well-being nature products are strongly present in the Nature Centre's activities and products.	Images and texts at the customer premises of the Nature Centre support communication in accordance with the Koli National Park brand.	Continuous	Metsähallitus
	Café Vakka's operations are developed in such a way that its activities emphasize locality (traditional bakery women and berries collected from within the National Park).	Continuous	Metsähallitus
	The events of the Nature Centre are built around sustainable tourism, well-being, authentic nature experiences, cultural heritage and living culture.	Continuous	Nature Centre staff in cooperation with companies

#### SUOMU NATURE CENTRE, PETKELJÄRVI HIKING CENTRE & NATURE CENTRE, RUUNA HIKING CENTRE

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
Securing the operating conditions of entrepreneurs who manage customer service points	Maintenance of service structures and development		Metsähallitus
	Maintaining the appeal of the exhibition	Continuous	Metsähallitus, companies

#### IV. BIOSPHERE RESERVE – A PIONEER IN SUSTAINABLE NATURE TOURISM

Strategic objectives 2025	Goals/measures	Timeline	Resources
Tourism to nature reserves and hiking areas does not threaten natural and cultural values. Implementation of sustainability principles is closely monitored	LAC metric indicators and measurement methods updated to meet the renewed principles of sustainability - Ruunaa, Patvinsuo and Petkeljärvi	2019	Metsähallitus
	Koli as a pilot site in the national update of LAC metrics	Carried out in 2018	Metsähallitus
	Koli visitor survey	Carried out in 2019	ENI SUPER-project, Metsähallitus
	Other visitor surveys	2020, 2024	Metsähallitus Business ventures
	Winter tourism promotes sustainability (is environmental, but also economically and socially sustainable). Winter tourism benefits clearly highlighted in communication.	Continuous	Metsähallitus, companies



Strategic objectives 2025	Goals/measures	Timeline	Resources
National Parks' conservation values communicated clearly and visible. The National Park is seen as a clear competitive advantage of the Tourist Area, which encourages other actors in the area to act responsibly.	Clarification of regional and common values with partners; Highlighting the values of Koli's Growth project.	Continuous	Metsähallitus, companies, Kolin tourism association
	The sustainability of nature tourism is increasingly visible to visitors in the area. Visible communication on the protection of natural and cultural values and its results.	Continuous	Metsähallitus, companies
Sustainable tourism is planned in cooperation with tourism actors and locals throughout the North Karelia Biosphere Reserve Sustainability is also promoted locally through cooperation.	Karelia Expert's sustainable development workshops coordinate the sustainable development of North Karelian tourism and the workshops work on the spirit of the region (sustainable tourism) and communicate this mission as a special feature of the North Karelian biosphere reserve elsewhere in Finland and internationally.	Continuous	Karelia Expert, Metsähallitus, companies
	Development in cooperation with the Koli Tourism Association. North Karelia Tourism Coordination Group & POKAT Tourism Group are also involved	Continuous	Metsähallitus, Koli tourism association
	Cooperation in Koli Soikkeli's nature management work continues as partnership with friends of the Koli National Park Friendship Association Ukko-Koli. Developing ways of cooperation.	Continuous	Metsähallitus, Koli National Park's friendship organization; Ukko-Koli Friends association
	If desired, the visitor/customer can participate as a volunteer in natural and cultural heritage management work (e.g. arranging pop-up nature management work events).	Continuous	Metsähallitus
	MAPTIONNAIRE-survey on Lieksa's tourism attraction sites" nature and culture	Carried out in 2019	ELY-Centre, SHAPE-project
The Biosphere Reserve is a profiled tourist destination whose attraction is based on nature and sustainability  Customers, locals and entrepreneurs know and appreciate the region as part of the North Karelia Biosphere Reserve	Bringing out North Karelia Biosphere Reserve and its status more strongly in the regional and national communication of nature services	Continuous	Metsähallitus
	Encourage collaborators to highlight the impact of the biosphere reserve in their facilities and communications as well.	Continuous	Metsähallitus, companies
	Principles of sustainable tourism for customer awareness: – Illustrated model materials for entrepreneurs	–2025	Metsähallitus & companies/Tourism 4.0
ECST	We are part of the network, but the certificate is currently not valid	–2025	Metsähallitus
The health and well-being benefits of nature tourism destinations in the Biosphere Reserve are well-known and are part of the region's tourist attraction.	Building key products around the effects of natural health and well-being in cooperation with tourism entrepreneurs in the region	Continuous	Metsähallitus, companies

Strategic objectives 2025	Goals/measures	Timeline	Resources
The nature tourism attraction sites of the Biosphere Reserve can be reached in an environmentally friendly way. We support environmentally friendly transport, transport development across sites & road maintenance.	Promotion of public transport connections to nature tourism attraction sites across the biosphere area – Carpool rides to other places, e.g. Ilomantsi-Petkeljärvi-Mölkö?	Continuous	Juuka, Lieksa and Joensuu cities together with ELY-Centre
	Continuity of Koli carpool services can be guaranteed.	–2025	Kolin matkailu Oy Lieksa city
	Emphasis on the Vuonislahti train connection as a transport link to Koli & a carpool connection across the ice road?	–2025	Tourism associations, companies, Lieksa city, Metsähallitus
	Developing the ice road	–2025	Lieksa city
	Suviexpress-timetables developed and functions according to need	2020	Tourism association, companies
	Development of internal traffic in Koli – Ahmovaara-Koli distance (bus for arriving visitors) – Shuttle bus for Koli key areas (holiday Koli – harbour – village – upper yard)	2020	Koli tourism association, Lieksa city
	Poetry and border road maintenance	–2025	Ilomantsi city
	Charging station for electric cars in Koli.	Carried out in 2018	Break Sokos Hotel Koli
The durability of structures is guaranteed by allocating resources correctly. Planning functionality & maintenance of the paths and cycling network.	Koli's route plans takes into account future growth pressures.	Carried out in 2019	ENI SUPER -project, Metsähallitus
Active participation in design and planning process. Expanding the involvement of actors.	Private landowners involved in the planning: entrepreneurs invite landowners to meetings (e.g. land rental to entrepreneurs for nature tourism program services)	Continuous	Companies
	Development of universities and polytechnics networking in projects	Continuous	Metsähallitus
Strengthening locality and increasing regional income. The measure is implemented in such a way that local people are proud of the area and feel ownership of it .	Local economic benefits and measured and analysed (LAC)	Continuous	Metsähallitus
	Communication and productization cooperation with tourism entrepreneurs in the area.	Continuous	Metsähallitus, companies
	Involving local residents in design work	Continuous	Metsähallitus
	Preferring and recommending local producers and products e.g. highlighting Karelian culture and know-how in the competition criteria.	Continuous	Metsähallitus, companies
	Meeting with Koli village association persons once a year.	Continuous	Metsähallitus
Securing the conditions for native fish species within the Lieksa River.	Ruunaa rapids fishery rehabilitation. Plan for the organization of the fishery thereafter.	–2021	Ely-Centre LUKE Kemijoki Oy Lieksa city Future Missions Metsähallitus

## V. ENHANCING BUSINESS OPPORTUNITIES

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
National Parks and hiking area are well-known nature tourism attractions in North Karelia. Metsähallitus actively contributes to other development plans & projects of the Biosphere Reserve.	Koli big picture 2050: – South Pielinen tourism development	–2050	Lieksa city, Juuka municipality
	Ruunaa region Master Plan	Finalised in 2019	Metsähallitus, Kike
	ViristKarelia Destination-project	–2019	Karelia Expert, Metsähallitus
	SHAPE-project	–2020	ELY-Centre, companies, Metsähallitus
	POKAT 2021: – North Karelia tourism thematic and operational Programme 2014–2020 – North Karelian internationalisation strategy (2015)	–2020	Regional council of North Karelia
The Biosphere Reserve is a key attraction for international nature tourists. Improving international visitor services. The North Karelia Biosphere Reserve is the No. 1 nature and tourism destination for authentic experiences in Finland.	Program services offered in several (Central European) languages and tailored to cultural backgrounds. Clear communication of which program services are available to English-speaking visitors.	Continuous development	Companies
	Mapping event offering with companies	Continuous development	Companies, Metsähallitus, Business ventures
	Exploiting the exoticism of border proximity in international tourism - packaged border visits	Continuous development	Companies
	Highlights in the region's international nature tourism: Nature, space, silence and culture	Continuous development	Metsähallitus, Koli tourism association, Karelia Expert, companies
The nature-tourist destinations of the Biosphere Reserve are profiled as a destination of authentic nature experiences, diverse services and consideration of year-round operations. Finding new entrepreneurs and seeking new business ideas.	Presentation of National Parks and hiking sites of the biosphere reserve at the new Koli Nature Centre Ukko hiking exhibition.	2020–2021	Metsähallitus
	Provides authentic nature experiences at program services and events.  Service development Winter: Winter fishing services (ice fishing & winter nets) are being developed for the entire biosphere reserve (e.g. lake-to-table products). Productization of ice road & ice road photography when driving on the ice roads. Development of hiking trails close the beaches. Snow surfing for Koli. Snowshoe routes in Koli is marked with signs. Sauna Experiences.	Continuous development	Koli tourism association, companies, Lieksa city, Metsähallitus
	Autumn product development: Autumn nature photography on the rise. Mountain biking. Sauna experiences.	Continuous development	Companies

Strategic objectives 2025	Goals/measures	Timeline	Responsibilities & Measures
	Summer product development: Canoeing (MH develops new opportunity to camp in Southern Hiekkasaari & Isossa-Korpi on lake Pielinen). Additional boat trips. Cycling routes development across the biosphere reserve to unite the key attraction sites (from one site to next). Mountain biking. Sauna experiences.	Continuous development	Companies, Koli tourism association, Metsähallitus
	Karelian culture and regional history are highlighted more prominently in the region's program services and productization: – Petkeljärvi: war history – Koli: art inspired landscapes then and now & lively village	Continuous development	Companies and Metsähallitus
	Package services destination wise and by site attraction features	2019 onwards	DMC:t
Consideration of new forms of operation and actions in the planning of the use of areas	Survey of entrepreneurs' willingness to invest in Ruunaa area	2019	Metsähallitus, Kike
	Ruunaa favourite destination in Finland for wilderness visitors	Continuous development	Metsähallitus
	Petkeljärvi and Patvinsuo National Parks: active involvement in management and land-use planning processes	Continuous development	Metsähallitus
Lengthening of overnight stays across the biosphere reserve. The whole area will be developed in co-operation so that the visitor offering encourage longer overnight stays in the region.	The development of integrated nature tourism marketing of the Biosphere Reserve continues so that people can plan longer stays in the area (visit several destinations across the Biosphere Reserve during the same trip).	Continuous development	Tourism associations, Metsähallitus, companies, Karelia Expert
	Development of the South Pielinen tourist zone: Juuka & Koli. Juuka is Koli's nearest Shopping area. Juuka river visibility in regional tourism.  Development of tourism in Paalasmaa (accommodation, activities, accessibility by water, local souvenirs).	–2025	Juuka municipality, companies
Merging regions to create a larger regional identity. Koli-Ruunaa-Patvinsuo-Petkeljärvi promoting networking and cooperation.	Active participation in the province's cycling and hiking route network development	–2025	Koli tourism association, companies/ Business ventures
	Cycling route development: – Koli's trail project	2019–	Koli tourism association Juuka municipality & Koli tourism association project
	Strengthening of Koli and Juuka hiking route: Juuka's hiking possibility mapping project	2019–	
	Strengthening Koli's trail activities	–2025	Koli tourism association

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# Appendices

## Appendix 1. Koli National Park sustainable tourism monitoring metrics 2020–2025 (In Finnish)

Kestävän matkailun periaate	Seurantamittari	Mittaustapa	Mittayksikkö/asteikko	Lähtötilanne	Tavoite 2025	Hyväksyttävän muutoksen rajat	
						Min	Max
1. Tuemme kohteiden arvojen säilymistä ja edistämme niiden suojelua	Kävijöiden arvio kulttuuri-perinnön tärkeydestä	Kävijä-tutkimus*	1–5, 5 paras	3,58	4,0	3,5	–
	Kävijöiden arvio luonnon kokemisen tärkeydestä	Kävijä-tutkimus*	1–5, 5 paras	4,77	4,8	4,5	–
	Kävijöiden arvio palvelun laadusta	Kävijä-tutkimus*	1–5, 5 paras	3,77	4,5	3,9	–
	Kävijöiden arvio virkistys-ympäristön laadusta	Kävijä-tutkimus*	1–5, 5 paras	4,34	4,4	4	–
	Kävijöiden kokemus maaston kuluneisuuden aiheuttamasta häiriöstä	Kävijä-tutkimus*	1–5, 5 paras	4,24	4,5	4,2	–
	Käyntimäärä Kolin luontokeskus Ukossa	Kävijä-laskenta*	Käyntejä kpl	99 500	120 000	90 000	–
	Myyränporrasesiintymät	Asetetun versotiheyden seuranta yhdeltä polun varren esiintymältä**	Verso kpl/seuranta-ala	174	Versotiheys ei saa heikentyä retkeilyn vuoksi	157	–
	Retkeilyreittien vaikutusalueen pinta-ala	GIS-analyysi, ei vielä tehty	–	–	–	–	–
	Silikaattikalliot Natura-luontotyyppin (8220) edustavuus	Asetettujen luontotyyppien seuranta	Kuvioiden edustavuus: 10 = erinomainen, 20 = hyvä	20202020	Seurattavalla neljällä kuviolla luontotyyppin edustavuus ei saa heikentyä retkeilyn vuoksi	20202020	10101010
2. Mini-moimme ympäristön kuormitusta	Polttopuun kulutus	PAVE-tietokanta	Pinopuu-kuutiometriä	167	100		190
	Kävijöiden kokemus roskaisuudesta	Kävijä-tutkimus*	1–5, 5 paras	4,4	4,6	4,4	–
3. Vahvistamme paikallisuutta	Alueen merkitys paikallisille	Kävijä-tutkimus*	Käyntimäärä kpl	39 100	52 000	41 700	–
4. Edistämme kohteiden tuottamaa hyvinvointia ja terveyttä	Huonorakenteisten palvelurakenteiden osuus	PAVE-tietokanta	Prosenttia	14	0	–	10
	Huonokuntoisten pitköspuiden osuus	PAVE-tietokanta	Prosenttia	16	0	–	10
	Kävijöiden arvio häiriötekijöistä, indeksi	Kävijä-tutkimus*	1–5, 5 paras	4,29	4,5	4	–
	Kävijöiden kokemus liiallisen kävijämäärän aiheuttamasta häiriöstä	Kävijä-tutkimus*	1–5, 5 paras	4,14	4,5	4	–
	Kävijöiden kokemus muiden kävijöiden käyttäytymisen aiheuttamasta häiriöstä	Kävijä-tutkimus*	1–5, 5 paras	4,32	4,5	4	–
	Käyntimäärä Kolin kansallispuistossa	Kävijä-laskenta	Käyntimäärä kpl	201 800	250 000	180 000	–

Kestävän matkailun periaate	Seurantamittari	Mittaustapa	Mittayksikkö/asteikko	Lähtötilanne	Tavoite 2025	Hyväksyttävän muutoksen rajat	
						Min	Max
	Omin voimin kuljettu matka	Kävijätutkimus*	Kilometriä	1 073 982	1 250 000	1 000 000	–
	Kävijöiden kokemat terveysvaikutukset, terveysindeksi	Kävijätutkimus*	1–5, 5 paras	4,22	4,3	4	–
<b>5. Edistämme paikallis-taloudellista kasvua ja työpaikkojen luomista</b>	Kolin kävijöiden rahankäytön paikallistaloudelliset kokonais-tulovaikutukset	Kävijätutkimus* ja -laskenta (ASTA-asiakastietojärjestelmä)	Euroa	19,5 milj.	30 milj.	20 milj.	–
	Kolin kävijöiden rahankäytön paikallistaloudelliset kokonais-työllisyysvaikutukset	Kävijätutkimus* ja -laskenta (ASTA-asiakastietojärjestelmä)	Henkilötyövuotta	150	220	150	–
	Suojelualueella käyneiden matkailijoiden kokonaisviipymä puistossa ja sen matkailu-lähialueella	Kävijätutkimus* ja -laskenta (ASTA-asiakastietojärjestelmä)	Vuoro-kautta	202 200	270 000	200 000	–
<b>6. Viestimme yhdessä kohteen arvoista ja palveluista</b>	Kävijätyytyväisyysindeksi	Kävijätutkimus*	1–5, 5 paras	4,08	4,5	4,1	–
	Kolin luontokeskus Ukon asiakkaiden asiakastyytyväisyys	Jatkuva palaute	1–5, 5 paras	4,3	4,5	4,2	–
	Kävijöiden arvio ennako-odotusten toteutumisesta	Kävijätutkimus*	1–5, 5 paras	4,45	4,5	4,1	–
	Käyntikerrat Kolin kansallis-puiston Luontoon-fi-sivuilla	Luontoon-fi-sivujen laskenta, uusi laskutapa tulossa vuonna 2020	Kappaletta	–	–	–	–
	Matkailun yhteistyösopimus-ten määrä Kolin biosfääri-alueella	Metsä-hallituksen seuranta*	Kappaletta	60	80	60	–
	Yrittäjien arvio kestävyden periaatteiden toteutumisesta omassa toiminnassa Kolin biosfäärialueella	Yritystutkimus**	1–5, 5 paras	4,06	4,3	4,0	–
	Yrittäjien tyytyväisyys Metsähallituksen toimintaan Kolin biosfäärialueella	Yritystutkimus**	1–5, 5 paras	3,91	4,3	3,9	–

\*Tarkastelussa käytetty vuonna 2019 valmistunutta Kolin kansallispuiston kävijätutkimusta

\*\*Tarkastelussa käytetty vuonna 2018 tehtyä Kolin biosfäärialueen yritystutkimusta

## Appendix 2. A SWOT- Analysis of North Karelia Biosphere Reserve as a destination (In Finnish)

SISÄINEN YMPÄRISTÖ	
VAHVUUDET (mitä nykyisiä vahvuuksia voisi hyödyntää tulevaisuudessa)	HEIKKOUEDET (mitä nykyisiä heikkouksia voisi parantaa tulevaisuudessa)
<ul style="list-style-type: none"> <li>– Tunnettuus</li> <li>– Luonto</li> <li>– Maisemat</li> <li>– Alueen hyvä maine ja tunnettuus</li> <li>– Ainutlaatuinen luonto</li> <li>– Luonto- ja kulttuurimatkailun yhteensovittaminen</li> <li>– Upea kansallismaisema, kansallispuisto</li> <li>– Ainutkertaisuus</li> <li>– Luonto</li> <li>– Lähtöpuitteet</li> <li>– Puhdas luonto</li> <li>– Luonto</li> <li>– Luonto, polut, taukopaikat</li> <li>– Luonto, rauha, 4 vuodenaikaa</li> <li>– Maisema, luonto</li> <li>– Laskettelurinteet, hiihtoladut ja polkuverkosto</li> <li>– Luonto</li> <li>– Kansallispuisto itsessään ja Kolin alueen historia ja maine</li> <li>– Luonto, vesistö, kosket</li> <li>– Luonto</li> <li>– Hyvä asiakaspalvelu ja paikallistuntemus</li> <li>– Luonto- ja kulttuuriperintö</li> <li>– Natura2000 – Koitajoen alue</li> <li>– Perinteen keräystä</li> <li>– Vesireitit (Änäkäinen), Karhunpolku</li> <li>– Koitere ja Koitajoki, luonto (metsät, marjat, linnusto)</li> <li>– Vesistöt, metsät, itäisyys</li> <li>– Hiljaisuus, luonto, erämaisuus, turvallisuus, vieraanvaraisuus, Itäsuomalainen rajanläheisyys, monipuolinen kulttuuri</li> <li>– Kansallispuisto, maastopyöräilyreitti Jänisvaaraan, latuverkoston kehittäminen jänisvaarasta Ukko-Kolille</li> <li>– Luonnossa liikkuminen ja reitit</li> <li>– Ilomantsi, monipuoliset palvelut lähellä (Ilomantsi), monta yrittäjää yhteistyössä</li> <li>– Luonto, rauhallisuus</li> <li>– Saavutettavuus etelästä käsin (lähempänä kuin Lappi), hyvä päivävaelluskohde, juna &amp; kimpakyytiyhdistelmä, retkikohteita on monta (niitä tulisi vain mainostaa enemmän, on jo paljon matkailijoita, luonto- ja kulttuuriperintö</li> <li>– Luonto</li> <li>– Kolin kansallispuisto ja Pielinen</li> <li>– Pienuus, autenttisuus, Koli on hyvinvoinnin käyntikohde, Kolin kulttuurihistoria</li> <li>– Kulttuuriperintö</li> </ul>	<ul style="list-style-type: none"> <li>– Pienuus</li> <li>– Tunnettuus</li> <li>– Korjata silta ja lintujen tarkkailutaso</li> <li>– Rakennuskannan remontointitarve ja asfaltointien rikkoutuminen vanhuuttaan</li> <li>– Palvelut</li> <li>– Matkailusesonkien ulottaminen ympärivuotiseksi toiminnaksi</li> <li>– Pysäköintialueiden ja matkailijoiden palvelujen riittämättömyys sesonkien huippuna</li> <li>– Saavutettavuus, pysäköinti ja opasteet</li> <li>– Älyttömät 2 000 000 turistin visiot</li> <li>– Hajanaisuus</li> <li>– Vaatimaton linnusto ja eläimistö, ympäristömetsien yksipuolinen tehotalous!!!</li> <li>– Metsästys (kanalinnut)</li> <li>– Liian harva tupaverkosto</li> <li>– Äärirehit häiriköt ja kaiken jarruttajat</li> <li>– Teiden huono kunto, parkkipaikat, palveluja ei ole ympärivuoden tasaisesti tarjolla</li> <li>– Palveluiden tarjonta</li> <li>– Ulkoilureittien kunto, vaaralliset pötkkelöpuut ja laskettelurinteiden reunapuusto</li> <li>– Yleisinfra, esim. paikoitus</li> <li>– Kommunikaation (ja parkkipaikkojen) puute</li> <li>– Palveluiden sirpaleisuus</li> <li>– Yritystoimintani moni-ilmeisyys</li> <li>– Yleisesti oma mielipiteeni: Palvelutarjonnan kehittyminen, "lomakeskus" ajattelu tiivine mökki- ja loma-alueineen. Oman tapahtumamme osalta pysäköintipaikat. Tiedostamme ja toivomme, ettei rakenneta luonnonsuojelualueille. Kilpailijoiden kuljettaminen mäelle on meille merkittävä tehtävä tapahtuman aikana.</li> <li>– Alueen markkinointi</li> <li>– Toiminta ympärivuotiseksi</li> <li>– Puutteellinen markkinointiyhteistyö paikallisen matkailuyhdistyksen kanssa</li> <li>– Viestintään</li> <li>– Saavutettavuus</li> <li>– Yhteistyö, oikea hinta kestävän luontomatkailun tarjoamiselle</li> <li>– Välinpitämätönsuhtautuminen ympäristöön, yhteistyö, luontopuolella on monta muutakin arvoa kuin raha</li> <li>– Ympäristön siisteys, asenteellisuus kansainvälisyyttä kohtaan, itseluottamuksen puute (ei uskalleta toteuttaa), ennakkoluulot</li> <li>– Salen aukioloajat ovat liian lyhyet, vuoropuhelu kunnan kanssa ongelmista</li> <li>– Kevyenliikenteen väylä Ahmovaara-Koli välille, Kolille ampumahiihtoleiri, MTB-reitit</li> <li>– Välimatkat ovat pitkät, tiestön huono kunto, julkisten kulkuneuvojen vähyys</li> <li>– Sijainti, Pielinen</li> <li>– Viestintä, paikallisia työntekijöitä vähän, ei muuta kuin matkailu (Kolilla), Lieksan kunta voisi panostaa enemmän alueen työpaikkojen luontiin, viranomaisten reagointi liian hidasta matkailun kasvulle Kolilla, henkilökunnan saaminen ja niiden majoittuminen Kolilla ongelma</li> <li>– Suppea yritystarjonta</li> <li>– Palvelujen niukkuus</li> <li>– Kolilla ei ole omaksuttu identiteettiä, ei uskallettu ottaa seuraava askel matkailun seuraavalle tasolle, kulkuyhteydet, epäyhtenäisyys, yhteistyön puutos, Kolin parkkipaikka-ongelma, maankäytön ohjaus ei toteudu Lieksassa muun vision mukana, vanha hiihtohissi uuteen</li> </ul>

## ULKOKOINEN YMPÄRISTÖ

MAHDOLLISUUDET (mihin kannattaisi panostaa tulevaisuudessa)	UHAT (mihin kannattaisi varautua tulevaisuudessa)
<ul style="list-style-type: none"> <li>– Pienuus, omaleimaisuus</li> <li>– Tunnettuuden lisääminen, ei massakohde</li> <li>– Ruokailut osana retkiä</li> <li>– Mökkien lisärakentaminen</li> <li>– Palveluiden lisääminen</li> <li>– Kolin alueen omaleimaisuus; sekä luonto, että kulttuuri ja perinne</li> <li>– Luomuun ja kestävään matkailuun panostaminen, markkinointitoimenpiteiden kohdentaminen sesonkien ulkopuoliseen hiljaiseen aikaan ja palveluiden kehittelyä tälle ajalle</li> <li>– Saavutettavuus, pysäköinti ja opasteet</li> <li>– Luonnon säilyttäminen ja turistimäärien rajoittaminen</li> <li>– Volyyymiä voi lisätä</li> <li>– Lajiston rikastuttaminen ja elvyttäminen; talousmetsien luonnon eläinkantoja elvyttävä hoito niin puistoissakin olisi lajeja runsaammin</li> <li>– Vesistöt</li> <li>– Tupaverkosto</li> <li>– Kalastus, polkupyöräily, leirintäalue talviurheilun mainostaminen</li> <li>– Parkkipaikat</li> <li>– Pysäköintialueiden rakentaminen ja ulkoilureittien kunnostaminen sekä maisema-alueiden avaaminen</li> <li>– Ikääntyneiden ihmisten pääsy helposti luontoon</li> <li>– Yleisinfra esim. kevyenliikenteen väylät</li> <li>– Yritysyhteistyö ja kaikkien sitoutuminen yhteisiin arvoihin Kolin kestävän matkailun edistämiseksi</li> <li>– Yhteistyö eri toimijoiden kesken</li> <li>– Yhteistoimintaan alueella tulisi panostaa</li> <li>– Ulkoilureittien monipuolisuus, ja myös se, että ovat tarvittavan haastavia. Yhdistyvät laajasti muihin retkeilyreitteihin</li> <li>– Talvimatkailu</li> <li>– Markkinointi</li> <li>– Kolin merkitys suomalaisen taiteen ja kulttuurin sekä matkailun leikkauspisteessä</li> <li>– Yhteistyöhön Ilomantsin Matkailuyhdistys ry:n kanssa</li> <li>– Yhteistyön tehostaminen</li> <li>– Uusi ajattelutapa matkailusta, kalastus, lintubongauspisteet (esim. torni tai koju Koitereelle)</li> <li>– Petkeljärven saavuttaminen vesiteitse, tuotekehittely, markkinoinnissa erikoistuminen, palvelutestaus, yrittäjien koulutus</li> <li>– Perinteen käyttäminen edelleen (esim. Kalevala ja tuohityöt), kansainvälisyydessä aitous, sotahistorian laajempi käyttö, monipuolinen luonto, eri luontotyyppien hyödyntäminen kestävästi, saunakierros maakunnassa (hyvä paikka esim. Raunin paikka Ruunaalla)</li> <li>– Pielisen vesiliikenteenkasvattaminen, retkiluisteluradan palveluja kehitettäisi molemmissa päissä (esim. Vuonislahden päähän iglukioski kunnan rahoittamana)</li> <li>– Kylän tiivistäminen, huippu-urheilijat Koliin leirille ja aktiiviliikkuja. Majoituksesta raha tulee, Loma-Kolin parempi hyödyntäminen majoituksessa, kevyenliikenteen väylä huipulle asti</li> <li>– Kimppataksi, eteläsuomesta kahtalaisen lähellä, melonta, yhteistyö</li> <li>– Kestävä matkailu</li> <li>– Kansainvälisyys (olisi jo valmius laajentaa kansainvälistä pohjaa)</li> <li>– Alueen yrityspalveluiden monipuolistaminen</li> <li>– Palveluun ja laatuun</li> <li>– Julkinen liikenne, tarinallistaminen, Koliin ”thought leadership”, saavuttaa Keski-Euroopan markkinat</li> <li>– Luontokasvatus</li> <li>– Kolin matkailuyhdistys olisi toimiva alusta yrityksille missä toimia. Erilaisten poolien perustaminen (esim. Islanti)</li> <li>– Puhdas luonto, Pielinen ja sen saaret, yhteistyö</li> </ul>	<ul style="list-style-type: none"> <li>– Kestämätön matkailu</li> <li>– Luonnon kuluminen</li> <li>– Alueen rakentaminen, kaavoitus</li> <li>– Suuret matkailijamäärät niiden hallitseminen, ilmaston muutoksen huomioiminen palvelujen tarjonnassa</li> <li>– Aluetta ei kehitettäisi ja palvelut jäisivät kesken</li> <li>– Ruuhkiin</li> <li>– Kansainväliset ja ympäristöuhat</li> <li>– Liikenne ja saasteet; MELUSAASTE on pahinta, joka puolelta kuuluu liikenteen jyrinä ja vähintään koirien räksytystä</li> <li>– Ilmastonmuutokset</li> <li>– Kovan yritystoiminnan kasvamiseen</li> <li>– Äärirehit ja äänkyrät</li> <li>– Uhkana on, että emme saa Kolia kehittämään matkailijalle mielenkiintoiseksi paikaksi, että Koli jää paikkana ihmisille, kerran nähty se riittää- paikaksi</li> <li>– Ulkoilureittien lähivuosto (lahojen ja kallellaan olevien puiden poistaminen)</li> <li>– Ei vastata olemassa oleviin puutteisiin</li> <li>– Lisääntyvän turismin vaikutukset; kasvu säilyttäen Kolin oma imago; turistien kyky kunnioittaa luontoa ja sitoutua arvoin</li> <li>– Aluekehittämisen ei suuria uhkia luontomatkailun osalta</li> <li>– Rakennusten huolto ja kunnossapito</li> <li>– Olematon palvelurakenne</li> <li>– Kustannusten nousu</li> <li>– Epävakaa poliittinen tilanne globaalisti (esim. Trump), ympäristökatastrofi (esim. luonnon puhtaus kärsisi)</li> <li>– Päätöksenteko keskittyy liian pieneen piiriin, maakunta-uudistuksessa ei uskota visioihin, jos yhdysreitistö ei toteudu niin yrittäjät ovat yksin</li> <li>– Saadaanko Koliin työvoimaa ja edullisia asuntoja työntekijöille</li> <li>– Tehometsätalous (vaellusreittien merkkaukseen vaikeutuu), villipedot (retkeilijöiden kannalta)</li> <li>– Metsien hakkuut</li> <li>– Ilmastonmuutos (jos säät ei enää houkuttele tulemaan), globaalit ympäristöuhat, maaseudun hiljentyminen, yhteistyön puuttuminen, majoituksen puuttuminen tulevaisuudessa, jos matkailijoita tulee lisää</li> <li>– Yritystoimintojen hiipuminen tai loppuminen</li> <li>– Massaturismi ja halpuuttaminen</li> <li>– Emme ota seuraavaa askelta matkailun kehittämisessä alueella, infra ei kehity, maankäytönohjaus ei toteudu, Koli ei löydä identiteettiään ja toiminta jää samalle tasolle</li> <li>– Puiston muuttaminen urheilualueeksi</li> <li>– Palvelurakenteista ja yleisesti infra (esim. sähkökatkokset ja talvella avaraamattomat tiet) ei pidetä huolta, paikat ränsistyvät ja ihmiset eivät enää tule</li> </ul>



### **Appendix 3. Koli-Ruunaa Hiking Area nature tourism plan 2010 monitoring and implementation plan**

Refer to following document: Kolin biosfäärialueen luontomatkailusuunnitelma

– Metsähallituksen luonnon-suojelujulkaisuja. Serie C 166; Satu Naumanen, Metsähallitus publication <  
<https://julkaisut.metsa.fi/assets/pdf/lp/Csarja/c166.pdf>> 93 p.

### **Appendix 4. Metsähallitus principles of sustainable tourism**

Refer to following document: Kolin biosfäärialueen luontomatkailusuunnitelma

– Metsähallituksen luonnon-suojelujulkaisuja. Serie C 166; Satu Naumanen, Metsähallitus publication <  
<https://julkaisut.metsa.fi/assets/pdf/lp/Csarja/c166.pdf>> 93 p. Content in English can be found in:

<https://julkaisut.metsa.fi/assets/pdf/lp/Esitteet/principles-of-sustainable-tourism.pdf>

Publication serie and number Raportteja 41/2020					
Publication serie and number Environment and Natural Resources					
Author(s) Daisy Silvennoinen, Timo J. Hokkanen (Eds.), Satu Naumanen (Author)		Date Joulukuu 2020			
		Publisher Centre for Economic Development, Transport and the Environment/ NK Biosphere Reserve			
		Financier/commissioner ELY-Centre, North Karelia Biosphere Reserve Karelia CBC SUPER project			
Title of publication <b>North Karelia Biosphere Reserve Nature Tourism Plan 2020–2025</b>					
<p>Abstract</p> <p>Approximately 340,000 annual visits are made to the protected areas managed by Metsähallitus in the province of North Karelia, which gives an overview of the status of Koli, Patvinsuo and Petkeljärvi National Parks and the Ruunaa Hiking Area as attractions for tourism in the province. Koli National Park is the most visited destination for nature tourism in the area, hence the name Koli Tourism Region.</p> <p>The biosphere reserve nature tourism plan is drafted consistent with guidelines for nature tourism in conservation and Hiking Areas, with sought ways to promote sustainable nature tourism. The plan has been prepared by Metsähallitus' nature services in cooperation with tourism actors of the region. The action plan for the biosphere reserve's protected areas and hiking sites sets targets that are key to developing the region's communication, marketing and cooperation, routes and infrastructure, hiking information, as well as sustainable nature tourism in the biosphere reserve that creates opportunities and economic sustainability for the various responsible tourism product and service providers. Currently, the key challenges for the biosphere reserve nature tourism are the inadequacy of year-round range of services, parking space at Koli National Park, poor accessibility to nature tourism tar-gets, current state of infrastructure and networking between actors, especially on communication.</p> <p>The goal of the plan is that by 2025, joint communication for entrepreneurs providing eco-friendly products and services will be strengthened, innovative solutions for Koli parking areas will be realised in cooperation between actors in the area, accessibility of destinations by public transport or carpooling solutions will be solved, infrastructures needing repairs done, and that the nature tourism target areas across the biosphere reserve are more closely linked and co-governed through interregional cooperation and communication.</p> <p>Nature tourism holds significant economic potential for local economies and the aim is to increase among other, the visitor spending in Koli National Park from EUR 19.5 million in 2019 to EUR 30 million by 2025. As part of the plan, the sustainable tourism metrics of Koli National Park were updated. This is because the destination is the most popular with visitors making its natural environments most vulnerable to potential visitor pressures. The renewed sustainability monitoring metrics for Petkeljärvi and Patvinsuo National Parks, and for Ruunaa Hiking Area are being finalised. The metrics help monitor the impacts of nature tourism and recreational use in the areas thereby allowing action in instances that sustainability seems threatened.</p> <p>Business and visitor surveys conducted in the area have been utilized in the preparation of the nature tourism plan. Two discussion sessions with tourism operators were held during its preparation. The process of preparation of the nature tourism plan has been carried out under ENI Karelia CBC Super project financed by the European Union, the Russian Federation and the Republic of Finland.</p>					
Keywords National Park, Hiking Area, Biosphere Reserve, Nature Tourism					
ISBN (print)	ISBN (PDF) 978-952-314-887-1	ISSN-L	ISSN (print)	ISSN (online) 2242-2854	
www www.doria.fi/ely-keskus		URN ISBN:978-952-314-887-1		Language English	Number of pages 89
Distributor Publication is available on the internet: <a href="http://www.doria.fi">www.doria.fi</a>					
Place of publication and date Joensuu			Printing place PunaMusta Oy		

**RAPORTTEJA 41 | 2020**

**North Karelia Biosphere Reserve Nature Tourism Plan 2020–2025**

**Pohjois-Karjalan elinkeino-, liikenne ja ympäristökeskus**

**ISBN 978-952-314-887-1 (PDF)**

**ISSN 2242-2854**

**ISSN 2242-2854 (verkkojulkaisu)**

**URN: ISBN: 978-952-314-887-1**

**[www.doria.fi/ely-keskus](http://www.doria.fi/ely-keskus)**