

# Sustainable development in Finnish national parks

Anni Pynnönen

Bachelor's Thesis

Degree Programme in Tourism
2019

#### **Abstract**



Author(s)
Anni Pvnnönen

### Degree programme

Tourism

### Report/thesis title

Sustainable development in Finnish national parks

Number of pages and appendix pages 37 + 1

The objective of the thesis is to discuss Finnish national parks and the ways of implementing sustainable development to preserve nature and reduce environmental impacts that are caused by human. The main emphasis of the thesis is on the environmental part of sustainable development. Although this is the main focus, also social and economic areas of the matter are covered since these three are integrated.

Sustainable development is an important and current topic as environmental issues like climate change, are one of the biggest topics of today. Also, the visitor numbers of national parks are growing constantly and therefore the question of how to maintain nature and reduce the impacts of the people is becoming more crucial.

The thesis discusses national parks overall but focuses on three. These three are chosen for their different locations which offer a variety of ecosystems. The chosen national parks are Urho Kekkonen national park in Northern Finland, Koli national park in Eastern Finland and Archipelago national park in Southern Finland.

The theoretical framework introduces the theory behind the subject; the terminology is explained, sustainable development and its relation to tourism are examined and the importance of the subject is justified. Furthermore, the theory part introduces the planning and managing of a national park and takes a closer look at the three national parks chosen for the research.

The method of the research is qualitative research and was executed by Webropol survey which was sent to the representatives of the national parks.

This thesis aims to answer the question of how the chosen national parks are implementing sustainable development in their practices. The thesis mirrors the theory and reality of how the chosen national parks reduce environmental impacts and implement sustainability in their practices.

The respondents agreed that the use and development of national parks should happen so that protecting nature values is the priority. The different nature of the chosen national parks is taken into consideration in the development plans of the national parks. The responses did not reveal much of concrete actions of how sustainable development in the national parks is implemented at the moment. The government and political decision-makers define the outlines and resources for the development of the national parks.

This thesis is commissioned by Haaga-Helia and it is a part of the Erasmus + Tourist project, which aim is to produce international information to support sustainable development

### **Keywords**

sustainable development, tourism, national parks, Finland, nature values

## **Table of contents**

1	Intro	Introduction			
2	Sustainable development in tourism				
	2.1	Defini	tion and the main principles	3	
		2.1.1	Environmental	4	
		2.1.2	Social	7	
		2.1.3	Economical	8	
3	National Parks in Finland				
	3.1 Planning and managing national parks in Finland			12	
4	National parks in the research				
	4.1	Urho Kekkonen national park1			
	4.2	2 Koli national park16			
	4.3	.3 Archipelago national park			
5	Methods			21	
	5.1	l Qualitative research2			
	5.2	Webro	opol survey	22	
	5.1	Reliat	oility and validity	22	
6	Results			24	
	6.1	Views	on sustainable development	24	
7	Disc	iscussion29			
8	Refe	eferences32			
9	Attachements				
	9.1	Attach	nement 1	38	

### 1 Introduction

Nature values and sustainable development are heavily visible in the news, political discussions and research as well as in everyday talks. Environmental matters and sustainability are brought up everywhere and they are linked to everything. Global warming is the biggest and the most current threat of today. It does not matter how well we would fix all the other problems and the threats of the world, if we have ruined the planet and living conditions here. Therefore sustainable development as a topic has such a high importance.

Forests have a major role in restraining the global change. Forests act as carbon sinks that reservoir carbon dioxide from the atmosphere. (Maa-ja metsätalousministeriö.) In the past 10 years the number of visitors in Finnish national parks has been doubled (STT 2019). This has had an impact to Finland's national parks, and this is why the research on how we are responding the growing numbers is important.

Finland is called a land of a thousands lakes and forests, and stereotypically Finns are seen as the people living in the forest. Nature is inseparable part of Finnishness. It is important to find new ways to secure the nature relationship for the society. This nature relationship affects positively on the public health and wellbeing.

Unfortunately economical values and money are still often valued more than sustainable development. Research on the sustainable development is crucial to justify and secure the value of nature values and sustainable choices. It also creates discussion, and helps to find solutions to the issues related it.

I chose the topic because I am interested in the environmental and sustainability matters, I also see a value for the information this thesis produces. I have personally visited all of the three national parks chosen for the study, also many others, and I have lived most of my life on the countryside and in the woods. There is a Natura 2000 site on my family's land, and visiting nature and national parks has been a part of my life since childhood. Therefore choosing this topic for my thesis was rather easy.

This thesis will focus on sustainable development in the Finnish national parks, mostly discussed from the environmental aspects and a tourism point of view. This study will first introduce the definitions and the main principles as well as the theory and the literature on the subject. The three national parks chosen for the research are Koli national park, Urho Kekkonen national park and Archipelago national park. These three are introduced more in

detail before going through the research process, methods, results and conclusions drawn from them.

The thesis is commissioned by Haaga-Helia and it is part of Erasmus + tourist project. Multiple universities are cooperating in the project, many of which from Thailand and Vietnam, though universities from Austria, Spain and Finland are participating too. The main aims of the project are to produce international information to support sustainable development as well as building a network and a platform for sharing that knowledge.

### 2 Sustainable development in tourism

This chapter will focus on first defining sustainable development and then discussing its three dimensions; environmental, social and economic, from a tourism point of view. The main focus of the thesis stays on the environmental aspect. The chapter goes through what sustainable development in tourism means and what kind of a role it has in it.

### 2.1 Definition and the main principles

Sustainable development as a term made its way to the everyday language in the late 1980s when the United Nations (UN) drew attention and discussion to the fact that the natural resources are running out. Consequences for the economic and social development were brought to the table as well. UN defines sustainable development as following: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". (United Nations General Assembly 1987, 43.)

Sustainable development is often thought solely as an environmental matter, when in fact it is always linked to social and economic aspects. "Environmental problems are social problems anyway. They begin with people as the cause and end with people as the victims" states Sir Edmund Hilary, the first man to conquer the Mount Everest. In other words, sustainable development means making decisions which take into account their impacts on the future environment, society, and the economy. (Strange & Bailey 2008, 24-33.) According to some new definitions, also political sustainability is being considered as a force impacting on the background to the other sectors (Tervo-Kankare 2017, 238).

Social- and economic wellbeing affect one another, and on top of that, everything is dependent on a healthy biosphere in where to exist. When thinking about long-term stability and success, both are built on a healthy and productive population. Understanding the complicated connections between these three parts is challenging, and it always involves many perspectives on each issue. (Strange & Bailey 2008, 27.)

Today, the environmental side of sustainable development is heavily highlighted. The reason for this being the reckless usage of natural resources that has led to many environmental issues, the biggest of them being climate change. The future generations are the ones having to deal with the consequences of our behavior and decision making. (Tuna 2011, 2.)

Tourism is a worldwide, well-known and very popular activity that includes traveling somewhere for a reason such as a holiday, entertainment, sport, health or business. Traveling is

a big part of tourism, but the even bigger emphasis is given to accommodation and hospitality. (Tuna 2011, 2.) Sustainable tourism is a form of tourism that considers the values of sustainable development. To clarify, World Tourism Organization defines sustainable development as: "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities." (UNEP & UNWTO 2005, 12.)

Sustainable tourism is often used interchangeably with terms ecotourism, nature tourism, alternative tourism, green tourism, responsible tourism or even cultural tourism. (Okech 2011, 230). Each of these has a bit different emphasizes in their definitions and therefore are not synonyms, but all of them share some similarities.

#### 2.1.1 Environmental

Sustainable tourism has several main aims, minimizing the negative effects on the environment being one that is often highlighted. Sustainable tourism also tries to encourage to appreciating nature and cultural heritage, as well as nature conservation. (Tervo-Kankare 2017,237.)

Sustainable tourism has become "a super trend", and especially millennials are more environmentally conscious than any other generation ever. Mass tourism does not attract like before, but tourists are interested in authenticity and uniqueness, and many are trying to avoid for example flying which is bad for the environment. For example in Sweden flying has decreased by 20%. (Kilponen, 2019.)

Environment and nature are broad concepts and in order to use them correctly, they have to be defined. Environment is understood as physical, social and cultural factors of either natural, cultural or built environments. More than anything else it is thought as a living environment for people, habitat, which is affected by our actions either positively or negatively. Often we also mean the surrounding nature that includes soil, flora, atmosphere, as well as the waters and sea areas, which people are trying to control. (Tyrväinen 2017, 93.)

Tourism is an industry that requires a clean and scenic environment in order to exist, but the industry inevitably changes the environment and risks spoiling it. The biggest global environmental threat is climate change, and tourism contributes to it a big time. To give more examples, construction of tourism sites changes the environment locally. Construction, heating and air conditioning consume natural resources. Tourism is also contributing to environmental pollution, while traffic and energy production weakens the quality of air.

Tourism ads stress on water resources, and nature near tourism areas is elapsing and being littered. (Tyrväinen 2017, 93.)

Nature as a common term means soil, hydrosphere, and atmosphere including its flora and fauna which people have changed not at all or little. Derived from this, protecting nature values can be understood as protecting nature, all of its elements mentioned previously, from the effects caused by human activities. The purpose is to minimize changes by human whether or not nature is somehow unique or ordinary. (Ekroos & Warsta 2012, 18.)

Climate change is the global abnormal change on the climate caused by the actions of a human. It is caused by the constantly growing amount of carbon dioxide, methane and other greenhouse gas emissions in the atmosphere. Most of the emissions are caused by the use of coal, natural gas, and oil. In the cities, most emissions are caused by heating, use of electricity and traffic. (HSY 2015; WWF.)

The climate change cannot be completely prevented anymore, it is already happening, but there is a lot that can be done to restrain it. The effects of climate change can be already seen. The sea level rises, glaciers are melting, natural catastrophes are becoming more common, rainfalls and elsewhere drought are increasing, the biodiversity of nature is suffering and drinking water and food production are endangered. The most important way to restrain climate change is to reduce the use of fossil fuels and to take care of the forests that act as carbon sinks. Everyone can make small acts on their everyday life to reduce the impacts. These can be for example favoring local and vegan foods, avoiding unnecessary flying and buying responsibly produced clothes and goods. (HSY 2015; WWF.)

Tourism accelerates global climate change, as it has become obvious, and most of the tourism's greenhouse gas emissions are caused by transportation, the majority of which by air transport. (Tyrväinen 2017, 94) This is why many airlines have various carbon offset programs with what they try to cover up for the negative impacts of flying. As important part is to make the travelers feel less guilty for flying and maintain airline companies businesses flourishing. More sustainable way of traveling would be for example rail transport, but obviously, air transport for long haul destinations is faster and more convenient way to travel. It would be more environmentally friendly if tourists stayed longer in the destinations, rather than making frequent trips. (Travis 2011, 79.)

An Australian airline, Qantas, claims to be the largest carbon offsetter out of all the other airlines. On their website, they state that since the year 2007, they have an offset of over 3 million tonnes of carbon emissions. They have calculated the fuel emissions for each of

their routes, and every customer can choose to participate in the offset program if they like, but it is not a compulsory practice. If a customer wishes to offset his or her flight, they can choose the desired project where they want their money to go. These projects are for example: "Empowering rainforest communities", "Conserving Tasmania's wilderness" and "Carbon neutral Kangaroo Island". (Qantas 2018.)

Not all of the airlines commit to sustainability with the same kind of programs, but practices vary from airline to another. Airlines are for example replacing their old inefficient aircraft with more fuel-efficient ones, as well as the other machinery and ground equipment. Some airlines have simplified their flying routes and made them shorter, and have put effort to recycling on land and in the air. They have also improved their employee's environmental training, so the staff knows how to follow the new policies. It depends again on the airline, how big efforts they make and how seriously they commit to sustainable development. (Emirates 2018; American Airlines.)

Ann Ojala wrote her dissertation "What makes us environmental friendly?" for the University of Helsinki and discovered the factors behind a person's environmental friendliness. If a person does not spend time in nature, there will not be positive memories and emotions towards nature either. These emotions and memories are important for creating nature relationship and appreciation towards nature. The basis for a nature relationship is created as a child. Part of it is rational thinking and knowledge, but without the time spent in nature, there will not be feelings and memories involved, which are an important part of the puzzle. These most likely add to the attitudes and appreciation towards nature. (Ojala 2012, 21-22.) Not only that but visiting nature has a positive effect on one's personal health and wellbeing (Tyväinen, Lanki, Sipilä & Komulainen 2018; Kuuluvainen & Saren 2016, 5).

According to visitor surveys of the nature and historic sites in Finland, 87% of the respondents had had either fairly great or very great impact on their well-being. (Metsähallitus, Parks & Wildlife Finland 2019.) In Finnish national parks visitors often get information about the surrounding nature and have a chance to learn how to behave according to sustainable practices. Knowledge and appreciation are thought to encourage environmentally responsible behavior. (Tyrväinen 2017, 99.)

Although tourism has a lot of negative impacts, sustainable tourism is aiming towards positive change. Despite the good attempt, sustainable tourism has drawn a lot of critique, and some scientific groups have even suggested giving up on the term. The reason for this is that climate change wise the idea of sustainable tourism is impossible. It would mean a way

of tourism which would cause little or not at all greenhouse gas emissions. (Tervo-Kankare 2017, 236-240.)

There is no tourism without travel and most of tourism's greenhouse gas emissions are caused by transportation, but of course, other parts of tourism like accommodation are playing their part in making tourism unsustainable (Travis 2011, 75). The fact that sustainable development and sustainable tourism has been more visible in academic and political discussions, has not made tourism any more sustainable than before, actually, tourism is less sustainable than ever before. (Tervo-Kankare 2017, 236-240).

#### 2.1.2 Social

To summarise, natural resources are the most crucial component for tourism, but at the same time, tourism development itself is making a major negative effect on them. Many of the destinations are overcrowded, natural environment and coastal zones are being destructed, infrastructure cannot take the overload which results in problems for example with garbage collection and sewage systems, traditional social life gets degenerated, and the list goes on (Tuna 2011, 8). If tourism of the area is poorly planned and regulated and causes visible damage, like the ones listed above, it easily turns the local people against tourism (Tyrväinen 2017, 93 -94). This is not only problematic for the local communities and environment but leads to tourist dissatisfaction too. Usually, tourists go for a holiday to relax and enjoy a peaceful environment and to leave the stress and busy home cities behind, which will not happen in a destination where tourism is not carefully planned. (Tuna 2011, 9.)

Sustainable tourism, in other words, well-planned tourism, has a great role in improving the life of local communities and offering jobs for them. It is striving to spread awareness and knowledge of tourism impacts. Improving equality and development are on the base of sustainable tourism. This is possible for example by offering jobs to minority groups such as ethnical minorities, uneducated people or for women in places where gender equality is not a reality yet. With tourism also basic services like health care and public transport might improve because when the area has tourism it is more cost-effective. Obviously offering high-quality tourism experience, which will bring money to the destination is in the same way important. Therefore we can see that tourism can positively affect the economic well-being of the destination. (Tervo-Kankare 2017, 237.)

As it has become obvious, sustainable development in any industries, tourism included, is a complex and extremely challenging matter. Let's take the example of a popular subject, reducing the carbon footprint. If we think honestly, there is no such thing as eco-friendly travel, all the traveling is contributing to climate change and the real eco act would be to

stay at home and not to travel. However, it is not that simple. If all the people suddenly stopped traveling, there would be millions of people unemployed which would be followed with a whole lot of negative impacts. (McCool & Moisey 2008, 6.)

Although tourism does create jobs, sometimes the ownership and/or employees might be foreign, which then is not helping the local communities. Similarly, tourism creates demand for imported goods, foods and services that were not needed before tourism. Interactions between cultures are kept in high value, but sometimes the local culture, tourist culture, and imported culture might be quite separate from each other, though occasionally interacting. (Travis 2011, 144-146; Tuna 2011, 3)

Cultures consist of multiple factors like social practices and norms, religious beliefs, values, languages, arts and many other things that certain communities have in common. It is natural that culture evolves during the time, but tourism is rapidly changing the host culture. The most alarming thing is not the changes in the superficial factors like in lifestyles, cuisines or customs, but the changes in the values, social relationships, quality and integrity of people's lives. These are the ones that might cause negative impacts. Tourism is accused of changing the social mores and morals which has seen to lead to prostitution, crime, gambling, vandalism, and religious decline. This is visible especially when we think the impacts of the First World tourist to the Third World countries. (Travis 2011, 144-146.)

#### 2.1.3 Economical

Even though many of the impacts of tourism are negative, there are also positive sides to it. Tourist crowds might wear off the paths in the national parks and leave trash after, but they also bring money in, which is used to reconditioning the parks, improving the trails and services offered, as well as nature conservation. Tourism is creating jobs for locals and making them an active part of the tourism industry and nature conservation if we discuss tourism related to nature. (Tyrväinen 2017, 98.) The positive effect that nature and national parks have on people's health and wellbeing and therefore public health is directly linked to economics (Ojala & Tyväinen 2015).

Tourism creates opportunities in areas where opportunities are limited. When thinking about Finnish peripheries such as remote areas of Lapland, for example, tourism has brought a source of livelihood for many. Development of the economic structure is important in the areas that are losing inhabitants for bigger cities. Tourism has a significant role in the economic structures of these sparsely populated municipalities. (Savukosken Kunta; Sodankylä Talousarvio 2018, 22-23.)

Finnish nature is also a source for foods, such as berries and mushrooms but also by hunting and fishing. Finnish nature and forests offer a considerable advantage to the growing trend of local and organic food products. (Viljamaa & Moisio, 2014, 24.)

Despite all the positive impacts of sustainable tourism has, in reality, the sustainable tourism model has been implemented fairly little. This is mainly due to the variety of motives of different actors in the tourism industry. Everyone sees differently what sustainable development is and how to implement it, as well as the value for it. Many of the entrepreneurs in tourism are thinking only about their own business and how to make it profitable. (Tervo-Kankare 2017, 238.)

### 3 National Parks in Finland

"National parks are over 1 000-hectare protected areas, which are also natural sights open to everyone. Their primary purpose is to ensure the diversity of Finnish nature. National parks are established by law on state-owned lands." (Metsähallitus 2019a.) Nature conservation is the most important function of a national park (Metsähallitus 2016, 27). All the national parks have been established based on a specific law.

National parks in Finland contain the following things: nature has to be seen somehow valuable, they have to possess a significant nature attraction and spread the interest towards nature. National parks in Finland are also aiming to educate the visitors by offering chances for independent and guided observation and learning (Metsähallitys 2016, 27.) National parks and other conservation areas have an important role as tourism attractions in Finland (Metsähallitus 2019b).

There are 40 national parks in Finland at the moment. Their area in total is 978 900 hectares, eands and inter the figure 1 below shows the locations of the national parks. (Metsähallitus 2019a). The first national parks and reserves were formed in 1938, in places where already existed some tourism activity. Patriotism was a strong driving force in founding the first national parks in Finland. (Puhakka & Saarinen 2013, 3.



Figure 1. Finnish national parks on the map. (Nationalparks.fi)

National parks are often confused to nature reserves, which serve a different purpose. While national parks are open for public and usually offer good outdoor recreation services and guidance, nature reserves, on the other hand, are serving research purposes. Often a person needs written permission to enter a nature reserve area, which is granted only for scientific purposes. However, some nature reserves have marked trails for public use. Nature reserves are much stricter with their nature conservation rules than national parks. (Ympäristöministeriö 2015.)

There are various other types of nature protection areas in Finland. In addition to national parks and nature reserves, there are 12 wilderness areas, 9 national city parks, 49 Ramsar convention areas for conservation of the wetlands,1866 of Natura 2000 sites that secure the biodiversity of a certain area, multiple nature monuments and landscape conservation areas as well as nature conservation areas on private land. (Ympäristöministeriö 2016.)

### 3.1 Planning and managing national parks in Finland

Metsähallitus is an enterprise run by the state, and it is a part of the Ministry of Agriculture and Forestry (Puhakka & Saarinen 2013, 414). Parks & Wildlife Finland is an organization under Metsähallitus, and it is responsible for managing the protected areas. This includes managing the species, habitats and cultural heritage of the protected area as well as their recreational services. (Metsähallitus 2017a.)

The role of tourism has increased in the national park planning in Finland. It is not looked at only from a recreational and educational point of view, but also as a factor in regional development. Well-planned and executed conservation and use of nature are often resulting as advantages for conservation as well as regional development goals. (Puhakka & Saarinen 2013, 1-2.)

Finnish national parks are receiving an increasing number of visitors. From 2016 to 2017 the national park visits grew by ten percent (Metsähallitus, Parks & Wildlife Finland 2019). In the past 10 years, the number of visitors in Finnish national parks has been doubled (STT 2019). In 2018 there were more than 3.1 million visits to Finnish national parks. If we also include the other protected areas the number of visits was over 6.8 million. (Metsähallitus, Parks & Wildlife Finland 2019.)

While the visitor numbers are growing it is more and more important to plan and manage national parks carefully to preserve the nature and the destination. Since Parks & Wildlife Finland is mainly funded from the national budget, they are worried about how they will be able to maintain the parks and historic sites with the growing numbers. The quality of the services might suffer along with paths, buildings, and structures of the national parks and the other sites. Also, nature and cultural heritage values need funding to be maintained. These will affect the tourism experience and satisfaction and might even lead to the sites losing their appeal in the eyes of tourists. (Metsähallitus 2017b.)

Yle News published an article 1st of August 2019 (Passoja), that due to the limited resources of Metsähallitus, and so forth Parks & Wildlife Finland, one-fifth of the resting areas in Finland will be given up. In Lapland, the share is even more. Resting areas usually offer fireplaces, outhouses, and huts in nature for the hikers and other nature enthusiasts. This means that these resting areas will be either demolished or the responsibility for managing them will be given to someone else. Metsähallitus states that they will focus on the most popular sites, and taking care of them. Despite this, there is a preliminary plan to establish a new national park in the fells of Salla in Northern Finland (Toivakka 2019).

Recession in the early '90s left many people without a job, and Metsähallitus had the obligation to employ a large number of people. Since there was so much workforce, there was also a chance to build a great number of resting areas and sites and other services all around Finland. However today, there is much smaller teams taking care of these sites, and they are not able to take care of everything especially when the visitor numbers are growing. (Passoja, 2019.)

The local newspaper of central Finland, Keskisuomalainen, wrote a comprehensive article on how anyone can voluntarily take part in reconditioning national parks in Finland. In fact, volunteers are crucial for the wellbeing of the national parks as there is more to do than there are people. Volunteering does not require any special skills, but rather willingness to help and interest towards nature. (Tervoja 2019).

As it was stated earlier, nature conservation is the most important function of a national park and the nature of the area should be kept or restored to its natural state. This includes conserving abiotic and biotic parts of nature such as species and ecosystems, but it can likewise focus on landscapes which are shaped by the people. Furthermore, national parks are used for scientific purposes and research, monitoring the status of the environment and offering outdoor recreation for the public. (Metsähallitus 2016, 27.)

It is not only important that the national parks are well managed and planned. Likewise, backcountry travelers have to plan their trips to get out what they want from the trip, but most of all to be safe and minimize the damage to nature and culture. A website called 'Leave no trace' focuses on informing and making nature travelers leave no trace or impact to nature and at the same time help people to get the most out of their trip. The website lists various crucial things that should be thought through when planning a trip outdoors. Basic things to check beforehand are the weather which will inevitably affect the trip somehow, terrain, rules, and regulations of the area, private land boundaries, group size and condition of the hikers. Based on these matters one can choose the right equipment and estimate the anticipated food consumption. One should also learn about the area and maps and plan the route and activities based on the abilities and goals of each participant. (Leave no trace 2019a.)

Consequences of a poorly planned trip can be for example that group cannot travel as fast as planned and never even reaches the destination they had in mind. Another example could be travelers who have not considered the weather and are not aware of the fire bans and have not planned alternative cooking options. By making a campfire to cook meals,

they risk the nature of the whole area and there is a great danger of a forest fire. (Leave no trace 2019a.)

It is the job of the entrepreneurs working with national parks and also other authorities to encourage and lead tourists to pay attention to their choices. Ville Laitinen, a tourism entrepreneur from the Archipelago Sea highlights the importance of avoiding flying and traveling for long distances to get to the destination, favoring local and organic food and goods, staying on the marked routes and paths, and acting according to the rules of the area and everyman's right. He also encourages people to shares their positive nature experiences on social media, because he believes that it inspires others to go into nature and that those experiences make people appreciate nature more. (Cygnel 2019.)

### 4 National parks in the research

There are three different national parks chosen for this study. The chosen national parks are located in different areas of Finland and therefore they offer a variety of ecosystems. Urho Kekkonen national park and Koli national park are amongst the most popular national parks in Finland. The following subchapters will go more in detail on these national parks and their characteristics.

### 4.1 Urho Kekkonen national park

Urho Kekkonen national park (UKK) is the second-largest protected area in Finland. It is located in Lapland and is one of the northernmost national parks in Finland. It is one of the most known wilderness destinations in Finland. As all of the national parks in Finland, UKK is managed by the Parks & Wildlife Finland, which is a unit part of Metsähallitus. (National-parks.fi 2019d.) UKK was established in 1983 which makes it the second oldest national park in Finland (Laki Urho Kekkosen kansallispuistosta 229/1938). The total area of the national park is 2 550km². Protecting forest, mire and fell nature as well as reindeer husbandry were the reasons for establishing the national park. The park also offers great conditions for hiking. (Nationalparks.fi 2019d.)

The history of man in Urho Kekkonen national park goes a long back in time. There is evidence of civilization in the area of Urho Kekkonen national park from 3 000 years ago. River Kemijoki starts from the national park and the shores of the river have been populated since the end of the last Ice Age. (Nationalparks.fi 2019d.)

The national park area was home for four ancient Sámi villages. These ancient Sámi people were called Forest Sámi, and they were hunters and fishers, who traveled for hunting trips for summers and returned to their villages for winter. The Forest Sámi culture and Shaman religion started vanishing in the 16th century and new settlers from the south came to the Sámi lands. (Nationalparks.fi 2019d.)



Figure 2. Kaunispää fell in Urho Kekkonen national park. (Anni Pynnönen 2018.)

The national park and some of its routes can be reached by public transportation, but to get to deeper into the wilderness one needs a car. Figure 2 above shows the views from the top of Kaunispää fell, and one can drive to the top of the fell with a car. UKK offers marked one-day hiking routes from easy to demanding as well as unmarked hiking excursions for several days that require orientation skills. There are multiple campfire sites on the routes. (Retkipaikka a.) In wintertime, UKK can be explored by skis and summertime by foot. Fishing with correct permits, canoeing, snowshoeing, bird watching, cycling, and horseback riding on specific routes as well as berry and mushroom picking are activities one can practice in the national park. Unlike dog and husky driving, and hunting by other than local residents, is prohibited. (Nationalparks.fi 2019d.)

The nature of the national park includes fells, gorges, watershed areas, and forests, especially coniferous forests. The flora of the national park is versatile and there are many different animal species in the area. One example of these animal species being the golden eagle which is also in the official emblem of UKK. (Nationalparks.fi 2019d.)

### 4.2 Koli national park

Koli is famous for its national landscapes and for being a source of inspiration for Finnish artists like Eero Järnefelt, Jean Sibelius and Juhani Aho. Still today the nature of Koli keeps inspiring artists, photographers, and nature-enthusiasts. Koli national park is located in

North Karelia, in Eastern Finland next to lake Pielinen, the fifth largest lake in Finland, and on municipalities of Lieksa, Eno, and Kontiolahti. (Nationalparks.fi 2019e.)

The Koli national park was established in 1991 (Laki Kolin kansallispuistosta 581/1991). Nature is not the only attraction in the national park, but there is a popular hotel, skiing center as well as Koli Nature Center Ukko located on top of the hills (Nationalparks.fi 2019e).

There are findings of trapping pits that were used during the Stone Age in the area of Koli. (Nationalparks.fi 2019e.) However, Koli was not inhabited before the 17th century because the area was thought to be home for powerful spirits. The value of Koli as a tourism attraction was discovered at the end of the 1800 century. (Retkipaikka b.)

Koli offers a variety of activities from 80 kilometers of hiking trails to kayaking, horseback riding, skiing, snowboarding, snowshoeing, snowmobiling, biking, fishing, and boating. There are also different type of volunteer work you can sign up to do such as harvesting or herding sheep. In addition to all of these, multiple entrepreneurs are making their living by offering various types of accommodation and activities, for example, husky sled rides and white water rafting nearby. (Nationalparks.fi 2019e.)

There is a lot to explore in Koli national park. One could argue that the best that Koli has to offer are the views from the peaks after climbing up one of the hills. You can also find yourself admiring a waterfall or from "Devil's Church" that is a 33-meter long cave. (National-parks.fi 2019e.)

Koli national park consists of a diverse nature. Visitor can explore birch tree forests kept with the traditional slash-and-burn method, other types of forests, rocky hills, highest of them reaching 347m. Over the years there are 4 078 different species found in the area of Koli national park, over half of them being insects. If you visit Koli in wintertime you are most likely to see trees loaded with heavy amounts of snow. Below Figure 3 shows the views from the slopes of Ukko-Koli's skiing center. (Nationalparks.fi 2019e.)



Figure 3. Ukko-koli slopes. (Juho Pynnönen 2018)

The easiest way to reach Koli is by car. The nearest bus stop is nine kilometers from Koli. There is also a possibility for a shared shuttle service. (Retkipaikka b.)

### 4.3 Archipelago national park

Archipelago national park was established in 1983 (Laki saaristomeren kansallispuistosta 645/1983). When discussing the number of islands, the Archipelago Sea has more islands than any other archipelago in the world (Nationalparks.fi 2019f). However, if we believe World Atlas, the most island would have Norwegian Archipelago that is said to consist out of at least 240 00 islands (Pariona 2018). According to the Finnish Ministry of Employment and the Economy (2015), Norway has in total 117 116 islands, which does not match with the statements above. According to this source, Finland has 178 947 islands in total. (Kuusisto 2015, 4.) Whilst according to the Telegraph, Sweden has 267 570 islands, which would then be the country with the most islands. According to this article, Norway would only have more than 50 000 islands when Finland is stated to have 179 584, out of which 98 050 is located on the country's lakes. (Smith 2018.)

To this study, the number of the islands or which country has the most of them matters very little. From the above, we can conclude that we do not know the absolute truth but the fact is that the Archipelago Sea and the Archipelago national park has a lot of islands and so forth a lot to offer for visitors.

Archipelago national park is located in the Archipelago Sea, in Southwestern Finland. The shapes of the islands and islets are formed by the Ice Age and waves after that. Islands are often rocky, pine forests are a common sight as well diverse flora next to the rocks. (nationalparks.fi 2019f.)

Finland's Southwestern coast and the archipelago has been inhabited since the late Stone Age (about 2000-1300BC). The population in the archipelago started to decline after the mid-1500s when wars and disease took place. In addition to these, the archipelago did not offer enough natural resources to support the growing number of inhabitants with the old techniques. Later the new fishing methods like drift nets and hooks eased the life of the archipelago and lead to the growth of the population again. (Nationalparks.fi 2019f.)

There are some findings from the prehistorical and the historical time such as burial mounds, antiquities related to fishing and monk rings which purpose still has not been discovered (Nationalparks.fi 2019f).

There are animal species that cannot be found anywhere else in Finland. These are for example White-tailed Eagle, which is the largest breeding bird in Finland. The Harbour porpoise is the only species of whales that live in the Baltic Sea. (Discovering Finland.)

A visitor of the park can explore islands of different sizes and shapes and see the wonders of the underwater world by scuba diving (Nationalparks.fi 2019f). Also, some islands have restrictions regarding visiting the island at the time of the bird's nesting season and dogs should always be kept on the leash (Cygnel 2019). Also, there are no services for people that have mobility difficulties. (Nationalparks.fi 2019f.)

Visiting national park requires at least some level of planning since one must travel some sea to reach the park. Some islands can be reached by car or bicycle. It is also possible to have your boat or kayak taking you to the islands. Visiting islands is made easy and attractive by free ferry services to all the inhabited islands. Figure 4 below shows views to the Archipelago Sea near the island of Seili. (Nationalparks.fi 2019f.)



Figure 4.The views in front of the island of Seili, Archipelago national park. (Anni Pynnönen 2019.)

However, the Archipelago Sea does not have mass tourism. Yet they are still paying attention and taking responsibility for tourism's environmental, socio-cultural and economic consequences, as all the national parks in Finland do. (Cygnel 2019.)

### 5 Methods

This chapter defines research and introduces the chosen research methods for this study, and how the research question "how the chosen national parks are implementing sustainable development in their practices" is approached. Since the topic of the research methods is wide and multidimensional, this study will only focus on the methods used in this particular thesis and will not cover research methods as such. Nonetheless, the chosen method, that is qualitative, is often compared to the quantitative method, which is not used in this research but is often thought as an opposite for qualitative research.

#### 5.1 Qualitative research

In other words, research could be described as a scientific effort to find new knowledge on a specific matter. There are multiple ways to execute research. However, there is a pattern that academic research usually follows. (Kothari 2004, 1.)

Research starts with a research problem. That is on the core of the whole research and this is the main question the researcher wants to find an answer to with the research. Having a hypothesis will help one to focus and limit the research from expanding too wide which results in superficial research that does not go in detail. Hypothesis is a suggested explanation, outcome or idea that the research is testing. Research requires collecting data which is then analyzed and used for reaching conclusion. After having the results, one can see if the set hypothesis was accurate or not, and how the results can be used. (Kothari 2004, 1.)

Qualitative research does not unambiguously represent one research method or approach, but it is a term that covers a variety of different approaches and methods. It is often thought of as an opposite for quantitative research. Qualitative research is rather descriptive than numeric unlike quantitative research, and tries to answer the question "why" more than "what". For instance, qualitative research endeavors to understand and to explain a specific phenomenon, a culture or behavior of an individual or a group, without trying to manipulate that. (Saldana, Leavy & Beretvas 2011, 3-4.)

The base for qualitative, and also for naturalistic research, was born in the late 18th century from an idea that people have to be studied in relation to the environment and social culture they live in. Usually qualitative research results in a great amount of detailed data on a limited number of people, which makes the research in-depth, but then, on the other hand, it cannot be applied on a large scale. (Health University of Utah.)

### 5.2 Webropol survey

This research on sustainability in Finnish national parks was conducted with an open answer survey made with Webropol. This method was the most suitable one because the interviewees were located all around Finland and it was not possible to meet them face-to-face. The first plan was to make Skype interviews, but this was not possible due to schedule difficulties.

The questions were the same for all the interviewees, and all of the questions were openended. Open-ended questions allow the interviewees to answer freely without being led to answer to a certain way with ready-made response options. Because the target group for this questionnaire was limited, open-ended questions worked well. If there would be a very large amount of responses, open-ended questions would be very difficult to analyze.

There are pros and cons of doing research with a questionnaire. On a positive note, the respondent can choose the time and place when he/she wants to fill in the survey. It might give more considered and organized answers compared to speech, which is then easier to analyze. On the other hand, everyone is not easy with words. Also, the researcher does not have the chance to ask to follow up questions or to make clarifying questions depending on the answers. The main problem, also with this particular research, was that the questionnaire requires more work and a survey sent by email or post is easy to ignore despite multiple reminders. (Gillham 2005, 113- 114.)

The survey was sent out in May and the respondents were given a time frame of three weeks to answer. Respondents received three reminders. After the survey was closed there was still one that wished to have a chance to answer the survey and wished to receive the ready thesis work, because she found the topic so interesting. Before sending the survey to the respondents it was tested by one outsider to check the functionality. I found the contact details of the respondents from Metsähallitus website.

### 5.1 Reliability and validity

Reliability and validity are not synonyms. Research can be perfectly reliable without being valid at all. Anyhow, validity ensures the reliability of the research. Even though these concepts are maybe the most easily measured in quantitative research, these are important and used in all types of research. (Kirk & Miller 1986, 20.)

According to common definitions, research can be defined reliable if it can be repeated multiple times and still receive the same consistent and accurate results. In quantitative research, there are three types of reliability according to Kirk and Miller (1986, 41-42). Therese three types are: research which can be repeated multiple times and still receive same results; research which results remain stable over time; and research where there is a similarity of results during a specific time period.

However quantitative research differs from qualitative, and reliability of a qualitative research is not always as easy to see. The most often qualitative research researches people, which makes it so complicated. Re-testing method might sensitize a person and affect the responses that the person would give. There can be also external influences that might make the person answer differently. Researcher has the responsibility to test respondents in a way that ensures consistent and accurate results. (Golafshani 2003, 598-599.)

Research is valid if it measures and answers to the exact questions that it was supposed to measure and answer from the beginning. Also truthfulness of the results play a major part in validity. Often researchers mirror their results to already existing data and asking questions when evaluating the validity of the research. (Golafshani 2003, 598-599.)

The factors for reliability and validity that were discussed above are perfectly suitable for quantitative research. For qualitative research, the matter of replicability of the results is not always an applicable way to measure reliability. Some even claim that reliability is "misleading" idea in qualitative research and if reliability is though as a criterion for a good research, then it is a sign of a not good research. The keys to evaluate reliability and validity of the results in qualitative research are precision, credibility and transferability. (Golafshani 2003, 600.-601)

### 6 Results

The purpose of this research was to find an answer to how national parks in Finland are implementing sustainable development in their practices. More specifically this research focuses on three national parks that were chosen for their popularity as well as for their different locations and ecosystems. These three national parks are Archipelago national park in the Archipelago Sea in Southern Finland, Koli national park in Eastern Finland and Urho Kekkonen national park in Northern Finland. The results will then mirror the theory and the reality of how the chosen national parks actually reduce environmental impacts and implement sustainable development in their practices.

The target group for this research was very limited. Out of 18 national park representatives that the survey was sent to, six answered. Accordingly, the percentage of respondents was 33%. Although the number of respondents was quite low, it usually is when doing research with surveys.

The interviewees were chosen to this survey for their status in Parks and Wildlife Finland. There were national park superintendents, regional directors, development managers and nature conservation managers from the areas of Koli national park, Urho Kekkonen national park and Archipelago national park.

Metsähallitus states the key principles for their environmental policy on their websites and this is part of it: "We develop our activities on the basis of shared values, strategy and responsibility. Responsibility also means that each Metsähallitus employee must, as part of their own work, continuously improve the environment. Ensuring that there is no conflict between ecological, economic, social and cultural sustainability is the principle guiding all our work. We follow developments in environmental matters and keep up to date with environmental trends, and work to ensure that Metsähallitus can lead the way in sustainable development." (Metsähallitus 2019c.)

### 6.1 Views on sustainable development

Sustainable development was defined at the beginning of this study and when the interviewees were asked how they saw sustainable development in Finnish national parks, the answers were in harmony with the definitions. The main matter that came up in the answer was the importance of preserving nature, locally and globally, and making sure that tourism in the national parks would not weaken the natural and cultural values. Visitors were also hoped to understand the value of national parks.

Furthermore, some respondent stated that economical sustainability should be left out when talking about sustainable development specifically in national parks. Someone else, on the other hand, said that environment, people and economy are all linked together also in national parks.

Metsähallitus (2013) states that on the base on Finland's strategy for sustainable development, are sustainable use, preservation, and management of nature together with ensuring the wellbeing of the citizens and securing the integrity of the society. So that it results as a Finland that makes use of the knowledge and strengths it has. The interviewees were asked how it is implemented in practice. The main thing appeared to be planning. The values of the area are defined, the threats for these values are noticed and actions to prevent these threats from happening are planned. In order to do this successfully, it requires continuous cooperation with the area's residents, farmers and entrepreneurs and other groups involved.

Archipelago national park has also used LAC- method that stands for Limits of Acceptable Changes. This method is used to help managers of wetland sites to understand, monitor and recognize actions and limitations for activities to help to maintain the ecological state of the area (Australian Government 2012). Respondents also mentioned other methods to monitor the development of national parks. Also, plan for sustainable nature tourism had been produced, although it was over 10 years old.

Some respondent felt that the implementation of sustainable development has been executed rather poorly. The emphasis is too much on the economic factors such as boosting tourism industry while ecological, cultural and social sustainability are left behind.

Metsähallitus and Parks and Wildlife Finland were the authorities seen as responsible sustainable development in national parks. Above Metsähallitus, Ministry of the environment has a big part in the picture as well as the parliament and the government. Ensuring the funding for is one of the most significant things that helps to maintain the national parks, and this is the responsibility of the government. On a smaller scale even the visitors, tourism entrepreneurs, and locals are responsible for securing the sustainable development of the site.

The research also aimed to discover special characters these three national parks have and how those have been taken in to account. Urho Kekkonen national park is located largely on the Sami homeland, and therefore it is crucial to pay attention to securing and

maintaining the Sámi culture. Also, the area is used for reindeer herding which is one of the traditional ways of living of Sámi people. These matters are very sensitive and current topics. Supporting and maintaining Sámi culture is particularly important when Urho Kekkonen national park is such a popular tourist attraction and heavily visited. Archipelago national park has flora and fauna as well as traditional landscapes that are rare in the other national parks.

Regarding Koli national park many come to the national park to see the nature but one respondent remarked that the most of the visitors come to Koli for other reasons than nature, for example, to stay at Hotel Koli and its spa as well as skiing to the Ukko-Koli skiing center. There was a concern expressed of how much damage private cars cause. There is a plan to build more parking spaces for private car, but rather than this, public transportation to Koli should be enhanced and supported.

As it has become clear throughout the thesis, the visitor numbers of national parks have grown considerably in the past years. This has led to local damages such as erosion and wearing off the paths and nature, littering and worn off structures. Globally thinking growing carbon emissions are seen as the biggest threat.

A respondent saw growing numbers positively and told that more visitors are equal to more people understanding the importance of protecting nature. Furthermore, it has benefitted entrepreneurs and local businesses big time.

Successful tourism businesses that attract more and more people received also some criticism. There are an uneven amount of resources that are being invested unevenly to different sites by the government. There are so-called "priority" sites that are invested more than the others. These sites attract larger and larger amounts of visitors, many of which from abroad. These sites are often out of reach of public transportation. At the same time local sites that would be approachable easily and with low carbon footprint for example school groups, are left without attention and resources.

These "priority sites" require more resources to function which means fewer resources for maintaining the other national parks and their natural values. This is added to the already existing shortage of money and high carbon footprint when travelers come to visit "priority sites" from far. This inevitably affects biodiversity and further to climate change. Lately, some of the respondents have started to question if the current direction of the development if desired or not.

Actions have been taken to answer the fast-growing visitor numbers. Paths are made more lasting, there have been campaigns informing about sustainable tourism and behavior, structures are renewed and built stronger. Guidance and information are offered widely and some national parks have restrictions to where visitors are allowed to wander due to the protection of nature and species. This is a common custom for example near birds' nesting areas. LAC method was again mentioned as a way to scan some factors of sustainable development, but it does not work for recognizing weaknesses in resourcing or acknowledging global environmental threats.

National parks have various entrepreneurs working directly or indirectly with national parks. The problem of sustainable development in national parks has sometimes claimed to be the fact that all of these entrepreneurs understand sustainable development differently. Therefore they also have different visions of how to implement it. The survey asked how the managers of the national parks ensured that all the entrepreneurs are acting according to sustainable principles.

A common answer was making co-operation contracts that define sustainable practices, principles and ensure that the entrepreneurs pay attention and act according to these practices. Also, guidance and occasionally training is given. A dialog is crucial and going through the possibilities and restrictions for the businesses. Even though entrepreneurs are always aiming to make money, most of them are aware of that wellbeing of nature is essential for their own business, and the consequences of destroying it would also damage their business. However, this is an aspect that has to be monitored continuously.

The second last question of the survey unraveled the factors that the respondents see as the most important in the future development of national parks. Overall responses wanted the future development to focus on long-term actions and remembering the main purpose of national parks which is to protect Finnish nature and to offer a chance for people to visit and get to know Finnish nature. Not so much providing a chance for co-operation businesses to make a profit.

When thinking purely Urho Kekkonen national park, one answers that the most important thing is to take care of the wilderness areas and to make sure that they stay as they are also in the future. Someone else sees it differently and emphasizes business thinking when answering that the new customer groups should be taken into consideration, especially international visitors. It is very clear that more money is needed to take care of the national park's structures such as staircases and huts.

Answers regarding Koli national park circle around the themes that are discovered already earlier in the results. Koli national park should use their power for example with marketing and communication also to guide visitors to other nature sites. This way they could ensure the possibility to visit nature sites near cities and housing areas. This way local kids and youths would have a chance to visit and get interested in nature more easily rather than attracting visitors from across the world, needless to say, which one is more nature-friendly.

A respondent wanted to stop the constant aim for growth and economic gain. Likewise, the amount of the visitors should be measured from nature and from the trails and paths rather than counting in all the tourists that come to ski and relax to Hotel Koli. This way there would be more current data of the people who actually come to visit nature. Planning national parks' development should be an integral part of the region's development plans. Respondents are hoping for more planning and anticipation than repairing and afterward.

The feedback the three national parks have been receiving from the visitors has been mainly positive. A lot of the negative feedback has to do with the fact that services in the national parks are falling into disrepair when the resources are used to maintaining the "priory sites". Some entrepreneurs want to bring motorized safaris to national parks but so far this wish has been declined. However, adjectives "the most beautiful archipelago in the world" and hidden treasure" were lifted up in the results.

### 7 Discussion

Nature and therefore nature preserves, such as national parks, are a highly important part of Finland and Finnish people's lives in the sense of nature protection and recreation. As it has become obvious, interest towards Finnish national parks has also grown significantly abroad.

There are a couple of things that seemed to be the biggest struggles in implementing sustainable development in Finnish national parks. The lack of resources for reconditioning and maintaining the national parks has been visible in the news lately, as well as it was visible in the responses of the survey for this thesis (Passoja 2019; STT 2019). Also, the fact that visitor streams are focused unevenly to certain sites.

I see a bit worrying that employees at managerial level positions at Parks and Wildlife Finland have slightly differing views on what direction sustainable development in Finnish national parks should take. Some are hoping to attract tourists from abroad and across the world to visit Finnish nature. Whereas others are trying to focus on making it more accessible for locals and residents from nearby to visit nature. The nature relationship is created in childhood, and this is why it is important to make it easy for the kids and youths to gain these nature experiences. (Ojala 2012.)

Globally thinking these two visions mentioned above, have a great difference in the amount of the impacts they have on the environment. Also, some see more value of thinking economics and the money national parks generate when others would exclude economic thinking from national parks and purely focus on preserving nature values. There is not necessarily conflict between these two but there are clearly different perspectives on the matter.

There was a consensus that the main purpose of national parks in Finland is to preserve nature and to offer nature experiences for visitors. All the activities are planned to keep nature preservation in mind. Some see a stronger connection with economics than the others, but a common understanding was that nature has a major positive impact on the whole society. For example, nature experience is proven to affect positively on one's mental and physical health, and therefore have a positive impact on public health. (Tyrväinen, Lanki, Sipilä & Komulainen 2018.) Even the ones that want to productize national parks and linked them more to the economy, understand the fact that without a clean and scenic nature there would not be visitor streams and tourist, not from near nor far. So preserving nature is the number one for all.

Throughout the thesis, there has been a discussion on how the national parks are experiencing record-breaking visitor numbers and how there is too little money to respond to this. Nonetheless, we are not talking about mass tourism. Finland's tourism is still small compared to some other countries and we are dealing with sustainable development in the national parks fairly well as I see it. Despite this, I think that Finland should aim to be an example country for others with our sustainable development practices. We need clean and untouched nature to pass on the Finnish national landscape and cultural heritage.

Even though sustainable development plans are already existing and acted according to, these plans could be more throughout. The first thing is that everyone would see the value for sustainable development and there would be common understanding how to implement it in practice. The terms and concepts should be redefined too so that there would not be any confusion.

A respondent mentioned the importance of cooperation with the local entrepreneurs and inhabitants. Residents of the area usually know the area the best and often are willing to put effort into preserving natural values. When the decision making and leadership are done far and by people who do not know the area personally, a lot of resources are lost and there is a danger of losing unique features of nature. The government and political decision-makers have a major role in defining the outlines and resources for the development of the national parks. Sometimes the decisions made by the decision-makers in high positions do not match with the needs and hopes of the locals and therefore it can be difficult for the locals to implement it. That is why cooperation is so important. Also, the decision-makers should give importance to the feedback given by the local actors.

Even small choices and acts can have big impacts in the sense of either preserving nature values or demolishing them. The responses did not reveal much of the concrete actions of how sustainable development in the national parks is implemented at the moment. Even though this research did not produce any great new findings nor large amounts of new information, it supports the already existing experience- and research knowledge. It is important to have research that confirms and strengthens already existing knowledge. By making research also the discussion on the topic stays alive. One of the respondents commented that it was interesting and important to stop and take a moment to think these matters.

We have more knowledge, information and discussion on sustainable development than ever before. If we take sustainable tourism, for example, it is very popular and used the term but in fact, tourism is more unsustainable than ever before. We should start using the

information and knowledge we have and start to act, so this all would not just stay on the level of talks.

The thesis process took place from March to September 2019, time frame of seven months. The questionnaire was sent out to 18 representatives of Finnish national parks and received six responses, so this approach worked well. The percentage of responses was 33%. For further research, I would suggest to follow up the different decisions that are now made to maintain different national parks and deepen the research on the effects of these decisions.

This research is valid and reliable. I have described the research clearly and processed the data openly. The identity of the respondents was kept in private as promised, I dealt the data anonymously and impartially. Research can be seen as valid as a result of receiving responses from all of the national parks chosen for the study. The questions in the survey sent to the national park representatives were relevant in term of the research question. The answers to the survey answered the set questions, even though the amount of the information was not much.

Regarding reliability, as I see it, the survey questions were understood as intended by the respondents. Accordingly could be deduced that the research questions could be reproduced and performing a comparative study would be possible. Already existing data on sustainable development supports the results of my research.

### 8 References

American Airlines. Setting the bar for sustainability. URL: <a href="https://www.aa.com/i18n/aboutUs/corporateResponsibility/environment.jsp">https://www.aa.com/i18n/aboutUs/corporateResponsibility/environment.jsp</a> Accessed: 27.3.2019.

Australian Government, Department of the Environment and Energy 2012. Limits of acceptable change- Fact sheet. URL: <a href="https://www.environment.gov.au/water/wetlands/publications/factsheet-limits-acceptable-change">https://www.environment.gov.au/water/wetlands/publications/factsheet-limits-acceptable-change</a> Accessed: 17.8.2019.

Cygnel, S. 2019. Tervetuloa Saaristoon. Mikä ihmeen kestävä matkailu? p.66-67. Paraisten kaupunki.

Discovering Finland. Saaristot. URL: <a href="https://www.discoveringfinland.com/fi/luontoe-lamykset/saaristot/">https://www.discoveringfinland.com/fi/luontoe-lamykset/saaristot/</a> Accessed: 16.6.2019.

EKroos, A. & Warsta, M. 2012. Luontoarvot ympäristölupamenettelyssä. Selvitys ympäristönsuojelulain ja muun lainsäädännön kehittämismahdollisuuksista. Enlawin Consulting Oy.

Emirates. 2018. Environmental policy. URL: <a href="https://www.emirates.com/english/about-us/environment/environmental-policy.aspx">https://www.emirates.com/english/about-us/environment/environmental-policy.aspx</a> Accessed: 27.3.2019.

Finland promotion board. Finland's country branding strategy 2017. URL: <a href="https://toolbox.finland.fi/wp-content/uploads/sites/16/2017/07/2017-07-12-ulkominis-terio-strategia-final-eng.pdf">https://toolbox.finland.fi/wp-content/uploads/sites/16/2017/07/2017-07-12-ulkominis-terio-strategia-final-eng.pdf</a> Accessed 20.3.2019

Gillham, B. 2005. Research Interviewing: The range of techniques. McGraw-Hill Education.

Golafshani, N. 2003. Understanding reliability and validity in qualitative research. University of Toronto.

Health University of Utah. What is qualitative research? URL: <a href="https://nursing.utah.edu/research/qualitative-research/what-is-qualitative-research.php">https://nursing.utah.edu/research/qualitative-research/what-is-qualitative-research.php</a> Accessed 21.7.2019.

HSY. 2015. Mikä on ilmastonmuutos? URL: <a href="https://www.hsy.fi/fi/asukkaalle/hillitse-ilmastonmuutosta/Sivut/mika-on-ilmastonmuutos.aspx">https://www.hsy.fi/fi/asukkaalle/hillitse-ilmastonmuutos.aspx</a> Accessed: 7.9.2019.

Kilponen, E. 24.7.2019. Kestävän kehityksen matkailu on supertrendi. Karjalainen, 199, p.A5.

Kirk, J. & Miller, M. 1986. Online publication 2011. Reliability and validity in qualitative research. URL: <a href="http://methods.sagepub.com.ezproxy.haaga-helia.fi:2048/book/reliability-and-validity-in-qualitative-research/n2.xml">http://methods.sagepub.com.ezproxy.haaga-helia.fi:2048/book/reliability-and-validity-in-qualitative-research/n2.xml</a> Accessed: 21.7.2019

Kothari, C. 2004. Research Methodology: Methods and Techniques. New Age Internationa Ltd.

Kuuluvainen, V. & Sarén, H. 2016. Luonnon hyvinvointivaikutukset- Hyödynnä tietoa matkailuliiketoiminnassa. Mamk, university of applied sciences. Mikkeli. URL: <a href="https://www.theseus.fi/bitstream/handle/10024/116464/URNISBN9789515885500.pdf?se-quence=1">https://www.theseus.fi/bitstream/handle/10024/116464/URNISBN9789515885500.pdf?se-quence=1</a> Accessed: 7.9.2019.

Kuusisto, E. 2015. Suomi, saarten ja vetten maa. Työ-ja elinkeinoministeriö. Forssa Print. Forssa.URL: <a href="https://mmm.fi/documents/1410837/1948019/Suomi\_Saarten\_ja\_vet-ten\_maa\_esite\_suomi.pdf/">https://mmm.fi/documents/1410837/1948019/Suomi\_Saarten\_ja\_vet-ten\_maa\_esite\_suomi.pdf/</a> Accessed: 9.6.2019.

Laki Kolin kansallispuistosta 581/1991. Finlex.

Laki Saaristomeren kansallispuistosta 645/1983. Finlex.

Laki Urho Kekkosen kansallispuistosta 229/1938. Finlenx.

Leave no trace. 2019a. Center for outdoor ethics. Principle 1: Plan ahead and prepare. URL: https://lnt.org/why/7-principles/plan-ahead-and-prepare/ Accessed 5.6.2019.

Leave no trace 2019b. Center for outdoor ethics. 9 out of 10 people in the outdoors are uninformed about their impacts. Let's change that. URL: <a href="https://lnt.org/">https://lnt.org/</a> Accessed 5.6.2019.

Maa-ja metsätalousministeriö. Metsien hiilinielut. URL: <a href="https://mmm.fi/metsat/metsatalous/metsat-ja-ilmastonmuutos/metsien-hiilinielut">https://mmm.fi/metsat/metsatalous/metsat-ja-ilmastonmuutos/metsien-hiilinielut</a> Accessed: 7.9.2019.

McCool, S. & Moisey, R. 2008. Tourism and Sustainability: Linking Culture and the Environment. Cromwell Press, Trowbridge, United Kingdom.

Metsähallitus 2016. Principles of protected area management in Finland. Edita Prima Oy, Helsinki.

Metsähallitus 2017a. Nature conservation. URL: <a href="http://www.metsa.fi/web/en/nature-conservation">http://www.metsa.fi/web/en/nature-conservation</a> Accessed: 25.4.2019.

Metsähallitus 2017b. Record number of visits to Finnish national parks in 2017. URL: <a href="http://www.metsa.fi/web/en/-/record-number-of-visits-to-finnish-national-parks-in-2017">http://www.metsa.fi/web/en/-/record-number-of-visits-to-finnish-national-parks-in-2017</a> Accessed: 25.4.2019.

Metsähallitus 2019a. National parks are Finland's natural treasures. URL: http://www.metsa.fi/web/en/national-parks Accessed: 4.4.2019.

Metsähallitus 2019b. Kestävä matkailu suojelualueilla, opas matkailuyrityksille. Vantaa. URL:https://julkaisut.metsa.fi/assets/pdf/lp/Muut/kestavamatkailu.pdf Accessed: 16.4.2019.

Metsähallitus 2019c. Environmental policy. URL: <a href="http://www.metsa.fi/web/en/environmentalpolicy">http://www.metsa.fi/web/en/environmentalpolicy</a> Accessed: 28.8.2019.

Metsähallitus, Parks & Wildlife Finland 2019. The visitation numbers in 2018 of national parks, national hiking areas and other protected and hiking areas of recreational importance. All areas managed by Metsähallitus. URL: <a href="http://www.metsa.fi/documents/10739/3335805/visitornumbers2018.pdf/c78ef820-7415-4d09-81a7-30f49b0c04ce">http://www.metsa.fi/documents/10739/3335805/visitornumbers2018.pdf/c78ef820-7415-4d09-81a7-30f49b0c04ce</a> Accessed: 25.4.2019.

Nationalparks.fi 2019a National parks- Finland as its finest. URL: <a href="https://www.nationalparks.fi/en/nationalparks/mapnationalparks">https://www.nationalparks.fi/en/nationalparks/mapnationalparks</a> Accessed: 7.5.2019.

Nationalparks.fi 2019b. Six of the best- Finland's most popular national parks. URL: <a href="https://www.nationalparks.fi/hikinginfinland/wheretogo/mostpopularnationalparks">https://www.nationalparks.fi/hikinginfinland/wheretogo/mostpopularnationalparks</a> Accessed: 6.5.2019.

Nationalparks.fi 2019c. Archipelago national park. URL: <a href="https://www.nationalparks.fi/archi-pelagon">https://www.nationalparks.fi/archi-pelagon</a>p Accessed: 6.5.2019.

Nationalparks.fi 2019d. Urho Kekkonen national park. URL: <a href="https://www.national-parks.fi/en/urhokekkonennp">https://www.national-parks.fi/en/urhokekkonennp</a> Accessed: 6.5.2019.

Nationalparks.fi 2019e. Koli national park. URL: <a href="https://www.nationalparks.fi/en/kolinp">https://www.nationalparks.fi/en/kolinp</a> Accessed: 7.5.2019.

Nationalparks.fi 2019f. Archipelago national park. URL: <a href="https://www.nationalparks.fi/en/ar-chipelagon">https://www.nationalparks.fi/en/ar-chipelagon</a>p Accessed: 8.6.2019.

Ojala, A. & Tyrväinen, L. 2015. Luonto hoivaa mieltä ja kehoa. Mielenterveys-lehti. 3/2015. URL: <a href="https://mieli.fi/fi/mielenterveys/hyvinvointi/ymp%C3%A4rist%C3%B6-ja-luonto/luonto-hoivaa-mielt%C3%A4-ja-kehoa">https://mieli.fi/fi/mielenterveys/hyvinvointi/ymp%C3%A4rist%C3%B6-ja-luonto/luonto-hoivaa-mielt%C3%A4-ja-kehoa</a> Accessed: 6.9.2019.

Ojala, A. 2012. What makes us environmentally friendly? Social psychological studies on environmental concern, components of morality and emotional connectedness to nature. Academic dissertation. University of Helsinki. Helsinki.

Okech, R. 2011. Managing Ecotourism Impacts in Gros Morne National Park, Canada.

Kozak, M & Kozak, N. 2011. Sustainability of Tourism: Cultural and Environmental Perspectives. p. 229- 245. Cambridge Scholars Publishing. Newcastle upon Tyne.

Pariona, A. 2018. The largest archipelagos in the world. World Atlas. URL: <a href="https://www.worldatlas.com/articles/the-archipelagos-of-the-world-with-the-largest-num-ber-of-islands.html">https://www.worldatlas.com/articles/the-archipelagos-of-the-world-with-the-largest-num-ber-of-islands.html</a> Accessed: 8.6.2019.

Passoja, A. 1.8.2019. Saana-tunturille graniittiportaat ja Luostolle rappuset raudasta-"Toivottavasti kestävät seuraavat sata vuotta". Yle Uutiset. URL: <a href="https://yle.fi/uutiset/3-10900980">https://yle.fi/uutiset/3-10900980</a>. Accessed 10.8.2019.

Puhakka, R. & Saarinen, J. 2013. New role of tourism in national park planning in Finland. Journal of environment and development, 22, 4, p.411-434. Sage.

Qantas 2018. Future Planet. URL: <a href="https://www.qantasfutureplanet.com.au/">https://www.qantasfutureplanet.com.au/</a> Accessed 26.3.2019.

Retkipaikka a. Urho Kekkosen Kansallispuisto. URL: <a href="https://retkipaikka.fi/urho-kekkosen-kansallispuisto/">https://retkipaikka.fi/urho-kekkosen-kansallispuisto/</a> Accessed: 7.5.2019.

Retkipaikka b. Kolin kansallispuisto. URL: https://retkipaikka.fi/koli/ Accessed 30.5.2019.

Saldana, J., Leavy, P & Beretvas, N. 2011. Fundamentals of Qualitative Research. Oxford University Press USA-OSO.

Savukosken kunta. Yleistä. URL: <a href="http://www.savukoski.fi/index.php?option=com\_content&view=article&id=9&Itemid=20">http://www.savukoski.fi/index.php?option=com\_content&view=article&id=9&Itemid=20</a>
Accessed: 6.9.2019.

Smith, O. 2018. The countries with the most islands (and the idyllic ones you must visit). The Telegraph. URL: <a href="https://www.telegraph.co.uk/travel/lists/countries-with-the-most-is-lands/">https://www.telegraph.co.uk/travel/lists/countries-with-the-most-is-lands/</a> Accessed: 9.6.2019.

Sodankylän kunta 2018. Talousarvio 2018, Taloussuunnitelma 2019-2018.

Strange, T & Bayley, A. 2008. OECD Insights: Sustainable Development: Linking economy, society, environment. OECD Publishing. France.

STT. 30.8.2019. Kansallispuistojen suosio on positiivinen ongelma: "Viivan alle jää iso plussa". Keskisuomalainen. URL: <a href="https://www.ksml.fi/kotimaa/Kansallispuistojen-suosio-on-positiivinen-ongelma-%E2%80%9DViivan-alle-j%C3%A4%C3%A4-iso-plussa%E2%80%9D/1428443">https://www.ksml.fi/kotimaa/Kansallispuistojen-suosio-on-positiivinen-ongelma-%E2%80%9DViivan-alle-j%C3%A4%C3%A4-iso-plussa%E2%80%9D/1428443</a> Accessed 2.9.2019.

Tervoja, P. 10.8.2019. Kansallispuistot rauhaa ja hiljaisuutta. Keskisuomalainen, 148, 213. p. 29-31.

Tervo-Kankare, K. 2017. Kestävä Matkailu. Edelheim, J. & Ilola, H. 2017. Matkailututkimuksen avainkäsitteet, p. 235- 240. Lapland University Press. Rovaniemi.

Toivakka, S. 11.8.2019. Hiljaisuuden keskellä on hyvä olla. Keskisuomalainen, 148, 214, p. 30-31.

Travis, A. 2011. Planning for Tourism, Leisure and Sustainability: International Case Studies. CABI. Wallingford.

Tuna, M. 2011. Social and Environmental Impacts of Tourism Development in Turkey.

Kozak, M & Kozak, N. 2011. Sustainability of Tourism: Cultural and Environmental Perspectives. p. 1-16. Cambridge Scholars Publishing. Newcastle upon Tyne.

Tyrväinen, L. 2017. Matkailun ympäristövaikutukset. Edelheim, J. & Ilola, H. 2017. Matkailututkimuksen avainkäsitteet, p. 93 – 99. Lapland University Press. Rovaniemi.

Tyrväinen, L., Lanki, T. Sipilä, R & Komulainen, J. 2018. Mitä tiedetään metsän terveyshyödyistä. Lääketieteellinen aikakauskirja Duodecim. URL: https://www.duodecimlehti.fi/lehti/2018/13/duo14421#s1 Accessed: 7.9.2019.

UNEP & UNWTO 2005. United Nations Environment Programme & World Tourism Organization. Making tourism more sustainable. A guide for policy makers.

United Nations General Assembly 1987. Report of the world commission on environment and development: Our common future. Oslo, Norway: United Nations General Assembly, Development and International Co-operation: Environment

Viljamaa, S. & Moisio, S. 2014. Luonnonmarjojen kansantaloudellinen merkitys. Arktiset Aromit ry, Oulun yliopisto.

WWF. Ilmastonmuutos. URL: <a href="https://wwf.fi/uhat/ilmastonmuutos/">https://wwf.fi/uhat/ilmastonmuutos/</a> Accessed: 7.9.2019.

Ympäristöministeriö 2015. Kansallis-ja luonnonpuistot muodostavat luonnonsuojeluverkoston rungon. URL: <a href="https://www.ym.fi/fi-Fl/Luonto/Luonnon moni-muotoisuus/Luonnonsuojelualueet/Kansallis\_ja\_luonnonpuistot Accessed: 4.4.2019">https://www.ym.fi/fi-Fl/Luonto/Luonnon moni-muotoisuus/Luonnonsuojelualueet/Kansallis\_ja\_luonnonpuistot Accessed: 4.4.2019</a>.

Ympäristöministeriö 2016. Luonnonsuojelualueet ja muut luontoa turvaavat alueet. URL: <a href="https://www.ym.fi/fi-Fl/Luonto/Luonnon\_monimuotoisuus/Luonnonsuojelualueet">https://www.ym.fi/fi-Fl/Luonto/Luonnon\_monimuotoisuus/Luonnonsuojelualueet</a> Accessed: 16.4.2019.

### 9 Attachements

### 9.1 Attachement 1

### Webropol questions

- 1. Mikä on asemasi Parks and Wildlife Finlandilla?
- 2. Minkälaisista tehtäväalueista vastaat työssäsi?
- 3. Mitä kestävä kehitys kansallispuistoissa mielestäsi tarkoittaa?
- 4. "Suomen kestävän kehityksen strategian lähtökohtana on yhdistää luonnon kestävä käyttö, hoito ja suojelu sekä kansalaisten hyvinvoinnin ja yhteiskunnan eheyden turvaaminen siten, että tuloksena on osaava ja vahvuutensa hyödyntävä kestävän kehityksen Suomi" (Metsähallitus 2013, 3, Kestävä luontomatkailu suojelualueilla, opas matkailuyritykselle).
- -Miten tätä käytännössä toteutetaan?
- 5. Kenen vastuulla kansallispuistojen kestävä kehitys on?
- 6. A. Onko alla olevilla kansallispuistoilla erityispiirteitä, jotka olisi huomioitava kestävän kehityksen kannalta?
- 1.Urho Kekkosen Kansallispuisto
- 2. Kolin Kansallispuisto
- 3. Saaristonmeren Kansallispuisto
- B. Jos on, niin mitä ja miten niitä on huomioitu?
- 7. Kansallispuistojen kävijämäärät ovat nousseet viime vuosina.
  - 1. Minkälaisia ympäristövaikutuksia tällä on ollut?
  - 2. Onko tämä johtanut toimenpiteisiin, jos on niin millaisiin?
- 8. Kansallispuistoissa toimii monia yrittäjiä. Matkailun kestävän kehityksen ongelman on usein väitetty olevan se, että yrittäjät ymmärtävät eri tavoin kestävän kehityksen merkityksen ja kuinka sitä tulisi toteuttaa.
  - -Miten huolehditte siitä että yrittäjät toimivat asettamienne kestävän kehityksen periaatteiden mukaisesti?
- 9. Mikä on mielestäsi tärkeintä kansallispuistojen tulevaisuuden kehittämisessä, alla olevien kansallispuistojen osalta?
- 1.Urho Kekkosen Kansallispuisto
- 2. Kolin Kansallispuisto
- 3. Saaristonmeren Kansallispuisto
- 10. Millaista palautetta olette saaneet palautetta kävijöiltä?
- 11. Mitä muuta haluaisit sanoa?