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## **Degree Thesis**

Bachelor Thesis

### **Developing tourism in biosphere reserves in Europe**

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#### **Example of the biosphere reserve Nedre Dalälven and from biosphere reserves in Europe**

Author: Sunny-Day Hamstra  
Supervisor: Eugenio Conti  
Examiner: Albina Pashkevich  
Subject/main field of study: International Tourism Management  
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**Abstract:**

Biosphere reserves have existed for quite a while, they are focused on being sustainable on all levels. According to UNESCO (n.d.), biosphere reserves are areas where nature and humans live in symbiosis with each other. That means that they are not allowed to interrupt each other, so humans cannot disturb nature but nature cannot stop humans/businesses from developing. But it should all happen as sustainably as possible. There was some prior research on tourism related to biosphere reserves, however, not any research on biosphere reserves related to tourism businesses except that they benefitted through marketing. The aim was to fill a research gap, which was on tourism businesses in a biosphere reserve. The questions asked in the thesis were about how tourism businesses benefit from existing in a biosphere reserve and how they can contribute to sustainability in a biosphere reserve. It is a qualitative research, to get more in-depth subjective perspectives. The goal was to find different answers to the research questions, which also happened. The primary data was collected through interviews and later analyzed through thematic analysis. The themes of the analysis were biosphere reserves in Europe, people actively working with the biosphere reserve Nedre Dalälven, and lastly tourism businesses in the biosphere Nedre Dalälven. The main findings were that tourism businesses benefit from existing in a biosphere reserve in various ways, like marketing, but that was already known in the literature review. However, even though that was already known before it was still relevant to find out about what more things tourism businesses benefit from. Another benefit was tourism businesses feeling more encouraged to develop sustainably. On how tourism businesses contributed to sustainability in a biosphere reserve were also different examples, on all three sustainability levels which are economic, environmental, and social. The data in the findings part are later discussed and related to the secondary data in the literature review. This research contributes in the sense of having filled the research gap which is about tourism businesses related to biosphere reserves.

**Keywords:**

Biosphere reserves, Sustainability, Tourism, Nedre Dalälven

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# 1. Introduction

This thesis is a qualitative research about biosphere reserves, two different aspects are being looked at. The first one is how tourism businesses can benefit from existing in a biosphere reserve, the second one is how are tourism businesses and sustainability related in a biosphere reserve. These are kind of general questions but still relevant due to it being understudied. Especially about tourism businesses in biosphere reserves, and that is why this thesis will focus on tourism businesses in a biosphere reserve. To narrow it down the focus will be on the biosphere reserve Nedre Dalälven, due to the author having a personal relation to it (which is living there) and it being understudied.

The author chose to write her thesis about biosphere reserves mostly because she was interested in the topic from having a personal relation to the biosphere reserve Nedre Dalälven. The author began to look into that specific case and found that there is not any literature to be found on it related to tourism and tourism businesses. When looking into literature about other biosphere reserves, one could see that there was literature on tourism related to biosphere reserves, however, not any on tourism businesses in biosphere reserves. It all started from seeing that there was no literature found on the specific case of Nedre Dalälven biosphere reserve related to tourism, to finding a research gap on tourism businesses in biosphere reserves. To not make it to focused on only the perspectives of Nedre Dalälven five different biosphere reserves will also be used as data to answer the research questions.

When only using Nedre Dalälven as a topic to look at, it will only be one case, which can cause that the data found is too focused on only that biosphere reserve. That is why also five other biosphere reserves are being looked at, to give more perspectives. The reason why it is so important to include international cases and not only the Nedre Dalälven case, is because biosphere reserves can be different from each other in different countries. However, it is also important to address that they have similarities, and the international cases are compared to each other to see if there are links between them. This introduction will provide some background on biosphere reserves, then following with the research questions and objectives, then aim of the research, and lastly a small conclusion on why that specific biosphere reserve was chosen for this research.

## 1.1 Background

There are many different definitions of what biosphere reserves are, they are areas where humans (including businesses, etc.) and nature are living in symbiosis with each other. That means that they cannot interrupt each other, they are supposed to cohabit without disturbing. The social cannot interrupt nature, however, nature is not supposed to stop the social part from developing either (UNESCO, n.d.). According to Ishwaran, Persic, and Tri (2008) biosphere reserves are a concept and a tool of UNESCO, which from the start was to protect certain areas on preservation and environmental level. However, which now has evolved to develop land and seascapes, where more than 80% of the land lies outside the legally protected area. Although there are various definitions of what biosphere reserves are, Batisse (1982) claims that many people do not know what it is or are confused when somebody tries to explain it.

Biosphere reserves started under the Man and the Biosphere program that UNESCO held. That program was about harmonizing biodiversity conservation and developing sustainably. According to Cuong, Dart, and Hockings (2016), some influential factors that determine if a biosphere reserve fails or succeeds are governance, finance and resources, stakeholder participation, management, and communication and awareness. It is difficult to succeed without commitment to the biosphere reserve by different government authorities (Cuong, Dart & Hockings, 2016). It is crucial to develop tourism sustainably in a biosphere reserve, due to its large potential of making a negative impact on biodiversity. There is an increase in nature-based tourism, and biosphere reserves are becoming very attractive to that kind of tourism. The biosphere reserve must keep developing sustainable even though an increase in tourism there (Nolte, 2004).

The biosphere reserve that is chosen to focus on in this thesis is Nedre Dalälven, which consists of the municipalities Säter, Hedemora, Sala, Avesta, Heby, Älvkerleby, Tierp, and the southern parts of Sandviken and Gävle. It has been a part of the UNESCO biosphere program since 2011. They have different projects to make the biosphere reserve even more sustainable. An example of a project they have been working on is restoring the natural reproduction environment for the salmon and to maintain the salmon migration (UNESCO, 2019).

## 1.2 Research questions and objectives

As explained in the introduction there is not much previous research on tourism businesses related to biosphere reserves, and the thesis will be focused on the case of Nedre Dalälvens biosphere reserve and five other biosphere reserves around Europe to give other perspectives than just Nedre Dalälven. That is why these objectives and research questions are implemented, to fill the research gap of tourism businesses in a biosphere reserve.

The objectives for this research are:

1. To find out the value for tourism businesses to operate their business in a biosphere reserve.
2. To determine if a biosphere reserve can be more sustainable with the help of tourism businesses.

The research questions:

1. In what ways can tourism businesses benefit from existing in a biosphere reserve?
2. How are tourism and sustainability-related in a biosphere reserve? And what are tourism businesses doing to contribute to sustainability in the biosphere reserve?

These questions will be focused on Nedre Dalälvens biosphere reserve but to give different perspectives it will also be focused on five other biospheres, and secondary data such as the data present in existing literature will be used to strengthen the arguments found when conducting the research.

### 1.3 Aim

Nedre Dalälvens biosphere reserve is a local biosphere reserve to the author of this thesis. From working in a tourism business in the area and living there the author has experienced a lack of understanding amongst guests and people living there of what a biosphere reserve is. That has led to them not knowing how to interact with the area. Throughout the research of this thesis, the author has noticed that it takes a lot of time and effort to get designated as a biosphere reserve and it could be very important for the development of the area. According to Becker (2019) a biosphere reserve designation could benefit tourism and adds value to the area. However, when local people and tourists do not know what it is, it kind of loses its meaning.

According to the author, it will be crucial in the future that people understand what it is and how to interact with it, due to the area developing sustainably which also could lead to more jobs in the area, better infrastructure, etc. It could improve people's daily life but also protect the environment. Why this is important to study is because the author hopes it will educate people more on what biosphere reserves are. Due to living and working in this biosphere reserve, it means a lot to the author to write this thesis. To not make it too narrow and just focused on Nedre Dalälven, five other biosphere reserves will also be looked into.

It is clear that not many people in the area know what a biosphere reserve is and the importance of it. It would be good for both the locals and the biosphere reserve if people were more educated in the field of biosphere reserves. To this day there is barely any research on tourism in Nedre Dalälven, especially not any academic papers. There is an existing research gap on tourism businesses in biosphere reserves and also with a focus on Nedre Dalälven, that is why this thesis is being written. The chosen research questions are used to fill that research gap. This thesis aims to find out in what ways tourism businesses can benefit from existing in a biosphere reserve and how tourism businesses and sustainability are related in a biosphere reserve. Hopefully, this thesis will be able to fill the research gap and educate local people on what a biosphere reserve is.

### 1.4 Biosphere reserve Nedre Dalälven

According to the website of the biosphere reserve Nedre Dalälven the biosphere reserve is called Älvlandskapet Nedre Dalälven, they focus mostly on working long term with preserving the open landscape, engage in fishing conservation, sustainable tourism, and being responsible for biological mosquito control. The biosphere reserve's website claims that those are the focus areas for this biosphere reserve. Traveling sustainable has increased in popularity and the biosphere reserve Nedre Dalälven wants to make sustainability an obvious fundamental platform in everything that is offered within the tourism industry in this biosphere reserve (Nedredalälven, n.d.). There is already quite a lot of existing research on biosphere reserves in various destinations and with the aspects of tourism and sustainability, however, there is barely any literature about the Nedre Dalälven one. There is literature about some projects they have done and explaining what they are doing, but there is no literature found about the aspects of tourism and sustainability, except for the information found on Nedre Dalälvens website shown above.

## 2. Literature review

### 2.1 Sustainability and tourism

According to Scoones (2007), the word sustainability has been very popular the last two decades, there is barely anything that cannot be paired with sustainability. There are sustainable cities, economies, businesses, and sustainable development. Thiele (2016) states that sustainability is important due to the increasing and ever-growing number of citizens, producers, consumers, and organizations. It is a popular and trending concept and hopefully will lead people to adapt to sustainability. Thiele also speaks about how important sustainability is but that it often can be used in the wrong way. For example, some businesses claim that they are “green” and are adapting to sustainability when they are not at all sustainable. Due to sustainability being a trend many businesses use it as a marketing tool, to make people interested because they are sustainable and doing something good. However, one should be careful because some businesses and organizations just use it as a way to market themselves rather than being sustainable (Thiele, 2016).

Purvis, Mao, and Robinson (2018) speak about the three pillars of sustainability, which are social, economic, and environmental. It is often shown as three intersecting circles with overall sustainability in the middle. Something cannot be completely sustainable without being sustainable on all levels. According to Freya Higgins-Desbiolles (2018) tourism, today has a big problem, it is actively growing and that is not compatible with sustainability goals. Freya argues that tourism is something that needs to be understood and managed towards sustainability. The continuous growth of tourism will kill tourism in the end, so there should be a stop and become more sustainable. Some of the current challenges of tourism sustainability are high energy use, habitat destruction, and large water consumption according to Pan et al (2018).

Buckley (2012) claims that the tourism industry is not yet close to reaching sustainability. *“Private-sector approaches to sustainability such as self-regulation, corporate social responsibility, eco-certification, and destination marketing and demarketing have been promoted widely, but proved largely ineffective”* (Buckley, R. 2012). Are some solutions that were thought to be effective but were proven to be ineffective.

Miller et al (2010) speak about how important it is that if tourism wants to adapt to a sustainable lifestyle, it is crucial that the public also adapts to those regulations and understanding. But from the study by Miller et al (2010) they noticed that there is a lack of awareness towards tourism's impact on sustainable factors. It also showed an unwillingness to change their current touristic behavior. However, sustainability is becoming more and more important for developing tourism according to Satta, Spinelli, and Parola (2019). They claim that if tourist businesses adapt to a “greener” sustainable option it could add more value to their business. Like Scoones (2007) spoke about sustainability being a trend in general, it also relates to tourism.

Sustainable tourism demand is increasing, so when adapting to sustainability it will add value to one's business but it also does something for the surroundings such as the economic, environmental, and social levels (Satta, Spinelli & Parola, 2019). Su, Wall, Wang, and Jin (2019) speak about that tourism is an important economic development option for destinations, however, tourism has both positive and negative influences on a destination. It sometimes results in displacement and relocation of communities, disturbing economic systems, and socio-political processes. Tourism can contribute to the social and economic levels of sustainability, through generating jobs, more money into the

destination, and sometimes improve local people's lives (Su, Wall, Wang & Jin, 2019). This section is about sustainability and tourism to provide some theoretical background before the section about biosphere reserves connected to tourism and sustainability.

## 2.2 Tourism and sustainability in a biosphere reserve

One could say that when thinking about biosphere reserves, the first thing to come to mind is the protection of nature. However, according to Kratzer and Ammering (2019) biosphere reserves go so much further than the protection of nature. They did a study in two biosphere reserves through social network analysis and a standardized survey. They came to the conclusion that innovations in peripheral areas are multi-level arrangements where biosphere reserves provide platforms for new needs and ideas, encourage the development and funding of services and products, and lastly act as gatekeepers between actors in different areas. Kratzer and Ammering (2019) also claim that if UNESCO really wants to make an impact on sustainability transitions, they need to prioritize differently. They should prioritize the integration of local actors plus their projects into their World Network of Biosphere Reserves (WNBR). However, it might not always be that easy to make locals interested in the whole concept of biosphere reserves.

Wallner, Bauer, and Hunziker (2007) claim that locals have been affected by the development of biosphere reserves, even if the locals are not participating actively in the biosphere reserve where they live, they will still be affected in some ways. It can be through a change of land-use patterns, additional rules for the production of goods, but also new marketing opportunities for locally produced goods. According to Wallner, Bauer, and Hunziker (2007), that means that companies can use existing in a biosphere reserve as a marketing tool, especially tourism businesses. They can use it to attract tourists because sustainable tourism is increasing which leads to biosphere reserves becoming more attractive. Due to biosphere reserves are focused on being sustainable and sustainable tourism is increasing. It could be a great way to attract more tourists to the tourism business. Due to it being in a more sustainable area that is working on being more sustainable all the time (Wallner, Bauer & Hunziker, 2007). Multiple travel agencies, DMOs, tourism companies have already been using it as a way to market themselves. All to attract tourists and make them engage in the biosphere reserve. (Ryan, Silvano & Seitz, 2013)

Even though it seems like biosphere reserves only positively affect locals, it is not always the case. Like in the study by Maikhuri, Nautiyal, Rao, and Saxena (2001) the Nanda Devi biosphere reserve in India. There have been a lot of conflicts towards the biosphere reserve, mostly due to the conservation policies. The locals claim that the strict conservation laws have caused problems for them. A few examples are that locals and tourists were excluded from the core zone, a decrease in the rural economy due to damage to crops and livestock by wildlife, their decrease in income from wild medicinal plant resources, and that tourism was not allowed in the core zone anymore. In this case, people were not happy existing in a biosphere reserve, due to the things they did before (which was not very sustainable) was not allowed anymore. In this case, legal enforcement of protection of the area got more attention than the rural economy, so the environment got more attention than the economy of the locals which is not sustainable. Because if it is sustainable then all factors such as economy, environment, and social should get equal attention (Maikhuri, Nautiyal, Rao & Saxena, 2001).

In the case of the Nanda Devi biosphere reserve, it has been difficult for locals to grow crops and have livestock. Due to the fact that wildlife has damaged that, and that leads to

less income. However, when looking at the website of the biosphere reserve Appennino, they market their food as a part of the biosphere reserve. In the beginning, Appennino was just a national park, and then in 2015, they were designated to be a biosphere reserve. The biosphere reserve markets locally produced foods a lot. They state that food is the outcome of a strong bond between people and nature. It is a very sustainable way of attracting tourists to eat because the products are local and also locally consumed. Which leads to the money staying in the area, which is good for the local economy (Parco Appennino, n.d.)

It is different between various biosphere reserves on how locals interact with the biosphere reserve. In the study written by Maikhuri, Nautiyal, Rao, and Saxena (2001) it seems like the locals are not too happy with the new regulations with the biosphere reserve. Then in the Appennino one, there the locals are very involved and encouraged to sell their locally produced products. It can differ between biosphere reserves on how local people interact with living in one. It also depends on those who run the biosphere reserve and what they focus on and how far they are with developing the area.

According to Bennett and Dearden (2014), conservation success is often dependent on support from locals towards conservation. Local people's perceptions were mostly negative towards the governance and management of the conservation of the marine parks. However, they claim that if governance and management of those marine parks would gain trust and build up relations with locals, it could lead to improved conservation. When looking at these two different studies where locals are against conservation, it is often because the government and management do not include them in decisions or educate them on what is happening and why. As Bennett and Dearden say about gaining trust and build relations with locals, it could be a solution for the future for those protected areas and biosphere reserves.

García-Frapolli, Ayala-Orozco, Oliva & Smith (2018) state in their study that sustainability, eco-friendly, and equity have become more important and popular over the last years, also in tourism. Protected areas have therefore also increased in interest by researchers, but also the tourism industry. According to them the main difficulties with accessing sustainability in those protected areas are human activities, such as hunting, construction, mining, tourism, urbanization, and resource extraction. From a conservation perspective, tourism can often generate negative impacts on a social, environmental, or economic level. However, the conservation of nature on that extreme level can also cause negative impacts on the local population, economic, political, and social factors. That is the whole point of biosphere reserves, it should be as sustainable as possible on all levels (García-Frapolli, Ayala-Orozco, Oliva & Smith, 2018).

According to Chung, Dietz and Liu (2018) nature-based tourism is more frequent in protected areas, especially those that are of higher biodiversity and more accessible from urban areas. In their study it shows that protected areas mainly focused on biodiversity have 35% more visitors. Tourism that exists in a biosphere reserve is usually nature-based, due to most activities in the area are based on nature. Kim, Lee and Kim (2020) speak about how nature-based tourism contributes to conservation of biodiversity. Through offering financial stability and enhancing visitors' interest in nature. However, they also claim that unsustainable tourism can cause a lot of problems in a protected area, such as human traffic and devastation of a wilderness area. The study showed that visitors respected the conservation of biodiversity. Even though it seems like nature-based tourism could be sustainable, there are still several points that will affect nature in negative ways due to tourism. According to Wolf, Croft and Green (2019) more visitation in an area will

lead to needing better infrastructure, maintenance of roads and trails, disturbance in the area. Even though this could be sustainable on a social level, because improved infrastructure and maintenance benefits locals. It will not be sustainable on an environmental level, due to the fact that one is interrupting/disturbing nature when applying those things (Wold, croft & Green, 2019).

Protected areas are often focused on it being sustainable on an environmental level only and preserving the area as it is. The problem with that is that the local community and the economy cannot develop, and that leads to the area not being sustainable on all levels. That is why tourism can be sustainable in a biosphere reserve if it does not interfere with nature. Tourism can also benefit a biosphere reserve, in the sense of making it more sustainable, through bringing money in the area which could be used to develop the biosphere reserve (Morea, 2021).

Even though some of the literature in this section speak about that more tourists leads to more income, generates jobs, is positive for the locals, etc. It is not always the case. Zhao and Li (2018) state that tourism is one of the worlds largest industries and it is continuously developing. The most common negative impact of tourism is on the environment, through pollution, tourist's behavior, and high consumption. Sometimes the money does not even stay in the area but goes to the big companies. Kuscer and Mihalic speak about the negative aspects of tourism and especially over-tourism. They state that with the increasing tourism, every destination could risk being affected by over-tourism. One thing they found out in their study, was that local residents had a negative attitude towards over-tourism in their destination. Even though biosphere reserves are trying to make tourism as sustainable as possible, one should still consider other examples where tourism affected locals and nature in a negative way.

Tracy Berno (2001) claims that getting tourism businesses to become sustainable can be a complex and long process, however, in a biosphere reserve they need to be more sustainable. When a tourism business in a biosphere reserve starts developing to a more sustainable future, it can add extra value to the business. Berno says that especially now that sustainable tourism is increasing in demand, that will generate more tourists which could lead to more income, more income can lead to more money which can lead to affording more sustainable options. This is crucial because of an increase in international tourism, which is good for the economy but not that good for the environment. That is why sustainable options are important today (Berno, 2001). A biosphere reserve is not already completely sustainable from the beginning, it is a long process of learning and researching that specific region and how to make it as sustainable as possible. (Hoppstadius, 2018)

The Wester Ross biosphere reserve will receive £193,000 from Highlands & Islands Enterprise in the next three years. They will receive that money to be able to create a more sustainable future for tourism. The chosen priorities are litter/waste management, infrastructure, and visitor education. The reason why that money is designated for making tourism more sustainable is that tourism is crucial for that area and the center of the local economy (Wester Ross Biosphere, 2021). This is an example of how biosphere reserves are trying to develop sustainably all the time, and it is not possible to be sustainable in a day. It takes years for a biosphere reserve to be as sustainable as possible just as Hoppstadius (2018) states.

This literature review section provides several different examples on cases around the world. Anything from sustainability, locals' opinions on biosphere reserves, to how

tourism affects nature. In the findings part are interviews with ambassadors from different biosphere reserves around Europe, to provide more in-depth views on the things discussed here in the literature review. The interviews also provide new information that was not found in already existing literature. There was not any literature found on the Swedish case Nedre Dalälven except for the little background information that is found in the introduction part. The findings' part will provide with information about both the Nedre Dalälven case but also some European cases.

### 3. Methodology

In this thesis, a qualitative method is used, due to the author wanting more personal answers and reflections that are not able to be obtained through measurement of variables like in quantitative research (Pathak, Jena & Kalra, 2013). *“Qualitative research is the type of research that finds out about people’s experiences. It helps us understand what is important for people”* (Silverman, 2020, p. 3) The research objectives relate to this quote in the sense of wanting to find out how tourism businesses relate to sustainability and how they benefit from existing in a biosphere reserve, with a focus on their experience. So, the point of the objectives was to find out about different people’s experiences. The reason why the questions are qualitative in this thesis is due to wanting to find different answers and opinions. The answers with qualitative research questions give a more in-depth personalized answer. Compared to a quantitative research which gives objective facts and a qualitative research gives a subjective point of view (Silverman, 2020) A qualitative method is focused on collecting data through conversational communication. Qualitative research is about why and how some things are the way they are and focusing on a smaller group of people, to gather the information needed.

There are various types of qualitative research methods, for example, interviews, focus groups, content analysis, case study research, observation, etc. It is not only that one gets more in-depth answers, one can also understand the person that is being interviewed more, in ways like emotions, the way they speak, body language, etc (Hennink, Hutter, Bailey, 2020). These arguments are why the author chose the qualitative method, because of the way it gives more varied and subjective points of view. The objectives want to know different opinions about the same topic, which a quantitative method would not be able to provide in the same sense. The quantitative method is data that can be measured, it can be used to analyze data for trends and relations (Watson, 2015). That is why the qualitative method fits better to the thesis and its objectives.

#### 3.1 Interviews

The method to gather knowledge for this thesis was through interviews, one-on-one interviews. Which is when one interviews one person at a time. This method is chosen due to the current Covid-19 pandemic, and therefore all interviews were held online or over the phone, which makes it easier if it is just one person at a time. The positive aspects of online interviews are that one can do it wherever they are with people around the world. Both participants can be in an environment where they feel comfortable and safe. Participants may be more willing to discuss sensitive or personal matters when having an online interview. However, there are some negative aspects as well. Such as bad internet connection, failing technology, not being able to read people’s body language like in real life, and sometimes it just does not fit to the study to do it online (Salmons, 2015).

The chosen method of interviewing is semi-structured. Longhurst (2016) states that semi-structured interviews are based on having prepared questions before the interview, but based on how the participant answers one can ask the following questions that were not planned from the beginning. That is why it is called semi-structured. Because it is structured in the sense of having prepared questions, and unstructured in the sense of asking additional questions according to what the participant answers. This method is used to gather as many varied answers as possible (Longhurst, 2016). The prepared questions from the interviews can be seen in the appendix part (appendix 1).

There are three different categories of people that were interviewed. From the beginning the plan was to just interview people from Nedre Dalälven, however, it would just give perspectives from that specific biosphere reserve. As seen in the literature review about the contrast between how locals reacted to biosphere reserves, it seemed irrelevant to just focus on Nedre Dalälven. That is why five other biosphere reserves in Europe were interviewed as well. So, the three categories are people from other biosphere reserves around Europe, people actively working with the biosphere reserve Nedre Dalälven, and lastly tourism businesses in Nedre Dalälven.

The people from biosphere reserves in Europe are coordinators of the biosphere reserves, the ones working for the biosphere reserve. The reason why these people were chosen is to see the perspective of the biosphere reserve itself. The main focus of this thesis is Nedre Dalälven and tourism businesses. However, if one would interview several tourism businesses in other biosphere reserves as well, it would be too time consuming and too much work for the amount of time the author had to write this thesis. The interviews with the Europe cases spoke about tourism businesses, so the questions could still be answered. Then people actively working with Nedre Dalälven were interviewed. One of them is the biosphere reserve coordinator and the other participant is a project leader. These two people were very useful to interview due to them having a lot of knowledge on the Nedre Dalälven biosphere reserve. They told things from the biosphere reserve perspectives, which was also important to know to answer the research questions. The owners of tourism businesses in Nedre Dalälven were interviewed. It was very important to the author to gather information on how tourism businesses are experiencing the biosphere reserve. Even though the biosphere reserve itself already answered the research question, it was still important to get another view point. In case the tourism businesses could tell something that the people working at the biosphere reserve do not know.

During the interviews, they were asked if they consent to the interview being recorded. If they consent the recorded version of the interview was transcribed, after that it was analyzed. The analyzed version will be used in the thesis, but every participant was sent the part that is written about them before sending the final thesis in. That is to check if they consent on the part being posted in the thesis, if they want something changed or have the interview removed completely the author should be prepared for that. This is to make the participants as safe as possible and that nothing is posted under their names without consent.

### 3.2 Sampling

The sampling method for the interviews is non-probability sampling. This is chosen because it is a specific case. Probability sampling is about gathering random people to find an answer that relates to the whole population. However, this is a specific case about biosphere reserves so only people working in a biosphere reserve or with the biosphere reserve are asked to participate. Generalizing to whole populations is not the goal of qualitative sampling strategies. To narrow the sampling method more down it is a purposive sampling.

According to Vehovar, Toepoel, and Steinmetz (2016) the researcher knows before the interviews what kind of people they want to interview and are chosen by those characteristics the researcher is looking for and that is what purposive sampling is. In this case, the researcher is looking for tourism businesses in the biosphere reserve, people actively working with it, and also people from other biosphere reserves (Vehovar, Toepoel & Steinmetz, 2016).

There are three different categories of people interviewed, people working in biosphere reserves in different parts of Europe, people working with the biosphere reserve Nedre Dalälven, and then tourism businesses in Nedre Dalälven. The main focus of these questions is on Nedre Dalälven, but to give a more general view as well the different biosphere reserves in Europe are interviewed. There are basically three categories of people that are interviewed, however, that is more to show different perspectives on the questions rather than trying to categorize them. How these categories and people were chosen to interview, was mainly due to the author having contact with the coordinator of Nedre Dalälven biosphere reserve. The author received several ideas from the coordinator on who to contact, and especially those in Europe. How these focus groups were established were mainly first to gather information about tourism businesses, but later the author realized that it would be more interesting if also those working with the biosphere reserves were being interviewed, to gather as many viewpoints as possible.

### 3.3 Primary and secondary data

To give a greater understanding of the primary data that is collected through interviews mostly, there is secondary data used such as already existing literature for strengthening possible arguments. So secondary sources, which may include published or unpublished work based on research that started as primary. It is research that somebody else did and that one uses to strengthen their own primary data found (Rabianski, 2003).

This secondary data (already existing literature) is used to strengthen the arguments that come from the primary data found through research. Primary data is information that the author finds out by themselves when researching in a specific field, but for most researches, it is good to have some secondary data. Primary data is data collected for a specific research problem, to gather data that will answer research questions. The primary data that one finds can later be used as secondary data for other researches. Secondary data is already existing literature of researches that someone else has done. Secondary data is good to strengthen arguments, giving some background knowledge, use to compare, etc. It can make a research more interesting when other examples are given. Some examples of secondary data are books, academic papers, newspapers, websites, and more. When finding secondary data, one needs to think about if it is relevant to the primary data found otherwise it will be irrelevant (Hox & Boeije, 2005).

### 3.4 Ethics

When writing a thesis, one has to consider the ethical challenges. Researchers face various ethical challenges through their study, according to Sanjari et al (2014) some of them are anonymity, consent, and confidentiality. That is why in an interview there should be no questions asked that could make the person feel uncomfortable or affect the person in a bad way, one should always be prepared that the person might say that they do not want their part included anymore, everything one does, should be ethical right for both parts. To protect the people being interviewed for this thesis the interviews were held online, to minimize the risk of spreading the Covid-19 virus and not go against any regulations. The questions asked were only about the biosphere reserve and nothing about their personal life. Because the thesis being about biosphere reserves and questions about their personal life that has nothing to do with biosphere reserves is not relevant to ask. The interviews were recorded on a phone (Sanjari, Bahramnezhad, Fomani, Shoghi & Cheraghi, 2014).

When the interviews were done, the interviews were transcribed and used as primary data. Then the primary data was compared to the secondary data, to see relations between the two. When the interviews were transcribed, the next step was to analyze the gathered data

through the interviews. The chosen technique for analyzing is thematic analysis due to it fitting best to answer the research questions. The names of the participants are not anonymous and the participants were sent their piece and they all consented to it being published the way it is, with their names shown as well.

### 3.5 Analysis method

According to Braun and Clarke (2006), it is a method to analyze, identify and find patterns/themes within the data found. Thematic analysis is great for those in their early qualitative research career since it does not require detailed theoretical and technological approaches or knowledge. Through that, it can be a more accessible form of analysis and thus be easier for those just starting with qualitative research. The theme/patterns capture important things in the data in relation to the research questions, which leads to finding some sort of pattern or meaning within the data set. Finding these patterns/themes is a part of the coding process, where one finds patterns in the transcripts that help answer the research questions (Braun & Clarke, 2006). There were two themes found, which can be found stated in the discussion part.

### 3.6 Transcriptions and translations

The transcriptions will not be attached as an appendix, because the interviews were both in English and Swedish, and the finding part of the thesis state an analysis of what was said in the interviews. The reason why the Swedish interviews were not translated is because when translating something to another language it could give another meaning than intended in the original language. Filep (2009) speaks about how some words do not exist in another language and that one should find a solution to that so that they do not lose their meaning. Filep also speaks about that the person interviewing in another language should be aware of the culture of the language. However, in this case, Swedish is the researcher's first language and does not cause any problems in that area. The Swedish interviews are analyzed the way the researcher interpreted the conversation, and the research will send the analyzed part in English for the person being interviewed to approve. Then there will be no miscommunication either.

Temple and Young (2004) state that one needs to be careful with translating issues due to that the researcher could risk being biased. It all depends on the position of the researcher. When translating from one language to another it could be that the author changes things because it sounds better in that language however, it could change the whole meaning of it and become something that the person interviewed does not want it to be. That is why the researcher of this thesis will not be translating the interview but rather analyze it and ask the person interviewed if that is what they meant and if they are okay with it. Just to stay as unbiased as possible. For the both English and Swedish participants there will be used direct quotes. The quotes from the Swedish interviews are translated to English. Due to the author sending the interpretations to the participants, it makes it trustworthy because the participants have to approve the interpretation before it can be sent in. The different interviews are divided into separate parts so that the reader will not be confused about who said what.

The challenges in gathering knowledge and information for this thesis are mostly due to Covid-19. The interviews will be held online, however, there might be a risk that some people are not able to have a meeting online due to lack of Wi-Fi or a computer, etc. If that occurs there will be a solution found for it, maybe sit outside with the required distance between. There will almost always be a solution for any problems along the way, it is difficult to predict what kind of challenges one might face throughout the thesis.

## 4. Findings

To find answers to the research questions of this thesis, various interviews have been carried out. There are three categories of people chosen for the interviews. One of the categories is people from other biosphere reserves around Europe. Another is people actively working with the biosphere reserve Nedre Dalälven. The last category is tourism businesses in the biosphere reserve Nedre Dalälven. Why there are different people chosen for the interviews is to get different perspectives. From the beginning, the plan was to only interview people from the biosphere reserve Nedre Dalälven, however, that would only show one perspective of one biosphere. That is why also five other biosphere reserves are being interviewed. The people being interviewed from different biosphere reserves around Europe are there to answer the questions as well but also to give a perspective on how different biosphere reserves can be from each other. How the findings' part is related to the literature review is discussed in the discussion part. The findings' part is just to show the analysis of each interview. The findings are analyzed in the discussion part; therefore, the findings' part is not analytical.

### 4.1 Biosphere reserves around Europe

#### **Florian Knaus from Entlebuch Biosphere in Switzerland:**

Entlebuch is the second biosphere reserve of Switzerland and is located in the Lucerne region. The biosphere reserve was established in 2001. According to Florian in the sense of tourism businesses, this biosphere has done quite a lot for local tourism businesses. Such as cooperation with hotels, restaurants, tour operators, skiing resorts, etc. The people in the management of the biosphere reserve have created field excursions that are nature conservation-oriented, like mushroom picking, birding excursions, etc. The biosphere reserve is trying to get local tourism businesses to adapt to their philosophy, which is reaching towards sustainability. *“We have created a so-called partner label, for hotels that want to pick up this philosophy to the extent possible, they can basically get a label that makes them a partner of the biosphere reserve”*. Which is something that benefits the local tourism businesses. Florian also speaks about when becoming a partner of the biosphere reserve it is expected to use resources from the region, especially the food resources in both restaurants and hotels. One more important thing is that the biosphere reserve is trying to link the tourism businesses more so that they can have exchanges with each other and create offers. *“They should rather work together and find offers where they can have synergies between them basically”*. He says that this is to create collaboration instead of competition between the different businesses in the area. For marketing the biosphere has created a pool where every touristic player pays some money, then the biosphere markets them all under one name basically. The biosphere reserve has some plans for the future, one of them is that they do not want too many daily tourists in the area. *“One main strategy for us with sustainability, we try to have a low number of daily tourists”* Therefore, the biosphere reserve is trying to create offers that include overnight stays, this will increase sustainability in a social and economic sense. Since local businesses benefit from these overnight stays. He says that usually, when daily tourists come, they bring their own food, more traffic, pollution littering, etc. These overnight offers will also lead to more environmental sustainability, because of less traffic when they stay more than one day which leads in a relative sense to less pollution. In the future, the biosphere reserve wants to go even more towards nature-based tourism and try to manage how many tourists come to the area so they will not be affected by over-tourism. The biosphere reserve has experienced that the demand for nature-based tourism and local foods has increased, and in 2011, 16% of the people visiting the biosphere reserve traveled to the region because of the biosphere reserve. A study next year will get insights into how this number has changed in the past decade. Tourism has been one main focus of the

biosphere reserve in the past and is very important for the biosphere reserve also for the future, therefore it is also scientifically monitored.

**Dean Eaton from Dublin Bay Biosphere Ireland:**

In 1981 the first part of Dublin Bay (North Bull Island) was designated as a biosphere reserve, later in 2015, the biosphere reserve was expanded. This biosphere reserve also includes a part of a capital city, which is Dublin. The main focus of the current biosphere coordinator is education, so educating people that live there but also tourists on what a biosphere is and why it is important. Dean says that the biosphere reserve is supporting local businesses through a series of programs, and a page on the biosphere reserves website stating their business supporters. The biosphere reserve does not work with tourism business directly but they offer advice on how they can be more sustainable, and if the tourism businesses are doing something particularly good in connection to sustainability, they have the opportunity to showcase that on the website. The biosphere reserve has worked with local sustainable tourism businesses to help promote their services via a series of competitions and videos. Dean states that the biosphere reserve wants to attract tourists of course, but want to manage it. *“How can we offer better products which will increase the spend but manage the numbers at the same time, so we do not have massive inflow of people that are not contributing to the local area”*. The biosphere reserve still wants tourism in the area but not a massive inflow, before they had issues with litter and people not understanding what the biosphere is about. That is why the biosphere reserve is focusing on educating people so that they can enjoy the beautiful area but also be aware of how to take care of it. According to Dean the biosphere reserve will be putting up posters in train stations with stunning pictures of the area and text stating how we can take care of and manage this beautiful area. Something else that the biosphere reserve has done is created a scouting badge that young people can earn when they do something good for the biosphere or nature. This is to involve more young people in thinking sustainably.

**Natasha Hutchison from Wester Ross UNESCO Biosphere in Scotland:**

Beinn Eighe national nature reserve was in 1976 designated as a biosphere reserve. 2016 the biosphere expanded and now covers 5,200 km of Wester Ross, which made the Wester Ross a part of the biosphere reserve.” *Our biosphere doesn’t sit in a government or municipality it is all led by members of the community”* Natasha says that it can make it difficult to get funding for projects. Something the biosphere reserve is currently doing for the local tourism businesses is that they have a supporter charter where businesses can sign up to and explain in what ways they are doing things sustainably. Sometimes the biosphere reserve promotes these businesses on their social media. *“It’s a bit of promotion for them their logo goes on our website and our logo goes on their website it draws that kind of cross-promotion”*.” *Other than that, we’ve just produced this leaflet, it is a map for people who wild camp and some guidance on what to do, where to go, list of where all the toilets are”* These leaflets will be handed out by these local businesses. *“our plan isn’t for developing tourism we leave that to the businesses and marketing. Our plan is to manage it in a way that keeps the communities happy, try to improve the infrastructure, community toilets, camper facilities, etc.”* Even though the biosphere reserve is not developing tourism directly, they are still doing things that help developing tourism in the area. The biosphere reserve has a sustainability working group that works with speaking to the community about issues that need to be taken care of or changed. According to Natasha one big problem in this area is the lack of housing, due to many having a second home here. That leads to young people leaving the area because there are no houses and not many jobs for them. In the beginning, local people were a bit hesitant towards the area being designated as a biosphere reserve because they thought it would stop them from doing certain things. The biosphere reserve quickly explained to them that it is not about

prohibiting them from doing things it is an opportunity to be linked to a globally respected designation.

**Chiara Viappiani from Parco Nazionale Appennino Tosco-Emiliano in Italy:**

The Appennino Tosco Emiliano biosphere reserve was designated in 2015 as a biosphere reserve, it is located in the two regions Emilia-Romagna and Tuscany. Due to the location, they have great opportunities with food. *“Our biosphere reserve has a great number of local products due to the climate we have here”* Chiara speaks about how food and gastronomy are basically the main focus besides the obvious in a biosphere reserve which are conservation, development, and providing logistic support to local stakeholders. The biosphere reserve has been working on several projects all to benefit the local stakeholders, and to preserve the area. According to Chiara the biosphere reserve has a brand called I care Appennino which links local food producers, associations, and volunteers. It is a label that local food businesses can use to promote themselves, however, it is also something the biosphere reserve uses to promote the area. Food is the main touristic attraction but hiking and e-biking are also increasing in popularity. *“Food is one of the main focus, the other one, of course, is the nature”* The biosphere reserve is working with how to make the biosphere reserve more sustainable in an environmental aspect. One thing is to find a solution to manage the tourists coming because now there are too many coming at once during spring and summer. However, almost no tourists in the autumn and winter, so the biosphere reserve wants to check how they can manage that more. Something else that Chiara mentions that the biosphere reserve is working on is creating a shuttle bus that brings people to specific areas in the biosphere reserve. Because now there are too many cars in the biosphere reserve, this shuttlebus will hopefully reduce pollution. In general, there are public buses going to the biosphere, but some places are only accessible by car and that is why a shuttle bus would be good to implement. On how the tourism businesses benefit from existing in this area is mainly through that the biosphere reserve is trying to create a strong network between them. So that they can benefit from each other and help each other which will make it more sustainable for all of them. The biosphere reserve can give them more exposure/visibility thanks to promotional activities (fairs and other educational tours) and participating in projects created by the biosphere reserve or in partnership with the biosphere reserve. For example, a project called MEL on bees and honey production in this biosphere reserve. There were many local participants and producers joining.

**Maasheggen UNESCO program team from Maasheggen Biosphere in The Netherlands:**

Since 2018 De Maasheggen has been part of the UNESCO Man & Biosphere. Since then, a large number of parties involved have been busy developing initiatives aimed at strengthening the area, including tourism and recreation. In collaboration with entrepreneurs, regional products have been devised, cycling and walking routes have been developed and promotional activities have been set up. According to the program team because that it is such a new biosphere reserve it is still in its starting point, and the area is still under development and the number of completed projects is limited but the number of the ones in preparation for the future is large. To this day the number of tourist companies in the area is still fairly limited and the cooperation between the biosphere reserve and local entrepreneurs mainly consists of thinking about and investing in joint products. On the sustainability factor in the area, tourism is already sustainable, due to tourism being focused on hikers and cyclists. *“We are not necessarily making it more sustainable, but are looking at how we can make the area more attractive and accessible to visitors, without compromising other interests such as nature, agriculture, cultural history, and residents”*. Tourism businesses in the area have benefitted from existing in the biosphere reserve in the sense of an increase in tourists. The program team says that since the award of the UNESCO status (that it is a biosphere reserve) the number of tourists has increased

significantly. This has created new opportunities and benefits for the local entrepreneurs such as more visitors, more turnover, sales of regional products, etc. Biosphere Maasheggen does not want to develop into something large-scale tourism area, but rather develop what they already have. The tourist that the biosphere reserve wants to focus on is the one that uses what is already there, such as attractions and routes. What the biosphere reserve try to add are facilities that make the stay more pleasant for the tourists, such as the watchtowers, routes, places to eat or buy local products, etc.

## 4.2 People actively working with Nedre Dalälven Biosphere reserve

In this section two important people of the biosphere reserve are being presented and what they said in their interviews. Magnus Pamp is the coordinator of the biosphere reserve, and Henrik Thomke is a project leader.

### **Henrik Thomke project leader in the Biosphere reserve Nedre Dalälven:**

The biosphere reserve Nedre Dalälven is still in its start-up when thinking about tourism and sustainability together. When the area became a biosphere reserve it gave the area an opportunity to think more about the environmental questions. Henrik spoke about having some sort of environmental certification, however, there were many different certifications which made it difficult for local businesses and entrepreneurs to have the time for that.” *So, we chose to take a step back when it came to the environment certification at that time*”. However, lately, according to Henrik it has been something that the biosphere reserve felt like they should start discussing again. Now the biosphere reserve has said that they want to create a biosphere reserve label, it should be based on a simple guidance for entrepreneurs and destinations that they can use to look at their own operation. Things such as what could I prioritize in my company or the destination that is better for the environment, and they could then get some suggestions on what to do. When these companies continue working with becoming more environmentally friendly, they could get something like a biosphere certification that they could use. Something that shows that they are actively working with environmental questions in their business. Previously the focus has mainly been on the fishing part of tourism, but now the biosphere reserve wants to elaborate on other tourism as well. Henrik also talks about that previous when talking about sustainability one has maybe thought more about the environment perspective rather than both social and economic. *“But it is also really important that the activities operated have an economic sustainability”*. In a biosphere reserve, it is important that the nature is doing well and does not get used in the wrong way. However, it is also really important that the businesses operated have an economic sustainability. When a business is well-established and is collaborating with other businesses in the area then it is easier for them to get accepted and be a part of the area which is important for creating social sustainability. The biosphere reserve does not have a budget for development and marketing questions, however, Naturvårdsverket (the Swedish environmental protection agency) has a possibility to give a small financial support to biosphere reserve areas for them to be able to keep giving basic information about biosphere reserves. Hosted by Nedre Dalälven is the informal network of businesses and destinations called “Turistnäternet” working with development and various marketing questions. Through Leader projects, they can finance that work. Leader projects are projects financed through the EU’s funding program for rural development. This is something the biosphere reserve has been using to finance some of the projects in the area. Henrik says that the biosphere reserve has been working with different tourism businesses in the area and has done several things to market the area. Such as inviting journalists that later have written a piece about the area, invited tour operators to see the area and helped them find the things they searched for such as hotels, museums, etc, joined several fairs, for example, tourism fairs. However, the biosphere reserve noticed that the demand for tourism fairs is not as high anymore so they have focused on the digital part instead. The Nedre Dalälvens

biosphere reserve website makes it possible for local entrepreneurs and businesses to market themselves there so that they are all collected in one place.

**Magnus Pamp coordinator of Nedre Dalälvens biosphere reserve:**

To not be too repetitive the things that were said in the interview with Henrik that also Magnus said, will not be put in this part. Magnus Pamp is the coordinator of the biosphere reserve. According to Magnus there have been some different projects in the biosphere reserve where one is about different activities to teach people about what biosphere reserves are. For example, walks in nature with a guide that talks about the animals and nature, and Magnus talks about the biosphere reserve. The activity Bioblitz is a social event but at the same time doing inventory on all the species and that is sent to the species database. Some other things that are also important for the biosphere reserve *“It is also about being seen on Facebook, Instagram, updating the website, sending out newsletters, and get all that communication going on everything we are doing”*. Every ten years the biosphere reserve is supposed to make an evaluation on what they have been doing and what has happened in the biosphere reserve. When doing that the biosphere reserve should also make a new action plan, for example, what they are planning to do in the next 3-5 years, but also what do people want them to do. The biosphere reserve sent out a survey and had some discussions, and it seems like sustainable tourism is something they should keep working with, sustainable fishing, maybe do something with the forest because that is something they have not done lately. There are many possibilities of what they will do in these upcoming years. It can be anything it could also be creating a biosphere label that businesses can use.

### 4.3 Tourism businesses in biosphere reserve Nedre Dalälven

**Maria Brook owner of Lars Pers I Fors:**

Maria Brook is the owner of an ecological goat farm in the biosphere reserve Nedre Dalälven. Maria produces and sells cheese and honey all from her own farm, but tourists and visitors are also more than welcome to visit and see the goats. *“I go to many markets where I can spread the message of biosphere reserves” ... “I always bring information about the biosphere reserve, like brochures and maps, and of course tell people about it”*. About the sustainability part in the business, an ecological farm with animals is already sustainable, because of the fact that animals are a part of the life cycle says Maria. The bees also contribute to sustainability because they pollinate a big area around as well. Above those things, there are not any weird or unnecessary things in the products so they do not harm the environment in any way. Otherwise, she does not really have an agenda for sustainability it just is sustainable automatically. In the interview, Maria talks about that she has experienced that not many of her guests know what a biosphere is. It is a difficult word to explain in just a few sentences. Maria says she believes that it is important to talk more about biosphere reserves, because many think it is some sort of prohibition when it is rather preserving, developing, and supporting. If tourism is more sustainable in a biosphere than outside is a hard question because it depends a lot on the tourism businesses themselves. However, when existing in a biosphere it leads to wanting to become more sustainable, it leads to wanting to do more for the surroundings.

**John De Jong owner of Edensgarden:**

Is a B&B located on Hällsjö Gård, with beautiful authentic Swedish cottages. The biosphere reserve and marketing part is really important for them says John. It is about the whole of what is created in a biosphere reserve, such as the marketing and the projects. John says he is very active in the local associations that have done many projects, in tourism and rural development. It is mostly international guests that are interested in the whole concept of the biosphere. They mainly come for nature itself but when telling them about that it is a biosphere reserve and explaining what that is, they get even more interested and excited. However, before coming there is almost no one that knows what it is. One question that was asked was if John felt like he was limited from developing in the

biosphere reserve. *“No actually on the contrary, I actually feel more encouraged to develop and that we can do so much more”*. Something that John says they do for the environment part in sustainability is waste sorting, re-using materials when building something, and not buying everything new. For the future, John wants to develop even more sustainably and become more self-sufficient. He does not want to create a big company but rather keep it small, so the product keeps its value and does not interrupt nature. In the future, he wants to continue educating people on what a biosphere is and make them think more sustainable. That is why he says he chose the beaver as his key product; he organizes beaver safaris and tries to teach the participants what the beaver does and why it is important for nature.

**Renata Künz owner of Hedesunda Camping:**

Hedesunda Camping is a campsite located in the biosphere reserve Nedre Dalälven. It is situated on an island surrounded by the beautiful river landscape Nedre Dalälven. When asked how it is to exist in a biosphere reserve, Renata claimed that it gives many opportunities. Biosphere reserve often means that it is an area with beautiful nature and cultural heritage. It is important for their business that the natural and cultural heritage stays in a good condition because it will attract tourists says Renata. However, other actors that can offer activities and opportunities are also really important. For example, supermarkets (ICA), moose parks, hiking trails, cafés, museums, etc. The biosphere gives a great opportunity to work together with these other actors. On how they benefit from existing in a biosphere is mostly that they are surrounded by beautiful nature that is in symbiosis with the development of entrepreneurs. She says she would like if the biosphere would promote local actors and products more, like she heard about a biosphere in Italy where they promote local products as products from the biosphere. However, *“To be honest I have not been that good at marketing the biosphere reserve that much either, other than telling tourists about what it is”*. In the future, she is planning to promote the biosphere reserve a lot more when the new website of the campsite is finished. However, it has not been that easy to market the biosphere reserve either due to the fact that most tourists coming there do not know what it is. When saying it is connected to UNESCO, they start to connect a bit. Renata says she wanted to promote the biosphere reserve before but it is difficult to translate it to four different languages (Dutch, Swedish, English, and German) that are used on the campsite. Some things that the campsite does for sustainability are when renovating using sustainable materials, water-saving showerheads, led lights, waste sorting, environmental cleaning products, using air source heating pumps, etc. The campsite also has different activities and tours to teach tourists about nature and how to take care of it. Fishing tourism is quite popular at the campsite and then they follow the rule of catch and release, which means you catch the fish and release it directly after. They also have a fishing excursion for kids where they learn how to release the fish in a safe way after catching them.

**Jack Hicks owner of Multiadventures:**

Multiadventures is a canoe and kayak rental located in the amazing Färnebofjärdens national park of the biosphere reserve Nedre Dalälven. They rent out Canadian canoes, kayaks, camping equipment, and stand-up paddle boards. Jack one of the part owners of Multiadventures has not noticed that much difference from existing in a biosphere reserve, but that could also be due to the fact that they are situated in the national park itself. Where everything already is about conserving nature. Through that the national park has beautiful nature it attracts quite a lot of tourists. Together with Henrik Thomke from the organization Neda, which is responsible for the biosphere area Nedre Dalälven, they have added their beaver tour on the Slowtrips website. There are some partnerships with other businesses in the area and Multiadventures is on the website of the biosphere reserve. So, there is some sort of partnership between them and the biosphere reserve. They are doing several things for sustainability. One thing they are doing is thinking about social

sustainability for themselves, “*by not doing things everyone thinks we should do to earn money but do the things we find fun so we can keep doing this for longer, that is one way of thinking of sustainably*”. Other things Jacks mentions that they do for an environmental sustainability is buying sustainable products that do not break after one year of using them, fuel-efficient car, re-using waste, etc. Something they would like to improve is the transportation of the canoes so that it will be more sustainable in the future. Something else they want to change is to have a more even flow in tourists coming. Now they have a peak in the weekends and vacations but very little the rest of the time. However, that is not something that they can change by themselves.

## 5. Discussion

This thesis looks further into the research gap of biosphere reserves related to tourism businesses and the relationship between tourism and sustainability. The collected data and findings show different perspectives on the questions asked and also add to already existing literature that was found when writing the literature review. The analysis chosen was thematic analysis which is about finding patterns/themes between the different answers. The patterns found between them was that all people interviewed were positive towards biosphere reserves. Common themes that were found through the interviews were that many experienced that tourists and local people did not know what a biosphere reserve is so awareness building and education are important for them (the biosphere reserves). Another theme to be found was facilitation and networking support. Between all answers, there are some patterns to be found and how tourism businesses and biosphere reserves are linked.

### 5.1 Theme one: Awareness building

Something that almost all of the people interviewed stated was that they do not want to interrupt local people too much with more tourists or other things. For example, Natasha from Wester Ross Biosphere stated that local people were quite skeptical towards the thought of the area being designated as a biosphere reserve. They thought that it would stop them from doing the things they had been doing before, but that is not the case with a biosphere reserve. Through these interviews one notices that many do not know what a biosphere reserve is, they often think that it is some kind of prohibition rather than an opportunity of doing everything more sustainable and developing. It can be very different on how locals experience living in a biosphere reserve like the research from Maikhuri, Nautiyal, Rau, and Saxena (2001) where the locals in Nanda Devi biosphere were not too happy living in a biosphere reserve because it restrained them from certain activities that were crucial for that area. However, the biosphere reserves and businesses that are interviewed for this thesis all seem to want to make it a positive thing for locals and businesses in the area. One should still keep in mind that even though nobody in the interviews said anything negative about existing in a biosphere, it does not necessarily only have positive aspects. It is clear that not every local is too happy when their area becomes a biosphere reserve, but it is often the lack of understanding of what it is. Like Dublin Bay biosphere that is working a lot on educating both locals and tourists through various actions. And as Magnus Pamp speaks about the biosphere reserve Nedre Dalälven organizing different activities that educate people on what a biosphere reserve is.

### 5.2 Theme two: Facilitation and networking support

Tourism businesses benefit from existing in a biosphere reserve in different ways. According to Wallner, Bauer, and Hunziker (2007), a biosphere reserve can be something to attract tourists with, since sustainable tourism is increasing, which makes a biosphere reserve more attractive for those tourists seeking sustainable vacation. Ryan, Silvano, and Seitz (2013) speak about that tourism businesses (travel agencies, DMOs, etc.) can use that to market themselves. From the data collected through interviews, one can see that many of the biosphere reserves have a label or a project where local tourism businesses can market themselves as a part of the biosphere reserve. While the literature found only spoke about that tourism businesses can use it as a marketing tool, there are several other ways they benefit from it. The biosphere reserves do quite a lot for the local entrepreneurs. Entlebuch tries to link the different businesses together so they can collaborate and strengthen each other, Appennino is working a lot with local food businesses and created a brand to link them together and that they can use to promote themselves. It is not only things that the biosphere reserve does directly for the tourism businesses, but also things for the area. Like Maasheggen for example, who try to improve their facilities to make it

more pleasant for the tourists to stay. That could also benefit tourism businesses because tourists most likely will visit with improved facilities. Wester Ross Biosphere created a map that shows where to camp, what to do, where to go, etc. this is also something that will attract tourists to the area, and that could also lead to the tourists visiting the local businesses. Maybe they feel like eating something then they will probably go to a local restaurant, or sleep somewhere then maybe a local hotel, the list goes on with opportunities. The focus of this thesis was to look into the case of the Nedre Dalälven biosphere reserve and also the five other biosphere reserves in Europe. Four different tourism businesses were interviewed in the biosphere reserve Nedre Dalälven. In how they benefitted from the biosphere reserves was mostly because it is such a beautiful area that attracts tourists, but also existing in a biosphere made them more eager to develop and especially sustainable. Something else they said was that they get to be part of the biospheres website which helps them market themselves. Renata from Hedesunda Camping stated that she wanted the biosphere reserve to promote local businesses more. When interviewing Henrik Thomke, it became clear that the biosphere reserve has several plans for the future. One of them is having some sort of biosphere reserve certification that local businesses could get when they are continuously working with sustainability in their business. This could also be some sort of marketing for local businesses. Previously the biosphere reserve marketed the area through fairs and such, however, the demand for those things decreased and that is why they are focused on their website instead.

### 5.3 Tourism businesses benefitting from existing in a biosphere reserve

In what ways can tourism businesses benefit from existing in a biosphere reserve? To summarize what is stated above, it can differ between biosphere reserves in what ways tourism businesses can benefit from existing in a biosphere reserve. The most common one is through marketing-based activities, all biosphere reserves do something to market the local tourism businesses through their website, projects, etc. This was known before through the literature review that marketing was one of the main benefits. However, through the interviews, one can see that there are several other benefits as well. Such as being more motivated to develop, tourists coming to the area because of other improved facilities, the collaboration between different businesses, etc. In what ways tourism businesses benefit from it in Nedre Dalälven is mostly through marketing, feeling more motivated to develop and especially towards sustainability, and the opportunities it gives to be able to collaborate with other businesses in the area. The tourism business also benefits from the awareness-building efforts made by the biosphere reserve according to the biosphere reserve values and vision in relation to development.

### 5.4 Tourism-related to the three sustainability factors in a biosphere

Biosphere reserves are all about sustainability, one can see it in the literature review and even clearer in the findings section. Social, economic, and environmental sustainability are themes one can see in the data. Garcia-Frapolli, Ayala-Orozco, Olivia, and Smith (2018) speak about how tourism is difficult to be sustainable on an environmental level, however, tourism in a biosphere reserve could help to be more sustainable on a social and economic level. Throughout the interviews, one could see that several things are happening with tourism and sustainability and that it is an important aspect to speak about. The different biosphere reserves are doing different things to make it sustainable on all levels. The social and economic level is basically what the research question before answered, that they are trying to do many various things to attract tourists that will increase income and jobs for local stakeholders.

On an environmental level, there are also different things happening. A few examples from the interviews are educating tourists and locals, creating new more sustainable transport options, trying to make businesses more sustainable, and managing tourists. That is something most businesses and biosphere reserves have in common, they want tourists to come. However, not that many that other things will be disturbed such as locals and nature. To answer the first part of the second research question: How are tourism and sustainability-related in a biosphere reserve? In a biosphere reserve, those two need to be connected, because sustainability is crucial in a biosphere reserve. Morea (2021) speaks about how protected areas are often focused on being sustainable on an environmental level only. That causes problems on the other two environmental aspects, social and economic. Which of course does not make it sustainable on all levels. That is why a biosphere reserve could be good for areas, due to the nature being preserved but does not stop the rest of the area to develop. Then it will be as sustainable as possible, however, as Hopstadius (2018) claims is that it takes years for a biosphere reserve to become sustainable.

Back to the question on how sustainability and tourism are related. Tourism and sustainability are very important for each other in a biosphere reserve. Tourism can generate jobs which will make it sustainable on a social level, and it also generates income that is sustainable on an economic level. However, sustainability is also important for a tourism business, because if the tourism business develops more towards sustainability, it could add extra value to the business as Berno (2001) says. Therefore, are tourism and sustainability very important for each other. Although the literature review answers this question it is still relevant to be brought up to add extra points from the interviews.

There was no previous literature found on how tourism businesses have contributed to more sustainable tourism in the biosphere reserve. To answer the second part of the second question: What are tourism businesses doing to contribute to more sustainable tourism in the biosphere reserve? The four businesses are doing several different things to contribute to more sustainable tourism. It is everything from using sustainable products, re-using waste or products, having bees that contribute to pollination, using more fuel-efficient cars, energy-saving equipment, etc. All these things contribute to environmental sustainability, they also contribute to social and economic sustainability. For example, if someone is staying at Hedesunda Camping they could rent canoes at Multiadventures and the other way around as well, if someone rents canoes there and wants to stay somewhere for the night, they could send them to the campsite. The same for Lars Pers I Fors and Edensgarden.

When a tourism business exists in an area it will contribute to economic sustainability in various ways. It will contribute to the local economy, but also bring people to other places such as supermarkets, other tourism businesses, shops, etc. It is also sustainable on a social level through new job opportunities, more money in the area, and destination development. Through that tourism is increasing in the area governments will see that it is important to improve infrastructure and facilities. This is all how it works in theory and it all depends on the different stakeholders in the area. If the businesses do not want to engage in being more sustainable it could be more difficult for the biosphere to become sustainable. There are several things that could make it difficult for a biosphere reserve to become sustainable such as lack of funding for projects, local people being against the concept of the biosphere, businesses not wanting to cooperate, members of the biosphere

not engaging, etc. However, for the biospheres spoken to none of these seemed to cause any problem. Not for Nedre Dalälvens biosphere reserve either. The businesses seem very eager and engaged in the whole concept of the biosphere reserve and so do the people working with the biosphere reserve.

## 6. Conclusion

To conclude this thesis, the research questions were successfully answered. The answers from the Europe cases related a lot to the Nedre Dalälven case. Even though they are different cases they still relate to each other because they are all biosphere reserves, which means they usually have similar goals. However, the focus points and development can vary from each other. Some biosphere reserves are not as old as other ones, which can mean that they have not come that far in development plans. There were two themes found in all of the interviews, that connected the Europe cases to Nedre Dalälven case. Which are awareness building and facilitation and network support. Awareness building is something that everyone found important, to educate both tourists and locals on what a biosphere reserve is and how to take care of it. Facilitation and network support is something the different cases had in common, things like improved facilities that could attract tourists to the area, but also helping tourism businesses to market themselves. The examples from all the cases can be useful for the different biosphere reserves, one thing that one biosphere reserve does might be something another has not even thought about. It all depends on what stage of development the biosphere reserve is.

The first research question was based on how tourism businesses can benefit from existing in a biosphere reserve. How they benefitted outside marketing which was already mentioned in the literature review, was through feeling more encouraged to develop, attracting tourists through improved facilities, and the chance to collaborate between businesses.

The second research question was about how tourism and sustainability are related in a biosphere reserve and how tourism businesses contribute to sustainability in a biosphere reserve. Tourism and sustainability are important for each other in a biosphere reserve. Tourism can generate more jobs which can make it sustainable on a social and economical level. But sustainability is also important for tourism because it can add extra value to the business. What the tourism businesses are doing to contributing to sustainability is generating more jobs, using sustainable products, re-using waste and products, having bees for pollinating, and energy-saving equipment.

Some issues that the Europe cases were talking about, is managing the number of tourists in the area. Even though the people working with the biosphere reserve want tourism to develop in the area, tourism can still cause negative impacts. Some participants have said that they have experienced to many tourists visiting, littering, and to much traffic. For the biosphere reserves it is important that there are solutions or at least try to manage it. That is something many from the interviews spoke about, that they want to manage the number of people visiting the area. That will lead to tourism developing but also that it disturbs the area as little as possible. This is also related to the Swedish case Nedre Dalälven, where some participants from the interviews also spoke about wanting to manage the number of tourists. Like Chung, Dietz and Liu (2018) stated that nature-based tourism is increasing in protected areas, so it is needed that biosphere reserves try to manage the number of tourists. With an increase in demand of nature-based tourism in protected areas (including biosphere reserves) it is important for the sustainability factor that tourism is more managed in a protected area.

There were some challenges along the way such as people taking long to answer, the process of transcribing taking longer than the author thought it would take, and whether not to translate the Swedish transcripts or do it. In the end, the author chose not to translate the transcripts of the Swedish interviews, due to the risk of making it lose its intended meaning. However, she chose to use some quotes from the interviews and translated them to English. One more challenge that the author came across was that

firstly the intentions were to focus it on Nedre Dalälvens biosphere reserve. However, along the way of the process, the author noticed that it would be too focused on one biosphere reserve when there are so many other opinions one could include. That is why there are three categories in the findings part, and one of them is the part of biosphere reserves in Europe. This has led to more and different perspectives on the research questions. The research questions have been answered which means that the author reached the aim of the thesis. This thesis highlighted that tourism and biospheres can benefit from each other in several ways, often overlooked in the literature. Hopefully, this thesis will be able to educate some people on what biosphere reserves are about related to tourism.

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## Appendix

### 1. Questions from the interviews:

#### Biosphere reserves:

- How have tourism businesses in the area contributed to the biosphere reserve?
- How is your biosphere reserve working with tourism?
- How can tourism be more sustainable in your biosphere reserve? What are you doing now to make it sustainable?
- Do you have any examples on how tourism businesses have benefitted from the biosphere reserve?
- Any examples of tourism businesses contributing to sustainability?

#### Tourism businesses:

- How is it to exist in a biosphere reserve?
- Do you benefit in any way?
- How are you working with sustainability?
- Any plans for future development?
- Do your guests know what a biosphere reserve is?