



Legitimacy claims on forest management and Key Habitats

An interview study on the legitimacy claims in the Swedish forest sector

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Abstract

Forest management and land use are an important part of the environmental challenges we face. Forests are important for species and the ecological systems they are part of, but they have also been a source of debate in recent years. This thesis uses interviews to explore the legitimacy claims made by different actors in the forest sector to justify their actions, and how these claims affect the management of forests in general and Key Habitats in particular. By drawing on previous research on legitimacy and natural resource management, different claims to legitimacy can be identified and analysed (Greene 2017; Rantala 2012; Sikor & Lund 2010). A key finding of the study is that legitimacy claims are made through legal legitimacy, both through property rights and international agreements. Another key finding is how different actors absorb and emphasise knowledge and how forests hold heritage and cultural values. Finally, this thesis shows how different claims to legitimacy affect forest management and how they relate to each other in terms of normative and empirical argumentation. The management of forests and Key Habitats is important for how we tackle climate change and respond to land use challenges.

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Abbreviations

WKH	Woodland Key Habitat
SFA	Swedish Forest Agency
SEPA	Swedish Environmental Protection Agency
SA	State Agency
NCO	Nature Conservation Agency
FOA	Forest Owner Association
FC	Forest Company

1. Introduction

About one third of the world's land surface is covered by forests, and in Sweden forests cover 68% of the land surface (FAO 2016; SCB 2023). Forests are home to a wide variety of plant and animal species. It is a system whose different parts influence and support each other in various processes. Forests are also an important part of the world's climate challenges, partly because of the many species that depend on a functioning forest ecosystem, but also because of their ability to sequester greenhouse gases.

There are forest areas that are of particularly high natural value and whose survival is crucial for species, biodiversity and ecological systems. These Key Habitats are areas of forest lands with high natural values (Swedish Forest Agency 2024a). This type of area is often not uniform in nature, but rather fragmented in the landscape, and is important for the conservation of biodiversity, plants and animals (ibid). Examples of Key Habitats are forest areas with dead wood, old trees or moss-covered rocks, which may be crucial for endangered species (Swedish Forest Agency 2017).

The management of forests in general, and Key Habitats in particular, is a central part of how Sweden as a nation will address the climate crisis and species extinction. However, the mapping of these Key Habitats has become a matter of debate (Ugge 2019; Röstlund 2021).

Actors may perceive themselves as having legitimacy to act for different normative reasons. For example, legitimacy claims may be based on knowledge claims, legal claims such as property rights, or ideological beliefs which may impact the forest management (Woods 2011; Rantala 2012). By examining different claims to legitimacy, a better understanding can emerge on how these claims influence and justify actions in relation to forest management and Key Habitats. Where legitimacy in relation to decision-making on natural resources is essential for a successful management of natural resources and acceptance of decisions (Rantala 2012).

Simultaneously, there is consensus on the importance of Key Habitats, but disagreement on the practical implementation of how they should be conserved and who is responsible. By examining the legitimacy claims made by stakeholders: State Authorities, Nature Conservation Organisations, Forest Owners' Associations and Forest Companies in relation to forests in general and key habitats in particular, the thesis examines how this affects forest management, nature conservation and forestry, and how this relates to the environmental challenges we face.

1.1 Aim and research question

This study aims to show the legitimacy claims that forest sector actors: State Authorities, Nature Conservation Organisations, Forest Owner Associations and Forest Companies, use to justify their management and how these legitimacy claims affect forest management in general and Key Habitats in particular. In order to respond to the objective, it is necessary to address the following question:

- How do different stakeholders claim legitimacy in relation to Key Habitats?
- How do these claims of legitimacy affect the management of Key Habitats?

1.1.1 Limitations

This paper describes the Swedish forestry sector's approach to Key Habitats, the actors' claims to legitimacy and how they justify actions on the issue. The actors to be interviewed in the thesis are state authorities, nature conservation organisations, forest owner associations and forest companies. However, no interviews were conducted with private forest owners, which could be a starting point for further research on the subject. In this thesis, forest owners' associations have been considered to represent the interests of private forest owners - as they are an organisation that represents their interests. The thesis has a national level perspective; however, the various methodological differences that exist for the Key Habitat inventory differ slightly between northern and southern Sweden, which may affect the results for this thesis. The occurrence of Key Habitats and their size also differ nationally, as well as the biological conditions that exist for Key Habitats to develop, which may affect different stakeholders' attitudes towards them.

The thesis examines how actors relate to and talk about international agreements but does not examine the agreements in more detail. The thesis only notes that the management of Swedish forests is influenced by international agreements and EU regulations but does not investigate the agreements further. The national policy also has a major influence on Swedish forestry and its management, however, the shifting political trends in this area have not been studied. Instead, other relevant actors from authorities have been interviewed to get a fuller picture of the current implementation of policy decisions and how they justify their forest management.

2. Background

This section includes a review of key concepts and keywords, such as Key Habitats and how they are biologically defined, to provide a deeper understanding of the biological importance of Woodland Key Habitats (WKH), as well as the Swedish forest politics and former bureaucratic process to create an understanding of the process involved. The section also includes a review of previous research on the topic of legitimacy and nature in relation to the thesis objective.

2.1 Woodland Key Habitats

The concept of the Woodland Key Habitats (WKH) was initiated in Sweden in 1990 with the aim of encouraging forest owners to understand biological values in the forest (Bjärstig et al. 2019). The Swedish Forest Agency (SFA) defines WKH as:

A Woodland or forest of great importance to native flora and fauna, determined by an assessment of naturally occurring structures, presence of indicator and threatened species, and historical and environmental factors. Red-listed species can be found in these habitats. (Swedish Forest Agency 2017).

Further, The SFA describes that Key Habitats are important to conserve and that they are unevenly distributed across the country (Swedish Forest Agency 2024a). In general, there are more and larger areas of Key Habitats in the northern part of Sweden. They also describe how they are mainly found in areas that have been protected from external influences, such as logging, for a long time (ibid). As stated in the definition, red-listed species can be a kind of indicator that an area is a Key Habitat. Threatened species tend to thrive in areas of high continuity, where species have been able to establish themselves in a stable environment for a long time (Swedish Forest Agency 2017). This means that they are mainly found in areas with little or no disturbance.

Key Habitats areas have a high biological value and a biological structure that favours species that thrive in certain environments', e.g., dead wood, large and/or hollow trees or areas adjacent to slopes (Swedish Forest Agency 2017).

Key Habitats are an important part of understanding the extent and conservation of biodiversity. Biodiversity is central to creating a resilient environment that can withstand pressure and stress. It is also important for the survival of species, especially in a changing climate (European Environment Agency n.d.). As well as its intrinsic value, biodiversity conservation is an important part of maintaining biological functions such as clean air and pollination and can reduce the effects of climate change and natural disasters (European Environment Agency n.d.).

From an inventory from 2017, in which a sample of Key Habitats were inventoried to look for indicators of biodiversity, shows that the biological value of the site is often higher than the original inventory showed (Swedish Forest Agency 2017). The inventory showed that Key Habitats often have a few red-listed or indicator species recorded per WKH, but that after re-inventorying, significantly more species can be recorded per Key Habitat. During the national Key Habitat inventories, they are carried out by the Swedish Forestry Agency on private forest owners' land, unless forest companies hire the service from them. Otherwise, they are obliged to carry out the inventories themselves when national inventories are carried out. At the same time, all certified forest owners are obliged by the environmental rules of certification not to harvest forests with Key Habitat status (Forest Steward Council n.d.).

Areas designated as Key Habitat have no legal protection against logging, but if the forest owner is certified through for example Forest Stewardships Council, FSC, or other forest certification systems you must preserve Key Habitats to keep the certification (Forest Steward Council 2019).

FSC is a global certification with national organisations. The organisation has national departments, and the certification aims to ensure that the product is of good quality in relation to social and ecological factors (Forest Stewardships Council n.d.). The certification can be of the forest itself, or of the entire production chain of forest products. The aim of certification is to create long-term conditions for economic returns, considering biological and social conditions (ibid). Part of the certification involves the exclusion from logging of areas that are classified or designated Key Habitat (FSC Sweden 2019). Most forest owners are certified through some certification, such as FSC or PEFC, which requires forestry to take account of biological values such as Key Habitats (ibid).

2.2 Swedish forest policy

Sweden's forests are owned by different types of owners, which the Swedish Forest Agency (2023) divides into the following ownership classes and holdings: individual owners 49%, private limited companies 25%, state limited companies 13%, the Swedish state 6%, other private owners 6% and other public owners 1%.

There are several laws that regulate the use of Swedish forests. Such as the Forestry Act, the Swedish Environmental Code and EU regulations and laws. The rules regulate how forest land can be used and how it is managed. Examples include protected areas, where, for example, Natura 2000 reserves are Sweden's response to the EU's objectives for protected areas (Swedish Environmental Protection Agency 2024b).

Another crucial effect on how Swedish forests is managed is linked to the decisions taken by the Swedish Forest Agency, among others. As Swedish forests are owned by a variety of actors, such as private forest owners, companies and the state, forest use can vary greatly depending on personal preferences or purposes. The owner of the forest, regardless of the actor, is to some extent free to use their forest as they wish, within the laws that regulate the forest.

The Swedish Forestry Act states that the government has the authority to decide how the forest is to be managed, or the actor that the government decides shall have the authority in the matter (Swedish Forest Agency 2023b). In the general provisions of the Forest Act, §1 describes the general objectives that apply to Swedish forestry.

§1 of the Forestry Act states that the forest is an important resource, but at the same time it should be looked after for the future and for various interests. The Act also outlines various policies and regulations in relation to forests and forestry, with Section 30 stating that consideration should be given to nature conservation and cultural heritage management, which includes the management of Key Habitats (Swedish Forest Agency 2023b).

Another law that affects forest management is the property law. In short, Swedish property rights mean that the owner of land in Sweden has the right to use or transfer his or her property within the limits of government regulations and other laws concerning land use (Swedish Forest Agency 2023b). Property rights do not directly influence the management of the national forests, but rather indirectly through the various interests that influence the organisation of individual management (Kungl. Skogs- och lantbruksakademien 2020). All forest owners, as individual owners, state or private companies, must comply with the rules and laws that affect forest management, but can choose to carry out different types of forestry within the framework of the current regulations (ibid). The right to property is protected by the Constitution but has changed over the years. In recent years, the protection of property rights has been set aside in favour of measures justified on the grounds of environmental protection and land protection does not necessarily entail compensation (ibid).

2.3 The historical process of Woodland Key Habitats

The Swedish Forest industry grew rapidly in the first half of the 20th century where in the 1950s it accounted for 45% of export earnings. But by the 1960s exports, production and efficiency had stagnated (Pettersson n.d.). The years between the 1950s and 1970s were characterised by intensive and large-scale logging, which eventually ended. The heavily exploited forest had to be restored, and large-scale

reforestation projects began. This led to a structural change in which environmental considerations were neglected, which was widely criticised in the 1970s (ibid).

Work on Key Habitats has been going on since the 1990s in Sweden, where the Swedish Forest Agency, SFA, has had the task of inventorying and registering Key Habitats mandated by the government (Bjärstig et al. 2019). Over the years, there have been recurring national inventories of WKH, e.g. between 1993-1998 and 2001-2006. In 1998, Forest Steward Council, FSC, included the protection of Woodland Key Habitats, WKH, and the set-aside of forest areas as a requirement for FSC certification (Bjärstig et al. 2019).

In 2017, the SFA, together with the Swedish Environmental Protection Agency, takes the initiative to renew the national strategy for WKH and starts a collaborative process with various stakeholders (Bjärstig et al. 2019). The decision is based on a 2016 report showing that there are high nature values in north-western Sweden where the current inventory model is inadequate. The collaborative process aimed to build consensus on the way forward for WKH and lasted from 2017 to 2019 (ibid). Problems arose during the collaboration process, such as the SFA Director General's announcement in 2017 that inventories in the WKH-rich area in northwest Sweden would be cancelled until the process was completed (ibid). Putting the inventory on hold was motivated by the need for a long-term and well-founded approach to the management of Key Habitats in relation to both responsible production and environmental objectives, taking into account the results of the collaborative process with the various stakeholders (Herman Sundqvist 2017).

Another problem was when the government at the time¹ announced in its autumn budget that the SFA would start a new nationwide inventory of Key Habitats over the next 10 years. Bjärstig et al. (2019) continues to describe how this led to it becoming a contentious election issue in the run-up to the national elections in September 2018, meanwhile the SFA is launching WKH inventories in May 2018.

The Swedish parliamentary parties were very divided on the issue of WKH inventories (Sveriges radio 2018). As a result of the election of 2018 and the new coalition government², they announced in 2019 that the Key Habitat inventory will not be resumed because of political agreements between the former government and the new support party the Center Party, which led to that the SFA cancels the inventories but decides to record the data received so far (ibid).

Landowners legally challenged the SFA's decision to register Key Habitats on their land, arguing that the SFA no longer have the authority to conduct inventories on

¹ The social Democrats and the Greens, supported by the Left Party

² The Social Democrats and the Green Party, supported by the Centre Party, the Liberals and the Left Party

private land after the government withdrew its mandate to conduct national inventories of WKH in 2019 (Swedish Forest Agency 2024a). Landowners believe that the SFA lacks the legitimacy to register Key Habitats on privately owned land (ibid).

As a result of the changed political situation, the SFA decided on December 21, 2021, that it would stop registering already inventoried WKH on privately owned land (Swedish Forest Agency 2024a). The decision means that the SFA no longer register Key Habitats in connection with felling notifications or felling permit applications from 1 January 2021. In cases where registration has already taken place, since 27 of June 2021, the landowner can apply to cancel the registration. The SFA will now cease its work to register Key Habitats, including the notifications received from the public.

In January 2024, the SFA decided, based on a judgement of the Swedish Supreme Administrative Court, to end the de-registration of Key Habitats on private land, but not resume any new inventories (Swedish Forest Agency 2024a).

Although the national inventory has officially been discontinued there are other supranational decisions that affect the management of natural resources. As part of the EU Green Deal, the EU has set targets for biodiversity protection by 2030 (Swedish Environmental Protection Agency 2024a). The strategy aims to ensure that 30% of the European Union's land and marine areas are legally protected by 2030. Some of the areas covered by the strategy are nature conservation, forests, urban greening and the EU Nature Recovery Plan (ibid). The European Commission intends to adopt a new governance framework for biodiversity to effectively strengthen governance in the Union, where the objectives permeate most parts of society (ibid).

This highlights the complexity and disagreement regarding both the importance of Key Habitats, but also how the political debate is shaping the managing of Key Habitats and the purpose of forests.

2.4 Previous research/ literature overview

This section will provide an overview of previous research in relation to legitimacy and nature. This will help to understand the circumstances, which this thesis is based on and continues within.

2.4.1 Legitimacy and nature

Legitimacy as a concept in relation to natural values and the forest has been an important subject for research the last decades (Paloniemi & Vainio 2011; Rabe

2017; Engelen et al. n.d.). Previous research on legitimacy includes elements of both knowledge and trust issues and the importance of a sense of 'proximity' in decision making, with individuals' perceptions of legitimacy changing depending on these conditions.

Legitimacy can be perceived as an individual's perception of an actor's ability to act or exercise some form of power in an issue or decision making. Paloniemi & Vainio (2011) describes in a study on forest owners' attitudes towards protecting nature on their land in southern Finland how legitimacy is an essential part of forest owners' willingness to assist in nature conservation initiatives. They argue that there is a value for legitimacy in feeling involved in collaborative processes and decision making, which in turn affects perceived legitimacy and willingness to voluntarily set aside land for conservation (ibid). They emphasise the importance of involving forest owners in the conservation process, and that the purpose of conservation is important for individuals to feel meaningful and have confidence in the action which in turn strengthens the sense of legitimacy (Paloniemi & Vainio 2011).

The concept of legitimacy in relation to decision-making in natural resource management is an important component for a successful conservation process. Engelen et al. (n.d.) describe how the European conservation project Natura 2000, considers both its advantages and disadvantages in relation to its legitimacy. The background to the protection of nature in Natura 2000 areas has been perceived as lacking a clear connection to the local community and that it is technocratic and top-controlled. This can result in a lack of legitimacy among the local population. Furthermore, the temporal dimension may result in hasty decisions regarding the conservation of specific regions. This can potentially give rise to the perception that such decisions are detached from the local context and lack democratic legitimacy (Engelen et al. n.d.). At the state level, the implementation has undergone a transformation with the objective of establishing a process that is more firmly embedded in the national system and enjoys greater public support (ibid).

Perceived legitimacy can also be influenced by factors such as power and knowledge. Power exercised through decisions about natural resources can be perceived as legitimate if it is based on research and knowledge. Engelen et al. (n.d.) describes how the exercise of power based on research can inspire confidence but can also be perceived as distant from the local, where there is criticism of an overly top-down approach to management. Rabe (2017) also emphasises the importance of participation in processes to improve decisions legitimacy. Further, participation can also make a decision legitimate, even if the individual disagrees, because of the opportunity to voice one's opinion (ibid).

A national survey of opinion formation in Sweden has identified trust in research as a central aspect of the political narrative, given that the majority of contemporary political decisions are informed by research (Andersson et al. 2020). These observations and results are significant in terms of legitimacy, as trust in the political system and science serves as a foundation for establishing a general sense of legitimacy in political and scientific decision-making processes, to establish and maintain the social contract in the relations between society and state (ibid).

The basis of different claims of legitimacy can also be explored by looking at how people relate to, talk about and reason about nature. This can be done, for example, through concepts such as nature vision or commodification.

Nature, and forests in particular, can be seen as an economic resource where its product can be monetised. But nature can also have other values in the context of social and cultural values, where nature and the landscape can be valuable in other forms than for the processing of resources. Woods (2011) describes the commodification of the rural landscape, where the landscape is given a value as a place, and not just as a resource. The values added to nature may be that it contributes to fresh air, biodiversity or carbon sequestration.

The concept of commodification is based on the commercial economic system on which society is based, where resources have a value because there is an economic value in the product (Woods 2011). The shift from commodities being products, to commodities being nature experiences or ecosystem services, means that nature is ascribed monetary values, which in turn invites landscapes into the economic system. This means that nature can be assigned an economic value, which is itself an anthropocentric view of nature - where it is given a value because it has a value for humans (Helmfrid 2007).

By taking an approach where all ecosystem services are considered, nature is given more types of values than monetary values. While the practice of assigning a monetary value to ecosystem services makes it comparable to other economic interests, it can take the focus off, or misjudge the ecological or social value of a place. It can also be argued to be an anthropocentric stand point, where the value of nature is validated based on what it can give to humans (Helmfrid 2007; Woods 2011). This perspective can also be applied to the narrative surrounding nature. The use of terms such as "natural resources" and "natural capital" indicates that nature possesses attributes that can be exploited by humans, thereby conferring value upon it (ibid).

The attribution of different properties and values to nature is contingent upon the way it is perceived, thought about, and discussed. Adopting a biocentric perspective on nature enables a more comprehensive understanding of natural systems.

However, as with the anthropocentric approach, this perspective still regards humanity as a dominant actor (Helmfrid 2007). This could be understood by the narratives of “natural resource management”, where you take natural processes and values into account, but still value humans as superior and therefore have authority to manage and control, based on what is considered best (ibid).

Different attitudes towards nature can influence how people relate to it, with different aspects such as nature perception, but also other normative values and attitudes towards commodification and resources having an impact on how nature is managed. Perceptions of nature influence how we act in relation to it and how we legitimize our behaviour, and what we consider to be legitimate action can be linked to the way in which we manage nature in general and Key Habitats in particular.

3. Theoretical and methodological framework

This section presents the theoretical framework that this thesis will be based on and how it will be used.

3.1 Theoretical framework and definitions

The theoretical framework used for analysis in this thesis is based on studies of legitimacy and to some extent theories of property and access. Below is a summary of some of the theoretical principles that underpin the theorisation of the concepts.

3.1.1 Legitimacy

In this thesis, the concept of legitimacy will be used to illustrate and examine the type of legitimacy claims made by different actors to justify their management in relation to Key Habitats in the forest. Legitimacy will be considered from both a normative and empirical perspective, considering the argumentation of justifying actions and the image of responsibility will be taken into consideration. To investigate legitimacy claims, I will draw on previous research on the topic to build a theoretical foundation to use in this thesis.

Rantala (2012) describes the complexity of legitimacy in relation to nature and forest management. Different administrative levels such as local, national policy and EU regulations come into play, but also social aspects such as norms and values. Legitimacy can be justified by democracy, for example, when the democratic basis creates legitimacy for decision-making (ibid). This can function as a tool for making visible the power structures involved in decision-making, where acceptance of decisions is influenced by democratic and normative values, as well as highlighting the legitimacy claims.

Democracy can also create a legitimate space for institutions, such as state authorities, because of the democratic basis on which it rests - and then people's belief in democracy in practice and in theory. Rantala (2012) highlights aspects where legitimacy is not fulfilled in practice. For example, in the context of natural resource management, where it comes into conflict with property rights, where individuals believe that they have a legitimate margin of manoeuvre because they own property, and that it is beyond the legitimacy of the authorities to regulate the use of, in this case, the forest.

In addition, Rantala (2012) describes how legitimacy is fundamentally about the perception of decisions as justified and acceptable. He also points out the difference

between normative (theoretical) and empirical (social) legitimacy. Legitimacy can be perceived differently depending on whether the individual relates to a decision that they theoretically support, for example, that the government has the right to make laws because they are democratically elected, but the decisions can be perceived as illegitimate in the implementation because of claims of property rights (ibid).

We can further elaborate processes of legitimation by drawing on Weber. He tries to understand why people act like they do through reconstructing the values and ideas that lie as a basis for various decisions and actions, which he argues can be traced to cultural contexts (Inglis & Thorpe 2019). In order to try to explain this further, Weber identified three different types of legitimacy used to justify people's actions: traditional, charismatic and legal-rational legitimacy (Matheson 1987). These three types of legitimacy are a type of framework to divide and categorize the base of which legitimacy is based (Greene 2017). By analysing claims of legitimacy through this analytical framework together with Rantala (2012), different claims of legitimacy can be made visible both in terms of Weber's three types of legitimacy, but also in terms of power dynamics and normative values.

How people behave can therefore be explained by the cultural context in which they live. But accepting other people's behaviour can also be part of maintaining the social contract. For example, democracy is legitimised because decisions are made by elected politicians, or we obey laws because they provide a framework for society, or we listen to scientists because they have expertise in a field. Angles on legitimacy claims can be highlighted through this type of logic. In this thesis, the concept of legitimacy will be used to illustrate and examine the type of legitimacy claims made by different actors to justify their actions in relation to Key Habitats in the forest.

Legitimacy claims can be made from angles such as property rights or recreation, which will be further analysed through a framework of property and access to create a greater understanding of legitimacy claims. From an approach such as ownership, property claims can be made where the actor argues that ownership allows them to manage the area as they wish (Ribot & Peluso 2003; Sikor & Lund 2010). This is one way of making political-legal claims. Other claims that can be made are historical claims, where history and tradition can be used to justify access to an area.

Sikor & Lund (2010) emphasise the difference between property and access in relation to natural resources, where ownership does not necessarily provide access to the area. Property claims is accepted on several societal levels, such as political levels and by laws, it is also legitimised by cultural norms and social values, but it

is not the only way to profit from natural resources (ibid). Access on the other hand, includes property, but is rather a variable of an actor's possibility to benefit from natural resources, and include factors such as "technology, capital, market, labour, knowledge, identities and social relations", which to some extent also appear as legitimacy claims in relation to forest management (Sikor & Lund 2010:4).

Further, Sikor and Lund (2010) describes how property refers to the legitimacy of use through social structures and forms, while access is rather the ability to benefit from natural resources, and how property not necessarily imply that an actor can benefit from it. Processes of both access and property in relation to forest management can highlight different types of claims to nature. By examining them from this theoretical angle, the trust and legitimacy of both institutional processes and social institutions can be made visible.

Building on previous theorising of legitimacy in relation to natural resource management, the concept is used to highlight different types of legitimacy claims and how they justify actions in the empirical data and how these claims affect the management of Key Habitats.

3.2 Methodological framework

As a basis for this study, material was collected in terms of interviews, to gain a picture of how stakeholders justify their actions, the legitimacy claims they make to the forest and how this affects the management of Key Habitats. In addition, a description is provided of the procedures followed in collecting the empirical material and the selection processes that were used in this context.

3.2.1 Interviews

Qualitative, semi-structured interviews are conducted with informants from state authorities, nature conservation organisations, forest owner associations and forest companies in accordance with Bryman's (2002) description of interview research. The interviews are semi-structured and based on the same questionnaire (see Appendix 1) to produce comparable material, with the reservation that some interviews may include follow-up questions that do not appear in all interviews. Given that the interviews are semi-structured, there is a shared starting point but with room for variation depending on the interviewee's answers and where the conversation is headed. (Bryman 2002).

The interviews have been conducted with people from four groups of stakeholders: State Authorities, Nature Conservation Organisations, Forest Owner Associations and Forest Companies (See Appendix 2). The informants were drawn from different organisations and were then assigned to one of the groups listed above by me. The

sampling groups serve as a tool to gain an insight into different stakeholders' perceptions of Key Habitat inventories, how they understand the legitimacy of decision-making and how they justify their actions in relation to the issue. The aim of the sample is to provide a nuanced picture of the issue, and as this is a qualitative study, the results cannot be generalised to the whole Swedish forestry sector, but the insight provided by the material can contribute to a deeper understanding of the issue based on the actors who responded to the interview and to demonstrate the links that exist within the sector.

The forest owners' associations as an interviewee group are intended to represent the interests of forest owners on the issue of Key Habitats, as the organisations are based on supporting and advising forest owners on issues concerning their members' forests. The group of forest companies is also relevant because they own a large part of the Swedish forest, and their management has a major impact on the forest at the landscape level. State authorities as an interviewee group represent the group that implements decisions on forest issues in general and Key Habitats in particular. They are also the ones who have a follow-up role to ensure compliance. Nature conservation organisations as a group are considered relevant because they have expressed dissatisfaction with the management of Key Habitats and can represent interests other than production interests - to create a nuanced discussion where different interests are allowed to take place.

The informants were identified both systematically and by the snowball effect. Informants were contacted by email and 11 were interviewed (see Appendix 1) during a digital interview. The interviews were conducted in Swedish, and all quotes appearing in the thesis are carefully translated into English. The interviews are recorded and then transcribed to provide an overview of the material and allow for systematic analysis.

In total, 11 number of interviews have been conducted, of which 2 with Nature Conservations Organisations, 2 with State Authorities, 3 with Forest Owners Associations and 4 with Forest Companies. Interviews lasted between 20 and 50 minutes, but the majority of interviews lasted around 40 minutes. A majority of those interviewed have been men, 9 in number, and two women. On several occasions, I have initially contacted a woman who then passed me on to a male informant. This may have affected the empirical material, but if nothing else it shows a male dominance in the forestry sector. All interviews were conducted using zoom, i.e. digital interviews. This may affect the empirical data in that the informant feels distanced or feels that there is a technical barrier that affects whether they want to or feel comfortable participating. At the same time, digital interviews have made it possible to collect a larger amount of data in relation to the time constraints

of this thesis. It has also allowed for a greater geographical spread of informants. All interviews were recorded and transcribed.

A geographical spread allows for a wide variety of information and provides an overview of the forest sector in Sweden. At the same time, there are major differences in the proportion of land area covered by forests in different parts of the country, and thus different parts of Sweden are affected differently. There are also climate differences across different plant zones, which this thesis does not consider. In relation to WKH, the inventory methods differ somewhat depending on where in the country the inventory takes place, which the thesis also does not consider.

3.2.2 Ethics and methodological reflection

All informants are anonymous but are named according to the actor group to which they have been categorised rather than by name to ensure that no one is personalised but rather help to create a deeper understanding of the underlying concepts and dynamics. All informants have been informed that they will be anonymised in the paper and have given their consent to participate. Only I have access to who was interviewed and the transcribed material in its entirety, to ensure anonymity.

There is a difference in the number of respondents from each group because it was difficult to contact people who were willing to be interviewed in the time available. I tried to give all the interviewed groups the same space in the discussion, although the difference in the number of interviewees per group may affect the result.

The study aims to show the legitimacy claims that forest sector actors make to justify their management. However, it is a qualitative study, and the results cannot be assumed to be representative or generalisable to the forest sector as a whole - although they may indicate trends within this particular study.

3.2.3 Framework for analysis

The theorising of legitimacy will unveil structures such as power dynamics, claims of legitimacy and how they view Key Habitats, both with a normative and empirical standpoint.

The empirics will be analysed through codes, to find key concepts, how they justify actions and claims of legitimacy. The material is analysed using codes that emerge from the material and the theory. This makes the material visible and provides an opportunity to identify recurring themes for the different actors (Creswell et al. 2018). The codes will be used as a tool for a deeper analysis and conceptualisation of the data, which will facilitate the analysis. The codes are as follows and include:

Environmental considerations, includes normative values such as arguments related to sustainability, environment and green transition;

(Private) ownership includes the value that ownership means freedom and power to decide over the property;

Implementation of decisions, how stakeholders perceive and wish that implementation of decisions should look like, and how they ideally want decisions to be made, and which actors should have responsibilities in relation to managing forests;

Knowledge, how the actors perceive their knowledge, to what extent they feel it is necessary, and how knowledge is maintained and reproduced;

Governmental influence, how much influence they think the state should have in forest management;

Heritage and culture, includes actions and legitimacy claims justified by historical and traditional arguments.

By using these codes, connections in arguments can emerge, both of a normative and concrete nature. The codes will also be used as theoretical anchor points, where it will be important to understand and analyse the codes to make claims of legitimacy and margin of manoeuvre visible.

4. Findings and analysis

This section will present the empirical material collected for the thesis by describing the various actors' claims to legitimacy and how they justify actions in relation to Woodland Key Habitats in the Swedish forest. The section will also present stakeholders' views on the values applied to Swedish forestry. The stakeholders will be referred to as State Authorities (SA), Nature Conservation Organisations (NCO), Forest Owner Associations (FOA) and Forest Companies (FC).

From the codes identified, the analysis will be structured in two parts. The first part is called 'the state, forest and ownership' where the codes governmental influence, (private) ownership and implementations of decision are included. The second part is called 'faith, power and knowledge' and includes the codes knowledge and heritage and culture. This allows for further elucidation of legitimacy claims in relation to Swedish forests in general and Key Habitats in particular. By analysing the content and prominent narratives in the interview material on the basis of legitimacy, I aim to answer the following questions:

- How do different stakeholders claim legitimacy in relation to Key Habitats?
- How do these claims of legitimacy affect the management of Key Habitats?

4.1 The state, forest and ownership

Today, the Swedish forest industry is facing major challenges. Not only in terms of adapting to international regulations and a green transition, but also in terms of communication between the relevant stakeholder's: state authorities (SA), nature conservation organisations (NCO), forest companies (FC) and forest owners' associations (FOA).

The conflict has been reflected in newspapers, public opinion and political debates in Sweden in recent years (Ugge 2019; Röstlund 2021). Through news coverage, the debate has spread to other areas, where the public has also been able to participate and take a stand in the debate on how Swedish forests should be managed and the role of Key Habitats. The different ways of looking at the issue of Key Habitats inventories and forest management is not just a question of property rights or consideration for red-listed species. It is also part of larger ecological systems, resilience and the international climate crisis (Bonan 2008; Pawson et al. 2013; Swedish Environmental Protection Agency 2023).

4.1.1 Legitimacy and governmental influence

Most informants feel that the issue of Key Habitats is particularly charged (FOA 2, FOA 3, FC 1, SA2, SA1). The interviews shows that there is a demand for dialogue and the opportunity to work together on possible actions. In addition, several actors describe the value of hearing other stakeholders' perspectives on the issue in order to create greater understanding and respect for decisions, i.e. legitimacy.

The Swedish Forest Agency is one of the authorities responsible for forest management. They are one of the actors responsible for implementing policy decisions, gathering information and at the same time contributing with knowledge about the forest to policy decisions. Both SA 1 and SA 2, as state authorities, describe that they have a responsibility to ensure that decisions are properly implemented and that they also have a central role in reporting statistics and providing expert advice to policy processes. The state authority actors are strongly claiming legitimacy through the public administration of which they are a part of. Where they describe their work in implementing decisions based on the existing policies. *“For the authorities, the job is to influence forestry in the direction that the relevant authorities and legislation want”* (State Authorities 2). However, SA 2 stresses that in practice they have very little margin of manoeuvre as they can only act based on government decisions. SA 1, on the other hand, believes that through management, inventory and knowledge dissemination, they have the opportunity to both influence policy and contribute to the knowledge base as part of their mission. Trust in the political system, from policy making to implementation by the authorities, is part of maintaining the social contract of democratic processes (Rantala 2012). It is where this process and behaviour is based and where claims to political and knowledge legitimacy are made.

The collaboration process, organised by the Swedish Forest Agency between the years 2017 and 2019, was an attempt to bring together different stakeholders around the issue of WKH (Björstig et al. 2019). The dialogue process can also serve as an arena for creating understanding for different actors, which in turn can increase acceptance in relation to decisions, which is part of creating legitimacy in relation to decision-making (Rantala 2012). Several actors testify that the collaboration process is an example of a context that can benefit the dialog between stakeholders (SA1, FOA 2, FOA 3, NCO 1, FC 3, FC 1). SA 1 states:

I learnt a lot in that even if we have completely different opinions, we may not reach consensus. But we do start to understand each other. Understand each other's needs and inputs. Based on that, we can try to shape policy instruments and understand how else we can work with these things. Because no matter how we look at it, the forest that is out there looks the way it does. (State Authorities 1).

Collaborative processes are described as a good way to bring stakeholders together and to gain a better understanding of the different interests they represents. These interests are described as very diverse, with some stakeholders wanting more nature-based forestry (NCO 1, NCO 2, FC 1, SA 1) and greater consideration for species and ecosystems, and others describing the forest as a renewable resource and a socially supportive industry that can contribute to the green transition in Sweden, but which is also important for the rural economy (FOA 1, FOA 2, FOA 3, FC 2, FC 3, FC 4).

These objectives may at first glance appear to be similar. The different actors from NCO, FOA, SA and FC all seem to agree that Key Habitats have a natural and important place in the Swedish forest. At the same time FOA and FC also describe that WKH is not opposed to efficient forest management, but even can and should be part of it, where different parts of the forest landscape are set aside, and other parts can be managed with today's felling practices. They also point out that most forest owners and forest companies have some form of certification, which requires at least 5% voluntary set-aside and that Key Habitats must not be logged. However, a representative of the NCO says that today's certification is not sufficient.

[...] And in the certification, it even states that Key Habitats, according to the Forestry Agency's definition from 1995, must be protected. And everyone stood up for it. It wasn't a problem at all in the 90s. Then something happened in the 2000s, when the FSC certification set the limit at 5% protection. Although it wasn't a ceiling, you could say it was a floor. FSC also says that all Key Habitats, whether you have 5% or 70% of the land you own, must be protected according to the certification. And then there is forestry, you don't want more than 5%, so then you start pulling or negotiating Key Habitats out of your ownership, out of your forestry company or out of your forestry planning. So, they started calling forests conservation forests or NO classes or NS classes or a small part of these things which became an alibi, you could say, to be able to log them instead. [...]. (Nature conservation organisation 1).

NCO 1 is of the opinion that certification is rather used to be able to use the forest intensively in other ways, but that it does not really address the problem associated with the decline of Key Habitats and natural values in the forest. In addition, the actor argues that the forest needs a structural change in which today's forest management needs to take more account of biological processes in the forest. Intensive forestry disrupts biological processes and endangers species and biodiversity, which is a strong claim to biological values to change the forest management. NCO 1 also emphasises the international agreements and EU regulations that the Swedish forestry industry must consider in order to achieve these goals. NCO 1 calls for a control function where the forest can be inventoried and controlled so that Swedish forests can meet the international commitments to which the country is a signatory. This type of argumentation refers to legal-political legitimacy claims (Sikor & Lund 2010; Greene 2017), where NCO1 also

emphasises the power of these supranational agreements, in relation to the market interests that the actor believes govern forest management.

Several FOA actors testify that high nature values are important, but if private forest owners must set aside part of their forest for nature conservation due to government decisions, the state should be liable for payment. If they are certified in some way, forest products have a higher value on the market. But in the case of WKH inventories, or if red listed species are found in the forest, the owner is not allowed to log the area until the opposite is proven. In these cases, FOA actors argue that the state should cover the costs of loss of income (FOA 1, FOA 2, FOA 3). They further argue that decisions that restrict property rights must be compensated for in economic terms in order to create acceptance and therefore legitimacy for the decisions (Sikor & Lund 2010; Rantala 2012). This type of legitimacy claim also relates to the legal basis, where FOA actors refer to legal property rights. In other words, they argue that forest owners should have more power and influence over the management of their property, in line with property rights.

NCO 2 emphasises the aspect of reindeer herding and the Sami right to land in relation to land use and forestry. As indigenous peoples, the Sami have special rights to land. The Sami villages are located in the northern parts of Sweden, where several different interests compete for land use. The Sami have been recognised as an indigenous people under Swedish law since 2011, and Sweden as a state has signed the UN Declaration on Indigenous Peoples³. There are recurrent conflicts where land use in the form of forestry, mining and wind power reduces the Sami's ability to graze their reindeer and carry out other activities to which they are entitled under agreements signed by the Swedish state (SVT 2024b; c; a). Where NCO 2 states:

[...] We have a current system of forest management that is totally self-preserving at the moment. But this is being challenged by the scientific state of biodiversity, species and climate. But it must be made clear that the Sami, for example, are rights holders. In other words, they are not only stakeholders, but also rights holders, who cannot live de facto with today's forestry. The way it is structured [...] (Nature conservation organisation 2).

The actor also highlights the state's negation of the Sami as an indigenous group, who are denied their indigenous right to use the land as they are entitled to, because of intensive forestry, especially in northern Sweden. The use of the Sami's Indigenous rights is a strong claim to legal legitimacy, but also de-legitimation of the current forest management. The Sami have traditional rights to use and live their heritage, which includes reindeer herding, but also forestry, fishing and hunting. These rights are regulated by international public law (Regeringskansliet 2018).

³ https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

This is a strong claim to legal legitimacy, based on both Swedish and international agreements and laws. NCO 2 calls for more state regulation of land use in relation to the Sami, who are also land rights holders in Sweden. The argumentation shows the complexity of the forest issue, where questions of justice, i.e. normative legitimacy, in relation to forest management are relevant. There is also an emerging power dynamic in the injustice, where the state does not take enough responsibility for the Sami's right to use the land, leaving them subordinate to the intensive forestry sector, which has other interests in the forest. Intensive forestry, with a high proportion of monocultures and young trees, harms other interests such as reindeer husbandry, where forestry makes grazing difficult and creates a lack of lichen and other fodder in the forest (Swedish Forest Agency 2024b).

The different types of legal claims made by actors aim to demonstrate the legal weight of their arguments. Property rights are emphasised by FOA actors as the final argument for allowing the forest owner to use the forest freely. At the same time, NCOs point to the international agreements that Sweden has signed, in which biodiversity must be given greater consideration. These agreements apply to all land, i.e. land owned by private individuals, municipalities, the state and local authorities. The narrative points to the urgency of the situation, where many actors will have to adapt to the current situation and the commitments that Sweden has made in the agreements. The dynamic between the FOA's and the NCO's different claims to legal legitimacy can be understood as a way of highlighting the strength of their arguments. FOA points out that forest owners are "powerless" against the state and FSC certification on the issue of WKH. Because of the protection of Key Habitats from logging, they are unable to profit from their property, which, they argue, makes them subordinate and loses their influence. There is a narrative emerging of a helpless forest owner in relation to a bureaucratic system where forest owners ultimately pay the price for maintaining biodiversity and resilient ecosystems.

At the same time, there are other actors, or rights holders, as NCO 2 points out, who have land rights in accordance with international agreements on indigenous rights. This is another dynamic that needs to be addressed in relation to both state and private management of the forest. The exclusion of the Sami in the discussion about the structure of the forest sector is a way of reproducing the dynamics and narratives of the forest as something that concerns private forest owners, forest companies and, to some extent, the national interest.

4.1.2 Legitimacy and (private) ownership

Economic interests underpinned by private property can be seen as the opposite of nature-based forestry, as was evident during the 2018 election, when the issue of the National Key Habitat Inventory versus property rights became a major election

issue (Sveriges radio 2018; Bjärstig et al. 2019). The political debate is based on different ideological grounds, with the more liberal parties believing in the importance of strong property rights and individual freedom. The claims are based partly on property rights, but also on the belief that owners will do what is necessary to protect valuable nature, combined with the belief that the private sector will play a part in conserving biodiversity through the certification system. The parties that were in favour of national inventories are more likely to make claims about the importance of protecting biodiversity and working towards climate goals. They argue that it is important to map the valuable nature that exists in order to create the best possible conditions for biodiversity.

Representatives from FOA strongly argue the importance of strong property rights, where the owner's right to use their property as they wish is central (FOA1, FOA 2, FOA 3).

Ultimately, it is the individual landowner who has and should have control over his or her land. [...]. Then we get a diverse forest as a letter in the post. [...] (Forest owner association 2).

Further, they stress that owning forest is an economic investment and that they should be able to make profit from that investment. They also emphasise that the large proportion of private forest owners in Sweden will naturally lead to a diversity of management, due to the diversity of interests and values of all individual owners. This type of argumentation is also prominent in other interviews.

I believe that we should have a diverse forestry. Then we should be able to rely on the forest owner to a large extent. Forest owners should have the opportunity to conduct forestry. If many do different things, it will be relatively good. Then, of course, we also need regulations. [...] Broadly speaking, I believe in individual freedom but with variation. Then it depends on who forest owner is. I believe in strong individual ownership. I think that also contributes to increased variation. (Forest owner association 1).

This type of argumentation is common to all FOA informants. They emphasise the right of individuals to do what they want, but also how the individual management creates a diverse landscape. The idea that large individual ownership automatically leads to diversity in forest management is a way for actors from FOA 1 and 2 to legitimise the current management. However, there are still clear narratives that largely determine how the forest is managed, where the forest itself, machinery and industry are adapted to the current clear-cut forestry management. The demand for a high degree of individual freedom in forest management, where FOA actors argue that this will lead to high diversity, is a way of legitimising management. At the same time, it is unclear on what grounds this argument is based, other than that many landowners are likely to have different interests, which is likely to lead to

diverse forest management. They emphasise certification as a regulatory tool, leaving the management of Key Habitats to market forces and the interests of individual forest owners.

The landscape perspective on nature conservation and Key Habitats is also something that appears in several interviews. FOA 1 argues that natural values change over space and time. If one disappears, another will develop somewhere else. Respondents also argue that the most valuable WKH's should be protected, but that in general the issue should be addressed through a landscape approach. This type of argument reproduces the narrative of individual freedom and freedom in forest management. It also emphasises the landscape perspective in relation to diverse ownership and that it will create high biological values and diversity.

The FOA point to certification as a control system that regulates the consideration of nature values. Certification is optional, but due to the current market, forest owners are more or less obliged to be certified. The certification is based on two pillars, one for the forest itself and one for the processing companies (Forest Steward Council n.d.). The FOAs argue that forest owners must be certified, which also means that they are managing their forest in a way that respects natural values, and that this is embedded in market forces. This also reinforces a narrative that FOA reproduces in terms of freedom and reduced regulation, where the market can regulate the necessary ecological considerations in forestry.

The representatives of the forest owners' associations, describe the different certifications as a floor and that they try to encourage their members to set aside more than 5% (FOA 2, FOA 3). At the same time, however, they emphasise that there are problems with the certification rules regarding WKH and private ownership.

When we draw up forestry plans on behalf of our members, we lean heavily towards PFC certification. There is a sort of democratic view that everyone should do their bit, and you are obliged to set aside at least 5%, the 5% of your property with the highest natural values, for nature conservation. Either leave it untouched or do conservation work there. In addition, we believe that the state should open its wallet. If the public thinks that you should be restricted in your use, then the public must pay for the party. (Forest owners association 2).

As the certification states that no areas with Key Habitats standards can be logged, and most forest owners, companies and sawmills are certified, it means that the forest owner is unofficially forced not to log the area, or they risk losing income. Informants from FOA strongly emphasise the right of private ownership, where this type of restriction, which follows the registered WKH, limits the right of individuals to use their land as they wish (FOA 1, FOA 2, FOA 3). The actors strongly refer to private property rights as the basis for the right of forest owners to log their forest

for economic interests. This kind of politico-legal legitimacy claim to property is clear, as the ability to derive benefits are sometimes more important than the right to do so (Sikor & Lund 2010). It thus becomes a kind of reduced access to the resource, which all FOA informants believe means that the state should compensate forest owners when they cannot economically utilise their ownership. They make strong reference to legitimacy through property rights, where laws and regulations are part of maintaining social contracts, but also based on social values and norms linked to freedom and democratic values in a sense of self-regulation (Sikor & Lund 2010; Rantala 2012). These kinds of narrative around freedom, self-fulfilment and market forces are produced and reproduced with thoughts of market certification as a regulatory measure to maintain biodiversity.

Thus, the narrative around freedom and strong property rights can also be seen as an exclusion of other actors. For example, the exclusion of the state, where the forest is also a national interest, as it has a major impact on the question of climate and greenhouse gas emissions on a national and international level. There are also other stakeholders who are excluded, such as the Sami, who NCO 2 also emphasises are right holders in terms of land use. Like landowners, the Sami have a legal right to use land, which may conflict with the interests of intensive forestry. For example, the enforcement of the Sami people's legal right to use land for reindeer grazing, which is in conflict with intensive forestry. This can be contrasted with the straightforward assertion of property rights and the exclusion of the Sami's right from the discussion, where strong claims to legal legitimacy are made of FOA in support of the forest owners' right to self-determination in forest management. At the same time, the argumentation points to a selective view of the laws regulating land use in general, in which the land use by the Sami is excluded or marginalised.

NCO 1 makes strong reference to the international agreements and goals to which Sweden has sign up to, which are not in line with current forestry practices. NCO 1 points out that the certification dose does not encourage enough offsets. Stakeholders argue that the minimum limit required by the certification, 5% offsets, is not enough in relation to the other values the forest holds. NCO 1 believes that there is a great and urgent need to change the Swedish forestry model. This does not necessarily mean the end of the industry, but a profound change.

We know that, for example, in clearcut free or near-natural forestry, where we take more into account and perhaps not even take more than this particular rate of return on capital, we can probably preserve species of hanging lichens that require long forest continuity, species of mycorrhizal fungi that also require long forest continuity. But we will, of course, affect the heritage associated with the dead wood and the old trees. Because we are taking trees out of the forest. It doesn't mean that we have to protect 100% of the forest, but we can have 70% of the forest this way, because the science says that we have to leave at least 30%. If we can manage that remaining 70% in a fair way. (Nature conservation organisation 1).

NCO 1 believes that by taking greater account of nature and ecosystem processes, forestry can be practised, if only through different means, and at the same time achieve the objectives and agreements signed for biodiversity and the future of the environment. This type of reasoning is based on claims of legitimacy for what is best for natural processes and ecosystems. NCO 1 use a biocentric reasoning where nature is central, and humans need to have greater respect for natural processes and the ecosystem. Other types of legitimacy claims that can be made visible is the claim to access nature, where NCO 1 argues that nature is for all to access and benefit from (Woods 2011).

It is clear that FOA makes strong legitimacy claims for freedom and individual responsibility in relation to the forest, emphasising property rights. The narrative that emerges are about the importance of the individual's right to their property, where the current Key Habitat regulations restrict the individual's freedom without any financial compensation for the restriction. At the same time, all FOAs believe that the freedom that would result from a reduction in Key Habitat regulations would not necessarily reduce the total amount of natural values. They point to and emphasise landscape level and individual differences in forest management that would lead to high biodiversity at the landscape level. At the same time, the strong reference to strong property rights excludes other actors and interests. NCO points to the need for regulation, given the urgent need for change in the face of the climate and biodiversity crises. The example in the quote, where if 30% of all forest land is preserved and the remaining 70% is managed in a more responsible way, there are good preconditions for greater resilience in the forest. Legitimacy claims are made with a biocentric view, with NCO emphasising the need for greater consideration of the biological systems and resilience of the forest. Furthermore, NCO claims legitimacy through the scientists' statement in the questions of land use, where they call for an urgent change in the management of the forest in relation to both biological values but also the Sámi right to land as right holder.

4.1.3 Legitimacy and implementation of decisions

How the interviewees approach the question of how the responsibility for changing and setting limits in relation to forestry differs. Most informants believe that the state has a major role to play in the implementation of decisions. And even though the management broadly is regulated by the state, there is different opinions on how large their margin of manoeuvre is. SA 2 describes that the actual influence of a state authority is limited and that it is more about the implementation of political decisions. SA 1 on the other hand, describes that a large part of their job is to implement decisions, as well as recognising valuable aspects and thereby influence policy decisions as experts. They also have a registering and investigating role and can therefore provide facts and material that can influence decisions. FOA 1 also

point to the state influence of the forest management, but highlight the diverse nature of interests that influence the management.

Both the state and, not least, the timber-buying organisations have a responsibility. The state is largely responsible for the regulations that exist. [...] But also the forest industry or the timber buying organisations, that are certified, have an impact on the market and therefor forest sector. Even there, it can mean that forest owners with high nature values are boycotted. I think there is also homework to be done there. [...]. (Forest owner association 1).

Because of the certification system, the FSC have an influence on the market, where FOA 1 argues that it forces forest owners to be certified. Market forces will create an indirect demand for certification, as consumers will want to buy mainly certified wood raw materials. Forest managers will also be forced to certify, as most sawmills and other wood raw material companies are certified and therefore only want to receive certified wood. The quote points to a narrative that legitimise market influence and power in the question of forest management, but also to liberal notions of freedom and trust in the market system as a control function. In addition, FOA 1 argue, that the market can regulate biodiversity through the forces of consumption, which leads to legitimate demands for forest management and highlights markets and consumers' willingness to pay for biodiversity (Swedish Forest Agency 2024c). At the same time, FOA 1 argue the exposed position of forest owners, where the actors believe that forest owners do not receive enough economic compensation for their high biological values.

Another factor highlighted as illegitimate is the lack of political decision-making. Some stakeholders are calling for clearer guidelines on how the forest should be managed. Both in terms of consistency and greater consideration of biological values, but also in terms of regulations that encourage forest owners, in particular, to protect and take account of natural values as Key Habitats. One example of this that was highlighted during the interviews was financial compensation (FOA 1, FOA 2, FOA 3). At the same time, NCO 2 emphasises the need for greater and stricter regulations from the state.

The state is failing in its responsibility to ensure laws and the equivalent that it should ensure, regardless of whether it is the environmental objective, or whether it is forests or other environmental and climate objectives for which the state is responsible. Or the responsibility to constitutionally enable the Swedish people and their tradition and culture. (Nature conservation organisation 2).

NCO 2 calls for stricter regulations and control systems, whereas the actor argues that the current regulations do not meet the requirements in terms of biodiversity loss and interests of the forest. The actor points to the responsibility of the state and calls for greater state involvement in forest management. This kind of reasoning

and accountability is part of democratic values, and the dissatisfaction shown is part of upholding both democratic values and social contracts (Rantala 2012). By holding the state to account on forest management, civil society becomes part of maintaining democratic processes. As Rantala (2012) describes, there is a difference between normative and empirical legitimacy. Where in this question, NCO 2 argue that the lack of decision making creates illegitimacy in the question of forest management. The lack of acceptance can be seen as a lack of empirical legitimacy. NCO actors are dissatisfied with the lack of decision-making, which in turn creates illegitimacy.

Further, NCO 2 argue for the responsibility of the large forest companies, where they have a big influence of the management but also has certifications to take into consideration, where the actor argue that they fail to live up to the required standards. NCO 2 points out that they have a little room for manoeuvre for forest management at a larger level, but that they can do advocacy work locally or in specific processes. For example, in questions regarding land use issues that conflict with the Sami's ability to exercise their indigenous rights. FC 1 argue that they are responding and changing to meet the needs of the reindeer herding Sami, as a large forest company.

[...] But it's about what you do, and it's about adapting to a changing world. I mean, two years ago we reduced our felling in Norrbotten [the Northern part of Sweden] because we realised that we had to find a better way to get along with the Sami and the reindeer herders, to join hands. [...] (Forest company 1).

Power dynamics between the different actors is created and re-created by how the actors talk about the management and when they talk about different aspects. By talking about and highlighting aspects such as the Sami and how the Sami's ability to use land, the FC 1 recognises them as actors in the question, which gives them some power and recognition in the question of how the forest is managed. By FC1 recognising the Sami is also a way of legitimising the rest of the forest management, where consideration has been taken on part of the company's land. The quote can be seen as a way of showing that the forestry company takes other values into account, such as the Sami, and can therefore legitimise the whole management by arguing that the company takes other values into account.

Stakeholders disagree about who is responsible for changing forest management, but several of them acknowledge the need for change (FC 1, NCO 1, NCO 2, SA 2). Forest company 1 states:

I think we are in the midst of a paradigm shift [...] If we [politicians and the forestry sector] had taken a different approach as a large group a few years ago, when the biodiversity strategy, when these big issues came up, and instead thought about how we can best do this [...] I think we are now slowly but surely realising that we have to start

looking at alternative methods of protection. We need to reduce logging in the way we do it today. Now the restoration regulation comes. When the government decide on a plan in a few years' time, I think it will be very exciting. Even if some people in the industry still have this negative view of the expectations and demands of the outside world, I think they will eventually have to give in. We cannot go backwards into the future. We have to face our responsibilities. (Forest company 1).

FC 1 identifies forests as one of the key factors in the climate crisis and recognises the importance of forests and forest management in relation to biodiversity and climate. The actor also emphasises the need for willingness in the forest sector for systemic change, which the actor believes is both necessary and already happening. The quote asks for accountability of all actors in relation to forest biodiversity, both accepting the concept and taking responsibility for the issue. This kind of argumentation confirms both the need for change, with FC 1 also taking responsibility for the issue, recognising the power they have over land use, but also that they are involved in reproducing the narrative of forest management. There are claims of legitimacy from the fact that FC 1 is taking responsibility for the change that is needed, but also in a sense of relying on science. FC 1 also emphasises the need to comply with international regulations, as does NCO 1. These types of legal claims to legitimacy are prominent where the management in question is motivated by international agreements.

I believe that if we are now to try to meet these international environmental targets, which Sweden has signed up to in Montreux on 19 December 2022⁴, at least 30 per cent of the land, sea and lake surface must be protected in ecologically representative habitats. They are of great value for biodiversity, which actually includes all public property, i.e. property owned by the public, the state, the church, the municipalities, for the purpose of preserving it for the common good. (Nature conservation organisation 1).

NCO 1 emphasises that all forest owners have a responsibility in terms of management, where all landowners are responsible for meeting the requirements of COP 15 (UN Environmental Programme 2022). At the same time, several actors point to the long-life cycle of forests. They stress that it is not possible to act hastily, and that the effects of management are only felt 60 to 100 years later. This means that several actors point out the need for caution in terms of new knowledge.

It's up to us to take input from the organisation and listen. What is working and what is not? I think it's difficult and often foolish to change management strategies often and quickly. Forests have such an incredibly long lifespan [...] If we do it now and then new research comes out in ten years' time, it will be a hundred years before we can reap the rewards. You should think carefully about what you are doing. (Forest Company 4).

⁴ <https://www.unep.org/news-and-stories/story/cop15-ends-landmark-biodiversity-agreement>

The precautionary principle applied to forestry is expressed in different ways in several interviews. FC 4 emphasises the importance of caution in forest management with regard to new research, using the long-life span as an argument for this caution. This argument is particularly sceptical of alternative management methods, but it is also a way of legitimising current management. It is better to proceed cautiously and continue with the current management, because you never know what the outcome will be, or whether there will be different findings in 10 years' time. NCO1 and NCO2 point to the rigid and unadopted forestry that is practised in relation to the available research and the current state of climate and biodiversity.

There are different views on what future forest management should look like, whether it should move forward or cautiously. But in general, many stakeholders show a willingness to change, and as Forest company 1 described, “*We cannot go back into the future. We have to take responsibility*”. There is a willingness to change among several stakeholders, although it differs between different actors. However, it should be emphasised that the desire to change management does not necessarily change ownership or forest management objectives. Several stakeholders would like to see more consideration given to Key Habitats in forest management and regulations, while others believe that this does not need to be done through stricter regulations, but rather as a result of free management.

Actors claim legitimacy for both legal claims, with Forest Owners' Associations in particular arguing that strong property rights will lead to a diverse forest due to the differing interests of forest owners. Nature Conservation Organisations and Forest Company 1 emphasise the need to change the forest system by taking greater account of biological values and Key Habitats, claiming legitimacy through international agreements. They would like to see forest management where larger areas are managed with greater consideration for natural processes and are protected from today's forestry model.

In general, there is a clear trend in favour of more state guidance, both in the form of stricter regulations, but also that these regulations should be able to provide compensation to private forest owners. There are also emerging narratives of illegitimacy in the form of a lack of state regulation, while at the same time positions are taken by several actors that reproduce the narrative of the importance of biodiversity and resilience.

4.2 Faith, power and knowledge

Actors such as State Authorities (SA), Forest Owner Associations (FOA), Forest Companies (FC) and Nature Conservation Organisations (NCO) claim legitimacy for knowledge and heritage in different ways. Knowledge can be gained through

research, gathering information from experts and taking advice from various people with knowledge of forestry. Knowledge can also be passed down through generations, which can also be used to legitimise different types of forest management but can also be a part of heritage. The role of knowledge and knowledge reproduction is a central part of natural resource management and land use, of which the Key Habitat inventory can be a part. In addition to the objectives that forest owners have for their forests, there are several different interests that need to be considered in relation to forest management. Indigenous rights, recreation, biodiversity conservation and the forest as a renewable product that can replace other fossil alternatives are some of the values that are expected to be provided by the forest. But also, a sense of heritage and responsibility, because forests are something that can be passed down from generation to generation.

The different types of incentives can also be linked to different types of legitimacy claims that appear in the material. Both knowledge and heritage arguments are used to legitimise the claims that actors make in relation to the forest.

4.2.1 Legitimacy and knowledge

Knowledge is an important part of forest management, where several scientists are calling for greater consideration to be given to nature conservation and red listed species in forestry (Gustafsson 2018; Swedish Forest Agency 2024c). The forest also plays an important role in the climate crisis, both as a carbon sink and as an alternative to other fossil resources (Bonan 2008; Pawson et al. 2013; Swedish Environmental Protection Agency 2023). This is also a recurring phenomenon in the interviews, where actors describe the forest as an important part of the green transition and its value in relation to climate crises. However, they approach the issue from different perspectives. Some argue that the forest should function primarily as an alternative to other fossil resources, while others believe that greater consideration should be given to nature conservation and natural processes.

SA 1 argues that a Key Habitat Inventory is a way of gaining and sharing knowledge about the current state of the forest. It can be seen as a valuable tool to map valuable areas and then find solutions on how to manage them. SA 1 points to the importance of conservation and the need to change the narratives surrounding the interests that affect the forest.

[...] But I still think it's these three key words again, with transparency and understanding and acceptance. Even if there is no consensus [on what the purpose of the forest should be], you can accept that there is something important in it [the forest]. And then you can still end up with political decisions or other decisions not to manage it based on the knowledge that exists. [...] It's about respecting landowners and in other ways. But if you look at it from a purely nature conservation point of view, what I think this is about is developing something that can balance political decisions and other

decisions in your planning. And everything else is about planning via diversity throughout Sweden to the individual small forest and the species that are there. And there is a huge challenge. (State Authorities 1).

SA 1 emphasises the complexity of the issue of forest management, where actors such as politicians, landowners and companies are involved. But there is also a question of scale, where Sweden as a country needs a national management plan, but also at the local level, where specific forests need to be managed carefully in relation to species and conditions. There are emerging claims of legitimacy in relation to the science of how the forest should be managed, and there is a strong sense of the need for change. The actor calls for management that is acceptable to multiple actors, and for policy decisions that address the need for biodiversity considerations based on the current state of science. This type of resonance reproduces a narrative of structural change, where other actors agree on the need for change. As the actor represents a state authority and is supposed to work as an expert in the field, this type of statement increases the impact and power of a structural change in management and consideration of biological diversity. At the same time, FC 4 argues that, because of the long-life cycle of the forest, caution is needed in adopting new management practices. This reasoning has been expressed in other interviews and shows a cautious forestry sector. This can also be seen in relation to certification as a regulation, which shows a reluctance to take greater account of biodiversity in management than is currently the case.

FC 1 also points to the need to continue to develop within the sector, while recognising the changes that have taken place in the industry.

We need to find more tools that we can use to make forestry more sustainable. If you look at the current red list, and there will be a new one next year. Half of the red-listed species are forest species and half are agricultural species. They are more heavily managed. This is not at all surprising, given that these are the two major land uses we have. And I think people sometimes forget that we have travelled a long way. Forestry today is not like it was in the 1970s, with giant clear-cuts that were completely bare [...]. We have introduced general considerations that are applicable. Almost all major operators are certified. You can think what you want about the ambition of the current standards. [...]. (Forest company 1).

The actor emphasises the need to think about the impact of the forest sector, where around half of the Red List species are forest species. This is a clear signal that management is failing to conserve species and biodiversity. At the same time, FC 1 argues that change has occurred, but that more change is needed to make forestry more sustainable. As the forest companies are large owners of the Swedish forest, with 25% owned by private limited companies and 13% by state limited companies, they have a major influence on the overall use and management of the forest. Due to the large areas for which they are responsible, management affects several

stakeholders, both directly in terms of the appearance of the forest and indirectly through the influence of the market. Large companies also have a great deal of influence in shaping and reshaping the narrative surrounding the forest sector. By emphasising the need for structural change and greater attention to biodiversity in the forest sector, the sector is better able to adapt. There is a request from FC 1 for better tools to adopt and change management to take greater account of biodiversity. The actor shows examples of how they have changed their management in some areas to protect areas of high biological value and create areas for recreation. At the same time, this is a way of justifying their actions - by changing management in some areas, they can claim credibility even though the rest of their forest holdings are still intensively managed.

Lack of knowledge was also an issue in the interviews, with some stakeholders (FOA 3, FC 4) suggesting that private owners in particular, may not be aware of new trends and practices. In these cases, organisations such as forest owners' associations have a great influence in providing advice and direction in forest management. FC 4 states:

A forest owners' association is similar to a forestry company. They are interested in buying the wood [...] But maybe it would be best if the forest owners got help from someone who is completely independent. But I don't think you can do that. You have to rely on someone, and I think you do. They feel supported by a consultant or a timber buyer. It's very important that they have this knowledge [about biodiversity loss and which forests should be protected]. That they can reach out and talk about these issues. (Forest company 4).

The view that forest owners are the least knowledgeable about biodiversity and Key Habitats is confirmed by FOA 3.

[...] I would say that we have quite a high level of knowledge about Key Habitats because these requirements are imposed on us through certification. The environmental organisations also have quite a high level of knowledge. On average, I would say that the actors have quite a high level of knowledge. I don't want to say that forest owners have a low level of knowledge about their forests, because they certainly don't. But the concept of Key Habitats is a kind of bureaucratic concept that was found in an office somewhere. In any case, the average forest owner doesn't really know where the boundaries are. [...] (Forest owner association 3)

The Forest Owners' Associations legitimise their actions through knowledge and have an advisory role in relation to the forest owners, where they have a great influence on the management of the forest due to the lower level of knowledge within the group of forest owners in relation to greater consideration of biodiversity and Key Habitats. The power dynamic is criticised (FC 4, NCO 2), where the FOA have an influence on forest management on private land. The dynamics of the market forces on which the associations are built create a power dynamic where the

forest owners' association provides the forest owner with management advice, but at the same time purchase the wood and has a market to consider. This means that the FOA has an incentive to cut down the forest of private forest owners, because the consultants are also the ones who buy the forest that has been cut down. This raises questions about the actual management of the forest and whose interests it serves. This may also indicate illegitimacy in knowledge reproduction, where underlying incentives may influence advice.

Many stakeholders point to the importance of knowledge and research for forest management and call for new tools to deal effectively with climate change. Several stakeholders also highlight that Forest Owners' Associations, which are the main source of information for many private forest owners, have incentives such as economic incentives that can influence the advice. At the same time, the Forest Owners' Association claims legitimacy through knowledge, as they have education and training in the subject of the forest and ecological considerations. At the same time, there are actors who claim that the forest owners' associations are illegitimate, as they have economic interests that may affect their advisory role to private forest owners, which may affect the management to lower consideration to ecological values and Key Habitats due to the economical incentives.

A power dynamic also emerges, with both forest companies and forest owners' associations emphasising that there is a willingness to change and adopt new practices and methods, which is an important part of a transition in Swedish forest management in relation to achieving global climate goals and mitigating climate change. At the same time, there are stakeholders who, because of the long life cycle of the forest, are more cautious about new management practices. Claiming legitimacy through knowledge is seen by some actors as a strong claim to legitimacy (SA 1, NCO 1, NCO 2, FC 1), while some actors (FC 2, FC 3, FC 4, FOA 1) emphasise caution as knowledge and science can change.

4.2.2 Legitimacy and heritage and culture

It is not uncommon for private forest ownership in Sweden to be inherited. It may have been passed down through several generations. Inherited forests often carry emotional and cultural significance, encouraging responsible stewardship across generations. Inheritance is also motivated by the desire to protect nature and the environment and pass it on to future generations.

NCO 1 emphasises how the forest should be passed on to future generations in a responsible way, where the values we see in the forest should change.

We need to think with a holistic perspective and see how we humans are part of the ecosystem and how we cannot rule over the ecosystem, as the forestry industry wants.

They have a complacency that they claim to be better creators of the ecosystem than nature is itself. (Nature conservation organisation 1).

NCO 1 talks about different visions of nature, where the anthropocentric view focuses on what nature can give to humans, while a holistic or biocentric view can point to other values that the forest holds (Helmfrid 2007; Woods 2011). By using a different approach to nature, other values can take place, which NCO 1 emphasises is of great importance. Several actors describe how the forest sector has a big impact on species and that some kind of shift is important (NCO 1, NCO 2, FC 1, SA 1). By taking a holistic view of the forest as a system and, as NCO 1 states in the quote, not overriding nature, natural systems can emerge. The actor stresses the need to take greater account of biological values and processes in forest management, and to claim legitimacy by looking at nature in a different way, but also in terms of responsibility to future generations (Woods 2011).

There are different ways of claiming legitimacy in relation to forests and cultural heritage. NCO 1 makes claims in terms of holistic and biocentric approaches in relation to forest management (Helmfrid 2007; Woods 2011). Where the forest and natural systems need to be healed and restored to pass the forest on to future generations. FOA 2 and 3, on the other hand, also talk about the cultural and emotional heritage that the forest can hold, while taking an anthropocentric approach in their reasoning, where humans have managed the forest to create high natural values (Woods 2011; Greene 2017). FOA 3 describes:

[...] They have either bought this forest and taken out large loans for it. Or they have managed it, which is not unusual, but they have managed it for generations. And they often feel that this forest looks the way it does because my family and I have made it look that way. (Forest owner association 3).

FOA 3 suggests that many privately owned forests that have high nature values do so because the family has cared for the forest. The actor believes that it would be a shame if the forest owner was 'punished' for caring for their forest so well that it developed high natural values, if this meant that they could not harvest the forest. FOA 3, FOA 2 and FOA 1 all believe that high nature values should not be penalised by a ban on logging, but that there should be financial incentives to encourage forest owners to take good care of their forest and at the same time make a financial profit from logging. Incentives could be in the form of financial compensation if forests are not allowed to be logged.

At the same time, FOA 2 emphasises that inheriting the forest is not just about money. There are also emotional values associated with forest, as something you inherit from your relatives. There are incentives to look after and manage the forest

responsibly. It is not only as a financial asset, but also as a cultural one. This shows a claim to legitimacy through traditional legitimacy (Greene 2017).

[...] And then, when you are there, they often start in the retirement phase, then you have a life behind you and thoughts of the future. What you do, you do mostly for the next generation. You want to do it well. (Forest owner association 2).

This aspect of emotional attachment to the land is recurrent and can be expressed in different ways. A narrative emerge about how the forest as an inherited property over generations creates beautiful forests with high biodiversity, it becomes a way to justify private ownership or custodianship of the forest with aspects such as emotional responsibility to both past and future generations, within the family. At the same time, these narrative can be seen as exclusionary, where the forest can also belong to the public in terms of both public access rights and other types of cultural and emotional values that the public or other groups attach to nature. It can also be seen as a collective resource that is an important part of the fight against climate change.

By describing the environment in general and the forest in particular in terms of feelings of responsibility and belonging, the forest adds values other than economic ones and opens the possibility of seeing the forest through different lenses, as NCO 1 points out that the forest should be seen from a more biocentric perspective. NCO 2 also talks about heritage, but in terms of the Sami's right⁵ and ability to use the land from an indigenous rights perspective. By asserting aspects of heritage and emotional ties to nature, legitimacy claims emerge in which actors argue that there is an underlying sense of caring for the forest because it has been passed down through generations and will be passed on to future generations. This kind of argumentation shows a sense of responsibility, but at the same time, claims to traditional legitimacy can also be a way of legitimising the current management, as well as a changed forest management depending on the objectives from the actor.

⁵ This focus is beyond the focus of this thesis, but is raised as a relevant and interesting aspect of land use

5. Concluding discussion

Different actors have different claims to legitimacy and different values, but all believe that their way of managing forests is the right way to achieve sustainable forestry. The different narratives that emerge from the study can be summarised as follows: on the one hand, there are actors who argue that the current forest system is sustainable and necessary, where there are other fossil products that can be replaced by forest products. Further, they build a narrative about the forest as a central part of the rural economy, enabling a vibrant countryside. On the other hand, there are those who argue that the current forestry system is in urgent need of reform. They see the need to change the current forestry system because of the weakening of ecological systems and the extinction of species. They point to the importance of better adapting the system to the needs of biodiversity and the changing climate. Several stakeholders describe how this division in the image of Swedish forestry has led to a heated debate in which the different actors find it difficult to communicate with each other regarding the forest management. The debate seems to be stuck in a situation where one side cannot understand the other, making it difficult to implement and accept decisions. At the same time, here is a clear consensus that a better climate for dialogue needs to be created (FOA 2, FOA 3, SA 1, SA 2, FC 1).

In general, certain claims to legitimacy are emphasised during the study. Actors from FOA in particular, but also from FC, invoke property rights to justify forest management and emphasise legal legitimacy. They argue that strong property rights can also meet the demand for ecological diversity within the forest, where several actors argue that large individual ownership leads to diversity in the forest due to the different interests of landowners. This type of argument supports the view that landowners should have a high degree of individual influence over forest management, while other actors (NCO 1, NCO 2, SA 1, FC 1) believe that urgent action is needed to meet the ecological challenges we face rather than protecting property rights. Property rights in themselves are not a contradiction in terms between achieving climate goals and allowing ecological considerations to play a greater role in forest management; rather, it is a matter of all forest owners taking responsibility for environmental considerations and key habitats, rather than assuming that diverse ownership automatically leads to biodiversity at the landscape level. This division in the debate is also evident in policy discussions on forests, with this type of argumentation emerging during the debate on the recent national WKH inventory in 2018 (Bjärstig et al. 2019).

Throughout the study it becomes clear that the forest is a central part of culture and emotional values. The forest as part of a cultural heritage emerges in the interviews,

where the emotional sense of responsibility determines how both FOA and other actors such as NCO emphasise that forest management is part of this heritage and is used as a legitimacy claim for the different types of management.

There is also a general sense of caution among some of the actors when it comes to resistance to new forestry methods, which is evident in interviews with both FOA and FC. They emphasise that the life cycle of forests is 60-80 years, which in their view means that it is not just a question of trying out different new methods if the current methods are working. This is used as an argument for continuing with the current forest management system. This is a clear example of reasoning that also has a clear impact on forest management, where current forestry practices are continued and where certification continues to regulate environmental considerations and the consideration of Key Habitats. This has a direct impact on forest management in terms of how the companies that own and manage large parts of Sweden's forests manage their forests, but it also has an impact on the whole forest sector in terms of setting the narrative and re-establishing market and production forces.

NCO stakeholders argue that this kind of reasoning shows a rigid forest sector where a changed system is needed to both meet international agreements and promote biodiversity. They point to international agreements and research to claim legal legitimacy, but also to argue the importance of a change in management. Because of the agreements signed by Sweden, there will be a change in management where the agreements aim to protect 30% of the land area of which the forest is a part (UN Environmental Programme 2022). The purpose of these international agreements is to invoke a different type of forest management from that which is practised today, but with greater consideration for biodiversity, Key Habitats and access to land

In conclusion, the conflict that arises in relation to forest management is based on different claims to legitimacy and objectives. The different claims to legitimacy that stakeholders make to legitimise their forest management differ. Both Nature Conservation Organisation and Forest Owner Association actors claim legal legitimacy, with NCO aiming at international agreements in terms of both biodiversity considerations and indigenous rights. The FOA, on the other hand, strongly asserts property rights to justify free forest management, where they mean that a diversity of landowners will lead to biodiversity, and that the certification system will protect Key Habitats, which they claim at a landscape level is sufficient.

Actors from Forest Company believe that current forest management is to some extent sufficient in terms of biodiversity, with the certification, is responsible for taking account of both environmental efforts and Key Habitats. They claim

legitimacy for the fact that they are certified and has internal environmental goals to meet international agreements. At the same time, some FC actors argue that even though they have taken some changes, there is still a need for greater change. There are other FC actors who believe that the entire forest sector should take more responsibility for increasing environmental considerations and for Key Habitats in forest management.

State Authority actors refer to the legal basis on which they act. The decisions they make and the actions they take are legitimised by claims to political support for their actions, but also by claims to knowledge as an expert authority. On the basis of the knowledge they possess, one of the SA actors in particular emphasises the need to pay more attention to biodiversity and key habitats in forestry, where they lobby for this importance in their work.

The thesis shows similar results to previous research where, for example, Rantala (2012) emphasises the importance of perceived legitimacy in democratic processes, but also how it is mainly the right to property as empirical legitimacy that comes into conflict with various government regulations. Regulations may be supported based on democratic normative values, but they are questioned in relation to the restriction of private property (Rantala 2012). At the same time, this study shows how these claims of legitimacy affect forest management in general and Key Habitats in particular. But also, how claims to legitimacy influence and reproduce how we experience legitimacy and what justifies action. For further research, it would be interesting to examine how private forest owners deal with issues of legitimacy claims and Key Habitats, as well as the impact of Key Habitats at a more local level - where forest management varies across Sweden.

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Appendix 1

Main Question	Supplementary questions	Key topics to discuss
1. Tell me a little about yourself.	<p>What is your role? How come you took revenge here? (on the position or owning the forest)</p> <p>What does your role involve?</p> <p>What are your thoughts on forest management? Why?</p>	<p>The role of the person</p> <p>the person's relationship with the forest</p> <p>Person's (labour) tasks</p> <p>Person's perception of forest management</p>
2. What are your thoughts on Sweden's forest industry today?	<p>What opportunities and challenges do you see? Why do you think so?</p> <p>How do you think it should change?</p> <p>Who is responsible for the change? Why do you think so?</p>	<p>Person's view of the Swedish forest industry</p> <p>The person's view of challenges and opportunities</p> <p>What the person thinks is important in relation to Swedish forestry</p> <p>Who bears responsibility</p>
3. What do you think good forestry should look like and be organised like?	<p>How do you work to ensure that the forest is well managed?</p> <p>Why do you think this is the best way to manage the forest?</p> <p>What room for manoeuvre do you think</p>	<p>Person's ideal image of Swedish forestry</p> <p>The person's actions in relation to their ideal image</p> <p>The person's goals and justifications for their actions</p>

	<p>you have in this matter? Why do you think so?</p> <p>What aspects do you think are important in relation to Swedish forestry (e.g. economic, social, ecological...)?</p>	<p>The person's image of their room for manoeuvre and claim to legitimacy</p>
<p>4. What do you think about the role of key habitats in Swedish forestry?</p>	<p>What responsibility do you think you have for key habitats? Why?</p> <p>How does your ideal image of Swedish forestry relate to key habitats?</p> <p>Do you think you have knowledge about key habitats and what they are?</p>	<p>The person's perception of key habitats</p> <p>What they think about key habitats</p> <p>What responsibility/right the person has in their perception of key habitats in relation to others.</p> <p>How knowledge is disseminated/ the state of knowledge, e.g. about key habitats</p>

Appendix 2

Role	Description
State Authority	The informant works in one of the state authorities whose task is to implement decisions taken by politicians and to support politicians with expert opinions on relevant decisions.
Forest Owner Association	A member organisation for forest owners, the association provides support and advice to the forest owner. Many forest owners' associations also own sawmills or other types of forest processing activities; forest ownership is an exception.
Forest Company	A company that owns, manages and sells forestry and forest products. All informants in this group is one of Sweden's bigger forest companies.
Nature Conservation Organisation	An organisation that works to increase environmental awareness and action on a range of issues. The organisation is non-partisan.

The interview groups and what they involve and signifies.

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