Mapping out Nature National Park

Controversies of nature, culture and realities



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Abstract

This thesis researches public enactments of nature-cultures within the case of the new Nature National Park Gribskov. It aims at mapping out controversies that rise when an area of the Gribskov forest will change its management practices from production forest to a place with *rewilding*, where large herbivores and untouched forest will be the approach to management, in order to increase biodiversity in the area. To create a map of the controversies, I analyse how publics gather around issues, and enacts different realities of purposes and usages of nature, which causes different realities to clash. Through an extensive set of data on the controversy, collected from Facebook, public hearings and interview with the local public, I identify six central objects of dispute, namely; large herbivores, fences, outdoor life, biodiversity, climate and expertise. These objects are fluid in their actions in different networks, causing clashes between practices of each object alone, as well as among the objects. An underlying factor of clashes within a majority of the objects are the enactments of *wild* nature, which leads to disputes over the design of the Nature National Park Gribskov.

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Abbreviations

DDD The Danish Veterinary Association
DN The Danish Society For Nature Conservation
MIM Ministry of Environment of Denmark
NNP Nature National Park
NST The Nature Agency

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1. Introduction

On December 4th, 2020, I was reading the news that the Danish Government, its supporting parties and The Alternative had agreed to grant Danish nature a "historic boost", investing 888 million Danish Kroner in biodiversity - specifically in a total of 15 so-called Nature National Parks (NNP's). This new agreement caught my attention; I am passionate about nature and biodiversity. The crisis we face on biodiversity is close to my heart, and I have long been following organisations pushing for action - organisations like The Danish society for Nature Conservation (DN), Forests of the Worlds, WWF, Amazon Frontlines and more. While my interest has firstly been in an international context, the pandemic and the need to escape my Copenhagen apartment to venture into nature has made me appreciate the local landscape and biodiversity more than ever. Therefore, I was delighted to hear the news that a significant effort to create areas with high levels of biodiversity was prioritised. Even more so when I found that one of the first two parks (namely NNP Gribskov) will be established close to Copenhagen, making it easy for me to visit and experience the new blooming biodiversity.

Therefore, the general political agreement and the local project were a positive and welcome initiative to me. Finally, some responsibility was taken concerning one of the world's most urgent crises in a local context, rather than granting responsibility to other countries. I further found that several organisations that I follow and support had played an essential role in pushing for political action on the topic, for instance, WWF (2020) and DN, with their president Maria Reumert Gjerding announcing: "For years we have fought to put wild nature on the agenda. The election became a breakthrough, where we debated nature as a stand-alone topic for the first time ever. Since the election, we have pushed to transform the promises of the election into action. And now, we have finally succeeded" (DN, 2020, own translation). This news made me choose the NNP Gribskov as my case for this thesis - I already knew I wanted to write on biodiversity, and now the perfect case had presented itself. My initial interest in the case was founded in my positive attitude towards the project; I wanted to research the political climate that had made the agreement possible; was it the public atmosphere, the pressure from biologists and advocates for biodiversity, pressure from international institutions, a combination of these factors? I only managed to scratch the surface of these questions before realising that first, it was quite an endeavour to research the background second, that it was far from everyone who shared my positive attitude towards the project. I followed an online Q&A session with the Minister of Environment, Lea Wermelinn, and found many critical questions and comments arrived - on how recreation would be affected, how tall fences were to be, how animal welfare would be ensured. This led me down a Facebook "rabbit hole" into how the public in Gribskov approached the project, and I found heated debate among the Facebook users on different Facebook pages and groups. Was I wrong in my initial enthusiasm? Moreover, what did this substantial push-back mean for the project overall?

1.1 Problem field

We humans have affected every part of the earth, from placing our flags on the highest mountains to leaving traces of microplastic in the deepest sea (Van Cauwenberghe 2013). Half of all habitable land is

used for agriculture, while livestock account for 94% of global mammal biomass, excluding humans (Richie & Roser 2019 and 2020). Wherever humans go, we leave a mark. Paul Crutzen and Eugene Stoermer coined the term for the Anthropocene epoch in 2000 to describe precisely this time, where humans have a significant effect on ecology and geology: "it seems to us more than appropriate to emphasise the central role of mankind in geology and ecology by proposing to use the term "anthropocene" for the current geological epoch." (Crutzen & Stoermer 2000, 17). The term has faced criticism (Mathews 2020) but nevertheless does bring attention to the impact on ecology that humans have had on the planet. At a 2019 plenary meeting of the IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), the picture painted was grim: "The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide." (Robert Watson, in UN 2019). Ecosystems are degenerated across the globe, with 28% of assessed species threatened with extinction, and around 1000 assessed species declared extinct (IUCN Red List). The globe has been through five mass extinctions. Now, we are facing a sixth mass extinction or "the Anthropocene mass extinction", as: "Ultimately, the current Anthropocene epoch and the current mass extinction are interconnected and indivisibly united by the environmentally degrading human activities of the past 200 to 300 years" (Wagler 2011, 79). The drivers of the biodiversity crisis we face today are related to human activities, such as pollution, land and sea use, direct exploitation of species and more (IPBES 2019, 25).

1.1.1 Global Issues in a Danish Setting

The global crisis of biodiversity is reflected in local circumstances here in Denmark. In the national assessment² 41,6% of species are put on the Danish Red List, meaning that they are assessed to be threatened or almost threatened with extinction within Denmark. The researchers of the Red List find that lack of habitats is the primary reason for this: "there is a continuous loss and deterioration of habitats for wild animals, plants and fungi in all of the most essential ecosystems" (Moeslund et al. 2019, own translation). This finding seems somewhat self-explanatory when looking at the Danish landscape; around 60% of the area is used for agriculture, 12% for cities, roads and infrastructure. This leaves 28% for natural habitats to unfold (Danmarks Naturfredningsforening & Dyrenes Beskyttelse 2018). However, even in the 14,5% of the country covered by woods, the majority of these areas (75%) are cultivated for lumber production (Nord-Larsen et al. 2019, 54). Concerns over the levels of cultivated land have been raised by scientists (Barfod et al. 2020) and The DN (Danmarks Naturfredningsforening 2020), who has been urging action. This push for action on the area left its mark in the foundation for the newly inaugurated Government in 2019, where action on climate and biodiversity became one of several foundations for "a political understanding" between the Social Democratic government and the political parties supporting their mandate. Concerning biodiversity, there was a focus on undisturbed forests and a promise of a concrete action package for reaching goals on biodiversity. In June 2020, the first step towards these goals was taken with a political agreement where 105 mill. DKK were directed at creating two new "nature national parks" in Fussingø and Gribskov: "We are in a nature crisis and animals, and plants lack space

¹ The IUCN has assessed approx. 135,000 species.

² In Denmark, a total of 13.300 species have been assessed.

and habitats. We need more continuous nature areas, where nature can evolve on its own premises. Therefore, I am thrilled that we now begin the process of Denmark's first two nature national parks with this agreement, which will mean wilder nature in our country" (Minister of Environment Lea Wermelin in: Naturstyrelsen 2020. Own translation). So declared the Minister of Environment when presenting the new agreement, made with Radikale Venstre, SF, Enhedslisten and Alternativet. From the outset, the initiative sparked debate, primarily for its lack of ambition in only appointing 1900 hectares to the new areas, such as the DN expressing that the proposal was a good first step, but there was "a need for a far more ambitious effort for many years if we are to turn the biodiversity crisis" (Gjerding in Kragesteen 2020, own translation). In December 2020, an agreement was made to establish additionally 13 parks, with a total of 888 mill. DKK invested in the NNPs. With this, the debate increased in multitude. Some still argued that the initiative was not grand enough (WWF 2020), others raised worries over effects on outdoor activities, such as athletic organisations DGI and DFI (Andersen 2020), others maintained that limits on hunting in the areas were regrettable (Jensen 2021). While different interest organisations were raising concerns, so too did the public. Locally in Gribskov, three Facebook groups were created; a knowledge-sharing group³, a group of "friends" of the NNP⁴, a group of opponents to the fence⁵. Several opinions were posted in local media (for instance, Grene 2021, Hjortsø 2021, Sabroe 2020), and many criticised the entire NNP or aspects of the new park. What had otherwise been presented as a wonderful initiative for Danish nature and Gribskov seemingly was not accepted as such by every local citizen in the area. In the online Q&A session on NNP Gribskov, more than 550 comments were made, and a controversy over the NNP was blooming. What caused such a public dispute? To make sense of and conceptualise the controversy, I set out to research the following question.

1.2 Problem statement

How does the rewilding project Nature National Park Gribskov interfere with public enactments of nature, and how do different publics represent matters of concern over nature?

³ https://www.facebook.com/groups/396152141600332

⁴ https://www.facebook.com/groups/3603411439738758

⁵ https://www.facebook.com/groups/825091534737935/

2. Literature on Rewilding

NNP Gribskov is a project inspired by rewilding conservation practices, as a cultivated nature area is changed into an area where less active nature management is needed. Therefore, I carried out research of the literature on rewilding at the outset of my research. As a result, I found that several reviews on rewilding literature had been conducted (Jørgensen 2015, Lorimer et al. 2015, Linnell et al. 2015, Jones & Comfort 2020). Therefore this section will primarily aim to establish knowledge on the subject of rewilding (and public relations to rewilding), something that I had little knowledge on.

2.1.1 Methodological approach

For my search inquiry, I have primarily used the online database Scopus. I chose Scopus as a widely recognised database for cross-disciplinary research, and the database only allows for peer-reviewed articles. Scopus has a slight bias towards fields of natural science (Elgaard Jensen et al. 2018, 622). However, I chose to limit my search to social sciences, arts & humanities, and multidisciplinary sciences to specify my results to focus on these disciplines' views on a topic otherwise researched in natural sciences. I further include articles from ProQuest, as this database has a broader selection of not only peer-reviewed articles but allows for other media such as magazines, theses and dissertations, blog posts and more, thereby leading me to gain a broader view into cultural discussions on the topic. From these two databases, I applied different search inquiries and boolean strings. However, I ended up searching solely for the word "Rewild*", which resulted in a total of 337 articles (and other media) after removing duplicates.

The first step of the literature search that I conducted was a semantic analysis of the abstracts of the articles, using the open-source tool CorTexT⁶, to create a network of terms. I extracted the articles' abstracts and created the network on Figure 1 by using CorTexT. The network consists of multi-terms (of up to four words) analysed by their specificity - terms that are unbiased towards a set of abstracts are disregarded, such as "review of literature" or names of journals. The aim is to have a list of multi-terms with high specificity, meaning that the terms are used in a high frequency *only* in a specific set of the collected abstracts, thereby revealing discursive patterns (CorTexT n.d.). In Appendix 1, I have further elaborated on the mechanisms behind CorTexT and my selection criteria for language processing.

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⁶ https://www.cortext.net/

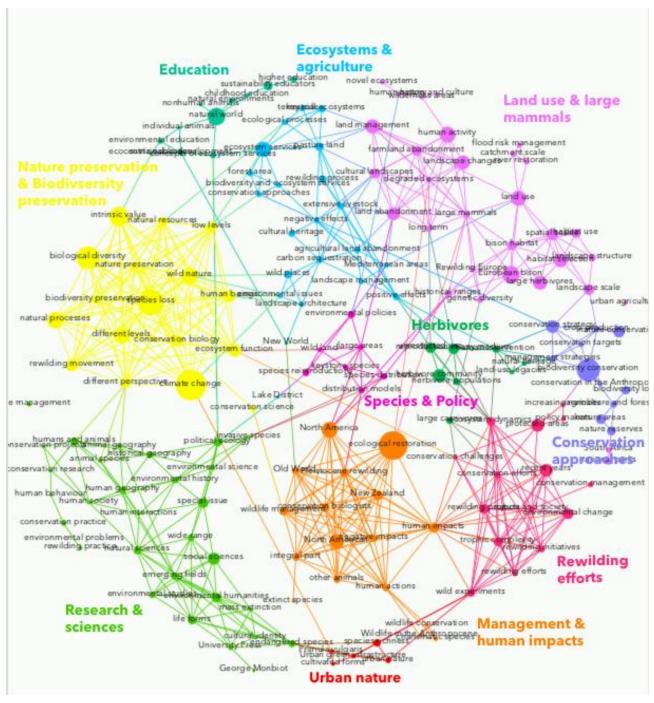


Figure 1 A network of multi-terms extracted from abstracts on "Rewild*"

Different clusters of themes in the literature appear from this network, for instance, revealing a specific branch of rewilding research focusing on urban nature and one on education (two branches which are of less relevance to my thesis). I further tagged each cluster with the top 5 most relevant articles (a function of the tool CorTexT), and I have used the multi-terms in the network as a starting point for conducting Boolean strings more specific to my research⁷. With the tagged articles and results from specified Boolean strings as a starting point, I found relevant articles to develop my understanding of rewilding and public opinion on rewilding.

⁷ See appendix 1 for a list of boolean strings that I in my search inquiry.

2.2 On the concept of rewilding

The notion of rewilding is an academically and scientifically disputed term, lacking a central agreed-upon theoretical definition or practical application. With the starting point in articles researching the definition of rewilding, I will sketch out the primary approaches to the practice. While not exhausting the field of the subject, the following should provide a picture of the core ideas, contradictions, affinities, current limitations and scientific issues on the concept of rewilding.

In the highly cited paper *Rethinking rewilding* (Jørgensen, 2015), Dolly Jørgensen constructs a genealogy of the word "Rewilding" through a review of 49 scientific articles concerned with the concept, resulting in six distinct categories on the notion of rewilding. She firstly notes that, genealogically, the word is connected to the use of "wilderness" in conservation practises and policy. Jørgensen attributes the first use of rewilding to the Wildlands Project in North America, founded in 1991. The Wildland Project's focus was on creating space for large predators, and she dubs the concept *the three C's*, namely cores, corridors, and carnivores, the purpose being: "to create North American core wilderness areas without human activity that would be connected by corridors" (Jørgensen 2015, 483). However, she finds that this approach has not been adopted in other rewilding studies and projects, precisely due to the focus on carnivores. Instead, the following two usages of the word focus on setting a historical baseline for the concept of "wild" before any human interference and differ primarily in their geographical location and, by extension, time period. The second concept focuses on the Pleistocene epoch in North America, while the third focuses on oceanic islands discovered in the 16th century. Both concepts draw on taxon replacement of extinct animals with "surrogate surviving species" (Jørgensen 2015, 484), such as African lions in efforts of rewilding.

While the two preceding concepts of rewilding are defined by an understanding of "wild" as a temporal condition before human intervention, i.e., to "re-wild" is returning to a stage of pre-human presence, the fourth concept Jørgensen introduces does not set a specific time for when "wildness" was present but instead focuses on landscape restoration through the reintroduction of large fauna. There are different approaches to what species to introduce, focusing on public acceptance of the reintroduction or focusing more broadly on species that humans have extirpated, despite the species not being present in the land (or going extinct) in the same period. The fifth approach to rewilding moves away from the reintroduction/replacement of extinct species towards uncultivated land areas: "Rewilding in this case is defined as 'a process in which a formerly cultivated landscape develops without human control'" (Jørgensen 2015, 484), a concept only used in articles dealing with European landscapes. There is a shift in focus from animals to plants returning to a state similar to before the European landscape became highly modified from agriculture. The final concept is used only in a small set of articles, and the focus here is on returning captive-born animals to free-range settings, shifting the focus from landscapes to single animals.

Jørgensen argues that these very different uses of rewilding in scientific literature might cause confusion: "Scientists have operationalised the concept of rewilding to meet the narrow parameters of given article's

subject matter... The genealogy of rewilding shows that within academic scientific circles, the word is applied in very different geographical contexts, to different types of species, and with dissimilar reference points." (Jørgensen 2015, 485). She argues that activists have taken on the word and mixes the different scientific uses of the word in their advocacy for a wilder nature, as it is now a plastic word: "As a plastic word, rewilding has been able to capture the public imagination. From a position of credibility and authority, rewilding may become the go-to blanket solution to environmental problems." (Jørgensen 2013, 486). Jørgensen finishes her article by noting how the concepts of rewilding she has presented has no place for humans. She advocates for an understanding of "wild", and thereby "rewild", to take into account humans in spaces of wild nature.

Jonathan Prior & Kim J. Ward object to the plasticity presented by Jørgensen in their article *Rethinking rewilding: A response to Jørgensen* (2016). The authors criticise Jørgensen's use of genealogy and provide an all-encompassing definition of rewilding:

"Rather than deduce the meaning of rewilding through a genealogical account of rewilding practices (both real and potential), we understand rewilding to be: 'a process of (re)introducing or restoring wild organisms and/or ecological processes to ecosystems where such organisms and processes are either missing or are 'dysfunctional'" (Prior & Kim 2016, 133)

The critical factor for the authors is that there are elements of non-human autonomy, meaning self-sustaining non-human nature, applicable to both single species and entire landscapes. The authors argue that this autonomy is the connecting factor for all the six definitions Jørgensen provides. The authors move on to refute Jørgensens opinion on rewilding concepts having a "radically exclusionary approach" to humans (Jørgensen 2015, 487), drawing on two examples of rewilding where humans and non-humans coexist. One of these examples Jørgensen draws on herself, the Oostvaardersplassen in the Netherlands, a forerunner of rewilding in Europe: "Whilst such experiments do afford (particular) non-humans a certain amount of autonomy, they do not cleave humans from Nature (or vice versa), instead they offer the opportunity to create unique, and ecologically surprising hybrid landscapes" (Prior & Ward 2016, 135). The response thereby targets the two main criticisms Jørgensen provided in her article by creating an encompassing definition of rewilding and providing examples of rewilding efforts that allow for human entanglement in rewilding.

2.3 People and culture in rewilding

The scientific discussion on the concept of rewilding is one thing, which Peter Jones & Daphne Comfort also outline in their article *A commentary on rewilding in Europe* (2020), noting that there seems to be little consensus on the definition of the term. The authors similarly introduce a wide selection of rewilding efforts in Europe and the UK, of different sizes, with emphasis on different species and effects of rewilding efforts. Based on these projects and the lack of consensus of the meaning of the term, they identify five challenges to rewilding in Europe: "namely, definition, measurement, unpredictability, policy, and communication" (Jones & Comfort 2020, 4). The first issue (the lack of consensus on definition) was discussed above. However, Jones & Comfort significantly adds to the discussion that the lack of definition

of the term affects locals near rewilding projects, as they fear consequences to their livelihoods and free access to the land around them when they do not know what the term entails. The issues of measurement and unpredictability are specifically related to the effects on biodiversity and existing ecosystems, relating to either the lack of comparable outcome measurements in different projects and, by effect, the potential risks and undesired outcomes that rewilding efforts might result in. The policy issue relates to a policy vacuum in that there are no clear policy guidelines to frame rewilding projects. The final issue of communication relates to the first issue of definition and public perception of rewilding, in that rewilding projects face an immense task of presenting the projects with positive stories, pictures and opportunities for the public, as a citation from the Rewilding Europe project clearly shows: "we need to show that rewilding is not about returning to the past, or somehow limiting people, but conversely that it offers opportunities – opportunities for people to live alongside thriving wild nature and benefit from it in a sustainable, exciting and reinvigorating way" (Pete Cairns in Jones & Comfort 2020, 5). Thereby, Jones & Comfort connects the lack of scientific consensus and policy guidelines to the public perception of rewilding, seeing it as a significant blockage to rewilding projects.

With the basis in uncertainties of public perception of rewilding, Holly Dreary & Charles R. Warren (2017) has investigated local managers and owners of wild land in Scotland and their perception and discourses on wildness and rewilding. Through comprehensive interviews and the Delphi method, they identify different meanings, motivations, goals and means of rewilding in Scotland, resulting in defining four dimensions of discourse on rewilding, which are distinct yet overlapping in their perspectives. They show how these visions form along two axes from intervention to non-intervention and from eco-centric to human-centric. These different yet connected dimensions lead to the conclusion that rewilding practises must take into account the different meanings connected to it, as "efforts to frame rewilding exclusively in accordance with one particular vision may result in a loss of meaning and value. Searching for a single paradigm of restoration ignores the fact that there are many different ways in which people interact with, and make meaning from, wild nature" (Dreary & Warren 2017, 216). They thereby argue that the multivalence of the concept makes it appealing to many different situations and practises of conservation which: "may help to shape a wilder nature which facilitates human flourishing" (Dreary & Warren 2017, 216).

Jamie Lorimer et al. (2015) discuss the political, social and ethical barriers that are related to rewilding and find that: "Opposition to rewilding is particularly likely where projects are perceived as being imposed from "outside," with little consideration for local interests" (Lorimer et al. 2015, 52). They find that failing to consider displacement of historic resonances, the local relationship with the land, as well as local or national identity connected to agriculture can lead to pitfalls. Here, they argue that the introduction of large herbivores might be central to what causes issues: "In contexts where there is no recent history of cohabitation with megafauna, it is difficult to know in advance what state and public responses to problematic megafauna might be." (Lorimer et al. 2015, 52). Connected to this, the legislative instruments of animal welfare might be a barrier to rewilding practises, and when these laws are exempted, they might lead to public push-back. Both the local relation to the land and the cultural and legislative norms on animal welfare can lead to controversy when implementing rewilding, leading Lorimer et al. to conclude:

"Advocates of rewilding must recognise that value is attached to cultural landscapes and that rewilding can conflict with prevalent and powerful institutions and cultural norms" (Lorimer et al. 2015, 55).

Concerning Animal welfare, the Dutch rewilding project Oostvaardersplassen (OVP) is an example that several articles draw on (Lorimer et al. 2015, Prior & Ward 2016, Prior & Brady 2017). In the article The Oostvaardersplassen Fiasco (2019), Bert Theunissen writes about three major turning points in the public and political opinion of the OVP. The OVP involved Heck cattle and Konik horses, which in 1996 were granted the status of wild animals, and thereby were no longer legally treated as kept animals (and feeding the animals during winters was not statutory). However, they were to be reactively culled if they were ill. Initially, it went well, but three brutal winters led to three major public push-backs; in 2005, 34% of the cattle died due to starvation, causing a new management approach, where the reactive culling should include animals that were not ill but were by late winter deemed not to survive. However, the implementation of the new management regime was not complete, and in 2010 another hard winter led to high mortality rates and new public outcries - causing the reactive culling to begin in autumn, putting a damper on the public debate. Finally, in 2018 yet another brutal winter hit and more than 60% of the grazers had to be shot - the management regime was changed drastically, horses were relocated, the rewilding management of the area was terminated. Theunissen finds that differences in relationships with nature between experts and the public were the cause of the failure and that experts failed to attune their management with the public demand: "If the OVP experts had been more sensitive to the public's expectations, they might have attuned their management of the reserve accordingly, especially after the outcries of 2005 and 2010. The 2018 fiasco could then have been prevented" (Theunissen 2019, 345).

While Theunissen emphasises the public push-back related to the high mortality rates of the herbivores as the foundation for the OVP rewilding project being terminated, Prior & Emily Brady focus on how the carcasses of the animals affected the aesthetic experience of visiting the OVP in their article *Environmental Aesthetics and Rewilding* (2017). They find a divergence in the approach to this aesthetic, where local communities respond negatively to such aesthetic (which within general rewilding extends beyond animal carcasses to rotting trees, unruly vegetation and difficulties in navigation, smelly swamps and more). Thereby, 'rewilding aesthetics' goes against the prevailing managed beauty, favouring a temporal, changing and "*terrible*" beauty. Prior & Brady do, however, find that over time, people might come to appreciate the aesthetic of a rewilded place compared to a more monotone place. Nevertheless, they do suggest "that it is vital that those advocating for rewilding policies directly confront any potential fallout from inculcating challenging aesthetic experiences" (Prior & Brady 2017, 45).

The relationship between people and their experience in and of nature is further investigated by Linell et al. (2015). They have investigated the *cosmology* of European biodiversity and found that European conservation approaches have abided a non-dualistic approach to humans and nature, where nature and culture are deeply intertwined (see section 4.1.2 for reflections on nature/culture dichotomies). However, simultaneously, there is a movement towards more dualistic approaches to conservation, such as rewilding, which leads to conflict. Therefore, they recommend that conservation projects plan for a

plurality of values, uses and approaches to conservation when establishing projects of rewilding and other low-management conservation approaches.

2.4 Conclusions of the review

It seems that there is general agreement in much of the literature that there is not a clear definition or approach to rewilding, but that the term is instead an umbrella concept that entails different approaches to creating wilder nature - for better or worse (Jørgensen 2015, Prior & Ward 2016, Jones & Comfort 2020). These reflections serve as a reminder that I must be mindful of different understandings of rewilding in NNP Gribskov and how different values are deduced from rewilding. Also, the broad and unspecified definition of rewilding spills over into political debates and public acceptance of rewilding projects (Jones & Comfort 2020). Specifically, it is evident from the literature that local interests must be considered, as unpredictable consequences can lead to public push-back on rewilding efforts (Dreary & Warren 2017, Lorimer et al. 2015). Furthermore, being aware of cultural landscapes, norms and interaction with nature is vital to the success of rewilding projects, and allowing for adaptation can be vital to ensuring their sustainability (Theunissen 2019, Prior & Brady 2017, Linell et al. 2015). However, literature on rewilding within social sciences and humanities emphasises political and stakeholder interest or push-back concerning different rewilding projects, rather than publics consisting of private persons. This prompts Linell et al. to conclude that: "It is time to complement academic cosmology with a mapping of the diverse cosmologies of the public. The result could be conservation with less conflict." (Linnell et al. 2015, 7). Further, little research on rewilding has been conducted on Danish rewilding projects and their social and cultural effects - here, the case of NNP Gribskov provides an opportunity to investigate how Danish publics react to rewilding efforts.

2.5 Aim of the research

Having now established knowledge on the topic of rewilding and public responses to rewilding, I begin my research of the case of NNP Gribskov. As this is one of the first large-scale national rewilding projects in Denmark (there are smaller rewilding projects across Denmark, but none are as extensive as the NNPs), this case presents an opportunity to study the public debate on rewilding before it has settled down. What are the public's primary concerns, and what are the primary occasions for dispute? To understand this, I will take on the invitation from Linnell et al. (2015) to map out the "diverse cosmologies of the public". In 2021, Tommaso Venturini & Anders Kristian Munk published their book *Controversy Mapping - A Field Guide* (2021), which has been by my side as I have ventured into the field guiding me in my endeavours. At the very beginning, they warn that "*Controversies tend to get cartographers caught up in their mess*" (Venturini & Munk 2021, 27), something that I have experienced during this thesis⁸. So why bother mapping out controversies? Venturini & Munk grants three reasons to do so. Firstly, it allows for the researcher to study science and technology in action, revealing how technologies come to be as they are. Second, it can be used as an opportunity to strengthen a design by revealing the faults and issues of

⁸ For instance, I have been reached out to by an informant (B) to join an event with a Danish Member of Parliament. B, an opponent to the NNP, seemed to hope that I had managed to find the smoking gun that would deem the NNPs impossible to establish during my research. I was unfortunately not able to participate in the event.

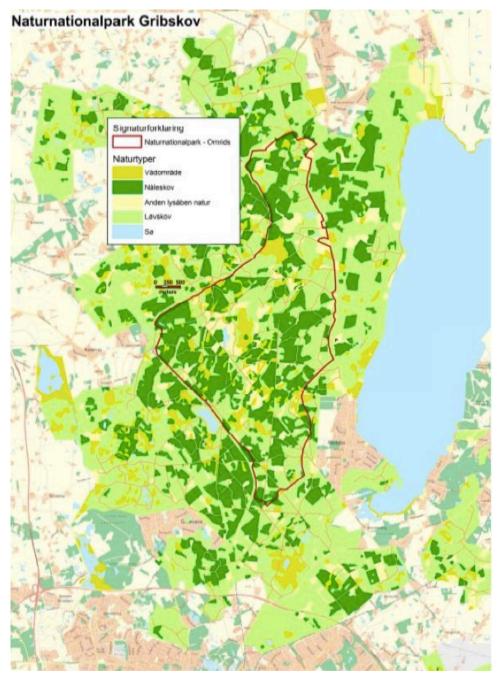
technology - it can be a *crash test*. Finally, mapping a controversy can help those affected by technoscience navigate the consequences, push for change or pick sides in a debate. To sum up; controversy mapping is helpful to those who study technologies, those who design them and those who are affected by them. While all purposes are relevant for the controversy forming around NNP Gribskov, the purpose of strengthening the design and revealing any potential faults of the NNP and that of making navigation and choosing sides in the debate easier for those affected are at the centre of this thesis. While it will become evident in the analysis that scientific black-boxes around the NNP are essential to why the controversy has arisen, I have chosen to focus on the public in this controversy. The mapping will thereby be revealing public interpretations, responses and ideas of the NNP. The aim is not to pick sides in the debate, reveal how some public responses are mistaken or display inaccuracies in approaches to the case. Instead, I aim to take seriously the concerns and enthusiasms of what is at stake in the debate, revealing the passions for nature that are attributed to all who are engaging in the debate.

3. The case of Nature National Park Gribskov

To enable a mapping of the controversy around NNP Gribskov, I must first establish the overall plans of the project. As is now evident from the literature, there are many different approaches to rewilding and a clear suggestion to consider the local public in the planning process. With this as a foundation, I will now describe how the Danish Nature Agency (NST) has approached rewilding in NNP Gribskov and how they have included the locals in developing the project plans. For this section, I will not interpret the plans but rather (shortly) present them as they appear in the project plans (Naturstyrelsen 2021).

NNP Gribskov will cover 1.300 hectares (ha) of the Gribskov forest and will be placed centrally in the forest that is a total of 5500 ha. Gribskov was chosen as the location for one of the first two NNPs due to its existing conditions, with varied nature habitats, existing high levels of biodiversity and a high number of threatened species. However, these existing conditions are declining due to invasive species such as birch and Norway spruce. While the entire forest is to be changed to the management paradigm of *untouched forest*, building on notions similar to Jørgensen's fifth definition of rewilding, the main difference is that the NNP area will have a higher level of grazing and browsing as large herbivores will be set out and remain in the area all year round - with no or little feed given to them during the winter, thus drawing on rewilding practices similar to those presented in Jørgensen's fourth definition. The area will be primed during the establishment of the park, where non-native species of wood will be reduced, structural felling will decrease homogenous areas, veteranisation of trees and felling to leave deadwood. Further, drains will be removed to reestablish wetlands.

The large herbivores that will be set out are moose, bullocks, red deer, complimenting the present species fallow deer, roe deer and sika deer. At first, eight moose, twelve bullocks and 25 red deer will be set out into the park, while the final numbers will reach approximately ten moose, 50 bullocks and 450 red deer. This is based on estimates that there will be a grazing pressure of 70 kg of grazing animals per ha, which is a relatively low level due to oligotrophic conditions in certain areas. However, adjustments to the herds might come as experience is gathered. Due to these herbivores, the entire area will be enclosed by a fence, as it is said in the project plans: "The fence around the Nature National Park shall keep the animals in, but not the visitors out" (Naturstyrelsen 2021, 5). Instead, existing facilities for outdoor life are maintained, and new facilities are added, but paths and roads are bypassing certain areas to allow for little disturbance in areas with high grazing potential for the herbivores.



Picture 1 Map over NNP Gribskov. The red line is where the fence will be placed.

The decision to establish NNP Gribskov was made on June 19th (Naturstyrelsen 2020), and it was appointed without public involvement in the choice of location. The planning process began at the end of 2020, with three working groups being appointed to grant their inputs into the plans for the parks. Two groups are granting inputs to all 15 NNPs, while a local group was established in Gribskov. The national groups consist of a scientific group (Table 1) and a stakeholder group consisting of 22 organisations representing different interests in the NNPs, from biodiversity, forestry, outdoor activities, animal welfare and more.

Member of scientific group	Current position
Professor Jens-Christian Svenning	Professor, Department of Bioscience (Ecoinformatics & Biodiversity)
Carsten Rahbek	Professor (macroecology), Research leader of the 'Biodiversity and Macroecology' Group, Natural History Museum of Denmark, University of Copenhagen
Hans Henrik Bruun	Associate professor of ecology and biological diversity, Department of Biology University of Copenhagen
Rita Merete Buttenschøn	Senior Consultant, Department of Geosciences and Natural Resource Management, University of Copenhagen
Henrik Vejre	Professor, Landscape Management, Department of Geosciences and Natural Resource Management, University of Copenhagen
Bengt Holst	Chairman of the Danish Animal Ethics Council, Chairman of The Danish Nature Foundation
Stine Krøijer	Assistant Professor, Department of Anthropology, University of Copenhagen
Jacob Heilmann-Clausen	Associate Professor Center for Macroecology, Evolution and Climate, Globe Institute, University of Copenhagen
Peter Sandøe	Professor at Department of Food and Resource Economics & Department of Large Animal Sciences, University of Copenhagen
Margit Bak Jensen	Professor, Department of Animal Science, action for Welfare, Aarhus University

Table 1 Overview of the scientific working group appointed by the NST

It is important to note that Peter Sandøe and Margit Bak Jensen, as well as the organisations DOSO (a collaboration organisation of animal protection associations) and the Danish Veterinary Association (DDD) were appointed later in the process, and thereby was not part of the initialisation of the project for NNP Gribskov. The local group established for NNP Gribskov consisted of local departments of interest organisations and different user groups, the municipalities that Gribskov is located in (Hillerød and Gribskov municipality), and local councils of the two neighbouring cities to Gribskov, Nødebo and Kagerup. In addition to the local interest group, the local public that an organisation or association did not represent could voice their opinions and ask questions on a walk with the local department of the NST,

and in the public hearing process, which was opened for inputs on the final project proposal. Below is an overview of the process of establishing the NNP outlined (Table 2).

June 2020	- The proposal to establish NNP Gribskov is presented
July - December 2020	 Virtual information meeting Forest walk in Gribskov with the NST Scientific working group established Stakeholder group established Local stakeholder group established Meetings and inputs to the project from the two national groups,
January - March 2021	 Meeting and inputs from the local stakeholder group First draft of the project plan is drafted Feedback from groups to the draft Project proposal is drafted
April - June 2021	 The public hearing process is opened (23/04/21-23/06/21) Tender process opened Political confirmation of the project proposal
July - September 2021	Administrative approval startedTender process closed
October - June 2021	Administrative approvals closedThe establishment of the NNP begins
July - September 2022	- Opening of the NNP

Table 2 An overview of the political process of NNP Gribskov.

There have been delays in the process of administrative approvals of the NNP, and therefore the establishment and opening of the NNP have been pushed - it was initially set to open in the first quarter of 2022.

While this section has only provided a slight insight into the concrete plans of the NNP, the development process and who was invited into the planning of the NNP, it serves as an introduction to some of the elements that are central to the controversy over the park. However, if I am to understand the public controversy fully, I must refrain from viewing only the perspectives granted by the NST and draw in perspectives from the public. Firstly, I must establish a foundation for approaching a public controversy.

4. Perspectives on publics and practices

To understand the controversy that NNP Gribskov has sparked, I turn to the traditions of Science and Technology Studies (STS). Within STS, controversies have long been the subject of study, granting various perspectives, such as controversies of scientific and economic nature (Callon 1984), technological design (Pinch & Bijker 1984), controversies where new alliances are formed, and old bonds are broken (Thompson 2002). Precisely because of the many different types of controversies that the field of STS has dealt with, perspectives on controversy are multifaceted and often specific to the controversy in question. However, as my focus is on mapping a public controversy, I will take my starting point in how STS views publics, and from this footing, bring in perspectives on how multiple realities are practised in order to highlight how a project such as the NNP Gribskov can both support different practices but also cause clashes between different publics. This is much in line with the grounding in Actor-Network Theory (ANT) that studying and mapping out controversies has: "ANT is not opposed to recycling theoretical notions developed in other contexts, as long as they are not used as interpretative frameworks, but rather as descriptive tools that researchers can cherry-pick and adapt for their own use" (Venturini & Munk 2021, 126). This cherry-picking is not without consequences to the analysis, as it puts my curation of the empirical at the centre of the analysis. However, accepting complicity as the curator of the analysis and the maps I will draw is necessary: "To be 'on the map' is to be acknowledged, given a position, accorded an existence or an importance" (Eilean Hooper-Greenhill 2002, in Venturini & Munk 2021, 30). Accordingly, to be off the map is to be invisible and under the radar. Therefore, my choices of in- or exclusion in the analysis are not without consequences to the actors in the controversy.

4.1.1 Roots in Actor-Network Theory

Mapping out controversies has roots in Actor-Network Theory (ANT), which, despite the name, have a vary relationship with the word theory (as the reflection on cherry-picking theory above insinuates). Instead, there is a strong sense of empiricism to mapping controversies, and here three guiding principles, initially formulated by Callon (1984), of ANT serve the purpose of freeing empirical investigations (Venturini & Munk 2021, 124). The first principle is that of agnosticism; the researcher does not censor the arguments of the implicated actors, does not judge their analysis or fix an actor that is yet being negotiated. The second principle is that of generalised symmetry; there is no a priori distinction between the agency of non-humans and humans; researchers are not to "change registers" (Callon 1984 in (Venturini & Munk 2021, 125) when moving between the social and the technical elements of the controversy. Finally, the last dogma is free association; as mentioned above, the researcher is to follow the actors and how they build worlds, rather than apply a rigid theory or grid to study them through. However, as mentioned, "ANT sees nothing wrong in using conceptual tools if they are helpful in one's fieldwork" (Venturini & Munk 2021, 125).

4.1.2 On the nature-culture dichotomy

As Linnell et al. (2015) note in their article on European conservation practises, there has historically been a (widely criticised) tendency within occidental sciences to dichotomise nature and culture. The field of STS has contributed to the criticism of this dichotomy by exposing contradictions within scientific

practises and conclusions (Linnel et al. 2015, 2). As I am approaching this case from an STS perspective, building on Bruno Latour's democracy and publics, I believe it pertinent to shortly establish the dualistic perspective on nature and culture that Latour applies. Building on the principle of generalised symmetry in ANT, Latour argues that We Have Never been Modern (1993). In this argument, Latour takes a starting point in Western science and its effects on Western culture - he argues that the "modern" is constructed as an effect of separation of culture and nature, as science and technology have allowed the "modern" to view nature through an objective lens, rather than through the divine and religion. Latour finds this a false premise; Nature cannot be neatly separated from politics and social interest. To Latour, neither culture nor nature exists in a vacuum, but are rather nature-cultures that: "simultaneously construct humans, divinities and non-humans" (Latour 1993, 106) into what Latour names collectives. The "modern" society constitute the collective by mobilising science: "we mobilise genetics, zoology, cosmology and hæmatology" (Latour 1993, 106). However, "modern" constructions of nature are no less subject to the social than any other cultural construction of nature. Latour does, however, see that the "modern" collective, mobilised through science and technology, differs from other collectives at one point; in size. They entail many hybrids that grow and recompose the social: "It is a matter of constructing collectives themselves on scales that grow larger and larger" (Latour 1993, 109). The actor-networks of the "modern" collectives are extensive and growing. This dualistic view on collectives and nature-culture is essential to Latour's view on democracy, facts and matters of concern.

4.2 Public concerns and issues

In 2006, Latour hosted an exhibition on democracy and parliaments, Making Things Public. His introduction to the catalogue that accompanied the exhibition discusses democracy and democratic assemblies (Latour 2005). He begins his discussion by contemplating the word *republic*, with an etymological reflection over the word, asking the reader "What is the Res of the Res Publica?" while criticising other political philosophers (such as Hobbes, Habermas, Rawls) for overlooking the *Thing*, the *Res*, of the public. His answer to the question is that the object, or the thing, of the public is the issue that gathers a public around it: "It's clear that each object – each issue – generates a different pattern of emotions and disruptions, of disagreements and agreements. (...) Each object gathers around itself a different assembly of relevant parties. Each object triggers new occasions to passionately differ and dispute" (Latour 2005, 5). In this thesis, the object of interest is thus the NNP Gribskov, which has gathered a public around it - a public wherein alliances are made between different parties, emotions are high, and debate is passionate and unforgiving.

It is within this understanding of democracy, the object-oriented democracy, that Latour argues for a shift in perspective on *facts*, which he further elaborates on in his article *Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern* (2004). Latour draws on different examples to showcase why facts are no longer relevant in political controversies. One example is of how the former US Secretary of State, Colin Powell, spoke in the UN of presenting "*facts*" and basing his words on "*solid sources*" (see Latour 2005, 8) that Iraq possessed weapons of mass destruction - when indeed he had no such sources and facts on his hands. This example showcases one weakness of facts: they can be mere assertions but

still be presented as facts. Latour draws on another example in a different Republican American, Frank Luntz, a political strategist, highlighting that facts' weakness is double-sided. At a time where the scientific facts of the climate crisis were backed up by *most* scientists and scientific results, the strategy applied by Luntz was to work against facts by emphasising the uncertainty, the areas of where the research was not complete or clear cut (Latour 2004, 226). Latour argues that *facts* that are undisputed and transparent are becoming rare, and attempting to collect proof "big enough and certain enough to convince the whole world of the presence of a phenomenon or of a looming danger, seems now almost beyond reach – and always was" (Latour 2005, 9). These examples and weaknesses of facts bring Latour to proclaim that the distance between facts and assertions is no longer relevant. Rather, the distance is misleading:

"It would imply, on the one hand, that there would be matters-of-fact which some enlightened people would have unmediated access to. On the other hand, disputable assertions would be practically worthless, useful only insofar as they could feed the subjective passions of interested crowds. On one side would be the truth and no mediation, no room for discussion; on the other side would be opinions, many obscure intermediaries, perhaps some hecklings." (Latour 2005, 9).

Because of this, as evident in the title of the 2004 article, Latour advocates for a move away from facts towards *matters of concern*. This move is bound to a new view on critique, as Latour phrases it, a critique that shifts its focus from the object towards the assembly: "The critic is not the one who debunks, but the one who assembles. The critic is not the one who lifts the rugs from under the feet of the naïve believers, but the one who offers the participants arenas in which to gather" (Latour 2004, 246). Rather than looking at the object itself, we should look at how the assembly represents the object; what is brought into the debate, who brings in what, how are different parties viewing the object? These are the types of questions raised when moving from viewing matters of fact to matters of concern in a controversy.

4.2.1 Issue publics

In a contribution to the collection *Making Things Public*, presented above, Noortje Marres has written an article discussing the writings of the American journalist Walter Lippmann and the American philosopher John Dewey, namely Lippmanns' *Public Opinion* (1922) and *The Phantom Public* (1927), and Dewey's *The Public and Its Problems* (1927). Marres builds upon the notions of public assemblies and object (or issue) -oriented democracy presented by Latour, namely that *Issues Spark a Public Into Being* (Marres 2005), as the article is titled. The article firstly presents two core issues of democracy, as found by Dewey and Lippmann. Firstly, political problems have become ever more complex, opaque and mediated in the highly technological democracy, prompting the conclusion that: "*If it cannot be assumed that those involved in the debate have a good grasp of the objects of debate, then it cannot be expected that the opinions and preferences that they form about these affairs are pertinent*" (Marres 2005, 210). The second problem is that democracy was unfit to care for complex objects, and can only deal with what is well-known to all: "modern democracy has no place for unfamiliar, strange, entangled objects of concern. Or at least its theory doesn't" (Marres 2005, 211). Based on these two observations, the conclusion of how to strengthen democracy seems to be having more quality information available to the public and public officials: "As long as publicly available information is not accurate and not up to date, citizens will not

be able to form pertinent opinions about these issues" (Marres 2005, 211). However, this is not the conclusion that is drawn. Instead, it is precisely these types of issues that are to be solved democratically: "The emergence of problems that are complex ("hard to disentangle") and about which information is lacking ("the facts are obscure"), is what opens up the opportunity for public involvement in politics." (Marres 2005, 212), because, in modern democracy, simple and transparent issues should be easily solvable by the institutions already in place. Therefore, democracy thrives under complexity because there is a need and an opportunity for a public to engage in the issue.

Marres does deviate from Dewey and Lippmann - their reflections on democracy and issue publics were set in the early 20th century, after all. First, Marres highlights that Dewey argued that there should be one state to address the issue, while today, we cannot simply rely on one state; there are many states involved in complex issues and multiple global and local institutions. Which state, which institution should then be the one to deal with it? Secondly, Marres points out that today it would be impossible to assume that the public would be in agreement. Rather, an issue might be the concrete object of a more general dispute: "When an issue arises, general and vague differences of opinion between ecologists and industrial farmers, between proponents of public health arrangements and free-marketers, for instance, may now be transformed into a focused dispute over a specific matter" (Marres 2005, 215-216). This perspective that Marres brings up then leads to a new acknowledgement; if issues are what sparks publics into being, how does a public controversy show how different publics approach the same issue?

4.3 Multiple realities clashing

As mentioned above, the mapping of controversies has its roots in ANT, building on principles such as symmetry between actors, human and non-human alike. However, the analyses of cases through ANT often have a perspective that centres around programmes and anti-programmes, following the actors, their movements and their translations (Vikkelsø 2007, 301). This could be a relevant framework to apply to the case of NNP Gribskov, as there is a clear programme and anti-programme; the programme set forth by the Ministry of Environment (MIM), DN, NST and a group of researchers to establish the NNP, has been faced with a public backlash that could be explored as an anti-programme: "a classic ANT tale might be concerned with how certain groups of actors succeed in constructing a sociotechnical network stronger than their competitors, and thereby gain a monopoly on defining..." (Gad & Jensen 2010, 64). Such "tales" are what Annemarie Mol calls "construction stories," as they tell tales of successful actor-networks that managed to win over competing actor-networks in defining and constructing "truth" (Mol 1999, 76). In this case, "monopoly" on defining the "true" nature of NNP. However, as I wish to study the controversy as it takes shape in the public, I must shift my focus from the initiators of the NNP towards the users of the NNP. What has become evident in the case is that the anti-programme is indeed not singular, but there are multiple anti-programmes relating to different usages and relations to the NNP and Gribskov itself. Similarly, I have found that there are different aspects of why publics are in favour of the NNP and thereby push the programme, but do so for different reasons. NNP Gribskov contains many issues with many disputing publics, all connected and clashing in one entangled mess. Therefore, I believe it to be more pertinent to apply a lens of multiplicity-oriented ANT, as Signe Vikkelsø (2007) names it: "Rather than following a particular actor or program, it invites exploration of the multiplicity of a phenomenon, that is, of the ways in which coexisting and partly connected versions of reality are enacted... How do these networks clash and interfere? Where are the tensions and connections between them?" (Vikkelsø 2007, 301).

Mol has been a driving force behind developing and utilising the perspectives from multiplicity in her analyses, from *The Zimbabwe Bush Pump* (de Laet & Mol 2000) to the diagnostic of anaemia in *Ontological Politics* (Mol 1999). Multiplicity maintains the principle of generalised symmetry in agency from ANT, for instance by analysing how the bush pump *acts* in its actor-network. However, applying a perspective of multiplicity adds that objects are not stable and clear-cut in their networks, but instead, they are fluid (de Laet & Mol 2000, 227). The fluidity of a seemingly simple object can show how the object has multiple identities and that the object has agency in multiple areas. Despite the fluid boundaries of an object, it is not to say that there are no boundaries at all - sooner, the object is performed in multiple ways, and it acts in multiple yet entangled ways: "*Instead of attributes or aspects, they are different versions of the object, versions that the tools help to enact. They are different and yet related objects*" (Mol 1999, 77). This might cause tensions; the realities of objects are performed in different ways, and these versions of reality can overlap but also clash with one another. The task thus becomes to illuminate the different networks that make up the versions of the object and how these are integrated, overlap, clash and conform:

"Through the description of these practices and their mutual interlocking, the analysis points simultaneously to differences in practices and identities, to the ontological spectrum of a seemingly simple and unequivocal object and to the concrete ways these practices are kept separate or are connected, and to the way they clash with or depend upon each other." (Vikkelsø 2007, 302).

4.3.1 Multiplicity and ontological politics

When reality is enacted, rather than something tangible and stable, ontology is reshaped and, in turn, becomes political. Mol raises four questions to understand how ontology is implicated in politics (Mol 1999, 74). The first question raised is; Where are the options? This question raises reflections on what sites arguments formed within different realities are bringing into decision making: "What they do, each of them [each argument], is shift the site of the decision elsewhere: to move it along. So they displace the decisive moment to places where, seen from here, it seems no decision, but a fact" (Mol 1999, 80). The question of where options are shapes ontological politics by showing how options are derived from facts that come from somewhere else. The second question is what is at stake? This question broadens the controversy from the object of reality that is the root of the controversy, into the interfering objects of reality that it entails: "For objects that are performed do not come alone: they carry modes and modulations of other objects with them" (Mol 1999, 81). This in turn leads to a never-ending set of realities, as one single object becomes entangled with the realities of other objects; there is no Nature National Park without the herbivores, felling of trees, the fence etc.

The third question Mol raises is whether there are options? This question is raised because: "The notion of ontological politics seems to imply the possibility of 'choice'" (Mol 1999, 83). However, Mol argues

that it is not necessarily an option to choose between different versions of realities: "What 'multiplicity' entails instead is that, while realities may clash at some points, elsewhere the various performances of an object may collaborate and even depend on one another" (Mol 1999, 83). Here, it is essential to distinguish between plural and multiple. The realities of an object are not plural, but multiple, in the sense that they are performed in ways that have relations between them, "They are not simply opposed to, or outside, one another. One may follow the other, stand in for the other, and, the most surprising image, one may include the other. This means that what is 'other' is also within" (Mol 1999, 84). Finally, these three questions raise the fourth question on ontological politics: How to choose? With the different sets of realities that Mol's understanding of ontology entails, there are a myriad of questions raised when it comes to the topic of how to make a political choice: "if we think in terms of ontological politics, then information is no longer given—to anyone" (Mol 1999, 85). Indeed, the fourth question only raises the new question of what outcome is sought after. Considering the public controversy around NNP Gribskov thus now entails looking at enactments of objects of the NNP and how these enactments are related, clashing, shifting site and connected to other realities.

4.4 NNP Gribskov - public enactments of issues

Viewing the case of NNP Gribskov through the web of the theoretical perspectives presented will allow for understanding the complexities of this controversy. I can view how publics gather around different issues of the NNP and how there might be clashes within each of these issues. However, the issues of the controversy are also results of different enactments of reality, which stretch beyond singular issues; they are related and connected to each other. Different realities draw on representations of objects and matters of fact and concern in their enactments of reality which interlock and implicate other objects and issues. In order to understand the realities of publics, I must first enter the field of the controversy.

5. Methodology: Mapping a public controversy

5.1 Map-making and the map-maker

In my attempt to understand this controversy, I have dived into the public debate where it plays out. The practice of map-making is essential to my methodological approach to this thesis and has been informing my data collection as well:

"This effort to unfold public debate, to care for all viewpoints while not giving everyone the same credit, to explore collective disputes and make them more legible, is a form of mapmaking, although not (or not only) in a geographical or even graphical sense... Rather, the objective of controversy mapping is to unfold sociotechnical disputes in a conceptual space where its multiple actors and issues can be weighted against each other" (Venturini & Munk 2021, 5).

Deciding that mapping, both visually and through exploring the debate, is the primary objective of the analysis leads to a set of necessary precautions and areas of attention; I must be mindful of the choices I make in who and what to put weight to in the mappings. Here, I have made choices by focusing only on the public engagement in the controversy, thereby excluding important actors in the network, such as scientists and politicians. However, it is necessary to select what patterns of a controversy to draw out: "Just as a city can be a single point on one map, but the entire territory on another one, so can a debate be a single issue in one controversy atlas, but the subject of the entire atlas in another one" (Venturini & Munk 2021, 55).

5.1.1The quali-quantitative approach

For the data collection, I will be collecting data from the web as well as doing interviews with locals of Gribskov. This is a quali-quantitative approach, an approach and wording chosen over the more widespread *mixed methods*, to emphasise the curation necessary with this type of data collection (Munk 2019, 172). I have been scraping Facebook pages, collecting online traces of the controversy. This data and other documents will be analysed using different tools for mapmaking and data presentation. Further, I have conducted interviews with locals of Gribskov to understand how the controversy unfolds in the local context and gain a deeper understanding of the controversy.

Firstly, similarly to mixed methods, I use the data to complement each other; my digital data collection creates a foundation from which I can gain insights that I will then scrutinise in the interviews; maps created from my digital data collection can point to a pattern, the interviews can unveil why the pattern unfolds in that way, or as Munk puts it: "To think about the quali-quantitative as a complementary relationship thus reflects... a way of interpreting the findings from a quantitative analysis of onlife traces through additional qualitative work in the field." (Munk 2019, 168). However, the maps do not reflect all-encompassing online data on the NNP's. They are carefully curated and reflective of choices I have made in the selection of what data to harvest digitally, as well as the choices made by algorithms, programs and

API's⁹ (Munk 2019, 172). Moreover, any quantitative data presented as a single data point on a map reflects many documents, for instance, Facebook comments, that are themselves qualitative insights into the controversy that I can further explore.

5.1.2 Digital methods & Techno-Anthropology

While using digital methods and following controversies as they play out online is not self-evidently an anthropological approach in the traditional sense, the methodology lays close at heart with one interpretation of the Techno-Anthropological approach. As a techno-anthropological researcher, utilising the digital as a tool for the research adds synergy to the research of controversies. Thus the field of techno-anthropology "acquires the added meaning of a technologically enhanced anthropology, one that actively exploits the ability to collect data and chart associations online" (Munk 2013, 304). When studying a public controversy, it is reasonable to look into the traces of the controversy online, as "digital media has transformed not only the study of controversies, but also controversies themselves" (Venturini & Munk 2021, 155). Digital media such as Facebook affects the controversy of the NNP as a platform where the public can voice their opinions directly to actors pushing initiating the NNPs, such as the NST and MIM. By extension, Facebook, in this case, becomes a part of the controversy as it makes "a difference in the way controversies engage people, parties influence the debate, knowledge claims travel, evidence is mobilized, etc." (Venturini & Munk 2021, 175). Online debates are not merely mirroring how a debate would take shape if not hosted (partly) online.

5.2. Data collection

5.2.1 Documents of the controversy

The footing of my mapping is based on documents and online traces of the controversy. For this, I have collected more than 10.000 Facebook comments from the Facebook pages of the Danish society for Nature Conservations (DN), the Ministry of Environment (MIM) and the Nature Agency (NST). While there is bias on these pages, as the actors behind the NNPs they present the project positively, the comments reflect the controversy as their Facebook pages create a space for directly communicating both critique and praise of the NNP. In this case, it results in a heavy debate between different publics in the controversy taking place in the comment section, with posts sometimes having hundreds of comments.

I applied a broad selection criteria for the posts I have included in my scraping, where I have collected any posts on Nature National Parks, as well as posts on unmanaged forests and on the use of large herbivores in conservation practises, even if they were not directly on the NNPs. This broad selection reflects the different aspects of rewilding found in the case, and I wanted to gain insights into reactions on specific practises (such as focusing only on reducing management of forests or on large herbivores), as well as broadly on the NNPs, as there are only a few posts on the NNP in Gribskov. I used the scraping tool *FacePager* to scrape the posts and comments.

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⁹ Application Program Interface

Facebook page	Number of posts	Number of comments
DN	15	2886
MIM	41	5510
NST	23	1631

Table 3 Overview of collection of Facebook comments

Besides the comments collected from Facebook, I am drawing on the documents from the public hearing process, consisting of 77 responses, of which 33 were sent in by private persons and 44 by associations. I have primarily focused on the 33 posts by private persons.

While data from Facebook and the public hearing is granting me knowledge on how different actors approach the topic of the NNP, most of the individual inputs come in short and relatively superficial, undeveloped arguments, as each media prompt short inputs; a Facebook comment can only be so long before people stop reading it. A view in a public hearing process is limited by the timeframe that is set for the hearing, albeit there are both long comments and hearing responses. While the quantity of the inputs gives me knowledge on what aspects of the NNP are important to the different actors surrounding it, it lacks depth and nuances.

Furthermore, there is bias in these media. For example, on Facebook, the debate is not limited to locals of Gribskov or even users of Gribskov, but it is open to the entire country. In the hearing, as is the nature of a public hearing, what is presented is primarily critiques or suggestions for change of different aspects of the park. The shortcomings of these selected data sources are why I find it necessary to conduct interviews with people engaged in the debate locally.

5.2.2 Interviews with the local public

I have conducted four interviews with users of Gribskov. Each interview has been situated in different situations, and I have had to adapt the interview to the specific interviewee. The purpose of the interviews has been to gain a deeper understanding of what is at stake in the controversy; I have aimed at learning from the interviewees what is truly important in the controversy of NNP Gribskov, following Venturini & Munk's (2021) first principle in their "cartographer's creed":

"1. I will follow the actors. I will not presume to know better than the people I am studying. I will learn from them what is relevant and important, what belongs to the controversy and what does not. I will not silence the voices I do not agree with or that I find off topic" (Venturini & Munk 2021, 7).

I began my recruitment of informants by firstly writing on two Facebook groups (The group organising people against the fence in NNP Gribskov and the group of "Friends of NNP Gribskov"), asking for people to take a walk with me in Gribskov. However, one informant (C) asked me to come visit her farm, located about a 45-minute drive from Gribskov, so she could show me the initiatives she had made to increase biodiversity there. I followed the cartographer's creed and decided not to exclude the perspectives granted

by visiting the farm. Indeed, the interview prompted many interesting perspectives that would not have been the focus if we had taken a walk in Gribskov.

Why go on walks?

While the NNP Gribskov is yet to be built, the forest of Gribskov is a real and physical place that I and everyone involved in the controversy can visit. I, therefore, decided that my interviews should take place in Gribskov. At first, this was an idea that came by itself: "it seems intuitively sensible for researchers to ask interviewees to talk about the places that they are interested in while they are in that place." (Evans & Jones 2011, 849). However, the primary reason for this choice was the idea that walking in Gribskov would prompt reflections that might have been forgotten if I was sitting inside talking to the persons I interviewed. Inspired by Sarah Pink's approach to sensory ethnography, specifically sensory interviews (Pink 2009) "an interview is not an exclusively aural encounter or event but one that also involves the materiality of the environment and of artefacts" (Pink 2009, 87). While Pink approaches the sensory interview with comprehensive inclusion of all senses, asking the informants to articulate their experiences not in words but through their senses (Pink 2008, 89), I have not in my interviews specifically asked informants to use "their senses." Instead, I wanted to situate the interview in the object of study, Gribskov, introducing the environment of the forest (or, in one case, a farm) directly into the interviews. By situating the interviews here, sight, sound, smell, feeling became part of the interview, as we encountered objects that stimulated those senses. As a result, aspects of the controversy arose during the interviews, which would have been less likely to be brought up if I had only sat down with the interviewees. One example of this was when the interviewee B was reminded during our walk:

"B: Right here [gesticulates around the areas], there are some very interesting orchids that grow here. Right there, where we entered, a small parking spot has been made [because of] the lack of parking spots. They have made that right on top of the *best* biotope with orchids. So they don't really have a good grip of the situation, and therefore I lose trust in the people who are to execute this" (Appendix 3, 1).

Had we not passed that area, B might not have brought it up, and I would have missed out on context for the lack of confidence in the experts that B feels. The mud under our feet, the distant *choo* of a train, the smell of the decomposing leaves all led to reflections on feelings and values related to the controversy. Focusing on the interview placement does not only prompt the interviewees to use the available props and sensory impressions to articulate their values and opinions. In Evans & Jones' project on *The Walking Interview* (2011), they present the notion that: "respondents found it easier to verbalise attitudes and feelings when 'in place', producing richer data. When inside respondents usually attempted to be helpful and give the 'right' kind of answers, whereas outside in the gardens, more informal and interesting interactions took place" (Evans & jones 2011, 850). I further chose to let the interviewees choose the location of the walk, generating a larger sense of empowerment to the interviewees (Evans & jones 2011, 850).

While I have had an interview guide along with me on every interview, it has been a fluid guide benchmarking the direction of the interviews and the general topics of interest, taking a starting point in maps created from Facebook debates and the public hearings (Figure 4 and 5). However, following the cartographer's creed, I refrained from moving into aspects of the controversy if the interviewee seemed to have little interest or knowledge in the area.

Informants

For the purpose of clarity in the mapping, the table below shortly sketches the positions that the four informants take on in the controversy.

Informant	Overall opinion on NNP Gribskov	Background knowledge
В	B is strongly opposed to the NNP Gribskov. She does not see one good aspect of the project and feels strongly about many of the consequences of the NNP.	B is a close neighbour to the forest of Gribskov; there is only a 1-minute walk from her house to the forest.
С	C is overall against the NNP, albeit she does see some benefits to biodiversity and can see some options for change in the management approach that would (according to her) have positive impacts on the project.	C has her own farm where she focuses on increasing biodiversity and humane treatment of the animals. She is an educated Agronomist, and her position in the controversy is founded in her background.
S	S is relatively neutral about the NNP. She can see both negative and positive aspects, and she has not engaged much in the debates.	S was not recruited through any Facebook site, but through my network. She is a close neighbour to NNP Gribskov, a 1-minute walk away.
J	J is overall positive about the project, but is critical that some aspects of the project have been prioritising outdoor life over biodiversity.	J lives in Copenhagen but has family that lives nearby Gribskov and visits often in this relation. He further often visits other areas with similar management practices.

Table 4 Overview of the interviewees

5.2.3 Quotes and formatting

I have conducted the interviews in Danish, and the Facebook comments and hearing responses are in Danish as well. I have translated all the quotes in the thesis to the best of my ability, trying to capture any Danish sarcasm, sayings and wording. In Facebook comments, I have further aimed at translating the grammatical style of the comments, such as including emojis, exclamations marks and differences in capitalisations of words. I have not conducted thorough transcriptions of the interviews but have used the

transcription AI tool *Sonix* and primarily corrected the quotes used in the report. See appendix 3 for the Danish transcriptions of the selected quotes. For the quotes from Facebook, I have noted from what Facebook page they have been collected and what date they have been posted, but I have kept the author anonymous. Similarly, I have kept the interviewees anonymous, and I do not use the names of the respondents to the hearings in the report, despite their names being visible in the hearing documents. Despite Facebook comments and hearing responses being fully public, I have done so because the controversy does lead to harsh language and verbal attacks on any person engaging in it. I do not wish to contribute to any attacks on the people who have been so kind to help me in this project or people whose comments I have used without their knowledge.

5.3 On investigating the public controversy of NNP Gribskov

Having collected a broad selection of data and sketched out perspectives on publics and enactments of realites, how am I to start disentangling the mess that the controversy around NNP Gribskov entails? There are multiple aspects that entail multiple realities, with different yet connected issue publics, which clash and connect in a myriad of ways. This entails choices for me to make, and as mentioned, I must accept complicity in the controversy now. In a project such as the NNP Gribskov, there are too many actor-networks, too many versions of reality for me to investigate within the framework of this thesis. Therefore, I take my starting point in the maps created from the data collected from Facebook and the public hearings to show the overall patterns of the discussion. Only then can I begin to delve into the multiple realities that are evident from the various discussions: "In controversy mapping, it is particularly important to follow the leads emerging in the discussion rather than a list of pre-determined questions as a way to respect the multiple framings proposed by informants" (Venturini & Munk 2021, 117). With these maps at hand, I can begin to venture into the controversy and slowly disentangle realities and their representations of the issues at hand.

6. Enactments of NNP Gribskov

At the centre of the controversy lies strong passions all related to values and uses of nature of the individual. How one enters the controversy and what one brings into the controversy is deeply founded in these enactments of nature. Therefore, the mapping of the controversy will aim at drawing up uses, values and practices found in the public around NNP Gribskov that are connected to the content and objects of the project. Firstly, I will provide an overview of the trends of the debate; what is at stake, and how has it evolved? As I mentioned at the beginning of this thesis, I only became aware of NNP Gribskov in December of 2020, when the plans to establish an additional 13 NNPs were presented - but in Gribskov it was already appointed in June 2020. Further, it was not until the online information meeting on May 5th that I truly realised how much controversy the project had sparked. When looking into the data I have extracted from Facebook, one noticeable aspect is that there is an increased interest in the topics over time across the three Facebook pages.

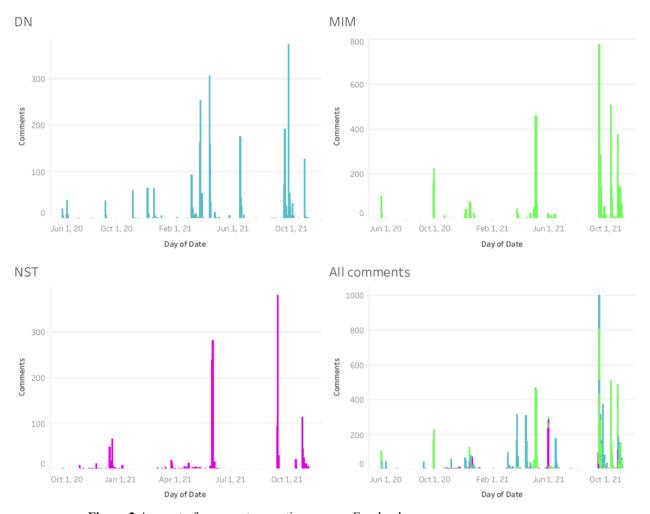


Figure 2 Amount of comments over time, across Facebook groups.

This is interesting, as I assumed that on a platform such as the DN, there would have been a more stable engagement as their audience might have been interested in the NNPs from the outset, as according to the organisation: "For years we have fought to put wild nature on the agenda" (DN 2020). It is, however,

noticeable that across platforms there is relatively low engagement with Facebook posts until the spring of 2021, where it seems that the issue publics of the NNPs grew dramatically.

From the Facebook comments, I have conducted a semantic analysis with a similar approach as I did on the literature of rewilding; I have used CorTexT to find multi-terms from the comments, to reveal discursive patterns of the debate (see appendix 2 for the protocols and criteria I have set for the multi-terms). I have curated a total of 250 multi-terms (phrases), which are used in a specific set of documents, meaning that a group of comments all use the same phrases frequently, but the phrases are specific to those comments; i.e. they are not used at all in a different comment group. Without looking at how the phrases are connected, certain patterns of the debate become evident. For instance, several multi-terms are focusing on animals; herbivores or grazers are mentioned often, as are sentences such as "cases of neglect", "animals behind fence" and "wild horses". CO2 is mentioned in different contexts as well. Two projects with rewilding practices on Mols are also frequently mentioned in these discussions. Different perspectives on nature are also found, such as "better nature" or "natural processes".

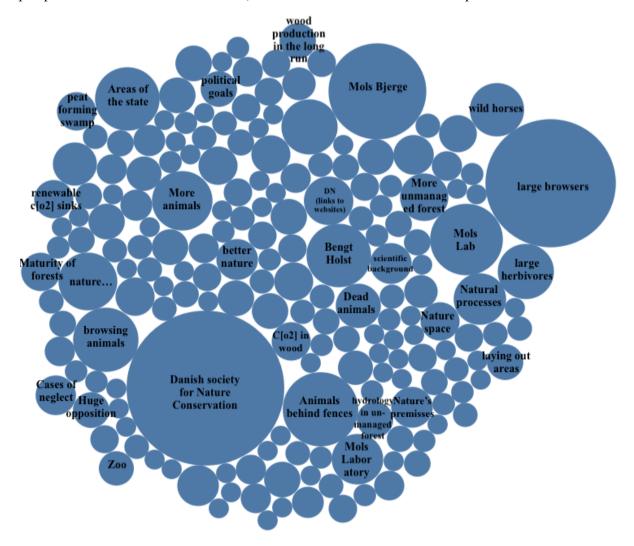


Figure 3 Frequently used phrases in Facebook comment sections, sized by their frequency. Interesting words are noted, while less informative words (such as "good day") and words of low frequency are excluded on this figure. See appx 2, p. 15 for the complete list of words.

From this list of terms, it is clear that many objects are at the centre of the controversy. When taking in a different map of the most frequently used term, seen below, it becomes clear that not all objects of discussion are connected, albeit some of the debates are strongly connected. I have attempted to tag each coloured cluster with a topic that encompasses all of the phrases in the cluster, despite this inevitable resulting in simplifying the collection of terms.

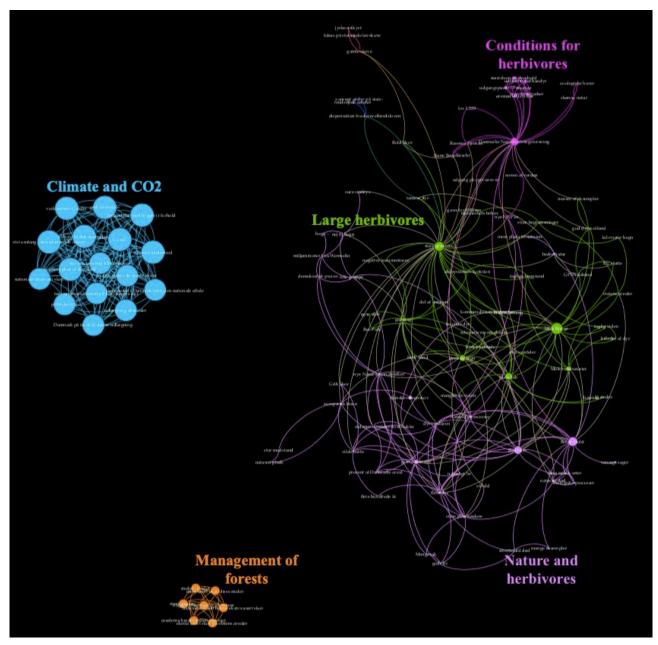


Figure 4 A network of frequency terms from Faceb. Nodes are connected if the phrase is mentioned in the same comment. Nodes are sized by their connections to other nodes. See appx 2, pp. 22-24 for a zoom-in on the different clusters.

From this network, it is evident that debates on CO2 and the climate effects on the park is a secluded debate, which does not relate much to other debates on the NNPs. Another isolated cluster is on the management of the forest - however, when looking into this cluster, it becomes evident that this is due to the cluster being mainly related to posts on unmanaged forests, where large herbivores are not used. The

highly entangled pink, green and purple clusters show that even within the debates around the large herbivores, there are distinct yet connected debates. The green cluster shows more generalised words such as "Large herbivores" and "Mols Lab" as the two most connected nodes, with other nodes such as "pictures of animals", "function of the ecosystem", "part of nature", "GPS trackers" showing no distinguished debate but general discussions on the large herbivores. However, two distinct debates are found in the herbivores' connection to nature and the animals' conditions in the NNP. This indicates that even within the debate on large herbivores, different sub-publics gather around sub-issues to the herbivores. When comparing the network of phrases to Figure 3, it is evident that some terms are subsumed in the debates on herbivores - terms such as "natural processes", "functions of the ecosystem", "better nature" are overshadowed by more well-connected terms such as "animals behind fence" and "dead animals". It seems that the conversation on nature is part of the conversation on herbivores, rather than the other way around.

These maps made from Facebook comments show that herbivores take up a large part of the dispute over the NNPs. However, through the public hearing responses, it is evident that when zooming in on the locals from Gribskov, some elements of the controversy are not clear from the Facebook maps. The map below consists of phrases from answers to the public hearing made by private persons, curated in the same way as the Facebook comments above, albeit only 99 phrases were found.

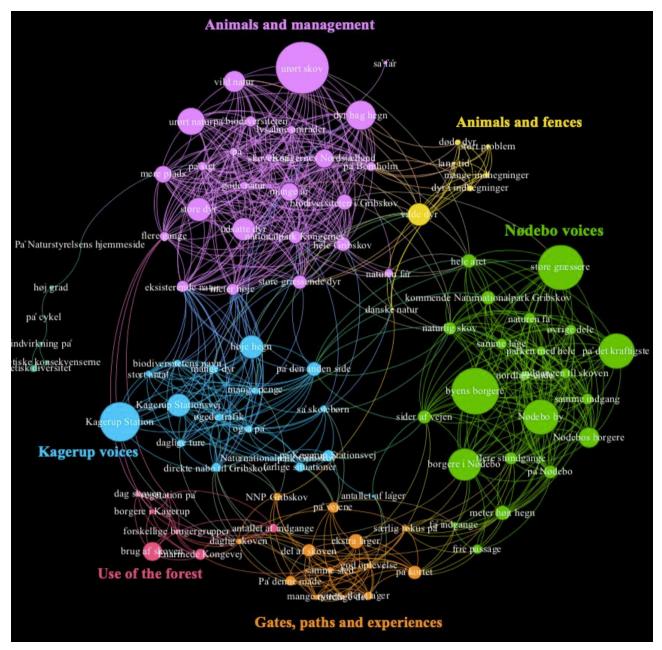


Figure 5 A network of frequency terms from the public hearing. Nodes sized by occurrence.

While there are reflections of debates similar to the ones evident from the Facebook network (there are mentions of herbivores and animals in several clusters), hints of different debates become apparent. For instance, the fence around the NNP appears in several clusters, and the orange cluster mentions gates and paths. Furthermore, the Nødebo and Kagerup clusters (the two towns located the closest to the NNP) mention roads, parking, and access to the park. In this sense, the hearing shows us a more direct engagement with the proposal for NNP Gribskov, in addition to debating the overall purpose and conditions of the NNPs. This is not surprising - Facebook has many users that are not local to Gribskov, while the hearing might include citizens that are not actively engaged in the overall debate on NNPs but care about how it will affect their everyday life. Here, it is prominent that access to and usage of the forest are distinct and essential issues to locals.

Looking at the development in the amount of Facebook comments over time made me curious on how the debate has developed over time; are there topics that were more present at the beginning, which has drifted into the background? Therefore, I created a figure of *epochs* of the 20 most frequently used phrases in the Facebook debate, across ten time periods between June 9th, 2020 and November 6th, 2021, the first and last post extracted.

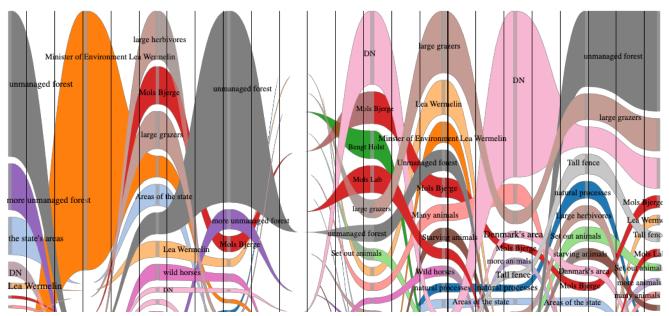


Figure 6 An overview over epochs of frequently used words. The top 20 phrases are collected from the entire body of comments and distributed over ten equally long time periods (the change in the year appears as a break in the epochs, resulting in there only being nine epochs on the figure). I have normalised the frequency count across periods, thereby the width of each phrase in each period shows the percentage that a phrase takes up in relation to the other phrases.

As is evident from the epochs of terms, in the beginning, there was a focus on unmanaged forest, reflecting the orange cluster on Figure 4, despite the first posts being on the NNPs. In the second epoch, the Minister of Environment overshadows any other phrase at one time - this is likely due to there not being many comments in the beginning of the debate, thereby there not being many of the frequent phrases appearing. However, the further into the time periods, the more traces of the debates that are evident on the other figures arrive; Mols Bjerge and Mols Lab enters, as well as the large herbivores. Here, the starvation of herbivores is also evident. Towards the end of the epochs, the phrase "tall fence" enters, a debate that was otherwise not remarkably visible in the other maps of Facebook comments but primarily in the hearing responses. Further, it is interesting to see that the phrase "natural processes" only enters the debate towards the end of the epochs, despite unmanaged forests taking up much of the space in the beginning - this hints that the natural processes might be more related to herbivores than to other management practices. Additionally, despite it being only a brief appearance, the term "Bengt Holst" occurs in one epoch - one of the members of the scientific group giving inputs to the NNPs. This hints at there being debates over this appointed expert group.

Having attempted to gain some overview of the controversy, I have identified a collection of objects of dispute; a seemingly large debate is on the herbivores in the park. The fence and access to the park appear to be important to locals of the controversy, and in the epochs, it becomes evident that it is a more widespread debate. The usage of the forest is clearly present in the local debates, while not as evident from the Facebook comments. While some of the frequently used phrases on quality of nature (phrases such as better nature, natural processes, nature's premises) seem to drown in the entanglement of the debate, there are frequent phrases of the debate. The debate on climate effects appears as a separate debate from the entanglement of the other debates. Finally, the mention of Bengt Holst points to there being some debate over the experts in the controversy. From this overview, coupled with the knowledge I have gained from the interviews, I will now venture into each of these disputes: "Each object gathers around itself a different assembly of relevant parties. Each object triggers new occasions to passionately differ and dispute" (Latour 2005, 5). The aim is to analyse what objects cause these passionate disputes and what concerns the public represent in the disputes. I will take my starting point in the most entangled object, namely the large herbivores. These discussions lead to investigating how fences affect the controversy, which further points to looking into the usage of the park. Then, the quality of nature and its relations to biodiversity will be investigated, and the dispute over climate effects of the park will be looked into. Finally, the underlying entanglement of experts that is evident across the debates will be unfolded.

6.1 Herbivores: Wild and free or trapped farm animals?

As is evident from the figures above, large herbivores (specifically the moose and bullocks) is by far the most debated subject in this case; it is the matter of concern that gathers the largest public around it. This is further the aspect of the controversy that leads to some of the most hostile statements by the involved public, as illustrated by this small selection of comments:

"Concentration camps for herbivores" (Appx 4, 35).

"One thing is the clearly perverse act of fencing in animals, waiting until the herd is too big and then waiting on them dying of hunger or parasites" (DN 14/04/21)

"I know nothing of the lies that you and the rest of hetze-nettet10 constantly spur out..." (DN 25/09/21)

"You are a small pack, who with lies, power and threats of violence desperately seeks to maintain your own selfish privileges at the expense of our common nature and biodiversity" (DN 25/09/21)

The object of the herbivores interfere with several other objects in the NNP, and in turn, these objects interfere with the herbivores. However, when looking closer at the herbivores and the conditions they will have in the NNP, it is evident that much of the debate is related to the *wildness* of the animals. These practises of wildness mirror debates found in the literature on rewilding; what does "wild" entail? Here, it becomes clear that there are two main camps, reflected in the comments below:

¹⁰ "Hetze-nettet" is a commonly used term by advocates of the NNPs to describe the opponents of the NNPs who are opposed due to animal welfare. The term originates from a famous Danish website, hestenettet.dk, combined with the word for a smear campaign. Without having been able to find its origin, I believe that the word is used because seemingly many of the opponents are riders, own horses or the like.

"YES PLEASE to fenced Nature National Parks, where the local animals can live natural lives - without having to worry about traffic, the farmer's crops and people's gardens. Where the animals themselves can choose where to go and what to eat. And who to mate with and whether they prefer bark or grass! Where the animals don't overeat the wrong feed, but where their fatness follows the course of the year" (DN 01/06/21)

"No, I do not call animals behind fences nature. The humans that have put the animals behind fence have a responsibility for them. A responsibility that the animals are fed, have water, shelter, treatment for parasites when needed... Nature and wild animals is when there is no fence and nature can unfold without human interference" (MIM 11/10/21)

These two comments reflect positions of the debate on the wildness of the animals, where the same phenomenon is translated into dichotomous realities. In one reality, any human interaction with animals limits the animals' freedom; therefore, these animals are wild due to their autonomy of i.e. not being fed. Moreover, the absence of "traffic" and "people's gardens" represent enactments of authentic wildness. This position reflects the notions of "wild" that Prior & Ward (2016) has where non-human autonomy is the essence of wildness. The enactment of wild in the first comment is connected to that of free choice: what to eat, who to mate with, etc. The second perspective found in the debate does not necessarily disagree with this notion; it depends on that same understanding and includes it its enactment of wild. Instead, the two positions clash because the second does not believe there to be non-human autonomy when the animals are placed in containment - their placement is mediated by humans and therefore, it does not choose what to eat, as it cannot seek feed or mates outside the fence of the NNP. The realities do not clash in enactments of wild as choosing what food to eat or where to go. Instead, they clash in enactments of whether these specific herbivores have that choice; in that sense, "They are not simply opposed to, or outside, one another" (Mol 1999, 85). Rather, the cause of the clashing of realities is the interference of the fence and the multiple realities enacted around this object.

The debate over wildness exemplifies how each reality is strengthened by shifting sites. On the "wild" side, a question of whether an unenclosed area can ever exist is raised: "Are the deer on Bornholm wild? The rabbits on Fanø? The mice on Anholt? The rats on a ship at sea? (...) All animals are in some way limited in their freedom of movement. Where do you draw the line for when it is no longer wild?" (DN 24/03/21). The original representation from the "non-wild" side is not that the containment in itself is what makes the herbivores "non-wild", rather that humans execute the containment, meddling with the non-human autonomy. The same tactic is applied by the "non-wild" camp, where it is brought up that the animals are bred by humans: "... Then there are the animals that are contained, they cannot get out, I think it is what they call rewilding, a concept I have not understood as it has nothing to do with wild animals, but honestly Bullocks!!! That is probably the most man-made animal in existence..." (Appx 4, 42). Again, the original representation by the "wild" side was not that the animals were not human bred, but rather that they live wild lives within the NNP, where they have autonomy. The arguments presented by the two sides are both moving the debate to a site where there is no other argument left to use, where their positions seem to be an indisputable fact: it is true; any animal is contained by something. Either no animal is wild or these herbivores are wild too. And it is true; humans breed these herbivores. From birth,

they cannot be considered wild. These representations of wildness are fundamental to the entire debate around herbivores, and also affects other aspects of the NNP. The representation of animals as wild or non-wild sparks a set of discussions and matters of concern, which build onto the ontological realities of "the wild". As is already evident from the statements above, the primary reason the wild/non-wild debate is taking place is that this affects how people judge the well-being of the animals. This cluster of the controversy is further one where many actors are drawn into the debate to strengthen either side of the dispute.

6.1.1 Starvation or natural fluctuation?

A key dispute that relates to the wildness of the herbivores is rooted in the decision that the animals should not have supplemented feed in the winter, when the cold sets in and most of the grass and plants are gone. According to the management plans, several steps should be taken *before* the animals being fed; areas of 1-3 ha will be closed off during the year, and can be opened to the herbivores if needed; trees can be fell, leaving new bark and twigs to be eaten; areas outside the NNP can be opened up. However, the primary tool for avoiding feeding the animals will be herd regulation, similar to practices at Oostvaardersplassen (Naturstyrelsen 2021, 50-51, Theunissen 2019). Despite this contingency plan, the subject of feed for the animals is still highly contested.

"The herbivores that are set out are tools. Nothing else. Their hunger is supposed to force them to eat unwanted scrub, bushes and bark. Things they cannot digest and therefore slowly and painfully they will starve to death..."
(MIM 17/09/21)

"It is completely natural for animals to be hungry. It is the norm for all wild animals a large part of the year. And for the 1773571th time. There are no animals that are going to starve to death in the nnp's..." (MIM 12/10/21)

Here, the statements extents enactments of wild/non-wild when the object of *hunger* interferes; hunger represents the herbivores' status as non-wild *tools*, where hunger is a necessary part of a human aim to increase open landscape in the area. Or hunger is represented as a natural part of being a wild animal. These enactments further lead the different parties to draw in representations of facts and expert sources in their argumentation. Specifically, as evident on Figure 4, the cases on Mols Lab and Mols Bjerge are drawn in from both sides of the debate. This section of the debate leads to confusion as it is a tangled situation; despite Mols Lab being located within the Mols Bjerge National Park, they are two separate projects using large herbivores - Mols Lab has a rewilding project where they use ponies and cattle to research the effects on biodiversity that the herbivores have. Mols Bjerge National Park has cattle, horses and sheep, however, these are enclosed in corrals and serve the purpose of nature management rather than increasing biodiversity (Naturstyrelsen n.d.). There have been several reports filed to local police on neglect of the herbivores in both projects, two of which has led to charges¹¹ on the treatment of the animals. However, Mols Lab has not been charged with starvation of the animals, despite reports to the

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¹¹ One case is from the NST owned cattle, that have been deemed too starved (see https://naturstyrelsen.dk/nyheder/2021/april/naturstyrelsen-er-sigtet-i-sag-om-dyrevelfaerd/) and one case on Mols Lab where a horse had gotten flesh wounds due to a GPS tracker cutting into the flesh (see https://www.sn.dk/danmark/politiet-rejser-sag-mod-naturlaboratorie-for-gnavesaar-paa-hest/)

police, while Mols Bjerge has faced charges over starvation. This situation leads to a dispute that the following comments can roughly sum up:

"Now, there have been two "cases". One where a proclaimed animal friend thought it was a pity for all the small cute horses that she could not feed them carrots and rye bread. That got a lot of media coverage. What did not get so much coverage was that the horses are fine, several veterinarians have investigated them..." (DN 25/03/21).

"that is a direct lie! Get your facts straight! One veterinarian said ok for the animals! Several veterinarians have criticised the conditions out there in Mols! Several of the animals are dead!" (DN 25/03/21)

Veterinarians are thus drawn into the debate on both sides as experts and the ultimate judge on the wellbeing of the animals, but with apparent disagreements of what the conclusions of veterinarians have been. Further, veterinarians are not themselves free from ontological politics, as C mentioned when we talked about who holds knowledge on the animals in the parks: "Because that is what they said on Mols, that they have an animal keeper who knows something about the animals. But he will only get that job because he is willing to compromise. And because the beetles and everything else becomes more important than the animals" (C, appx. 3, 5). This shows that there are no facts on the issue that are so clear and indisputable that they can convince everyone in this dispute of their truthfulness. Even when mobilising the field of veterinarians, there are disagreements as to whether these animals suffer or not, and in extension of this, concerns over the biases of the veterinarians or others are raised when they are employed by the Mols Lab. Even if there is agreement that veterinarians are essential, it is seemingly not enough to bring closure to the debate. This leads to the debate being moved along to other representations or proof of what is being debated: "An object-oriented democracy should be concerned as much by the procedure to detect the relevant parties as to the methods to bring into the center of the debate the proof of what it is to be debated." (Latour 2005, 8). Here, we see that the "starvation" side represent hunger in the shape of pictures which are widely shared in the debate.







Picture 2-4 A picture of a tree that has been stripped of bark; A cow's back where you can see the bones; A horse with clear markings of the ribs. Examples collected from Facebook comments.

The pictures are (supposedly) taken at different locations in Denmark, where large herbivores are set out to either manage nature or as part of research on their effects on biodiversity. As a Facebook commenter notes, the pictures: "don't lie, but show mistreated and strongly malnourished animals" (DN 27/03/21). Pictures 2-4 is only a selection of a wide range of widely shared pictures, depicting animals with bones showing, dead animals, animals eating common broom ¹² animals "drinking" from lakes that are frozen over and more. However, these representations of the animals' starvation does not seem to take on the reality of the "natural fluctuation" side:

"The pictures of the winter thin horses are used as documentation that the horses are starving, when the fact is that none of the horses had under 2,5 in their fatness score (on a scale where 1 is underweight, 2 is moderate, 3 is normal weight 4 and 5 are overweight and extremely overweight) it is this that is referred to when we say manipulation with pictures" (NST 01/06/21)

Different tools are used on this side to enact and determine the hunger of the animals; on the natural fluctuation side, it is a score used by owners of large animals (horses, cattle, swine) to determine their fatness levels based on rankings of different parts of the body¹³. According to this comment, the animals were not deemed to be starving through this scale. The differences of how to determine the hunger-status of the animals is a clear reflection of how each reality is manipulated: "Rather than being seen by a diversity of watching eyes while itself remaining untouched in the centre, reality is manipulated by means of various tools in the course of a diversity of practices" (Mol 1999, 77). One place, the animals eating bark and showing bones are clear enactments of the reality of their starvation; the animals are starving. In another performance, the enactment depends on a score on a measuring system and by this system, the

¹² Along with comments that the common broom is poisonous to the animals.

¹³ See for instance https://brogaarden.eu/blogs/information-om-heste/fed-eller-fit-sadan-her-huldvurderer-du-din-hest or https://highland-cattle.dk/onewebmedia/Huldvurdering%20af%20malkek%C3%B8er%20(2).pdf for the approach for horses and cattle.

animals are not starving. An additional factor brought forth by B on how seeing the animal makes her feel: "And completely selfishly, I just don't want to come in and see the animals suffer or walk around being thin" (B, appx. 3, 2). This reflects that this is not only a matter of whether the animals are well, but another matter of concern is how it makes people feel to see what the "starvation" side enacts as starving animals; and how these feelings might make people act: "Well, it is lucky that I live so close by because I have a small stall, I will put out so that anyone can come and get feed, carrots, beets, hay in bags for free. People can just help themselves - they decide what for what purpose they will use it" (B, appx. 3, 1). What B indicates here is that she will make it possible for the visitors of the NNP to feed the animals, despite this being heavily advised against by the authorities. But this reflection by B shows that the reality of non-wild, starving animals leads to people to take on the responsibility themselves to feed the animals, when their owners will not.

6.1.2 Consequences of exemptions to the law on animal welfare?

As Lorimer et al. (2015) mention in their article, a barrier to rewilding Can be legislations on animal welfare, which might lead to public outcry if changed. The wildness debate and the starvation debate is highly entangled with the law L229 - the law on NNPs (Folketinget 2021). When looking at the herbivores, the debate relates to §3, where two exemptions to the existing law on animal welfare are presented. These consist firstly of not having to inspect the animals individually, as it is currently demanded of anyone keeping animals, but rather the population is inspected as a whole. Secondly, the paragraph that demands the animals are "treated with care", housed, fed, provided with water and healthcare (and more) is exempted in the NNPs. The argument for these exemptions is presented as: "Some provisions in the law for animal welfare are hindering that there can be limited human interference" (Folketinget 2021, 25). The exemption from being "treated with care" primarily leads to the disputes over starvation that was delved into above, although some disputes on shelter and parasites are raised, such as: "And then there is the worm treatment. Of course you can take out the ones [that gets it] all the time, because there are not so many animals that get worms. They say it is about 20% that gets 80% of the worm" (C, appx. 3, 5). However, the debate on starvation changes from being on whether the animals are starving to centre around whether it is legal for the NST to let them:

"Do we agree that the Law on Animal Welfare's §3 is: §3. Anyone who keeps animals shall ensure that they are treated with care... It is this paragraph that the Minister of Food in accordance with L229 can grant exemption from. As far as I can see, that very much opens up for legally letting the animals be mistreated in relation to hunger, thirst, lack of shelter and lack of caretaking... Not that the animals HAS TO be mistreated, but the option is definitely opened as far as I can see" (MIM 11/10/21)

"1. It [§3] is a regulation about tending, which is about feed, water and shelter. It is not thought to be relevant in NNPs, because the feed volume is regulated by taking out animals, there is plenty of water and the animals don't need shelter or find it somewhere... The animals are still to be treated with care, as there is no exemption from "§2. Animals are living beings and shall be treated responsibly and protected as much as possible from pain, suffering, anxiety, permanent impairment and essential disadvantage", which is the most important paragraph in the law on animal welfare... So plenty of control and animal ethics, actually more ethics since the animals gets

some of their lost freedom back and to a greater extent can live natural lives on their own premisses" (MIM 29/09/2021)

These comments reflect that while the site of dispute has now shifted to the legal treatment of the herbivores, the reality of their wildness still impacts the judgement on their well-being. Both sites are relating their arguments to the law, whereby the judgement of animal well-being becomes an enactment of legality, but they shed light on different aspects of the law. The first argument points to the exemption from housing, feeding etc. and argues that thereby they do not have to be fed by the owners, i.e. they are allowed to be starved, plagued by parasites etc. Because the animals are not wild, humans should care for them and legally, they are allowed not to. The second perspective opposes this, arguing not only that the law says to treat the animals responsibly - but that L229 is more responsible as wild animals should not be disturbed by humans. This perspective further leads to an argument often used by the "wild" side, in different variations - that if one cares about animal rights, they should take up the battle on animals that are captive in other understandings than in the NNP:

"you should be against hobby- and riding teams, where horses are languished in small boxes and on small, monotone folds and praise the rewilding areas instead... But you don't, because your opposition has NOTHING to do with animal welfare, but is rather just about your own selfish privileges on the cost of animals and nature. Sad..." (DN 25/09/21).

Now, there is a comparison, adding complexity into the realities - what is being compared (Mol 2002)? In the above statement, the comparison has to do with freedom, space, variety in nature. However, the non-wild sides makes comparisons on different terms:

"Do you seriously think that it is better animal welfare to let the animals be slowly poisoned or live on the border of starvation, than to be cared for with smiths, feed, veterinarians etc. in exchange for having to carry around a human for about an hour?" (NST 01/06/21)

Here, the comparison is made on their hunger levels, the care for the animals etc. Once again, the dispute is at a dead-end. The enactments of wild/non-wild represent *well-being* to mean two completely different things.

Similarly, the exemption that allows the animals to be inspected on population level rather than individually also connects back to the wildness debate. For instance, C mentions how she, as a farmer, is checking up on her animals every day, as the law demands.

"It is the thing with inspection, that I think is the big hurdle in the animal welfare law. Because, for instance, here I go out and check on my animals every day. I walk around... I count them, I check if someone has a tree [twig] hanging or is stuck in something. I mean, I have had to cut some free up in the other area because there was a thicket of blackberries... But they will do it as a group inspection. And what animal is it that you do not see in the group? The one that got stuck. The one that has trouble calving!" (C, appx 3, 4).

The debate moves away from being on the care of the animals, towards the animals getting stuck somewhere or calving without the help it needs. But for the "wild" side, what is brought up in relation to this is that interference in these matters takes away from their wildness: "As the law dictates right now, animals behind fences should be inspected frequently and there is to be interfered if the animals need it. Period. In the long run, I would like to see the animals gaining the right to die a natural death without human interference" (DN 13/04/21).

Throughout the disputes over the herbivores, what is evident is that how wildness is performed is deeply entangled in how the well-being of the animals is enacted; one significant actor in these networks around wildness is the fence around the NNP.

6.2 The fence: closing in, keeping out

Following the debates on the large herbivores, an essential object is the fence that surrounds the NNP. The fence in this debate becomes a fluid object. In the network of enactments of the wild, the fence acts as different versions of a related object; it simultaneously keeps in the herbivores and restrict them from living their wild lives, and keeps out interferences from non-wild actors such as roads, cars, fields, enabling them to live wild lives. However, what is evident is that the wild-side does not necessarily seem to favour the fence, as evident from this statement: "What do you think is an alternative to fences? I would also prefer a free and natural dynamic, with all the best [nature] of what we haven't wiped out. Free living extensive races of cattle, horses and mufflons. But I'm convinced that would bring about completely different complaints (MIM 20/09/21). So a fence enclosing the NNP is not deemed entirely favourable for the wild side. Nevertheless, the entanglements of the fence do not end at the disputes over herbivores' wildness. Fences are a matter of concern for the people living nearby the NNP, as evident from the map on Figure 5 created from the hearing, and outside the concerns over animal welfare, two significant concerns have been evident in interviews and public hearing: how it affects the aesthetics of the park and the access to the park.

6.2.1 Aesthetics

The fence surrounding NNP Gribskov will be 2,5 metres tall and created from steel wire and wooden posts, similar to that in picture 4. In addition, there is the option to add an electric wire on both sides of the fence to ensure that no animals on either side will try and breach through the fence.



Picture 5 A picture of a fence similar to the one that will be put up in NNP Gribskov. Shared on a public Facebook group.

One aspect of the fence that raises much concern over the aesthetics is the height. For instance, at one point during her interview, I asked B whether she could point to anything she found positive about the NNP, which prompted the answer:

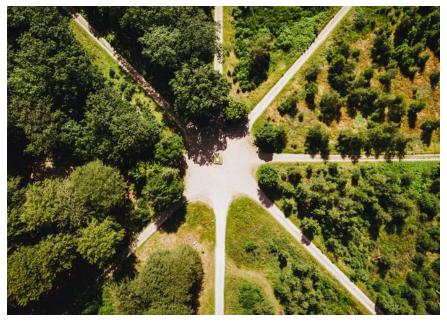
"In the law it is said that there are possibilities to do them without the fences? That is so strange, because that is the essence of it all. It is what these biologists want: That is to have the herbivores concentrated. You can't do that without fences. But you can do it without the large fences, and that is a compromise that could be looked at. Could we spare those ten damn moose?" (B, appx 4, 3).

Granted, this does not seem to be a positive thing about NNP Gribskov that B mentions here, but it is a reflection that several locals raise: why have the moose if they are the only reason the fence is that tall? Those in favour of the NNP can find reasons why the moose are a good idea: "Moose are good at grazing in swamps, and can get good grips of some of the invasive species that are now a problem in Gribskov (birch, wood reaps etc.) - they can thereby help keep areas open" (MIM 05/05/21). However, several locals note in the hearing that the tall fence is also expensive: "The long, tall fence with electric wires is established due to the wish to set out - at first - 8 moose. A very large expense for 8 animals!" (Appx 4, 21). Therefore, the height itself is quite a central matter of concern to the locals. However, it is not only the height that is a concern around the aesthetics but the overall experience is affected: "The worst thing about a fence on a walk in the forest, is if you have to walk alongside the fence. The experience of untouched nature will completely disappear" (Appx 3, 5). A fence is represented as incompatible with nature. However, according to J the concern of the newly installed fence is paradoxical: "The paradoxical thing is that the anti-fence people are like "arrh, there should not be a fence", but they will actually remove a lot of fences, because there are these smaller areas that are delimited and fenced in" (J, appx 3, 7). To J, the aesthetic effects of the fence should thereby be welcomed as they will result in less fences within the enclosure of the NNP.

An aspect that several locals mention is related to the cultural landscape of Gribskov:

"There is this parforce landscape. It is something where you have a long path. You are standing in one place, and then it just goes on and on and maybe you are standing in the octagon. And you have a view of all directions. Here, they have been so sly, so if you look at where the fence is coming, it goes a little bit uphill, then a little downhill, then up again. And when I was on one of these nature walks with the NST, it seemed like they would place the fence right down that small hollow. So when you are standing on the road, you cannot see the fence" (B, appx 3, 1)

B was not certain of this placement of the fence, but curiously found it *sly* that they would attempt to hide the fence from the view when standing in the middle of the 8 way crossing of the parforce landscape, when the aesthetic issue for most of the public seems to be that the fence interferes with the experience of untouched nature; this indicates that at least for B, the sheer knowledge that the fence is there is enough spoil the experience in nature, even if it is not directly visible.



Picture 6 The parforce octagon seen from above. 14

The unaesthetic argument around the fence does, however, extend beyond the fence in itself; it connects to other unaesthetic experiences such as B mentioning "uncomfortabilities" concerning the NNP - she sees the tall fences as an excuse to later be able to set out other animals, such as bison and maybe even wolves: "There has been talk about what they truly want, in the end, is that the forest becomes off-limit [to humans]. The animals will be left to care for it themselves. That seems very fitting with wolf and bison and wild boars" (B: appx 3, 1). Gribskov being off-limits seems to be the primary concern around the fences for many users.

¹⁴ Source of the photo: https://museumns.dk/events/guidet-tur-store-dyrehave-en-tur-i-verdensarven/

6.2.2 Limited access

When deciding to fence the area, fencing *out* the locals becomes a significant matter of concern in the controversy - a total of 21 of the hearing inputs from citizens (of the total of 33¹⁵) mention the fence or access to the forest, excluding any input that only mentions the fence in relation to animal welfare: "We care strongly that the public should continue to have good opportunities to fare in the nature of Gribskov. We want to make sure that the fence does not hinder or render difficult the daily access which the citizens of Kagerup have had for over 250 years" (Appx 4, 23). The fence interferes with access. Old paths and entry points into the forest will no longer be available; only some will be kept. As a citizen responded in the hearing:

"Overall, I am not satisfied with an "animal park" with fences that makes it very difficult to fare in Gribskov. That the Minister tells us that we can easily use the national park anyway does not make our experience any better. Compared to today, it is a degradation, and therefore it is giving lower priority to the current users of the forest." (Appx 4, 26).

In this response, the fence demotes the entire forest area, compatible with B's notion that even if the fence is out of sight, it still acts to impair the experiences in the area. Indeed, the fence can act as a barrier to entry into the park, not only in its physical manifestation but also by creating an unwelcome atmosphere:

"Too many fences and signs are a limiting psychological factor. - How many [walkers] will end up turning around when facing a sign saying "access at your own risk" and a list of restrictions?" (MIM 05/05/21).

As evident, the limitations to access is a matter of concern that gathers a quite large part of the local public. To others, such as S, it does not seem to be a significant concern, albeit it will be somewhat annoying: "I of course think it is a bit annoying that it will be fenced in, and it will become a bit more inconvenient" (S, appx 3, 6), as she mentions later: "I assume there will be a gate" (S, appx 3, 6). The locations of gates in Nødebo, where S lives, is, in fact, a small matter of concern related to the fence: "As a citizen of Nødebo, I am puzzled that the fence is placed so relatively close to the city. When you, as many do, enter the forest via the school path, you will quickly be met by the fence and can only choose to go either north or south" (Appx 4, 46). Seven of the hearing responses mention this school path, arguing that many citizens of Nødebo use this path as the key entry point. One response somewhat sarcastically notes: "If it is because the employees planning the Nature National Park do not know how citizens in Nødebo use the forest, I would suggest a joint walk along the future fence, to show them where the paths are" (Appx 4, 4). While the hearing process did result in a gate being placed by the School Path, it does emphasise that including the local public is important if the actors behind the project do not want it to seem as if it is: "imposed from "outside," with little consideration for local interests" (Lorimer et al. 2015, 52), as existing literature on rewilding already highlight.

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¹⁵ Five of the responses are identical with responses to the other of the first NNP in Fussingø, with the same authors. Therefore, it is difficult to know if all responses are submitted by locals or by people with a more general interest in (or concern over) the NNPs.

While to some, the fence lead to a degradation of Gribskov overall, to others, it is only a minor inconvenience and not enough to hinder their access - as long as gates are placed strategically. However, it is clear that there does not seem to be anyone enthusiastic about the fence; rather, it can be seen as a necessity to allow for other purposes of the NNP to exist. Moreover, much like the fence is a fluid object concerning wild/non-wild debate on herbivores, so too is the fence a fluid actor concerning outdoor life for some, it is a tool to create exciting experiences. To others, it is, as evident above, a limitation to outdoor life.

6.3 Outdoor life: Hindered or enabled?

As is evident from the case description, it is not the intention that the fence or the NNP should hinder outdoor life for the locals and visitors: "The new Nature National Park Gribskov shall, besides increasing biodiversity, supply new opportunities for the citizens" (Naturstyrelsen 2021, 34). This closely ties to the different uses of the park, and much like the Zimbabwe Bush Pump (Mol & de Laet 2000), the forest of Gribskov has so far been serving many purposes, tied to different realities that have (for the most part) peacefully coexisted in the forest; mountain biking, horse riding, dog walking, mushroom gathering and many more activities. Where the question raised by de Laet and Mol regarding the Bush Pump is whether the technology works, in the case of the Gribskov controversy, I find that the question is instead whether the forest serves its purposes, now that it will become an NNP. When looking at the outdoor life, it is clear that this is not answered with a clear-cut yes or no, but rather is a matter of the fluidity of the park.

6.3.1 Herbivores - dangerous or exciting?

The large herbivores enter the networks that shape the realities of outdoor life. For some, the herbivores offer exciting opportunities for new experiences in Danish nature, as J expressed when I asked him about whether he was concerned over the height of the fence: "I think it is fine. I focus more on all the interesting things, that there will be moose. When I was little, I remember, because there were sometimes some moose that swan over (from Sweden). And maybe you would see them" (J, appx 3, 7). Others agree with this sentiment: "Amazing initiative! It is going to be intriguing. I am especially looking forward to meeting all the large animals and to see their effects on nature (S)" (NST 30/04/21). Here, the NNP offers new purposes for the forest; the added object of moose and other herbivores brings new opportunities for outdoor life. Further, these new opportunities are fluid as well, as the herbivores act not only as fascinating animals to see, but their presence has fascinating effects on other parts of the NNP: "To go on exploration in a large area, with large [herbivores] and experience the animals' natural behaviour, the dynamic that they contribute to and the effects they have on nature gives an indescribable joy and will lead to gaining new perspectives on one's own existence" (MIM 29/09/21). In these different enactments, the fluidity does not cause any tension; rather, the realities are connected and even include one another; the purpose of setting in the herbivores is their (apparent) effect on the rest of the species in the NNP, and experiencing their effects on nature also entails experiencing them in nature: "what is 'other' is also within" (Mol 1999, 84).

However, to others, the herbivores present as dangerous - and they do so in a sense that shakes the ground of several purposes of the forest: "I know that you have NOT made a risk assessment of faring amongst the herbivores. You [the NST] and the minister claim again and again that faring is completely possible, no matter that in similar enclosures for example in England, people are killed every year" (MIM 14/10/21). A risk assessment, or rather the lack of one, becomes an essential object in enacting the dangers of the herbivores. Further, the commenter links to a news article (Pidd 2020) and a study (Murphy et al. 2009) that has found that between March 2000 and March 2020, 98 people were killed by cattle in England. These articles are new representations, presented as matters of fact. Thereby, they become additional tools to enact the dangers of the herbivores. However, the articles primarily mention farmers of cattle, or private persons getting in between a cow and its calf as the victims - something that C knows should be avoided: "Well, the first time my first cow had a calf, I wanted to get a little closer to it, and then she came [mimic an angry aggressive cow]" (C, appx. 3, 4). This is the reason that bullocks were chosen for the park (Naturstyrelsen 2021). However, instead of indescribable joy, the bullocks lead to indescribable fear, even for people only enjoying a walk in the park. This is something that S can relate to, despite this not being as garlish as fearing for her life: "I like to walk alone in the forest, and sometimes I will be listening to something [with headphones], and I would be very sad to get shocked. You know, all of a sudden there is this huge cow standing there. I would be a bit frustrated by that" (S, appx 3, 6). So for regular users of the forest going for walks, their usage can be either denied or somewhat disturbing, albeit not a complete hindrance - S notes that she does not yet know if she will feel as safe walking in the forest, for instance when it is dark, despite her saying that: "I'm sure that that such animals are more afraid of me than I am of them. It is just the thought" (S appx 3, 6). The fluidity of the herbivores in enactments of outdoor life thereby does cause some tension.

Walking in the forest of Gribskov is challenged, albeit according to S it is a matter of uncertainty, and time will tell whether it will feel safe for her to walk amongst the animals. However, some argue that certain population groups are even more disturbed in their access:

"Fences and large herbivores does not go well with groups of children will be in Danish nature, you are excluding all club activities involving children in nature!" (MIM 21/09/21)

B also mentioned children and their safety regarding the herbivores, and as we walked past a small white house, she said it was an institution "for people with dementia. Who come from Hillerød municipality and are there during the day. They walk around here too, and they are not totally sharp. I am also worried for them." (B, appx 3, 1). So while it may feel uncertain for healthy adults to walk around the NNP, the elderly and children are now included to represent the dangers further.

The fear of the herbivores does stretch from walking in the park to include other recreational activities: "No, it will no longer be possible to ride, walk your dog or be on MTB [mountain bike] anymore. The risk is simply too large... It is simply not okay that you are limiting/hindering access to the forest that we are all paying to. It is a big NO THANK YOU from here. [2]" (MIM 17/09/21). As this comment reflects,

the issue with herbivores extends to different park usage domains, from walking dogs (in line with the above reflections) to mountain biking. However, for riders, the unpredictability in relation to the herbivores is double-sided; their own horses can pose a risk. B, C and S¹⁶ all own and ride horses, and they all mentioned that they will no longer be riding in the forest, despite different reasons: "I would not ride through that area. No, I would simply not because I don't know how my horses would react to a moose. Deer - never mind. Cows - no worries... I don't know - moose are way bigger. And then I'm thinking: If I walk towards those cows [points at the cows in front of us], then they will move. They would. But I'm not sure that a moose would" (C, appx 3, 4).



Picture 7 C's cattle that she knows will move when walking towards them.

For B, the cows are, however, part of the issue, as her horse is not fond of them (B, appx 3, 2). The issue for riders thereby implicates the agency of both the herbivores in the NNP and the agency of their horses.

In different enactments yet, the herbivores actions can serve as a learning opportunity: "Many comments are saying 'but people are going to be in danger because of the animals': One of the most important factors is exactly that we humans have to once again learn how to be around animals!" (MIM 05/05/21). And for others yet, it seems that there is no problem at all: "I dare to both walk my dog and ride my mountain bike, and apparently I will have the entire Gribskov to myself " (MIM 17/09/21). However, for some, it seems that the enactment of the NNP as a place for enjoying the effects that the herbivores have on nature cannot be compliant with the enactment of the NNP as a place for outdoor activities: "The purpose with Nature National Parks is unclear in the proposal because it aims at unifying two incompatible options: interesting nature experiences, calm and immersion versus outdoor life and tourism" (Appx 4, 57). Here, the comment draws out the clashes of realities between different outdoor life in the NNP.

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¹⁶ S does however not use Gribskov for riding, but says that she would not feel safe doing it with the herbivores there.

6.3.2 Aesthetics

As became evident when reading literature on rewilding, aesthetics in rewilding projects are different from what users might be used to and can be what Prior & Brady (2017) calls *unscenic* or *terrible* beauty. Similarly to their findings, it is evident that the users of the NNP have clashing realities of what is aesthetically pleasing and what is not. For some, the changes in aesthetic are displeasing and affect the experience of outdoor life:

"B: Let's go up and look up here. Here we have one of our very best mushroom areas. And then I'm thinking that if bullocks are to walk around here, then it will be over with mushrooms. Because they stomp like crazy.

A: Okay. But I thought it was exactly something like mushrooms that it was beneficial for [setting out bullocks]. That it is the entire reason; to increase these smaller organisms?

B: Yes, but if you look where a herd of bullocks have been, you will just see that it is completely trampled, mud that is. Of course there will be some mushrooms spread around, but that is often a bit down hill" (B, appx 3, 2)

For B, mud, wet paths, and other aspects that make the area impassable seem a great matter of concern regarding aesthetics. This is something that J can see as well: "I will also say that when you see places where there are lots of animals, you can see that it is really stomped down... Maybe there will be less flowers" (J. appx 3, 7). Further, the herbivores once again prove to be a source of matters of concern, as their hunger is regarded as displeasing to watch - what Prior & Brady (2017) names terrible beauty, some publics find to be just terrible: "How long can you walk before meeting a dead horse, cow or one with a dead foul/calf hang out of the birth canal? How long before you meet a cow with the uterus hanging out? That unfortunately often happens for cows that calve..." (MIM 14/10/21). Similarly, B notes: "We have worries that they are going to put out carcasses. So that there will be dead animals and rotting and illnesses and so on. And the thought is uncomfortable. And it is not something that belongs here" (B appx 3, 2). Thereby, the challenging aesthetics that B and others find in the NNP hinders their enjoyment of outdoor life. However, others do find the notion of terrible beauty to be aesthetic in itself: "how do you think wild nature is? It is tough and harsh but it is also beautiful and vigorous. To get thin and fat is part of the natural" (DN 25/09/21). And others yet find the potential effects on biodiversity to be aesthetically pleasing: "The stag-beetle, king of the beetles. Does that follow at some point? Could be very exciting" (MIM 05/05/21).

6.4 Biodiversity: Worth prioritising?

As presented in the introduction to this thesis, the entire reason for creating the NNP is to increase the biodiversity in Denmark and decrease the loss of threatened species. However, when looking at the controversy that is sparked over outdoor life in the NNP, it is evident that the effect on outdoor life leads to controversies over priorities; that the scientific enactments of nature spills into and interfere with the everyday enactments of nature practised by locals - how much must different parts of the outdoor life compromise in order to attain higher biodiversity? Or the well-being of the herbivores? Moreover, *is* biodiversity even important?

6.4.1 Compromise for whom (or what)?

It is evident from the above analysis on outdoor life that some user groups do not find it possible to use the NNP in the same way as they are using the forest now. However, when discussing the effects on outdoor life, a disagreement over *who* or *what* is compromised in the NNP arises. As mentioned, the NST emphasises the opportunities to continue any outdoor life in the park, but this leads to new push-back from some users:

"What is the point, when now that nature is finally the first priority, then all kinds of sport- and outdoor life will still be allowed? How does that benefit nature and biodiversity?? We humans must now take a step back and in a national park fare entirely on the premises of nature. We should hurry up and have this national park be accepted by international standards. That will not be possible if we accept all this [outdoor life]!! (MIM 05/05/21).

So now a new question is raised - who is truly compromising here, nature and biodiversity or the outdoor life? B raises the argument that this is not because she does not want biodiversity when we were talking about the limited access:

"It is not because we do not want biodiversity. And I'm really sick of reading all the allegations that it is because we are so selfish, all of us who are saying that we don't want this shit... Because we are actually just normal people, who are very worried. And I love the forest. I live here, so why should I have some... I mean, some selfish opinion that the forest is only for me? I mean, I know we all have to be here, also the flowers and the bees and all of that" (B, appx 3, 2).

However, she later notes that there are certain things that are not worth compromising.

B: "If it is to benefit something... It goddamn has to benefit something very, very, very, very important before you take in animals as tools and let them suffer. It has to be vital for some humans or some children or something or... I just don't think that it is. We're not there *at all*."

A: "No, it is vital to some beetles, some fungi and some butterflies and the like. What do you think about that?" B: "Yeah, it does not measure up, I think. No, I just don't think so." (Appx 3, 3).

Overall, it seems that while biodiversity is not *irrelevant* to B (she often brings up other types of initiatives that enhance biodiversity), there are some clear limits to how far practises to increase biodiversity can go. For many people, the line seems to be drawn at the large herbivores: "Biodiversity is fine... We need all kinds of nature, just not at the expense of the large herbivores" (MIM 05/05/21) or "How do you feel about all the animals that are mistreated, suffer and die slowly, for the sake of ruined nature and biodiversity. If you think that rewilding in Rune E. Larsen, Rasmus Ejernæs and Wermelin's way can save anything else than carcass beetles and bluebottles, think again" (DN 27/09/21). What is evident in these reflections is that the traces of the wild/non-wild debate have a significant role in how people judge the project overall, not only in terms of the treatment of the animals but fundamentally whether the use of large herbivores can be justified in the quest to attain biodiversity. For J, the choice of herbivores in NNP Gribskov rather represents a compromise in favour of outdoor life, which he considers unfortunate. He would have preferred aurochs to the bullocks: "I think that when something important finally happens, and a big step is taken in this area, it is a bit annoying that it is just more of the same. That it is just

completely regular cows doing nature preservation, just like it has always been. And then I think that it is a bit boring that they will not, for example, set out wild boars, because that is very obvious in a forest like Gribskov" (J, appx 3, 7). What is nonetheless evident from these perspectives is that there is a definite clash in the realities of who or what is compromising in relations to the NNP; as evident from the discussion on outdoor life, for some it is the users of the park that are being forced to compromise their access and safety in the park. For others, it is nature and biodiversity that must compromise and make space for human use, an argument which makes J dryly note: "I also think that it is annoying that there are some animal species that go extinct, just because there are someone who thinks it is annyong that there are not enough gates" (J, appx, 7). For others yet, it is the large herbivores and their well-being that is compromised for the sake of beetles and butterflies. It is clear that there is a dispute over priorities in the NNP and that every enactment of the purpose of the NNP or the forest cannot exist without causing tensions and clashes. Further, it seems that in the shape that the NNP has in the project proposal, none of the purposes are achieved fully. However, some argue that compromise is the right approach to increase nature and biodiversity overall:

"I first and foremost want more nature, and I can live with the biodiversity potential only being 90% fulfilled in most places, if it paves the way for reasonable forestry, outdoor life etc. It is my belief that we will get the best results with an approach that balances with the rest of society. That of course does not exclude untouched and protected areas, where all human activity and faring is prohibited" (DN 18/06/21)

6.4.2 Are NNPs the way?

The clashing realities over what is forced to compromise in the NNP are all connected to different perspectives on the NNP management plans, thereby the approach to rewilding that the MIM and the team of experts have applied to the NNPs. Nevertheless, concerning biodiversity, a dispute over whether rewilding is the right approach is raised - often based on these exact compromises that are made above. Some are certain:

"Rewilding is the method to get more nature... Otherwise, the area would become overgrown and all the flowers would disappear... What do you want. Densely vegetated shrub with low diversity in species? Because that is often the result, when you don't have the large herbivores". (DN 18/06/21)

But others argue that the money that the NNP will cost is better spent somewhere else. C, for instance, argues that: "You can have the cake and eat it too" (C, appx 3, 4). She argues that she has done so much for biodiversity on her farm, and that the money would be better spent in places like hers: "Why make it such an expensive process, where you have to make a huge fence? I know how much work there is with fences. It will be so expensive. It cost 88 million to establish it. Then there is a storm, trees falling. It is a lot of maintenance. And why should the state pay for all that if a farmer could do it?" (C, appx 3, 4). C believes that changes in the subsidies to farmers would be a better place to start increasing biodiversity, to heighten the incentive to establish farms for nature preservation, and a bonus to this would be that the supervision with the animals would be possible as well (C, appx 3, 5). Others, however, do not believe that creating more sustainable agriculture is the best approach; rather they would spend the funds buying land: "Buy new areas for nature rather than fencing in the existing ones. Make agreements with

agriculture and municipalities and create wild corridors throughout the country. We want more biodiversity and more nature everywhere! Not just in small enclosures here and there" (MIM 03/05/21).

For others yet, the NNP and its approach to rewilding is not extensive enough:

"I must admit that even though it is lovely news... it is somewhat odious and is still far below international standards... The so-called "nature national parks" we are talking about now will not be real National Parks, but correspond with category IV [of IUCN's protected area categories] which is about habitat- and species management. We can call them what we want, but a Fiat does not become a Ferrari even if you call it that" (MIM 06/05/21).

This comment draws in representations of management styles to argue that the NNPs are not the right approach to increase biodiversity, comparing it with international standards. There are pulls in opposite directions from different realities related to the NNP. Some argue for more comprehensive approaches to conservation than the rewilding approach in the NNPs, while others argue for shifting the focus onto agriculture. Others yet, such as B argue for things to stay somewhat the same:

"You can see in Gribskov, there has been research before and after they changed to close-to-nature management. Biodiversity has become better, so it is moving in the right direction. So you can just do that in other places as well. Do it everywhere! And then take out lumber, as you need it, and then leave the forest alone. And then take [lumber] again. It is only trees that are growing that are converting CO2..." (B, appx 3, 2).

B raises the argument of not changing a practice that is working. Overall, despite biodiversity not being the *first* priority for every issue public that gathers in the case of the NNP, it seems that every issue public does find biodiversity to be a matter of concern - only the solutions to increasing biodiversity are different. In the quote above, B mentions biodiversity, but she also shifts the site of the debate on biodiversity onto another implicated aspect of the controversy, namely the effect on climate and greenhouse gas emissions.

6.5 Climate: a contained debate?

As is evident from the maps of the debate, there exists a debate on the climate effects of the NNP, but while the other discussions are related in several messy and entangled ways, it seems from the maps that the debate on climate is separate from the rest of the dispute - an utterly separate enactment of the purpose of nature. There can be little doubt that the climate crisis is a great matter of concern to a large part of the public, and this potential conflict thereby leads to controversy and raises a central question that leads to disputes, as the sentiment in the quote by B above reflects: "Is biodiversity more important than climate?" (MIM 26/10/21). So while the case of climate seems to be separate from the rest of the controversy on the maps, when looking into the data, it becomes clear that it is entangled.

Many commenters are finding a significant issue with the effect the NNP has on climate: "CO2 and biodiversity. For the sake of climate we should be planting forests and not eat meat. How does that align with felling parts of the state forests and setting out large herbivores instead?" (MIM 05/05/21). The project proposal itself mentions that there might be a negative effect on emissions: "The effects of

establishing a nature national park in relation to climate, hereunder greenhouse gases, is complicated and difficult to quantify... It is however the expectation that there as a result of the transition to nature national park will be a collectively negative effect in the absorption of CO2" (Naturstyrelsen 2021, 49). It is a complicated calculation, as there is an entire network of effects in changing the forestry practices something that is echoed in several comments: "Has the CO2 problem disappeared? You are coming up with "solutions" that are giving a greater CO2-emission. Lumber will be imported from foreign countries at the same time another Danish trade is buried. It is SO terrifying!!" (MIM 26/10/21). For some, it is a wrong approach when it negatively affects climate change. For others, it seems that the matter of concern of climate is separated from that of biodiversity: "In unmanaged forests and similar projects, Co2 absorption is completely uninteresting, as it is based on the premises of biodiversity and nothing else. Then we can consider climate in production forests" (NST 19/12/20).

For some, the effects on climate is somewhat connected to the production of lumber, such as when B mention Danish traditions:

"We have such proud traditions in Denmark with carpentry and fine wood decorations on buildings, furniture, all kinds of things... And where will we get [lumber] from then? Well, then we will have to get it from abroad. Then it has to be transported even further, that costs on CO2, it costs on price, it will become more expensive" (B, appx 3, 2)

Others claim that there is no reason to worry about the CO2 emissions and further shift the side of the debate towards the profit of lumber production.

"I don't know where you get the CO2-numbers from, because an unmanaged forest takes in more CO2 than a production forest in the first many years, and will never emit more than it absorbs. And it is not the state's responsibility to grow crops, so there must be private initiatives if there is a wish to produce more lumber in Denmark... And no matter what, this is about nature and biodiversity, nor about profit for once" (NST 27/10/21).

In this enactment, the question of what is more important, biodiversity or climate, is thereby rejected and shifts to being a question of biodiversity against profit, something that is (from this perspective) easier to choose between.

6.6 Expertise: who to ask?

As I have made clear by now, this research aims to understand the *public* controversy around NNP Gribskov, contrary to much other STS controversy research that focuses heavily on experts (such as Callon 1984). However, when staying true to the perspective granted from Latour, viewing how different publics represent the objects of dispute, it is evident that different publics draw in or question expertise and scientific results and use these results as means to represent their reality. This shows a clear connection in this controversy between the action of changing sites in ontological politics, and the object oriented democracy and representations of facts. Different issue publics in the disputes shift sites to different fields of expertise, where their enactments can be presented as facts, resulting in their enactment of reality, which seems to be the right approach to the NNP. As a scientific foundation to the decision to create the

NNPs lies several reports on the state of Danish biodiversity, significantly the Danish Red List (Moeslund et al. 2019), an expert report from IPBES in Denmark (Barfoed et al. 2020) and later in the process a report on the effects of rewilding (Fløjgaard et al. 2021). Central to the debate over expertise in the project is that several of the members of the appointed scientific group, guiding and contributing to the concrete plans of each park, are also scientists that have contributed to those reports. This entanglement is something that leaves marks on the debate on expertise in the project.

6.6.1 The red list - is there a crisis in biodiversity?

One scientific fact that has become a matter of concern and highly disputed in the public debate is the Danish Red List, and the status of this list. The 2019 Red List shows that 41,6% of the registered species are red listed, meaning that they are threatened, vulnerable or almost threatened, while 17,3% are threatened, compared to respectively 35,3% and 18,7% on the last Red List from 2010. However, the data collection¹⁷ and the categories included on the Red List¹⁸ has changed from the previous Red List, and this causes great dispute over whether the red list has been meddled with - and by extent, whether there even is a crisis in biodiversity: "What crisis in biodiversity? Is it the one Rasmus Ejrnæs claims there is, and that he has made the entire government believe in? He cannot count, and he has cheated a lot with the numbers. When they are counted correctly, by people who know how, it is only an increase of 8 per thousand in 10 years" (DN 27/09/21). This mistrust in the red list can be traced back to the Master of Forestry Søren Grene, who has questioned the results of the Red List and wrote an article in Frederiksborg Amt Avis (Grene 2020), where the method for comparison between the 2010 and 2019 Red Lists were questioned:

"Based on this widespread and very serious misconception of the Red List and to ensure that I had not misunderstood everything, on the 24th of May I started a dialogue with the AU headship. In AU's response the university established that "species in Denmark collectively are a little bit more threatened since 2010". Concretely, this entails around 45 of around 5500 species have been estimated to be a little more threatened than they were in 2010, corresponding with around eight per thousand. Not to trivialise, but there has not been a tremendous decrease over the past 10 years" (Grene 2020)

This statement in the local paper (and later on different online blog sites) seems to be what has sparked the debate over the red list as a fact; indeed, what has happened is that the Red List has become a matter of concern to both opponents of the NNPs and advocates, but each side utilise different representations of the red list.

"So you are apparently closing your eyes to the fact that Aarhus University has denied and apologised/explained why the red list looks like it does?" (MIM 30/10/21)

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¹⁷ There are several changes in the data collection; new knowledge on certain species, a larger population of species accounted for, the taxonomy of species have changed, mistakes have been made in the past red list, and other reasons.

¹⁸ In 2019, the category reflecting a lack of data on the species were included on the Red List, which it was not in 2010 (in comparisons, the category has been accounted for on both lists)

"What do you think Aarhus University should have apologised for? I rather think that there are many who has an interest in throwing suspicion on the Red List, because it is an inconvenient proof that our way of managing and utilising nature today has a lot of negative consequences to many species" (MIM 30/10/21)

On one side, the manipulation of the Red List is represented as a matter of fact, as it undermines the entire project of the NNPs. On the other side, the Red List emphasises the crisis in biodiversity and enhances the need for the NNPs. Further, on both sides, the question of what is at stake involves the crisis of biodiversity, albeit the realities clash once again in this matter of concern. The manipulation of the Red List not only undermines the NNP but the entire crisis in biodiversity - it simply does not exist: "Now it HAS been established that the red list was manipulated and that we actually do NOT have an imminent crisis in Biodiversity" (MIM 26/10/21). However, no matter how the numbers are calculated on the Red List, to another side it proves the existence of the crisis: "The amount of threatened species have decreased (very little) but this is due to including several more species in 2019 than in 2010. If you read the assessment, it is evident that there also has been a deterioration of their state, i.e. they have become more threatened. A comparison of all the assessed species does not make any sense, and that is what the scientists have explained on the website" (NST 31/05/21). Different realities once again end up in a clash in this controversy, when the object of the Red List not only is fluid but also is an ontological enactment of conflicting facts. For instance, Søren Grene and his expertise on the subject of biodiversity is questioned in itself: "Neither the author (of a previously shared opinion letter on a blog) nor Søren Grene has a shadow of scientific knowledge or competence to speak as they do on the red list and several of their claims are directly untrue" (MIM 11/10/21). Thereby, the question becomes not who are experts but who are relevant experts in relation to the NNP?

6.6.2 Who are experts?

Prior to the question of who is an expert comes the question of what the issue of debate is. C mentions that she feels that some experts have been overlooked: "That is what I think about the Nature National Parks, it has become one sided. One scientific group. And that means that there are some forestry people, there are some agronomists, there are some veterinarians who were just [mimicking sweeping sound]. We don't want to listen to them... Yeah, it is lacking like an all round, all factors accounted for? That is what I am missing" (C, appx 3, 5). As C brings up, the issue publics that gather around expertise in the project are primarily parted into three groups. While C mentions agronomists, this seems to be more of a personal bias with her background as an agronomist (in all Facebook comments, only once is agronomists mentioned, and this is in a comment listing many different educational backgrounds). However, the three other groups she mentions are heavily debated; forestry, veterinarian and the scientific group of biologists.

6.6.2.1 Forestry

For C, and several others in the debate, the forestry experts are a significant source of knowledge: "I recognise that the biodiversity can be increased. Whether it is in exactly those forests, and how to approach, I would say I don't have enough knowledge. There it would be the Masters of Forestry I would turn to. And they have said that they think there is a high score [in biodiversity], so therefore I'm left thinking "hmmm"" (C, appx 3, 5). Here C draws on forestry experts to judge the current state of

biodiversity, and from different Facebook comments the book Klimaskoven (Madsen et al. 2019) seems to reoccur in debates on how forestry experts have opposed the effects on biodiversity that the NNP has, such as in the comment: "the to this day only professor in forestry at the Forest School, Institute for Geoscience and Nature Management by Copenhagen University, says in the book "Klimaskoven" (2019) that biodiversity, including the presence of mushrooms and beetles, is greater in the standardly managed beech forests, than in unmanaged forests, because the forestry ensures greater variation" (MIM 26/10/21). So from this perspective, it seems that the NNPs and more unmanaged forests will decrease biodiversity rather than increase it. However, the other party in the controversy does not regard forestry experts as relevant sources in the case of biodiversity: "Firstly, a Master of Forestry is someone who is educated to produce lumber and not to focus on nature/biodiversity" (MIM 26/10/21) and "Lumbers will speak for the case of forestry. These are not the ones to call to get impartial information on forestry versus biodiversity" (MIM 26/10/21). Thereby, the impartiality is questioned on behalf of the forestry experts. Are they the only ones considered impartial?

6.6.2.2 Biologists

Of course not. Just as is evident from the comments on the Red List, the central biologists in the scientific group are regarded as impartial too. For instance, when the previously mentioned IPBES report (Barfoed et al. 2020) is brought in as a representation from the advocates of the NNP:

"A consensus paper composed by rewilding scientists can be affected by the same challenges as a consensus paper about pig farming by Danish Agriculture & Food Council."

"Excuse me, but you wrote [previously in the comment thread]: "You are seeking alternatives, and I think we should listen to the science". In the entry above, you can listen to what neutral scientists say about the topic. When you compare a group of scientists with a political interest organisation, I have to ask myself if we live on the same planet." (DN, 14/04/21)

So from the opponents perspective, the biologists behind the IPBES report are partial, while for the advocates, they are "neutral scientists". The advocates generally find that there is a broad consensus on the effects of rewilding and usage of large herbivores: "there is evidence and wide consensus from far most biodiversity researchers [that rewilding works]. I think you should make sure to take part in the research, if you have so much expert knowledge????" (MIM 19/09/21). However, when I asked B if there were anyone she trusted in the dispute, she answered:

"No. They don't really dare to say it. Then they will not have a job anymore... There is the one who is the only educated scientist in biodiversity. That Bent Odgaard. He started the entire dialogue, or discussion. It was actually him that caught my attention. Something he wrote or was quoted by... And then it occurred to me. He is actually all alone. Really, all the others who are joining [the opponents], they are coming from outside the system. They are pensioned, or people working with it in their free time, or are fools like me..." (B, appx 3, 2)

B mentions the biologist Bent Odgaard, and while he is not "the only educated scientist in biodiversity", he has specialised in palaeoecology and has been outspoken in the debate, arguing that the foundation of rewilding is based on a myth about how Danish nature used to look, which he finds to be a false

representation. Odgaard develops his criticism with notions of a baseline for Danish nature before being affected by humans, approximately 6000 years ago, thus following notions of rewilding presented in Jørgensen's (2015) first two definitions of rewilding. From this stance, he argues that large herbivores and open landscape is a misunderstanding of how Danish landscape looked, and thereby the choices made in the NNPs are based on wrong impressions of wild nature (Odgaard & Klamt 2021a & b). Odgaard himself and his understanding of the Danish landscape reoccurs in the debates:

"Why not listen to those who really know something, experts (the veterinarian organisation, Animal Protection Denmark etc.) and real experts, like Bent Odgaard, who is actually a professor in it" (MIM 15/06/21)

"There has historically never been that amount of wild, large herbivores in the forests, so that these by their own force have been capable of keeping forests open?" (Appx 4, 17)

However, even when representations of a different scientific, even biologist, perspective are used to strengthen the argument against the NNPs, the advocates of the NNPs find arguments why that representation is false: "About Odgaard, he is not super relevant to draw on in this instance, as he is talented at pollen analysis, fossils and other paleontological areas and not as talented in natural ecological processes" (MIM 26/06/21). Thereby, even if a biologist and paleoecologist such as Odgaard questions the foundation of the NNPs, it does not seem to shake the ground of the reality that the NNPs are the right solution to the crisis in biodiversity.

6.6.2.3 Veterinarians

While there is a more existential debate on the foundation and legitimacy of the NNPs with an anchor in different biological perspectives and different expert groups' perspectives, there is a debate that concerns the right expertise to develop and grant inputs to the NNPs. This is related to veterinarians, as evident from section 6.1.1. Are their perspectives even something to consider in relation to the NNPs and thereby include in the expert group? For J, he believes it to be questionable, as he finds that veterinarias are used to dealing with something completely different: "Veterinarians are mostly educated to care for agricultural and domesticated animals, and not anything about how to care for moose or keep up with wild ox or... In that way, I think that it is fine that they are not in the expert group. Because their starting point is a different one. The conditions for those animals [agricultural and domesticated], they live in a totally different way than these [wild] animals will" (J, appx 3, 7). But for many others, veterinarians offer important perspectives to the treatment of the large herbivores: "why did Lea Wermelin refuse to include veterinarians in the group to speak on animal welfare, Biologists are not experts on animal welfare. There you need the correct professional knowledge and competency" (MIM 11/10/21). However, the counter argument to this thereby becomes: "This is not about animals needing treatment. This is about ensuring the habitats for as many species as possible and horses are not worth more than beetles and butterflies in an ecosystem. Therefore, veterinarians are not experts in rewilding" (DN 17/09/21). The debate on veterinarias has led to changes in the appointed scientific and interest group - a veterinarian has been included in the scientific group (Margit Bak Jensen with a specialty in behavioural needs and animal welfare), as well as Professor of Bioethics, Peter Sandøe. Further, the two organisations DDD and DOSO were included in the stakeholder group, as mentioned in the case description. Thereby, there have been

changes in the otherwise disputed expert group, officially acknowledging the speciality of veterinarians as relevant to the NNPs, despite certain publics not regard their expertise relevant in the parks. However, when raising Mol's final question of ontological politics, *how to choose* (Mol 1999, 85), it is evident that from the outset of establishing the parks, the outcome that was sought after was the outcome that biologists could provide; their expertise was prioritised over that of forestry and veterinary science.

7. Mapping out conclusions

This research has aimed to map out the public debates of the controversy over Nature National Park Gribskov, with the problem statement asking, "How does the rewilding project Nature National Park Gribskov interfere with public enactments of nature, and how do different publics represent matters of concern over nature?". This thesis has thus both contributed to an academic call for such research (Linnell et al. 2015), but it has also contributed to mapping out a topical and ongoing problem locally in Denmark. I have approached this quest with a large set of data on the controversy as it unfolded on Facebook, in public hearings and in interviews, and applied perspectives on how controversies, e.g., "matters of concern" (Latour 2005) or "issues" (Marres 2005), spark publics into being concerning both conflicting, but also otherwise seemingly co-existing, ways of enacting nature as a response to the dominant political enactment of nature-as-means-for-biodiversity through the development of the NNP. I have aimed at not applying an a priori understanding of the case but instead stay open to the issues that the public of Gribskov presented to me. At first, I used digital methods to establish the primary topics of dispute, namely large herbivores, the fence, outdoor life, biodiversity, climate and expertise. I attempted to sort out the highly entangled networks that appeared in maps created from Facebook comments and the public hearing for the NNP by tackling each of these topics one by one. However, it has become increasingly evident throughout this unravelling that the objects of debate cannot be neatly separated in this controversy; they are enmeshed and connect to one another in a myriad of ways, even extending far beyond the aspects that I have been able to cover in this thesis.

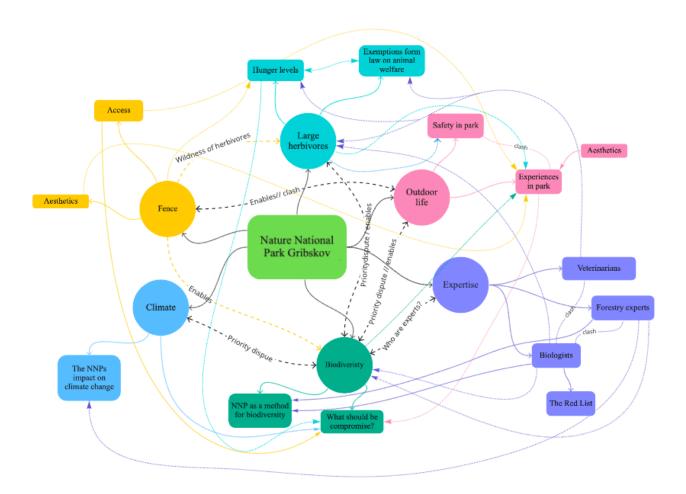


Figure 7 Network of issues identified in the thesis. Based on the disputes I have unfolded in the thesis, I have drawn a network of how issues within the controversy are connected.

Some of the entanglements that became visible on maps created from Facebook and the hearing have been reaffirmed, as I have explored the field of the NNP qualitatively, such as the entanglement of the large herbivores and the fence. It is evident that these objects are acting in multiple ways in their connections to other objects. Furthermore, outdoor life proved a great matter of concern to locals, and the NNP enacted both new opportunities and new restrictions. However, some factors were not immediately clear from the initial mapping of issues; expertise has proven to be an underlying factor in several identified issues, which did not appear as distinct on the initial maps, aside from one frequently mentioned person from the scientific group. So too did the issue of biodiversity prove to be an underlying factor to several disputes, as it became a matter of prioritisation between different concerns. The effects that the NNP has on climate initially seemed separate from other issues, but when exploring the field, it was apparent that the issue was related to that of biodiversity as a priority dispute.

Some disputes have proven to fundamentally impact most objects of the NNP; clashing realities of what is *wild* are evident in several of the enactments of different objects, and issue publics gather around the realities that the NNP is not wild is wild or could be even wild*er*. In Table 5 below, I have sketched out how the enactments of wild are enacted, which demonstrates the fluidity of the actors in the network.

Actors Realities of wild	Herbivores	Fence	Outdoor life	Biodiversity	Expertise
Non-wild	Human-bred and enclosed by fence	Not present in wild areas	Presence of unaesthetic, excluding or unsafe human initiated objects hinder outdoor life	Biodiversity is increased through close-to-nature management practices rather than wild areas	Veterinarians and forestry experts are experts on conditions in a non-wild area
Wild	Agency to choose what to eat, who to mate with etc.	Necessary to ensure wildness within	Wildness of the area enables interesting outdoor experience	Biodiversity is increased by rewilding previously managed areas	Biologists are experts on rewilding
Wilder	Holds agency, but are less wild as human-bred species	Necessary to keep non-wild out	Outdoor life should not be present in wild areas.	Biodiversity is increased by obtaining international standards of wild areas	Biologists and international standards are determining the status of wild

Table 5 Overview of how different issue publics enact *wild* in relation to objects of dispute.

Through the mapping of the controversy, I have found that the NNP Gribskov interferes with current enactments of uses and purposes of the forest in Gribskov, in multiple ways, which are connected but can lead to clashes; the fence represents limited access to some users while representing the purpose of increasing biodiversity to others. Herbivores can represent new exciting experiences in the forest while also presenting concerns over the usage of animals as tools. These and many other matters of concern were raised by publics that have gathered around NNP Gribskov to affect the politics of the case. It has become clear that several nature-cultures exist within the NNP and that these can at times peacefully coexist, while in other aspects, they cause magnificent clashes.

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