ENVIRONMENTAL CONSERVATION CONFLICTS IN SWEDISH SAPMI:

Sami Ethnoecology and the Struggle for an Indigenous Conservation Paradigm

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Abstract:

Given a backdrop of industrial land use fractures in Northern Sweden, the kind of humanenvironmental relations cultivated in Sapmi has consequences for Sami indigenous sovereignty and ecological sustainability. Critically investigating different nature relations is of significance to Human Ecology fields in order to deepen knowledge on both unintended and intended consequences of how we understand and engage with environments. Despite mutual alliances between Sami and Swedish-Western environmentalists against extractivist industries, Sami have remained ecologically at odds with environmental narratives that charge them with being 'unecological', particularly by: 'overgrazing' reindeer, herding with modern transport and opposing an increased large carnivore population on their herding pastures. The way that such critiques subvert and challenge Sami ethnoecology has remained largely unexplored. Hence this thesis investigates the struggle for Sami to articulate their own conservation paradigm in conflict and contrast with dominant environmental interests in Swedish Sapmi. Through a thematic analysis of interviews, Sami folklore, quantitative research results and environmentalist content, this research shows how a Sami conservation paradigm is limited in practice by the geographical enclosure of Sapmi, human inclusive and reciprocal and shaped by cultural subsistence practices. Within these three themes I show how environmentalism obscures the regenerative possibilities of Sami herding and subverts Sami ethnoecological relations to their landscape and wildlife. I conclude by highlighting the contributions made to knowledge within Human Ecology fields on the consequences human-nature paradigms have within conservation.

Keywords: Environmental conservation, land use, Sami ethnoecology, human ecology, environmentalism, Sweden, Sapmi.

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Acronyms:

RHC = Reindeer Herding Community (Sameby)

SRH = Sami Reindeer Herding

PA = Protected Area

IK = Indigenous Knowledge

EC = European Commission

WWF = World Wildlife Fund

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1. Introduction

When entering Gällivare, a small town located in the middle of Norrbotten county, Sweden's northernmost region, you are greeted by a sign, which at the top reads 'The Mining Capital of Europe', and underneath: 'Laponia World Heritage'. This acutely captures two dominant land use paradigms: extractivism and environmentalism - both pulling the local landscape in different directions, both seeking to define the region differently: a resource pool or a pristine wilderness. Subsumed beneath these paradigms, and wedged between the variety of demands and interests they exude, are the Sami. This indigenous group has counted this region as a part of their homeland, Sapmi, for millennia, a homeland spanning Northern Sweden, Norway, Finland and Russia. Well before the Swedish nation-state was established, Sami hunted, fished, foraged and herded reindeer in Sapmi. Today, Sami reindeer herding (SRH) lands are continually beset by intensive logging and mining, including this year the approval of a new iron ore mine in Gállok, 100 km from Gällivare and within the World Heritage Area and SRH pastures. Scholarly and journalistic investigations into such extractivist projects have revealed the consequences for Sami integrity (Sale and Potapov, 2010; Abram, 2016; Lawrence and Larson, 2017; Jääskeläinen, 2020). It is clear where Sami stand on the ecocide of their land. Then, given the neocolonial nature of these industries, the forgivable assumption is that Sami are represented by Swedish-Western environmentalism which is fighting to protect Sapmi through conservation approaches of the 'World Heritage' kind, and by allying with Sami in anti-extractivist protests. To an extent this holds true; they share a number of goals. Yet mutual alliance against destructive industries does not automatically signal widespread support for Sami ecology, nor should Sami local environmental relations be subsumed under this paradigm.

Swedish-Western environmental movements are known to pick-and-choose on which local issues they support Sami, based on their own ideologies. Where the Sami are recognized as practicing ecologists by environmentalists, they are considered poor ones (Beach, 1997:125). The most controversial criticisms of Sami are on the topics of: the status of the wolf population at the expense of SRH, the claim that reindeer are 'overgrazing' and causing landscape degradation in the Swedish mountains and the use of equipment like snowmobiles and helicopters for SRH (Beach, 2000:180). The wolf and the reindeer in particular are powerful symbols within these conservation

conflicts (ibid.). Where Sami and environmentalists do align, for example over damming and mining projects, they have had different aims and motives behind their engagement (Green, 2009:176). Responding to environmentalists' critiques, Sami representatives have argued that environmentalists are uninformed and detached romantics, unequipped with "knowledge of the facts of life in nature." (Beach, 1993:108). Internal opinions differ, but what is clear is that Sami have their own ideas about Sapmi's conservation, and are vehement against being enfolded within a Swedish-Western ecological framework (Beach, 1997:123).

As such, the World Heritage phenomenon signaled proudly in Gällivare, can be considered a continuation of conservation ideologies going back little more than a century (Green, 2009:53). Sami on the other hand, have lived in direct contact with the local environment for milenia, enacting their own ethnoecological systems on the landscape, and thus are Sapmi's original 'conservationists'. Yet their own environmental sovereignty is rarely taken seriously. If State and corporate extractivists seek to exploit and deteriorate lands and resources, long managed by Sami, environmentalists can be understood to - partly through their opposition to this - impose an alternative human-ecological paradigm on the region. Backed by Swedish-Western institutions, organizations and ideologies, this is often considered the most legitimate, righteous and authentic approach to Sapmi's conservation. This thesis deals with the Sami struggle to demonstrate and sustain their own environmental conservation paradigm up against this. Since paradigms are shaped by other group's endeavors to impose their own values, this includes an examination of Sami-environmentalist relationships (Sjölander-Lindqvist, 2011:18).

This research is motivated firstly by the need to visibilize Sami on issues of conservation and indigneous land sovereignty. In a presentation, the CEO of Beowolf Mining, the company set to mine Gállok, shows a photograph of Sapmi forest in order to smugly ask: "what local people?" (Anderson, 2018). When hearing from Swedish Sami for this research, the perceptions are that: globally they are unknown as Sweden's indigenous people, in Europe they are the 'invisible people' and nationally there is a lack of knowledge and interest in Sami issues, including amongst environmentalists. Hence this thesis is motivated to contribute to scholarship that engages in deeper recognitions of Sami land sovereignty; not as purely victims of extractivism and as more than simply 'reindeer people', but as conservationists in their own right. Therefore, this thesis asks:

in which ways are Sami-ecological relations challenged and subsumed by Swedish-Western environmentalism, and how is a Sami conservation paradigm articulated in contrast?

In order to answer this, I investigate Sami-nature relations through an ethnoecological lens: a cultural study of indigenous land and resource ecology, in order to illustrate elements of Sami conservatism that emerge against dominant approaches to nature, and form a Sami paradigm. I apply a thematic analysis to data collected from primary and secondary interviews with Sami and Sami folklore, a primary interview with a Swedish environmentalist, scientific results and environmentalist content. This produced three themes: geographical enclosure, the wolf and wilderness, and subsistence conservation. These illuminate how a Sami conservation paradigm is: (1) limited in practice by geographical enclosure, the ignorance of which subverts the regenerative capacities of SRH; (2) human inclusive and reciprocal, challenged by fortress conservation ideals elevating individual animal personas; (3) shaped by subsistence interactions, where Western animal-nature ethics subvert the sustainability of Sami-animal relationships through hunting and herding.

1.1. Thesis Structure

In this first section, I define key terms and introduce the history of Swedish colonialism in Sapmi, and the evolution into the current Sami land use and rights complex. Following this, a decolonial and ethnoecological theoretical framework for this work will be laid out, including discussions on relevant literature and core conceptual groundings. Next, I describe the mixed methods used to gather the dataset (see Appendices) and the supporting methodology. What follows is a thematic analysis of the data presented in the three themes, exploring the challenges put to Sami environmental relations in contrast with Sami ethnoecology. The final section concludes on and states the contribution of these findings.

1.2. Defining 'Sami', 'Environmentalists' and 'Conservation'

Neither 'Sami' or 'environmentalists', are homogeneous groups. Firstly, 'Sami' is not purely a group of ethnic individuals alive today but constitutes the historical culture of an indigenous past

reflected into the present; simultaneously a changing and growing culture of today grounded in ancestral traditions. Thus 'Sami' refers to a living, indigenous culture as it is engaged with by its people. Within Swedish Sami society, there are many fractures over what it means to be Sami, largely an outcome of divisive Swedish laws and policies determining them chiefly as reindeer herders (see 1.3.). Yet many Sami engage their traditions outside of or alongside SRH, for example through hunting, fishing, cooking, dance and song. Thus in this thesis, while SRH is a core ethnoecological component, 'Sami' is not a synonym for reindeer herders.

Moreover, Swedish-Western environmentalism, in the context of Sapmi, can be roughly defined by two intertwined groups, organized by the kind of activities they prioritize. The first is focused on environmental goals through the maintenance of national parks, the protection of wildlife and limiting human intervention through lobbying and activism. The second, by protesting extractivist projects in order to try to halt ecological destruction. Overall, they share a relation with Sapmi that is mostly separated, abstract and remotely decided, compared to indigenous environmental relations that are situated, engaged and grounded (Adams, 2005). This is because their ecological values have emerged from urban-industrial society, often in defiance of the destructive activities of said society, rather than through direct and consistent physical contact with Sapmi. Hence environmental activists have been shown to identify first with political activism rather than nature (Mackay et al, 2021:12). This 'politicized identity' means they are guided by what kind of environmental structures they are up against, which has been incredibly valuable in combating ongoing social and environmental injustices. Yet, it is important to consider not only what to ward off, but what kind of human ecology should be strengthened, and the conservationist role people play in that system.

Furthermore, by questing towards an indigenous approach to conservation in Sapmi, I advocate that we take Sami ecology seriously, by challenging our own ways of "comprehending human action, perception and cognition[...]our very understanding of the environment and of our relations and responsibilities towards it." (Ingold, 2000:40). Relations and responsibilities to an environment can be captured by the term 'conservation', which Dowie has defined as: the preservation, management, and care of natural and cultural resources (2009:xii). While the application of the term has been monopolized by Western conservationism (see 2.3.), there are

many ways to preserve, manage and care for an environment. In this research, the term refers to a particular set of relations between humans and a landscape, which begets a set of stewardship practices. Legislating a national park, promoting a reindeer herding system and protesting logging are all conservation activities, just different kinds. So extracted from the grip of Western hegemony, conservation can offer a neutral definition of how groups relate and deal with nature. Thus there can certainly be an indigenous conservation paradigm. Consequently, this thesis deals with how Sami present in the struggle over what it means to relate to Sapmi in a way that counts as 'conservation' up against dominant Swedish-Western environmentalism. Implicit within conflicting environmental conservation paradigms, is what nature is and what it means to be human in contact with it.

1.3. Background: The Colonization of Sapmi and Sami Land Rights

The majority of the Swedish section of Sapmi is forest landscape known as taiga - a wide-ranging circumpolar belt of coniferous forest in the northern hemisphere (Borchert, 2009:20). Its cold climate and long winters are also home to the reindeer (Rangifer Tarandus), who inhabit most taiga and tundra zones, mostly as wild populations. Reindeer have been present in Sapmi since the last glaciation (9,000 years prior), and were semi-domesticated since at least the 16th century or as early as 800 AD; the exact timing and nature of the move from hunting to herding is debated (Adams, 2005:5; Kamerling, 2017:370; Borchert, 2009:21). A primary element of Sami ethnoecology, SRH has become a monolithic component of Sami culture and economy today. However, the imposed regulations of reindeer management and Sami land rights are strongly connected to colonial processes (Brannlund and Axelsson, 2011).

During the medieval period, Sami were mostly sovereign over their lands. What followed was a period of aggressive fiscal and territorial policy by the Crown, increased settlement on their lands by christian farmers and the discovery of minerals which ignited further colonization as Sapmi was suddenly seen as a treasury to bolster Swedish imperialism (Kvist, 1994: 204-205). To open up Sapmi to farming and forestry, from the 19th century Sami nomadic lifeways were further brought under centralized control. Through a number of reindeer grazing acts (1886, 1898, 1928 and 1971), Sami land rights have evolved into limited 'occupational rights' for a minority of

herders: around 2,500 of the population are dependent on herding and 5,000 own reindeer, out of approximately 20,000 Swedish Sami (Beach, 1986:11-12; Sametinget, 2022). The 1886 Act defined Sami (indigenous) rights as herding rights, restricting hunting and fishing to herders. By the last Act (1971), this was limited to only Sami herders that are members of a Reindeer Herding Community (RHC): an exclusive social and territorial entity and an economic and administrative association that represents the interests of its members over a delimited geographical area (Horstkotte, 2013:5). In sum, the Swedish government does not recognize Sami ownership of land, instead RHC members are granted: "the right to *use* Crown Lands for their herding as a kind of privilege[...]to help them preserve their unique culture. Saami culture is then narrowly recognized by the government to mean only reindeer herding" - if a member strays from this livelihood they must give up their rights (Beach, 1990:276; Beach, 1985:18).

Thus indigenous rights in Sweden are only occupational herding rights, and not based on immemorial land rights: the right granted to those who can show blood ties with indigneous inhabitants of a land as far back as can be remembered (Beach, 1985:23). This relegation of Sami rights to occupational herding excludes many practices from 'counting' as Sami. Where many indigenous peoples are defined by a plurality of hunting, gathering, foraging, pastoralism, not to mention art, customs and theology, Sami are singularized as reindeer herdings. While the Samireindeer relationship is significant, and some argue the 'building block' on which Sami culture was founded (Beach, 1990:255), the pigeonholing of Sami into an economic and rights-based herding complex excludes the Sami majority from indigenous rights, maintains settler colonial systems and tears at the fabric of the culture. It is not that other practices, like hunting and fishing, are incompatible; herders have been known to move to particular summer pastures because of good fishing, or to free themselves of herding tasks for moose hunting in the autumn (Beach, 1990:260). They are simply not considered as 'Sami', since the Sami right is as a herder. Therefore, many Sami have no grounds on which to claim their ancestral rights as hunters and fishermen if they are excluded from RHCs. In 1983, this led to a Sami hunter without membership in a RHC hunting four moose on herding territory to protest Sweden's limiting occupational rights (Beach, 1985:17-18). Moreover, a Sami man from the Jokkmokk area - a hunter, fisherman and forager but not a herder - explains how members of the local RHCs mock him for not being a 'real Sami'. He responds: "You can't start farming reindeer just because others find that more genuine. Hunting and fishing goes a lot further back than reindeer farming. It hasn't been regarded as particularly Sami but actually it is." (Anderson, 2018). However, recognizing Sami hunting and fishing rights to a degree, the Girjas RHC won in the Supreme Court (2020) and regained these rights on their land, based on immemorial rights (Allard and Bränstrom, 2021:62). This could spark similar victories in other RHCs or even an amendment of the 1971 Reindeer Herding Act. For now, it leaves unresolved the rights of Sami who are not RHC members (Allard and Bränstrom, 2021:57). The complex issue of which Sami have land rights means that many Sami do not have a seat at the table in decisions on the management of their traditional lands.

2. Theoretical Framework

For this research, I draw on a variety of interdisciplinary theories and concepts to develop an applicable framework, touching on the intersections between decoloniality, political ecology, environmental anthropology and philosophy. Here, including an exploration of the relevant literature, I lay out how I apply decolonial and ethnoecological concepts, moving beyond right-based approaches to ecological conflicts in Sapmi. I also situate the research within my ontological-epistemological approach to the nature-culture nexus and the indigenous 'ecomorality' debate, as key underlying theoretical factors in my framework.

2.1. Decoloniality and Right-Based Approaches

Firstly, this thesis is grounded in decolonal tradition. Much of Sami indigenous knowledge (IK) has been lost or destroyed by colonization and submerged and transformed under forced Christianization (Boekraad, 2016:56). Engaging IK implicitly challenges colonial methods of knowledge production. More specifically, Fanon's (1967:499) recognition of the connection between environmental degradation and human oppression on colonized lands as not weakly connected but one in the same thing informs my conjunctural approach to situating Sami conservation within both cultural-political assaults, and extractivist land use. Thus in the first analytical theme, I conceptualize the physical and political phenomenon of 'geographical enclosure': the gradual closing in on Sami ecology due to socio-political boundaries and ecological degradation. This conceptualization also reflects a core tenant of 'Indigeneity' often presented in decolonial literature as a 'whole systems' practice both the "tangible and intangible, are interconnected" and inseparable (Jonsson, 2011:103). Hence IK is often discussed as relational

knowing, of 'thinking with two minds' on "the metaphysical and pragmatic, on language and place, and on values and relationships." (Kovach, 2009:57).

Furthermore, my focus relies on understanding indigenous-settler relations in order to interrogate the ways that this marginalizes indigenous people and devastates their histories, landscapes and social relations (Kovach, 2010:42; Smith, 2021:32). Overall, such decolonial underpinnings form underlying ontological-epistemological assumption which points the research towards challenging the imposition of dominant environmental paradigms in Sapmi through a Sami lens. Notably, while the decolonial tradition is emergent from a Western paradigm - maintaining many Westernscientific characteristics - Kovach argues that despite inherent bias a Western-born research approach can adapt to align with indigenous objectives, including through the incorporation of IK as a method, hence my application of 'conversation' and 'story knowledge' (see 3.1. & 3.2.) (ibid.:43).

Literature addressing Sami ecology from decolonial perspectives primarily focuses on land rights. Kvist (1994) aptly examined the 'racist legacy of Swedish Sami policy', highlighting particularly virulent policies by presenting historical cases in Swedish Sami. Borchert (2009), in a broad exploration of the Swedish Sami also focuses on the coloniality of Sami land rights. The work of Beach (1981, 1986, 1990, 1993, 1997, 2000, 2004) has however been chiefly significant in capturing Sweden's colonial legacy as implicated in Sami rights, and the consequences for the political ecology of SRH. Beach's scholarship has informed the framework of this thesis in a number of ways, not least in highlighting the effect that Swedish legislation has had on SRH. Importantly, his articulation of Sami rights as 'occupational rights' contributed to the mapping of 'geographical enclosure' (Beach, 1985). This heavily problematized rights complex is, however, interwoven with various different environmental interests in the region attempting to impose their versions of conservation. Research on how this challenges and subverts Sami environmental relations is largely absent.

2.2. An Ethnoecological Approach to Sami-nature Relations

Dowie argues that the relationship between indigenous and environmental-conservationists is overall still a "good guy/good guy story" since both share "a goal that is vital to all of us - a healthy

and diverse biota [and] are communities of integrity" with conflict mostly due to "conflicting views of nature, radically different definitions of "wilderness", and profound misunderstandings of each other's perspectives on science and culture" (Dowie, 2009). Unlike Dowie, I am not so convinced that such 'conflicting views of nature' can be so easily aligned. Furthermore, history has shown us that it is the claims to do good by communities and environments that sometimes commit the most harm. Hence we should critically examine and reveal different environmental paradigms. In another examination of indigenous-environmentalsits relations, Reimerson (2015) revealed how hegemonic conservation discourse silences indigenous critics of their nature arrangements. However, this analysis is rather at the level of the discursive politics that suppresses indigenous voices, where I intend to draw in indigneous relations to their local environment.

In the case of Sapmi, Beach has explored the conflicts that arise due to environmentalists' criticisms of Sami (1997, 1993), which has introduced the key fractures between Sami and environmentalists in Sweden for my analysis. Additionally, Sjoegren and Matsunda (2016) qualitatively explore the wolf issue 'through Sami eyes'. Such explorations of elements of Samienvironmentalist conflicts, however, are limited to this. Therefore, considering the lack of research attention, I enquire more deeply about Sami-environmentalist relations, offering what I argue is a more grounded approach to competing human-ecological paradigms. I draw on Sami ethnoecology as a prism through which to understand environmental conservation conflicts in Sapmi and position human-nature relations as structured by cultural engagements with and perceptions of environments.

Ethnoecology in research runs through from theory to analysis. Here I will discuss the theoretical concepts relevant for this thesis. Brosius et al. (1986:188) defined ethnoecology as based on the assumption that human-environment relationships are influenced by thought, knowledge and language, yet these conceptions are embedded in the physical-practical interactions that occur inplace, and not as separate metaphysical 'discourse'. Thus there are three elements of an ethnoecological framework: kosmos - the belief system guiding nature management, corpus - the knowledge which underlies interactions and praxis - the practice of natural resource management (WinklerPrins and Bassols, 2005:7). From this perspective, an ethnoecological examination of a Sami conservation paradigm should include all three elements.

Alternatively, common approaches to human-nature relations focus on 'cognitive frameworks', as with Muradian and Pascual's (2018) 'elementary typologies' of human-nature relations, developed primarily through how people think about - not act in - nature. This is since it is believed: "people often consider the properties of the relationships they hold with nature rather than the inherent worth of nature itself or the benefits they derive from it in instrumental ways" (ibid.:1). While largely alignable with their 'Stewardship' typology, Sami-nature relations could also be said to overlap within 'Utilitarian' and 'Devotional' typologies: nature is sacred and worshiped, but also a practical resource. In indigenous societies, nature relations are defined by the material in dialogue with the cognitive. Thus Ingold (2000:1) has stressed how we should not compartmentalize human resource use or spiritual dynamics; together these constitute skill that is "grown, incorporated into the human organism through practice and training in an environment". Hence Ingold wishes to situate people "in the context of an active engagement with the constituents of their surrounding". Similarly, Cianchi (2013:1) sees how human societies and cultures are shaped and constrained by both their relationship to nature at an abstract level, through understandings of wilderness, mythologies and religion, and at the practical level, through the management of land, food and water resources. Thus, I approach a Sami conservation paradigm as grounded in subsistence practices alongside cognitive processes. This induces ethnoecology's corpus, kosmos and praxis, illustrating how cognitive and practical elements are inseparable in understanding Sami-nature relations.

Additionally, Brosius et al. (1986:189) stress that ethnoecology should proceed further to consider not only how these structures and behaviors reflect an environmental paradigm, but also "how this world view compares to one that might be derived from scientific ecology.". Hence this thesis enfolds ecological and archeological evidence. This approach takes the initiative to ground environmental narratives in interdisciplinary scientific evidence.

2.3. Nature-Culture Dualism: Wilderness and Conservation

Moreover, how the nature-culture nexus is articulated is consequential for conservation paradigms, and thus for this thesis' framework. Western nature-culture dualism separates human culture from wild environments, based on prescribed understandings of 'wilderness'. The US Wilderness Act (1964) defined wilderness as: "an area where the earth and its community of life are untrammeled

by man, where man himself is a visitor" (Dowie, 2009:xvi). Such ideology is known as 'fortress conservation', which first took shape in 20th century North America. Naturalists like John Muir and Aldo Leopold appealed to environmental beauty and science to advocate for 'true nature' as that which is cleansed from any and all human-material interactions, inciting the creation of the first national parks (Martinez-Alier, 2002:1-2; Dowie, 2009:93). These Protected Areas (PAs) were created by removing indigenous peoples whose homelands they had been for millenia. In the 1960's, conservation biology began providing scientific support for these ideals (ibid.). Martinez-Alier (2002) has called this the 'cult of wilderness', which sees local peoples become 'conservation refugees': removed from their land and stripped of their resources so that PAs could be installed and managed as Western science sees fit (Dowie, 2009).

However, indigenous histories debunked the 'untouched' wilderness myth and anthropological evidence emerged proving that human habitation did not automatically correlate to environmental degradation and could actually mean the opposite (Fairhead and Leach, 1996). Metaphysical theorizations in environmental anthropology and related disciplines have argued for the dissolution of nature-culture boundaries entirely. McKibben's (1988) claim that we have reached 'the end of nature' and later Cronon's (1995) conceptualization of the 'myth of wilderness' argued that since no landscape is without the fingerprint of human activity there are no longer 'natural' places. Vogel's (1996) went further, equating a mall to a wilderness landscape. In one sweep, all social presence and interaction in environments is reduced to having the same effect of ending 'nature', from building a mall to planting a tree. Vogel's ontological footings underlie Mels (2001) approach to Swedish Sapmi's PAs, which rightly critiques the idea that they are unmediated by humans. This however does not address how then we can understand nature in mediation with culture. Certainly, there are no 'pristine' spaces left entirely untouched by humans - but does this mean that 'wilderness' is obsolete? That physical nature is only construed through our own human sociality is yet another iteration of anthropocentrism which, while rightly recognizing the ways in which we distort narratives around nature, treats this as the only way that the natural world could come to exist.

Malm (2018) has argued that constructionists' engulfing of nature within culture has unfortunately led to a total disillusionment with wilderness, and petitions for its relevance by mapping out a history of maroons saved by wilderness refuges. He argues a Marxist case for wilderness as "a

space less fully subjugated to capital than others. There is a long history of exploited and persecuted people seeking freedom in and through the wild." (ibid.:3). While he revives wilderness as an emancipatory concept, it need not be revived only as a radical space to undercut imperialism. Not only a site for escape, but also space which is intrinsic to indigenous lifeways worldwide. Surely a look at wilderness starts here. For what has been called wilderness is not 'pristine' but has been shaped for millennia by indigenous societies who certainly know the difference between their homelands and a mall. Thus wilderness could be understood as an ecological space that is defined primarily by wild or semi-wild species who can renew themselves independent of human mediation, but it is not necessary that they always do so - they need not be human-independent to be 'wild'. In other words, wild ecological communities may or may not interact with humans (positively or negatively), but they are not communities entirely born of human fruition - like almost all items in a mall.

Further, Ingold's (2000:41) work on indigneous societies of the northern circumpolar region reflects their sentiment that nature is culturally constituted: the "social world is grounded in the direct, mutually attentive involvement of self and other in shared contexts of [embodied] experience[...]they do so as beings *in* a world" (ibid.:47). Thus Ingold justifies a move to do away with distinctions between biological nature and culture. However, Hornborg (2009:95) has aptly petitioned that, despite ontological enmeshment, analytic distinctions be maintained so scholars can still theorize unique semiotic or biological elements, their interactions and show "how 'nature' is imbued with socio-political relations" (ibid.). Since this thesis focused on northern indigenous ontologies, it is guided by Ingold's interpretations of environments as not separately cognized, nor disembodied from a physical environment that exists with its own impulses. But at the same time, in order to analyze Sami ethnoecology, the terms can remain analytically distinct. While indigenous ontologies may experience and describe biology and culture as indistinct, they are still comprehendible as separate logical components.

2.4. Indigenous 'Eco-morality'?

Furthermore, the idea of a 'Sami conservation paradigm' in this research collides with another conceptual dilemma that has plagued scholarly work on indigenous topics: the idea of indigenous people as 'naturally' closer to nature and thus more morally 'eco-moral'. Indigenous closeness to

nature was originally seen as an unsavory, primitive state of being. Sami were no exception. Existing in a 'state of nature' meant they were without complex culture and economy, as opposed to 'civilized' and 'cultivated' Nordics: until the mid-20th century some believed that Sami would change into wild animals and kill domestic animals and farmers (Pedersen and Viken, 2003:194). Simultaneously, derogatory attempts to revive a paternalistic awe for indigenous cultures led to the 'noble savage' slur, blamed on Rousseau's thought experiment on the origins of inequality (Rousseau, 1755). Sami were key in the development of Rousseau's 'noble savage"; in Swedish botanist Linneaus' writings on Sapmi, Sami were described as living harmoniously with nature, inspiring Rousseau (Malm, 1997). Graeber and Wengrow (2021:157) argue that the slur became equally designed to prevent meaningful conversation: "being told you are an inferior breed and therefore anything you say can be ignored, and being told that you are an innocent child of nature or the embodiment of ancient wisdom and therefore everything you say must be treated as profound are almost equally annoying.". However, the original 'savage' slur won out. Charles Dickens reflected this in an essay 'debunking' the 'noble savage': "I call a savage something highly desirable to be civilized off the face of the earth.", and argued for just that: the total extermination of hunter-gatherers (Dickens, 1853).

Contemporarily, these oscillations between different ways of dehumanizing indigenous peoples has led to deep hesitations in approaching indigenous traditions and lifeways out fears of misrepresenting or romanticizing cultures. Thus there remains a problem: how to avoid this on the one hand, and avoid ignoring, dismissing or belittling cultures on the other. Some approaches appear to risk the latter out of fear of the former. 'Romanticism' accusations can also be derogatory and evasive, especially when something is only perceived as romantic to an outsider but normal for those within the culture. Green (2009:175) argued that, of the many labels given to indigenous peoples today, the most prominent is that of the 'natural conservationist', which is argued to be the 'noble savage of our time'. Included in such dismissals is the idea that indigenous cultures would have taken the exact same path to ecocide as Europeans if they had only been able to advance from their "primitive traditional technology. Natives, they argue, have simply lacked the power to exert much damage." (Beach, 1993:94). Or that now that they possess modern technology, they are just as prone to be 'eco-criminals' (ibid.). This kind of understanding can only be achieved by erasing cultures, as well as ignoring fierce, ongoing resistance to the imposition of European industrialized order. While there are undoubtedly exceptions to the rule,

indigenous groups have fought fiercely to maintain as much as possible of their non-industrial lifeways. It is clear that many indigenous groups worldwide seek to maintain their land and their culture as a living, breathing one within the global industrial system that they are now also dependent on. Putting any culture on a pedestal as innocent and unreachable is unhelpful, yet that recognitions of solidarity, resilience and wisdom within indigenous groups be dismissed as 'romanticism' might be as troubling as the noble savage slur itself.

Historically, Sami have not exploited Sapmi's resources, but rather used them effectively, where survival depends on their renewal, needing to maintain balance with a number of local ecosystems they had access to in order to thrive (Boekraad, 2016:55). This entailed 'Árbediehtu' (Sami IK) which clarifies knowledge as both information and process and is stored within the greater culture to be shared (Jonsson, 2011:98&117). Given this embedded knowledge and sustainable history within their environment, it is unsurprising that Sami often see their culture as more 'eco-moral' than industrial society (see 4.). This is not the same as saying that every ethnic Sami individual alive today is a natural conservationist, but that in cultural traditions and practices, fostered by Sami through millennia of intergenerational IK systems, they have maintained values that are at the very least more ecologically attuned.

3. Methods and Methodology

Applying a variety of methods, during this research I collected: semi-structured interviews, secondary interviews, Sami stories, scientific studies and primary environmentalist video and documented content. Here I will discuss the methods and methodology undertaken and applied to achieve this dataset, the analytical framework applied to the data, key ethical considerations and my positionality within the research.

3.1. Primary Conversations

I first conducted four semi-structured interviews (see Appendix A.). Three of the interviews were with Sami participants: Fyn, Lara and Siri. Where an interview takes place is decisive, since human behavior is deeply influenced by the environmental context (Albuquerque, 2014:17). Thus I found

it important to hold the interviews in an environment where the participant felt comfortable and familiar. Three interviews took place in Swedish Sapmi, at the home of the participant, a public meeting place or a walk in the forest, while one took place digitally. I used convenience sampling of Swedish Sami living in Sapmi that are members of a RHC and are involved in herding to some degree, either part-time or casually through their family, and thus are likely to be invested in land use and conservation questions in Sapmi. The sampling method was relevant given that targeting a more specific Sami demographic was limited not only by the research timeframe but the season: full-time SRH families are very busy in the spring and a number of potential participants asked to be interviewed in June. This drawback led me to extend my dataset beyond primary interviews in order to also diversify and strengthen my findings. Thus I discovered Boekraad's (2016) interviews with Swedish Sami herders on ecological sustainability through beliefs and rituals, and Sjoegren and Matsunda's (2016) interviews also with Swedish Sami on wildlife conflicts in Sapmi.

All primary interviews were between 60 to 90 minutes, and I used a conversational method of semi-structured interviewing. I chose this method because it aligns with the decolonial and indigenous epistemological focus of my framework: it honors orality as a means of sharing and transmitting knowledge, akin to indigenous methods of interviewing like: yarning, talk story, restorying and re-membering (Kovach, 2010:40&42). Open questions and mutual dialogue are key to generating trust and gaining authentic responses, since participants respond often out of their own initiative (ibid.:46; Albuquerque, 2014:100). Thus both parties conversated equally and relationally, rather than myself imposing a strict question-answer pattern. This method allowed the participant to formulate their own views without limitations, as is recommended in ethnoecological research; it is deeply important for studying ecological representations because the person has sovereignty over the externalization of their ideas, experiences and values (Albuquerque, 2014:100). A weakness however, is that this can easily bypass key questions and topics valuable to the research, because the participant often gears the conversation towards what is more intuitive and interesting to them, and the interviewer tends to follow this trajectory.

However, this was unproblematic, since my methodology did not require that I capture very specific answers: I conducted the interviews early in the research process, leading empirically with an inductive approach: I entered the field with a broad focus on conservation conflicts in Sapmi

and let the interview responses inform and produce a theoretical focus. Thus my method focused on learning to see and judge rather than universalize or calculate. This initial approach is a cornerstone of the grounded theory method, where the researcher enters the field with somewhat of a 'blank slate' and theory is "is generated or grounded in data from participants who have experienced the process." (Creswell, 2013:83). This was also in order to ground the research in contextualized methods of reasoning, making it more relevant and applicable to the local context, as opposed to being guided by metaphysical and non-local principles.

Though my focus is on Sami ethnoecology, as discussed this involves contrasting with other dominant values which influence the paradigm in question. Hence one interview was with the leader of a prominent Swedish conservation organization, Michelle. I targeted an organization that was particularly engaged in carnivore and wilderness conservation in Sweden, since these had begun to surface as topics inseparable from Sapmi conservation conflicts. I chose not to pursue other primary interviews with environmentalists due to the research's Sami focus, but also because Swedish-Western environmentalists are more publicly dominant than Sami, with far more powerful platforms, influence and reach. Thus, I collected videos and documents from NGOs and governing institutions that exhibited environmentalist values, proposals and structures relevant to Sapmi (Appendix D.)

3.2. Story Knowledge

From a primary interview and two secondary sources I also collected Sami folklore (Appendix C.). While there has been some progress in decolonizing human relationships within research institutions, Kovach (2009:28) claims that the epistemological-methodological shift of decolonial knowledge production has been weak. The inclusion of story as both a medium of knowledge and a method to create knowledge can begin to move this needle (ibid.:35; Christiansen, 2012:231). Claude-levi Strausse was one of the first anthropologists to propose that mythological thinking is better conceived of as its own sophisticated science (Levi-Strauss, 1962). Story, in an indigenous context is, "methodologically congruent" with IK systems; a co-created form of relational and collectivist knowledge, which highlights the dynamic between self, others and nature (Kovach, 2010:35&42). From an indigenous standpoint, story "involves the continued observation of elements of collective memory and complex, non-synthetic examinations of these same elements,

which comprise human groups' beliefs and ways of life." (Albuquerque, 2014:64). Because of the intimate link with environments this produces, the abandonment of IK embedded in myths, proverbs and folktales have been associated with losses in biodiversity (Adom, 2016:2). In alignment with my framework, I sought stories focused on human-animal and human-land value systems. These came from my interview with Lara, Boekraad's (2016) collation of stories from their own interviews and written accounts and Hatt's (1912) Sami Stories collected ethnographically.

One epistemological weakness of interviewing Sami today, is that over only a few generations there has arisien a significant gap between the cultural dynamics of these younger members of the society compared to those of the past (Albuquerque, 2014:222). Yet traditional stories give access to the past through the present as intergenerational and collective knowing. Moreover, while story can challenge colonial ideologies of knowledge production, this is still bound within Western institutional settings that privilege the written word; the pertinence of oral knowledge tradition is both protected - risking erasure if not written down - and at the same time subsumed by written format (Adams, 2005:1). Hence despite decolonial and indigenous framings and methods, Western institutions often have the final word on knowledge production.

3.3. Life Science Data

The first theme 'Geographical Enclosure' dealt with SRH ecology and extractivist land use. This relies on a degree of scientific evidence to clarify how reindeer affect their environment, and are affected by external pressures. Therefore, in line with aforementioned ethnoecological framings, my dataset was supplemented with secondary scientific research results (see Appendix C). These results came from seven research papers across ecology, environmental science and archeology. I searched for data that dealt with human-ecological elements on SRH that were relevant to the theme. These studies showed results that contributed to capturing SRH ethnoecology.

3.4. Methodological Limitations

Some strengths and weaknesses have been addressed, however the overall methodological approach requires perspective. Just as a diversity of data and methods of collection can enrich

research, particularly from an interdisciplinary standpoint, this also comes with losing a certain depth compared to focusing solely on primary conversations. Inclusion of other primary, secondary and quantitative data sources is at the expense of elucidating deeper perspectives and comparisons from and between a larger number of participants. Furthermore, the predominantly qualitative methodology of this research limits its ability to make conclusions about the wider Sami population. Therefore, although I investigate a Sami conservation paradigm, I am limited to illuminating within cultural phenomena the small scope of my data.

Additionally, I was somewhat limited by the inclusion of only English texts and sources in the research, although given that Sami are a culture that crosses many national-language boundaries, literature has increasingly been published in English. During interviews, English was not a problem as all participants were proficient. My intermediate Swedish helped to overcome minor translation hurdles.

3.5. Thematic Analysis

Ingold (2014;384) writes on systematically linear 'coding' methods of data analysis: "Such a procedure[...] offends every principle of proper, rigorous anthropological inquiry—including longterm and open-ended commitment, generous attentiveness, relational depth, and sensitivity to context—and we are right to protest against it.". Accordingly, while I began my research with a quasi-grounded theory approach, this is where the comparison ends since I did not apply multiple levels of digital coding - meticulously 'labeling' the data. I agree also with Kovach (2009:53) that this would feel like extracting the context of people's stories reductively and unintuitively. Alternatively, I underwent two stages of thematic analysis of the data, an analysis method which Bryman et al. (2021) consider to be a generic and somewhat of a loosely defined method for organizing findings. First, I partially transcribed my primary interviews collected during fieldwork in Sapmi, leaving out rapport building or superfluous content. From this, I identified a variety of elements, which I boiled down into 3 overarching themes: geographical enclosure, the wolf and wilderness and subsistence conservation. These themes were a result of investigating points of intersection and resonance in narratives and elements where Sami conservation ethic diverged from the 'norm' and challenged dominant land use paradigms through their own ethnoecological connection to Sapmi. Based on this, I continued data collection of the rest of the primary and

secondary sources, organizing these not based on the type of content but relevance to each of the pre-identified themes. It is clear that the primary interviews were heavily weighted, given that the rest of the dataset was grounded in the findings from these interviews. Though not providing the initial empirical grounding, secondary interviews and stories were weighted similarly. Following this, sources of Swedish-Western environmentalism played an important juxtaposing and contextual role. Lastly, scientific results were used as supportive data in the first analytical theme.

3.6. Ethics

Decolonial scholars have made clear that indigenous focused methodologies should ensure that research be carried out respectfully (Jonsson, 2011:101). This is true for Sami who, like other indigenous peoples, have been unfairly treated in research (ibid.:118). I made sure to explain the topic of research and how I planned to approach it, leaving room for participants to decline participation and for any questions to be answered beforehand. Further, anonymity is important in order to avoid doing harm (ibid.:110). There are a variety of different interest groups, conflicts and fractures in Sapmi, both internal to Sami society and externally, where my research could risk inciting harm should participants be disclosed. Additionally, participants were given a consent form to sign and read pre-interview where they were notified of their right to withdraw (even post-interview), that their personal details would be confidential and remain anonymous and consent to record was given. Consent for recording was also gained again before beginning the interview. Following the interview, I offered participants access to a draft and/or the final version of this thesis.

The development of scientific knowledge has largely served Northern countries' civilizing mission, at the expense of indigenous communities. Disciplining approaches to indigenous research is therefore essential to prevent this. It is important to recognize indigenous participants as knowledge contributors, who have given up their time in order to share knowledge as well as insight. This means listening to and respecting their knowledge rather than purely trying to extract or demand answers. My grounded approach to data collection helped with this, since I did not need to adhere to a ridged deductive interview method. I could respect their time and knowledge by listening and letting them veer towards sharing within the areas of my topic they chose, letting them set the foundations for the research themselves.

3.7. Positionality

In the context of this research, I am both non-indigenous and an outsider to Sapmi and Sweden. This dual-outsider status has had different implications for my methods. A lack of deeper preconceived understandings, knowledge and personal connections to Sapmi meant that I could approach the topic relatively objectively compared to someone who may be pre affected by different interests in the region. It also could have made it easier for me to gain trust amongst participants since it could be assumed that as a non-Swedish person, I was unlikely to be aligned with a particular political or economic interest group that would put me at odds with Sami interests. At the same time, my outsider status came with my own assumptions and biases which I had to challenge in order to approach the research critically. Coming from a region in Australia with a strong indigenous culture I had to be careful to not project the colonial, legal, political and economic circumstances of one indigenous group onto another, and to try to understand the Sami in their own right.

4. Findings, Analysis and Discussion

From early on in my research, it became clear that, having been cast as 'un-sustainable 'by environmentalists on a number of topics, Sami fought to defend their culture as an ecological one. Green argued that indigenous people in general are often hesitant about being labeled 'natural conservationists' (Green, 2009:175), however my research revealed the opposite for Sami. Both Lara and Fyn described their culture as ecologically minded. Siri told me the story of her discovering this for herself: "when I was young, I was very environmentally aware and fellow Sami in the village were mocking me[...]I thought "oh the Sami they are not environmentally friendly at all" and I wanted to become involved in the environmental movement in Sweden and I partnering up with vegetarians and environmentalists because I felt more at home there. But as I grew older, I realized that there is a view from the Sami people that I grew up with that everything in nature has a soul[...]every stone every tree". She believes this way of looking at the world makes it difficult for Sami to act unsustainably. She continues: "So yes some can mock environmentalists and drive their [motorbike] but still in the long-term Sami don't destroy, because they have this

relationship to the land that makes it impossible to be an asshole. There is a common way of looking at nature that is environmentally friendly with the Sami.".

Furthermore, in two interviews with Sami women, both described Sami-environmental interdependence as fostering ecological mindedness (Boekraad, 2016:55&56). One of these women made clear that "not all Sami are keeping the rules[...]we live in a time of decadence.", yet 'abandonment' of the core culture by some, for her does not obliterate the wider Sami nature-based ethic. Further, Pedersen and Viken (2003:200) highlight how Sami 'eco-morality' is reflected in ethnographic facts and in Sami folklore and traditional norms.

Nevertheless, the relationships between Sami who care for the local landscape and Swedish-Western environmentalists who claim to do the same, remains tense. Siri, having worked within both the environmental movement and in Sami politics, understands these tensions well. She explained how from the 1960's in Norway, Sami gained "allies from environmentalists" but that comparatively in Sweden: "there has never been a case where Sami and environmentalists have been able to completely unite against threats to the environment[...]recently with the climate crisis[...]they lifted this issue about indigenous people's ways to manage environments[...]it's not until then I believe that the Swedish environmental movement has shown some interest.". Siri stressed that there are similarities and potential synergies between Sami and environmentalists but working within the Swedish environmental movement left her saddened at the extent of ignorance and disinterest in Sami culture. She believed that mutual defense against the mine in Gállok could be a turning point. Fyn was however not as hopeful: "I think it's a lot of activism and "we have to do something" but no solution.". He was also concerned that "the same people who are standing with the Sami are the same who advocate for mass scale industrial green energy. And, we know where they're trying to put their windmills.". This skepticism alludes to deeper cultural-ecological gaps between Sami and Swedish-Western environmentalism, despite a mutual distaste for mining and logging.

Such tendencies to stress the ecological relevance of Sami society, and apprehensions towards a Swedish-Western environmental paradigm, attuned my research to investigating the ways that environmentalists were dominating the environmental conservation narrative in Sapmi, and how Sami articulated their own conservatism through ethnoecological processes. My findings reveal

three core interrelated themes: geographical enclosure, the wolf and wilderness and indigenous subsistence, which together articulate a Sami conservation paradigm in Swedish Sapmi in highlighting the ways that this is challenged and subverted by dominant environmental ideology.

4.1. The Geographical Enclosure of Sapmi: Extractivism, Land Rights, and Overgrazing

SRH is deeply entangled with questions of environmental conservation in Sapmi. Because of colonial policies, intensive herding - the practice of following and concentrating a herd intermittently and seasonally in various different pastures over a vast range area - was by the early 20th century largely replaced by extensive herding, whereby herds are left to roam uncontrolled most of the year (Kamerling, 2017:370). In Sweden, environmentalists have argued that SRH is exceeding 'rational reindeer quotas' and therefore overgrazing is causing 'degradation' in the 'sensitive' arctic environment (Beach, 2004:112; Pedersen and Vilken, 2003:199). Yet where and how reindeer are herded today is the result of historical land complexes.

Over centuries Swedish society and industry has eaten into the capital reserves of Sapmi's environmental resources, hampering the flexibility of Sami livelihood and heavily impacting Sami relations to the local landscape (Beach, 1981:492). Accordingly, the first theme I analyze here is the physical and social limitations that Sami face, which I call 'geographical enclosure'. This theme contextualizes the following analytical themes within Sapmis history of land use conflicts and land rights. It provides a pretext for Sami conservation ecology as situated amongst compounding constraints on Sami land use. Primarily through the example of 'overgrazing', I analyze the findings to conceptualize 'geographical enclosure'. Here, 'enclosure' refers to both political boundary-setting and the ecological effects that envelope indigenous land use. I discuss the native-regenerative aspects of herding yet show that the capacity for conservation-oriented practices is choked by extractivism and land rights complexes placing heavy physical and legal constraints on traditional local ecological management, while stressing internal Sami relations.

First, grazing lands have been heavily degraded by extractivist industries. Brannlund and Axelsson (2011) showed how the flexible use of pasture area was and is a foremost adaptation strategy towards ecological pressures on herding, yet rotational (intensive) grazing is found to be no longer

possible due to extractivist land use (Axelsson-Linkowski et al, 2020:482). For one, mines have been carved out of large swaths of Sami herding areas. Fyn reflected on his great grandfather's grazing lands, which is now the site of Kiruna's infamous iron ore mine. His RHC's land has not been mined so far, but the threat of extractivism looms. Should the Gállok mine come to be, Lara worries: "I'm not sure if my family would be able to keep on herding because there would be no land to have [reindeer] during winter[...]the problem started before with all the dams, they are not safe to walk and drive on, also because of that there is no other path for the reindeer to get to winter and summer pastures". However, the timber industry is possibly the most widespread force of geographical enclosure in Sapmi (Beach, 1986:16). Reindeer depend on lichens as a major food source especially during winter. Lichens are slow growing and abundant in old-growth forests, and in the last 60 years Swedish forest management has seen a 71% decline in lichen-rich forest areas due to clear-cutting (Axelsson-Linkowski et al, 2020:482). Through their research with Sami herders, Axelsson-Linkowski et al. (2020:488) found that "options for sustainable reindeer husbandry are shrinking due to the cumulative effects of different encroachments' ', particularly logging and climate change.

Additionally, claims of 'overgrazing' are often accompanied by anger at the use of snowmobiles, motorbikes and helicopters in PAs for SRH. Yet, reporting on the effects of modern industries, Beach (1993:108) argued that "not only is there less grazing land, but it has been cut up into a patchwork with such major impact on the herders' temporal and spatial patterns of labor that they are obliged to take advantage of the new vehicles if they are to survive as herders at all." Axelsson-Linkowski et al. (2020:485) also found that the fragmentation of Sapmi due to modern types of land use forced reindeer herders to incorporate snowmobiles to compensate. Evidently larger systemic patterns of the enclosure of Sami geography have made these technologies important if not essential.

When discussing limitations placed on herders in Norrbotten due to 'overgrazing', Lara explained: "they have done no studies on this, but they made up an amount, like that[...]why don't [they] ask the experts that actually live here?". As well as disregard for IK, the lack of scientific studies on circumpolar grazing effects is significant (Moen and Danell, 2003). It is also difficult to ascertain past evidence of grazing effects, since logging during the last century has destroyed archaeological

evidence of SRH (Kamerling, 2017:378). Studies done on the 'unsustainability' of arctic herding have ignored "the indigenous expertise of the herders [and] the complex ecological requirements and patterns of pastoralism in an arctic environment" (ibid.). In the Swedish Mountains, Moen and Danell (2003) concluded that "large-scale overexploitation by reindeer in the Swedish mountains is not evident.". Benjaminsen et al. (2015) argue that the 'overgrazing' narrative functions as an enduring myth, detached from a supposed scientific basis. Signs of overgrazing are understood reductively and context-free, shifting the burden of blame to Sami while ignoring the wider land use ecology. Surveys and policies targeting 'overgrazing' focus on 'rational' targets and detached figures. SRH as a rich, adaptive and complex "assemblage of social forms, practices, traditions, and ethical principles" has therefore been reduced to the "sterile, dysfunctional caricature of a meat factory." (ibid.).

As such, invisibilizing geographical enclosure misrepresents SRH ecology and obscures its regenerative possibilities, thereby thwarting traditional Sami conservation practices. In a context free of intense geographical enclosure, reindeer partake in ecological mutuality within the arctic environment, depending on a high degree of integration into the landscape in order to migrate successfully and provide vegetation maintenance through grazing (Sjoegren and Matsunda, 2016:47). Thus, the prosperity of reindeer is intimately linked to the prosperity of arctic environments. For instance, reindeer depend on diverse, old growth forests' increased presence of arboreal lichens for winter pastures, especially given climate change induced freeze-thaw cycles that create thick layered snow blocking reindeer from accessing ground lichens (Horstkotte, 2013:6-7). Compared to the single-layered monocultures of clear-cutting, forests with multi-layered canopy have more variable snow hardness due to the patchy distribution of hard snow clumps on the forest floor dropped from the canopy, making pastures accessible (Horstkotte, 2013:15).

Evidently, reindeer thrive in unison with healthy arctic forests. Hence Lara iterated: "the forest is supposed to be alive and wild, not trimmed down the way it is just now.". Unsurprisingly then, mediated grazing, such as in an intensive system, helps biological diversity: "a completely ungrazed area contains fewer species than a moderately grazed area, while a further increase in grazing pressure leads to a reduction of diversity." (Beach, 1997:136). Research shows the effects

of reindeer use on the arctic landscape correlates with landscape structure, and claims they are "ecosystem engineers capable of mediating the effects of climate change." (Skarin et al, 2020:2). Thus Sami herders have stated that Sapmi without reindeer is unnatural: "the reindeer leaves its mark on nature, but this it must be permitted to do[...]an area which has been utilized for reindeer grazing for many hundreds of years then surely it must be considered a natural state." and; "Mountains without reindeer are equally unnatural as mountains with too many reindeer" (Andersson, 1995:13 in: Beach, 1997:136).

Reindeer have over millennia increased vegetation complexity, and have been a food source for predators in the region (Adams, 2005:5). Hence where reindeer were eliminated in the Swedish mountains, thick carpets of lichen dominated, preventing other plants from growing (ibid.). Despite limited evidence, studies show that trampling and grazing has increased the presence of edible plants. Research assessing the impact of SRH on plant cover found successive increases after herding activity in (for example) low shrubs of the Vaccinium genus, which includes

after herding activity in (for example) low shrubs of the Vaccinium genus, which includes bilberries (blueberries), cranberries and lingonberries (Kamerling, 2017:369&385). Another study also found that such 'berry shrubs' tend to increase in response to grazing pressure (Vowels et al., 2017). More research is needed but SRH has shown the capacity to generate food landscapes and increase plant complexity. Thus Hausner et al. (2020:1661) found that herders required regenerative systems with "seasonal adaptation[...] and the need for space and flexibility to move across administrative and natural boundaries to access pastures." . However, geographical enclosure has evolved into a barrier against the capacity for SRH to enact such regenerative and adaptive conservation strategies.

In addition to the compounding of extractivist land use is the existence of fixed RHCs placed within newly drawn sovereign borders between Sweden, Norway and Finland, delegating 'artificial herding areas'. Fyn recounted how: "People had been migrating freely before[...]the whole idea of migrating freely was that you never overgraze. In my area they had 7 different camps or locations they migrated between with the explicit idea of not overgrazing and degrading the land. But now they have created artificial areas and started migrating in a different way." Here he describes intensive herding, which was a regenerative practice for centuries, but is not conducive to national borders and delimited RHCs. In addition to enclosure limiting the capacity of those

Sami herders within their RHC lands, the Sami rights complex limits the ability for the Sami majority to work within their ancestral lands at all. As well as being political establishments for rights-based purposes, RHCs are also geographical establishments that fix the Sami majority into settled Swedish society, distancing them from cultural subsistence practices. Lara explained that: "everyone in my family can't work with [SRH], it would be impossible for me to work with it if my cousin wants to work with it.". This is due to both ecological and legal restrictions placed on herding, and thus the unlikelihood of being accepted into a RHC. Thus Siri explained how herders act based on scarcity: "reindeer herders are afraid that they will have to share these tiny bits of resources with other Sami people so then they tend to get scared and protective of their rights.". Evidently, geographical enclosure not only removes herders' capacity to respond to ecological pressure on herding, but it also functions to exclude most Sami from interactions with their environment to begin with. Since local environmental connections are key to what it means to be Sami, this essentially restrains the ability to be indigenous in Sweden. Thus Siri expressed that her deepest worry "is the possibility to make new generations of Sami a part of the community" by allowing access to ancestral lands.

In Jokkmokk, the relentless nature of geographical enclosure is evident. Lara discussed what might happen should the Gállok mine be completed: "probably they would combine our Sami village with another Sami village, but there is not enough space for the reindeer, so that would probably create lots of conflicts within the [SRH] society". In all of my firsthand interviews with Sami, each reflected on these external factors in Sweden that were enclosing their land and exacerbating internal conflict, particularly blaming the Swedish State for: "imposing all these laws on us and never ever looking back and rectifying anything. So we have this big big pile of unresolved issues which we are set to deal with now"(Fyn). Siri has worked during her political career to unite Sami and address "the Swedish State as our enemy, not each other[...]we are not united enough". Similarly, Lara declared that Sami are "busy fighting each other when they should actually fight the real problem".

Largely ignored in claims of 'overgrazing', in its totality geographical enclosure produces incapacities for SRH to enact traditional conservation strategies in Sapmi. Here I have shown how extractivist land use alongside delimited RHCs constrains SRH. This includes the physical

exclusion of most Sami from their traditional lands. This highlights a limitation of the 'praxis' element in ethnoecology - the practice of natural resource management. Environmental conservation paradigms are mediated by what is possible on the landscape, hence how a Sami conservation paradigm articulates itself through 'kosmos' and 'corpus' - belief systems and local knowledge - is influenced by the land use possibilities of the environment in question. Geographical enclosure thus can be considered the most significant threat to Sami abilities to manage their environment, by both reducing the ability for Sami herders to sovereignly practice their own conservation strategies and excluding the Sami majority from land use decisions entirely, while heightening internal conflict.

4.2. A Wolf in the Wilderness

That geographical enclosure has forced Sami into a tight corner has been largely ignored by environmentalism, which instead "fines small-scale Saami livelihoods for being ecologically nonsustainable and threatening [a] terribly diminished 'wilderness'" (Beach, 2000:122). Yet at the same time, some environmentalists have protested against extractivist projects on Sami land, rallying against further exploitation. This highlights a simultaneous disregard for the effects of geographical enclosure on SRH, as well as protection from it. Discussing this, Siri said: "I think we are getting closer to each other. But I think there's still a lot of issues that have been bothering the environmental [movement], for example the wolf, this question is very difficult to handle together. And also this question that Sami people are becoming modern and using motorcycles and snowmobiles in very beautiful lands. [These factors] are bothering cooperation.". The issue of the wolf in Sweden (representing large carnivores in general) and the worship of beautiful human-free 'wilderness' that such carnivores should inhabit, signal a 'fortress conservation' approach to nature. How this presents in Sapmi and the ways in which Sami respond is key to understanding a Sami conservation paradigm. The data reflects how human-inclusivity and ecological embeddedness is a central to Sami ethnoecology; human agency need not be separated out from the landscape in order to achieve conservation. Therefore, there is a flat approach to the local environment whereby humans are entrenched in ecological causes and outcomes with their own agency as herders and hunters level with native predators. As a result, Sami are less likely to elevate certain charismatic species but assess local animals regarding the "overall integrity of the

natural landscape they operate in", as opposed to Swedish-Western environmentalism which focuses on conservation goals for individual animal species. (Sjoegren and Matsunda, 2016:47).

The wolf conflict in Sweden is represented on one hand by environmentalist agendas of biodiversity, animal rights and sustainable development, and on the other by those arguing that local traditions and livelihoods are at odds with a high wolf population (Sjölander-Lindqvist, 2011:15). Sami are but one group within the latter. Historically, the elimination of wolves in Sweden was not caused by Sami, but rather by the spread of Swedish society (Beach, 2004:118). In 1647, the Swedish government stimulated a nation-wide hunt that led to the extermination of the wolf. In 1966 the wolf was granted protected status, but this was the same year the last wolf was shot in Sweden (Sjoegren and Matsunda, 2016:38). The wolf has since returned, with a current Swedish population of 350 (Naturvårdsverket, 2021). In Sweden and on a global scale, wolves are not considered endangered. Official Swedish conservation policy holds that the wolf should be given a place within Swedish ecology, including also other large carnivores (Sjölander-Lindqvist, 2011:15&18). In Sweden there has been an almost yearly licenced hunt for wolves since 2009, with conservationist groups appealing to the EC to take Sweden to court for violating EU legislation protecting the wolf. The central goal of Swedish conservationists is to increase the population and rangeland of Swedish wolves (Räikkönen et al, 2013:1).

Meanwhile, Sami herders are averse to a large wolf population in Sapmi, which would compound on the preexisting large carnivore populations that hunt reindeer. For this reason, though mostly in response to the hunting lobby (many Sami are also hunters), the aim of the licenced hunt is to "limit wolf abundance to just over 200 wolves through the use of hunting." (Räikkönen et al, 2013:5). Thus the debate is not about whether a wolf population should exist, but rather to what extent geographically and numerically wolves should populate Sweden. I do not argue here for or against this, but rather focus on the ways in which the wolf and its wilderness are portrayed by environmentalists, what this reveals about Swedish-Western conservationism, and how Sami articulate their own conservation approach to wildlife and wilderness.

For environmentalists, the wolf is a symbol of ecological resilience and integrity (Sjoegren and Matsund, 2016:48). Yet, often, the wolf is depicted, not so much as an ecological agent, but as a charismatic being with exceptional value, and a victim pursued ruthlessly by cruel hunters. The

latter is rightly so, since in Europe wolves were relentlessly hunted to extinction. However, the historical persecution of wolves is fundamentally different from the licensed hunt for wolves in Sweden today, which aims to control the population and not exterminate it (Ericsson, 2004). Yet Michelle, chair of a prominent Swedish conservation organization, was more likely to allude to the act of hunting and hunters as intrinsically immoral, rather than the ecological significance of increasing the wolf population. She explained that: "The main reason for hunting wolves is the hunters. In Sweden it is very popular to hunt with dogs[...]the wolf will kill the dog. The hunters don't like the wolves because of that and because they take the moose, they want to take the moose themselves.". Thus hunting is portrayed as a vengeful and selfish act, a moral rather than ecological phenomenon. He goes on to compare the desire to hunt in Sweden as a cultural heritage "like bullfighting in Spain.". When hunting lynx he says that it is "really stressing the animal", including "pushing the Lynx up in the tree" resulting in young lynx "starving to death because they are separated from the mother.". While there is certainly room to question the ethics of carnivore hunts in Sweden, this kind of narrative focuses on a hunter/victim dynamic through the use of graphic language and anthropomorphizing carnivores by appealing to stress and the parental bond. In line with this, activists have also staged hunting scenes and walked through Stockholm with wolf 'coffins' (Sundell, 2011).

The ethics of killing an animal is key here, but beyond the scope of this paper. However, whether righteous or not, the 'shock' of such narrativization invisibilizes the ecological context for carnivores in Sweden and the greater land use tensions and realities that this provokes, as well as the other human and animal actors, behind outrage over human hunting. Human hunting is depicted as 'exceptional violence', since the violence with which carnivores hunt is largely ignored in favor of their victimization. Wolves hunting in a pack for reindeer stress the whole herd to a high degree, often leaving them dispersed for days. Liv commented on how Lynx sometimes hunt and then 'just play' with reindeer: "they kill them and don't even eat them, they just leave.". Yet, for environmentalists, this hunting, which causes stress and separates calf from mother, is considered 'natural' while human hunting is not. This targets and elevates large carnivores as exceptional, charismatic actors, while extracting humans from Swedish ecology, in order for it to be a truly 'wild', 'moral' and 'natural' space.

Conversely, within Sami ethnoecology, animals are not elevated as victims or perpetrators, but as equals. Lara shared a story with me, in which "it all started off with the wolf being scared of the reindeer", but the tables turned since the reindeer did not react to the wolf's intimidations and turned its back to the wolf - since then the wolf has been hunting the reindeer. In the story, fear can go both ways, with the reindeer not 'less-than' the wolf because it is its prey - the reindeer can also be the one who is feared. This suggests a landscape of reciprocity and mutuality between species, where Swedish-Western conservatism tends to elevate mammalian characters who are more 'anthropomorphic' or remind us of domesticated pets, like bears, lynx and wolves. This does not mean that Sami do not favor the reindeer over the wolf, but that both are respected as local actors within a human-inclusive system. Herders are embedded into the arctic system and hold just as much right to subsist off reindeer as wolves do. Hence Sami describe the human-animal relationship as structured in terms of their appreciation for their position within the same world mediated by reciprocity (Beach and Stammler, 2006:21). Beach (1981:230) has argued that while conservationists are justified in the concern for the wolf as a species part of a larger ecosystem, SRH is also part of that larger ecosystem. Sami have long coexisted with wolves, both as highly successful predators understood as mutual participants on the landscape (Sjoegren and Matsunda, 2016:41). In Sami folklore, the wolf is featured as a retributionary force against farmers who seek to eliminate the Sami: while farmers are attacking Sami villages wolves attack their livestock (Hatt, 1922:8&82).

Yet coexistence has been stressed by geographical enclosure. As shown, greater political and ecological land use patterns have forced a set of limiting circumstances on SRH, and the wolf issue is no exception. Past freedoms enabled Sami to implement their own herding strategies and adaptations to deal with carnivore pressure. Yet, as mentioned, geographical enclosure has led to an 'artificial' system of SRH, which also has implications for the wolf dilemma on the Sami side: 'they created these artificial migrating routes [...]the extensive herding business is that we leave the reindeer be for extended periods of time[...]if you do that you have to keep the predators at a fairly low level." (Fyn). Without the capacity to herd intensively, herds are then more independent, and thus more vulnerable to predation. Therefore, the idea that the wolf be allowed to dominante in a context that already has herders cornered is unappealing. In a human-inclusive system there is no reason why this should privilege the wolf. Consequently, herders argue that wolves should be

allowed to exist but not on herding land. One such herder attested against the image of Sami as a vicious enemy of the wolf: "[environmentalists] assume that we only want to get rid of them[...]the question never comes, "how would you like things to be"?" (Sjoegren and Matsunda, 2016:44).

Additionally, geographical enclosure affects wolves directly. Industrialized habitats, human populations and national borders inhibits them from migrating successfully in and out of Sweden to the North and South, leading to an increasingly inbred Swedish wolf population. This has led Räikkönen et al. (2013:1) to ask if "conservation is merely about avoiding extinction of remnant populations, or whether conservation also entails maintaining genetic aspects of population health.". Yet environmentalists tend to obscure greater integrative questions of carnivore ecology and biodiversity, even though biodiversity conservation also includes healthy biological diversity within a species. When pressed about the ecological value of increasing the large carnivore population in Sweden Michelle responded that "it is all about Darwin, they are there for a meaning of course.", alluding to their place in a complex biodiverse system. However, given the genetic state of Swedish wolves, a healthy population, whatever number that may be, might not be a good indicator at all of biodiversity, also given the species tolerance for environmentally degraded habitats (Sjoegren and Matsuda 2016:48).

Furthermore, large predators like wolves do not service other species as a food source, rather they contribute to biodiversity through their hunting services whereby they circulate resources (carcasses) back into the ecosystem and by working as 'selective breeders' of prey species (Beach, 2004:116). In Sapmi, they did this competitively alongside humans for centuries at least, until their extermination in the 15th century. In terms of reindeer, humans and other carnivores now almost exclusively take up this role of killing and selective breeding. Thus, as Beach (2004:116) has noted, while the biodiversity argument retains in principle some limited validity for wolves in reindeer-herding regions, the presence or absence of a maximum wolf population "does not carry great practical ecological significance of a positive kind". Sami herders, as such, are fighting for their role as a kind of predator within this system, unconvinced by the idea that carnivore predation is more 'natural', and that the low density of wolves in some areas makes the land less unecological. Rather herders have sought to protect their own activity which is seen as no less 'natural': "Man is part of nature, just like a carnivore, or reindeer or moose[...](Sjoegren and Matsunda, 2016:41).

The reintroduction of the wolf to Yellowstone National Park is often cited as case-in-point for the exceptional value of wolves. Yet this was critiqued by Yellowstone scientists as a romantic myth which boils down the complexity of a variety of large Yellowstone carnivores to just wolves, and falsely attributes positive changes to rivers and elk populations to wolves (Kuhne, 2018; MacNulty et al., 2016). The positive reduction in elk was in fact largely attributed to human hunting pressure of legal harvests outside the Park (ibid.). This confronts representations of wolves as ecologically exceptional, as well as the belief that conservation requires maintaining a 'fortress' against human predation.

Moreover, Michelle commented: "The hunters always feel that they are the best to regulate the populations, but[...] over a long time there will be an impact on the population.". Despite that fact that wolf population has increased during the licenced hunt, the long term concern remains on hunting itself, with an absence of concern for what a larger Scandinavian wolf population would mean for the wolves themselves with no "continuous gene flow" - if the population can be maintained ethically at all as such (Naturvårdsverket, 2021; Räikkönen et al, 2013:5). The tendency to elevate the wolf at all costs, including its own, begs the question of whether it is a prowolf paradigm or an anti-hunting one.

Closely aligned with elevating the wolf is the tendency to promote 'Wilderness' PAs devoid of human activity for carnivores to exist 'unhindered'. An environment is ecologically sound only if the carnivore-prey relationship in their habitat is unmediated by humans, under the assumption it has always been this way: "The nature has been there for millions of years. It is better regulated itself than the hunters, that's why we believe that [arctic predators and prey] should exist in larger populations so they can to a bigger extent regulate [themselves]." (Michelle). This is reminiscent of the first imaginings of Nordic PAs where "all animals would be safe from the hunter's bullets." (Nordensköld, 1880 in: Mels, 2001:139). This excludes Sami ethnoecological agency as hunters and herders, determining positive conservation as a space without humans. Wolves and wilderness represent the desire for humans to 'leave nature alone', to speedily return to their industrial habitats and allow 'authentic' environments to prosper. Hence the Swedish Environmental Protection Agency puts down the selection of the Laponian World Heritage Site by the UN to its:

"magnificent and undisturbed nature, its rich biological diversity and its cultural significance for the Saami people." (Naturvårdsverket, 1997:6). Yet mentions of Sami subsistence are painted as 'unnatural': "Besides the grazing impact of reindeer herding, nature is in all essentials untouched."; or, "The main part of the region is genuine wilderness, only affected by Saami culture." (Naturvårdsverket, 1989:28&32).

Despite the virulence of fortress conservation, Swedish PAs have not prohibited hunting and SRH. However, environmentalists continue to push for Sweden's PA management to align with EU recommendations on wilderness conservation. The chairman of the European Wilderness Society explains how: "the EU developed a definition of wilderness [where] wilderness was really defined as an area where we humans do not play a role in it. No logging, no fishing, no berry collection." (EWS, 2020). He continues: "We should have the humility to at least have the will to allow a certain part of any area that we define as wilderness to not interfere with what has happened. We should have the decency to let nature do its thing." (ibid.). Michelle echoed this: "We would like [Swedish] national parks to be 100% hands off and no hunting at all.". When asked about herding, she was reluctant to make such a statement: "that's difficult to do anything against because they have their rights.". In sum, for Swedish-Western conservatism 'true' nature exists only where humans do not, making humans the enemy of nature; a virtuous and sustainable relationship demands that humans keep off the land.

Such ideology also emanates from European institutions, with potential implications for Sapmi's relatively lax PAs. The EC drafted criteria, seeking to regulate Europe's PAs as per their own vision: "strictly PAs should be occupied by naturally occurring habitats and species and have a sufficient size[...]to ensure the non-disturbance of natural processes[...]. Extractive activities, such as mining, fishing, hunting or forestry, are not compatible with this level of protection, while less intrusive activities such as scientific research, natural disaster prevention, non-intrusive renewable energy installations or non-intrusive and strictly controlled tourism may often be compatible." (EC, 2021:12-13). Despite the cited motivation to 'bring back nature into our lives', it is clear the goal is rather to promote nature-culture separation through the incredible feat of equating hunting and fishing with mining and logging and empower the renewable energy industry (ibid.:1). Ironically, the EC has indirectly funded Beowolf Mining, the company recently approved to mine

Gállok. The mine would block two routes used by reindeer to migrate from summer to winter grazing, risk significant environmental contamination of the region and haulage roads would cause widespread habitat destruction (Tsiouvaras et al., 2018:1). The mining consortium 'Pacific' of which Beowolf is a member, received funding of 30 million SEK from the EC for 'environmentally friendly ways of extracting minerals' (Röstlund and Otto, 2022).

For Sami the renewable energy industry is far from 'non-intrusive': "green electricity requires vast amounts of land[...]we are supposed to move over a little[...]during hundreds of years[...]the Western world has built its riches on the land of indigenous peoples. And now the West intends to become environmentally friendly, and it's supposed to take place on the lands of indigenous people, at their expense, again, I think it is horrible." (Sjoegren and Matsunda, 2016:44). Fyn stressed that "conservation should be this area never to be mined, never to be exploited" by extractive activity, which is deemed industrial activity causing significant and long-lasting ecological impacts, and not subsistence practices active on the landscape for millenia.

The discussed tenants of Swedish-Western wilderness conservationism fly in the face of Sami ethnoecology which exhibits a human-inclusive equity and reciprocity (Boekraad, 2016:97). This is apparent, for instance, in stories about 'the underground people'. In Sami folklore, they live in a parallel world and are generally understood as "guardians of a value system" that can "protect or punish transgressors" (ibid.; Lara). Two Sami scholars have concluded that this belief represents "a view of nature management and environmental protection[...]When the landscape and the nature were populated by others, even if they were underground spirits[...]the relationship with the natural surroundings became characterized by equality. Humans had to treat nature as their neighbor and peer[...] a relationship of reciprocity." (Myroll, 1999: 29 in Boekraad, 2016:97). One Sami woman described how during her childhood people would not dig a hole nor choose a place to dispose of dirty water without seeking permission from the underground spirits (Boekraad, 2016:103). This highlights how land use interactions are culturally embedded and premeditated. Thus unsurprisingly herders are skeptical of the idea that removing humans from a landscape makes it more 'wild' or 'conserved': "we have this holistic outlook, in that way a landscape without human presence is also strange, in my opinion"; "when a natural preserve was established it was in order to protect nature from all human influence, it was almost as if man should not be

allowed to exist in nature." (Sjoegren and Matsuda, 2016:41). What is often labeled 'pristine wilderness' is in fact the Sami homeland, the stamping grounds for a highly developed traditional reindeer herding (Beach, 1986:16). When asked about fortress conservation Fyn responded: "it's insane. I just spoke yesterday to a woman about this. So it's a huge topic[...]all the places around here have names: all the streams and all the little knobs and mountains, and they're all Sami. So the idea of humans being separated from nature is a fantasy. It's a cultural landscape, we've been herding, hunting, fishing[...]it's been thousands of years. Therefore, there is no Sami term corresponding to the concept of untouched nature (Boekraad 2016:124).

Evidently, a Sami conservation paradigm approaches wolves and wilderness in terms of wider integrative effects that includes humans within the local arctic ecology. As equals in this system, wolves are not elevated as exceptional actors or unique signifiers of a healthy arctic landscape, but rather as ecological actors among many, including human hunters and herders. This 'flat' relationship to the local wildlife also means that subsistence practices like herding and hunting within 'wilderness' areas are no less native or foreign than the subsistence actions of the wolf. Within such a paradigm, the conservation of wolves and/in PAs does not necessitate the exclusion of human subsistence, which is considered integrated, conscious and an authentic part of the landscape. Rather, it seeks protection from industrial projects that exceptionalize human enterprise and cause widespread ecocide at the unilateral expense of Sapmi's inhabitants, human and animal.

4.3. Subsistence Conservation

With the inclusivity of humans in a Sami conservation paradigm, it also becomes apparent that integrative landscape practices are not just 'permitted' but are integral to Sami-nature relationships. Chiefly, it is through participation in the arctic ecosystem in the pursuit of animal foods in the form of hunting, herding and fishing that Sami have developed a conservation value system. Inversely, for Swedish-Western environmentalism, excluding the pursuit and consumption of animal foods makes one more environmentally in tune. This is particularly a touchstone for environmental activist factions, rather than the fortress conservation interests discussed so far. In contrasting this vein of environmentalism in relation to Sami ethnoecology, I will highlight how subsistence-based human-animal relationships contribute to defining a Sami conservation paradigm.

As theorized (see 2.2), our material-practical relations with the environment shape nature ideologies, and food is no exception. Early in our conversation, Fyn began to question anti-meat activism in Sweden, associating this with green technocratic agendas like Bill Gates, who recently attempted to impose a geoengineering project in the Swedish arctic: "he advocates for veganism and that everybody should adopt that[...]Greta [Thunberg] is telling us exactly, she's bringing basically his message to us in this sense.". It became clear that there is a largely unaddressed ethical divide between environmentalists abhorring meat-eating, and indigenous Sami, whom they support in many anti-colonial struggles, but have a culture largely defined by herding and hunting. As well as Thunberg, organizations like Greenpeace and Extinction Rebellion are opposed to livestock farming and often advocate animal rights in general. Fyn recalled how a "group of vegans targeted this group of herders about 10 years ago to not "kill Santa's reindeer". They were horrible and disturbing". However, in Sweden contemporarily, there is no large public conflict on this issue - it exists as an underlying divergence of ethics, haunting relations and debated privately. Despite this, as environmentalism becomes increasingly institutionalized and 'plant-based' agendas gain capital support, there is no certainty that this will not have repercussions for indigenous rights and livelihoods: those who seek to maintain traditional land use practices like hunting, and pastoralists who depend economically on meat-eating culture. Already, voices in the Global South have spoken in defense of communities who rely on animal foods, claiming that 'Criticism of animal farming in the West risks health of the world's poorest due to the high nutritional content of meat' (Mugerwa and Iannotti, 2021).

Notably, environmentalists' aversion to animal foods is usually provoked by the unsustainability of industrial meat production, not indigenous hunting or pastoralism. Fyn commented ironically on how, when it comes to working with livestock, Sami get "the green light because we have indigenous status". Yet this indigenous exception to the 'rule', is unclear and does nothing to address the underlying divergence of animal-nature ethics or how this could still subvert Sami ethnoecology. In a video, Greta Thunberg argues that "our relationship with nature is broken" before delving into the problems with livestock. Amongst reels of petting various animals, she asks: "what about their thoughts and feelings[...]some animals plan for the future. Forge friendships that last for decades. They play, they help each other..." (Mercy for Animals, 2021).

These are valid questions, but the assumption that consuming livestock signifies a 'broken' relationship with nature, and the suggestion that animal consumption means a disregard for animal agency obscures indigenous ontologies underneath a critique of industrial farming and in favor of increasingly domineering Western human-animal ideals. Additionally, such sentiments not only draw on sustainability points, but the anthropomorphizing of animals, in line with wildlife conservationism discussed in 4.2.. Environmental groups like Greenpeace, Extinction Rebellion and the WWF are no stranger to elevating charismatic mammals (like WWF's mascot, the Panda), to promote an anti-animal consumption and/or a worldwide wildlife conservation agenda (Dowie, 2009:50). The Inuit documentary 'Angry Inuk' investigates this in relation to anti-sealing, and the movement's devastation of indigenous biocultural (Arnaquq-Baril, 2016).

Like Inuit, Sami relate to animals very differently than Westerners. Siri, having worked within the Swedish environmental movement and been vegetarian said: "I have been thinking a lot about how to live sustainably and how to eat reindeer meat or fish, but not the industry meat, and I've seen that with my fellow Sami people and - a lot of young people - who are very aware of how they are living. And then I've also been in the environmental movement and many of my friends were vegan, they were not Sami, so I've also been in that place and seen really how uninterested [they] are in Sami issues, [...]environmentalists are not interested in Sami issues[...]they don't know anything about Sami.". Ignorance on the issue is perceived as a part of deeper dissociation from Sami culture within environmentalism. Siri also believes that "the Sami way of living, the indigenous way of living, is a lot closer to the environmental movement than the environmental movement themselves know about. For example, many Sami young people don't eat other meat than wild meat like reindeer, moose, because they realize that we cannot have a healthy planet by continuing with this meat industry. But we also cannot have a healthy planet if we do not eat [local] food, it's better to pull up a fish from your own river, than to send for vegetables from South America.". Lara took a similar position: "industrial meat is not right[...]it depends on what kind of meat and why you eat it and [the] lifestyle around it.". She also stressed the local aspect of Sami animal consumption and questioned: "I don't know if it's good for the planet either to only eat plants, I don't know, do we have the capacity to do that?".

Unfortunately, the approach of 'permitting' Sami animal-based subsistence livelihoods as mere 'exceptions' to Western-bred ethics, assumes ecological superiority of Western nature relations and sidelines the environmental relevance, value and importance of indigenous way of living. Conversely, Sami-animal relations are formed through subsistence practices such as hunting and pastoralism. These require an interdependent engagement with the landscape where theological conservation ethic depends on the utility of animal resources. This reflects other indigenous-nature relations, where environmental utility also infers protection and thus is necessary for effective conservation (Riseth, 2007:177). A Sami hunter and herder explains: "Religion is tied to the use of resources. Spirituality intervenes in material conditions - you have that as long as you depend on it, otherwise you cannot have it anymore. It becomes artificial - just an experience." (Boekraad, 2016:55). Conservation ethics depends on being 'in touch' with nature, and not alienated from it. Siri exclaimed: "if we get alienated from nature, we also become unlucky and we become vulnerable to changes if we can't cooperate with nature, we are vulnerable.". Western nature ethics deny the assertion that meaning lies in the relational contexts of human engagement in nature, but rather that it is laid over the world by the mind (Ingold, 2000:51). Yet for Sami, a healthy relationship with the local landscape depends on the pursuit of its resources, since it is through the physical requirement and interaction with animals that they come to be spiritual organisms that warrant conservation. Hence the reindeer is revered as incredibly important in Sami theology and is simultaneously one of the most utilized resources in their environment, used as: a decoy to lure its wild progenitor towards hunters, a pack animal, a sled-pulling animal and a ridden animal, and as having provided milk, meat, clothing, shelter and tools (Beach, 1990:255). At the same time, it is incredibly sacred; particularly white reindeer, where the skin is used for the casing of cradles to protect a baby (Lara, Fyn). These two are not coincidentally related: intimate utility of animals gives rise to reverence and protection. Instead, worship of animals and nature separated from material interactions becomes abstract and reverts to metaphysical conceptualizations that quickly become detached or universal, lacking intrinsic regulation.

Furthermore, the 'Máddo' tradition can be considered one of the central elements in demonstrating how Sami theology deals with ecological sustainability through ethics and behavior toward animals (Boekraad, 2016:75&77). Though there are many names, 'Máddo' has its origin in Northern Sami and roughly translates to 'mother of species' and can be understood as a guardian

spirit of a species (ibid.). Stories within the Máddo tradition work to establish a value and behavioral system that aims at maintaining a sustainable relationship with local animal species (ibid.:87). The stories are characterized by conscientious hunting and utilization, highlighting the power of subsistence in generating sustainable human-animal relations. Stories of Máddo protection spirits seek to regulate behaviors through a strict set of rules and attitudes towards animals, including overfishing, mistreatment, poaching and even grumbling about a bad catch (Boekraad, 2016:88.). For example, the wolf protector spirit is said to take revenge on one who kills too many wolves (ibid.). Boekraad (ibid.) reported that the more fragile the population of the animal the more stories there seem to be about it.

Evidently, and as discussed, the Sami relationship to local animals is characterized by a value system that considers reciprocity the norm (Boekraad, 2016:68). The binding mutual obligations between the reindeer and Sami and the dog and Sami, is told in the origin stories of these relationships to have emerged through food, hunting and protection (Hatt, 1922:33). Accordingly, Ingold in his studies of northern hunting peoples has iterated how animal foods are widely reported as gift, and the reciprocity between humans and the spirit of animals like the deer which "sustains humans with food, while through the act of killing the deer, humans reciprocate by releasing the spirit of the deer to become reborn, thereby ensuring the reproduction of the animal species" (Ingold 1987: 2). For Sami, "essential to this mutual respect is non-wastage of the animal master's gifts and the proper promotion of the reincarnation of the spirits of the animals gifted to humankind in the flesh" (Beach and Stammler, 2006:14). Furthermore, compared to a materially detached approach to wildlife which accentuates individual rights and emotions, in Sami culture animals are articulated in their totality, thus what is best for the whole group that is 'the bear' is more important than an individual 'bear'. The understanding is that the death of individual animals is necessary and beneficial for subsistence and for the good of species and land. Death is not taken lightly, animals are not disposable but are actors within the network of life and death. One Sami woman interviewed described how she finds the reindeer slaughter difficult, but she understands that it is for the good of the whole herd (Sjoegren and Matsunda, 2016:46).

Particularly, the Sami relationship with the bear through hunting stood out in illuminating subsistence-based conservatism within Sami culture. The bear was considered incredibly sacred,

with hunts and skeleton disposal heavily ritualized (Boekraad, 2016:75). Through interviews and observations, Boekraad (2016) came to understand how Sami view the bear as intelligent and often spoke of it as a family member. An oral tradition from the Jokkmokk area tells of the friendship between humans and bears, and the attitude of hunters as characterized by respect for the bear as of equal value, with a soul and the ability to think like humans (ibid.:74). This respect and empathy for the intellectual and anthropomorphic traits of the bear did not remove the animal as a food source, rather it was an even more valuable resource, and through the pursuit of it even more worthy of protection. Thus one Sami woman described the bear as especially sacred, and eating it as a religious experience (ibid). This reflects Ingold's observations of many northern hunting peoples that "hunting itself comes to be regarded not as a technical manipulation of the natural world but as a kind of interpersonal dialogue, integral to the total process of social life wherein both human and animal persons are constituted with their particular identities and purposes." (Ingold, 2000:49). For Sami, acts of hunting and herding as subsistence practices shapes a powerful wildlife conservation ethic.

5. Conclusion

While environmentalism has been an ally in the Sami fight against the destruction of their lands and resources by extractive industries through PA policy and activism, the two groups remain ecologically at odds. This research asked: in which ways are Sami-ecological relations challenged and subverted by the dominant Swedish-Western environmental conservation paradigm, and how is a Sami conservation paradigm articulated in contrast? Applying a thematic analysis to data from interviews, Sami folklore, scientific research and primary content, this thesis elucidated three ethnoecological themes: geographical enclosure, wolves and wilderness and subsistence practices. An analysis of these themes has shown how: (1) environmentalists' critiques of reindeer 'overgrazing' in SRH subvert how geographical enclosure constrains SRH as a potential regenerative practice, severely limiting Sami capacities to enact sovereign traditional land and resource management practices; (2) challenged by dominant views on large predators which elevate and exceptionalize them, Sami have a reciprocal and human inclusive relationships to wildlife and wilderness; (3) Western animal-nature ethics subvert Sami sustainable relationships to nature developed somatically through animal-based subsistence practices.

While the Western approach to environmental conservation has been adopted globally, there is growing recognition of its inadequacy. Protests, regulations and PAs are failing to adequately protect biodiversity and repel extractive land use, not to mention failing to conserve areas of cultural significance. This thesis contributes to challenging the widely assumed logic of this paradigm through the story of Sami ethnoecology in Swedish Sapmi which illuminates an indigenous environmental conservation approach that is locally relevant and practical, challenging domineering ecological assumptions. While what might now be said is: 'maybe it is time for an indigenous conservation paradigm', the path to this is laden with numerous threats and hurdles not just from domineering environmental views, but from corporate and institutional factions that do not conceive of Sapmi's social-environmental justice issues at all. However, my hope is that this thesis contributes to Human Ecology fields by inciting pause on how we conceive of and approach nature care and management, lest we funnel headlong into new crises and alienations. It also contributes by adding another layer of understanding to land and resource sovereignty through Sami eyes, in a public and research landscape where they are still mostly sidelined.

Finally, further research could expand on investigation into a Sami environmental conservation paradigm by including more varying internal groups, such as Sami who are not members of a RHC and those who are, those who are hunters and those who are not. This could also include observations and interviews on other ethnoecological material such as craftsmanship and art as ways to explore the Sami relationship to Sapmi.

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Appendices

Appendix A. Primary and Secondary Interviews

Name/Source (anonymized)	Date	Contacted	Description	Member of RHC
Siri	April 2022	Referral	Sami politician and reindeer owner	Yes
Lara	March 2022	Referral	Sami artist and reindeer owner	Yes
Fyn	March 2022	Cold Contact	Sami artist and reindeer owner	Yes
Michelle	March 2022	Cold Contact	Leader of a Swedish Environmental Conservation Organization	N/A
Boekraad	2016	N/A	Secondary interviews with Swedish Sami herders on ecological sustainability through beliefs and rituals	N/A
Sjoegren and Matsunda	2016	N/A	Secondary interviews with Swedish Sami herders on wildlife conflicts in Sapmi	N/A

Appendix B. Primary and Secondary Sources of Story Knowledge

Source	Date	Story Tradition/s Analyzed	Source Type
Lara	2022	The Wolf and the Reindeer, The Underground People	Primary Telling
Boekraad	2016	The 'Máddo' tradition	Secondary Interviews
Hatt	1912	When the Farmer Wanted To Stamp Out the Sami, How the Sami Got the Dog, How the Sami Were Given the Reindeer	Secondary Ethnography

Appendix C. Scientific Studies

Author/s	Year	Title	Field	Analytical Contribution
Axelsson- Linkowski et al.	2020	Shifting Strategies between Generations in Sami Reindeer Husbandry: the Challenges of Maintaining Traditions while Adapting to a Changing Context	Human Ecology	Evidence of the ecological limitations placed on SRH due to extractivist land use.
Brannlund and Axelsson	2011	Reindeer management during the colonization of Sami lands: A long-term perspective of vulnerability and adaptation strategies	Environmental Science	Evidence on the importance of intensive herding as an adaptation strategy.
Hausner et al.	2020	Sámi knowledge and ecosystem-based adaptation strategies for managing pastures under threat from multiple land uses	Ecology	Showing herders requirements for land use flexibility.
Horstkotte	2013	Contested Landscapes: social-ecological interactions between Forestry and Reindeer Husbandry	Ecology	Evidence of the synergistic relationship between forest health and SRH.
Kamerling	2017	High-resolution palynology reveals the land use history of a Sami renvall in northern Sweden	Archaeobotany	How SRH herding activity affects plant cover positively.
Skarin et al.	2020	Reindeer use of low Arctic tundra correlates with landscape structure	Ecology	Reindeer herders as a tool for conservation in the face of climate change.

Vowels et al. 2017	Expansion of deciduous tall shrubs but not evergreen dwarf shrubs inhibited by reindeer in	Ecology	SRH has regenerative capacities.
	Scandes mountain range		

Appendix D. Environmentalist Content

Source	Yea r	Title	Туре	Environmentalist Attributes	Last Accessed
European Wilderness Society	2020	Opening Session: Do we need to protect wilderness?	Video Panel Discussion	Wilderness Ideology, Fortress Conservation, Biodiversity, Climate Activism, Animal Rights	12 May 2022
Mercy for Animals	2021	Greta Thunbergs message #ForNature	Video	Animal Rights, Climate Activism Biodiversity Conservation	12 May 2022
European Commission (EC)	2020	Draft technical note on criteria and guidance for protected areas designations	Draft Criteria Document	Sustainable Development, Fortress Conservation Wilderness Ideology	12 May 2022
Naturvårdsverket [Swedish Environmental Protection Agency]	1997	The Laponian Area: A Swedish World Heritage Site	Report Document	Wilderness Ideology, Fortress Conservation	12 May 2022
Naturvårdsverket	1989	The National Parks Plan	Report Document	Wilderness Ideology, Fortress Conservation	12 May 2022