CABIN FEVER

Can the Norwegian cabin culture be sustainable?

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Introduction

In Norway, cabins were originally built for travelers and fishermen that needed a place to rest after traveling long distances by foot, or for farmers tending to the livestock in the mountains in summer. The Norwegian "Seterhytte" became a tourist destination in the mid 18th century, and by the 1960s cabins became a mass phenomenon (Helgerud, 2021). Now cabins are used all year round by everyone, and have become luxurious, having all kinds of commodities usually found in city houses. Its popularity has also increased with almost every 10th Norwegian owning a cabin (Kaste, 2021).

Norwegians want to be close to and, in harmony with, nature. But how much in harmony with nature is this cabin culture?

Why is cabin culture in Norway a problem concerning SDG 15?

According to Statistisk Sentralbyrå (SSB), Norwegians owned almost half a million cabins by the end of 2022 (SSB, hytter, no date). SSB also provides the information that most cabins are owned by people who are above 40 years old. This means there is approximately one cabin for every 6th Norwegian (SSB, befolkning, no date). These cabins come in addition to their primary residences already owned in urban areas. Having such a large part of the population with access to several residences represents a very high standard of living, it is not sustainable, and if everyone on Earth was consuming and living like Norwegians, we would need several planets (WWF, no date). According to a study done by IPSOS in 2018, there is a trend of people under the age of 45 not buying their own cabin because they have access to one already. The sharing of cabins is something we will discuss further in our solutions (Solbraa, 2019).

In our view, cabins are not inherently bad for ecosystems, it will depend on the way it is built, where it is built, and how it is being used. We will discuss this further in our solutions also.

A cabin can be built in a way that is in harmony with nature, our concern is that the policy and norm for cabin building the last 20 years has been done with no respect to several SDGs. The Norwegian minister for environment, Espen Barth Eide, even goes as far as to say that "Norway has sinned in this part, and allowed too much degradation of nature, and that cabin building is one of the biggest problems relating to this issue" (Rustad, 2022).

The norm has become a high standard that resembles houses you normally find in cities. This is a stark contrast to the traditional "Seterhytte" which had very humble accommodation. The average size of a cabin in 2022 was 101,9 square meters, almost double the size of an average cabin in the 1960s (Helgerud, 2021). At present time 70% of the ice-free surface has been altered by humans (UNCCD, n.d.), and even though cities only represent 1% of the land use, they could concentrate 70% of the world's population by 2050 (IPCC, 2022). Taking into consideration the growing global population, it stands to reason that we need to consider area neutrality in new emerging urban areas, such as cabin urbanizations, to minimize the impact on life on land. This will be discussed further in our solutions.

The way cabins are built now is in direct conflict with SDG 15, as land use change is the biggest driver of biodiversity loss in Norway. We will focus on the loss of biodiversity in this paper, and the lack of regulation is an important aspect when it comes to solutions. However, the continued building of cabins also interacts with several other SDGs. SDG 9, 11 and 12 are important to mention.

Specifically, we want to highlight target 9.1, which is about developing quality, reliable and sustainable infrastructure, with focus on equitable access for all. Also target 11.A, is an important target relating to the challenge of not having an official strategy for future cabin development. It aims to support economic, social, and environmental links between urban, peri-urban, and rural areas by strengthening national and regional development.

Target 12.2 says that by 2030, we need to achieve the sustainable management and efficient use of natural resources. And target 12.8 is arguably of high importance, as this target states that by 2030 people everywhere should have relevant information and awareness for sustainable development and lifestyles in harmony with nature.

Biodiversity loss

Land use change is the main driver of biodiversity loss globally (Jakobsson and Pedersen, 2020). Land use change is defined as a process by which human activities transform the natural landscape, referring to how land has been used, usually emphasizing the functional role of land for economic activities (Paul and Rashid, 2017). In the last 100 years the area of Norwegian wildlife habitat has been reduced from about 50% to 11,5% (Jakobsson and Pedersen, 2020). Furthermore, land use change is considered to be the biggest threat to nine out of ten of the species on the Norwegian list of endangered species (Jakobsson and Pedersen, 2020). The number of cabins is increasing each year, and these cabins take up land areas that would otherwise be habitats for wildlife. Cabins in Norway are mainly located by the coast or in the mountains. Most cabins are located within 0-49 meters above sea level (SSB, hytter, no date). Vacation home areas cover 7,9% of the total area of Norway (SSB, hytter, no date).

There are many different ecosystem types in Norway that are heavily affected by land use change, specifically terrestrial ecosystems like wetlands, forest, mountain areas and open lowlands, as seen in attachment 1 (Jakobsson and Pedersen, 2020). What are these different ecosystems, and how are they affected? Wet marsh covers about 13% of Norway's total land area, and consists of swamp, swamp forest and water springs (Jakobsson and Pedersen, 2020). Land use change has been the biggest threat to wetlands, mostly due to draining swamp areas for agriculture, forestry, road building, electrical infrastructure and house- and vacation home building (Jakobsson and Pedersen, 2020). Forests cover about 44% of Norway, with 27% of this area being productive forest (Jakobsson and Pedersen, 2020). It is estimated that about 60% of all known Norwegian species are connected to forest ecosystems (Jakobsson and Pedersen, 2020). Furthermore, about 50% of endangered, or nearly endangered, species on the Norwegian list of endangered species live in forests (Jakobsson and Pedersen, 2020). This makes forests an important ecosystem for Norwegian biodiversity. Open lowlands are open land areas below the forest border, and includes boreal moorland, coastal heather, semi-natural meadows, and semi-natural salt meadows (Jakobsson and Pedersen, 2020). These ecosystems contain much biodiversity and is for example the habitat for many pollinating insects (Jakobsson and Pedersen, 2020). Many cultural landscapes are part of open lowlands. As mentioned, most cabins are built at 0-49 meters above sea level. This puts lowlands especially at risk with the expanding number of cabins in Norway.

Coastal heather is a cultural landscape found along almost the entire Norwegian coast and is an important ecosystem for many coastal species like pollinating bumblebees, wild sheep, and coastal birds. Many cabins are built along the coast of Norway. This can pose several threats to the coastal heather ecosystem in the area. Cabins can, for example, bring in invasive species because people plant them in their garden. This can become a threat to the local biodiversity in that area. Cabins can also substitute the cultural landscape of coastal heather, causing loss of habitat for species in this ecosystem. Furthermore, when building in coastal heather, this can cause implications to cyclical burning of the landscape, which is a crucial part of maintaining the ecosystem. Overgrowth in this landscape can become a fire hazard, as well as minimizing the grazing area for animals such as wild sheep that do not graze on trees and big bushes. Overgrowth of coastal heather turns into coniferous forests which have less biodiversity, especially if these forests mostly consist of one species of trees, as seen much along the Norwegian coast.

Solutions

A total stop in cabin development is unlikely, but some things need to change. However, there is no consensus and different political parties want different things. The Norwegian Institute for Nature Research "NINA" have listed area neutrality, material and energy reduction, and limited extension of infrastructure as the basis for sustainable vacation home development (Kaltenborg, 2022). This could imply that vacation homes must progressively become more basic as they are built further away from urban areas and that they should be shared to reduce the total numbers of cabins (Nasjonalparken Næringshave, 2022).

Based on these suggestions we propose three solutions that we believe in:

1. Regulation:

The regulation of cabin building is not entirely new in Norway. In the 1960s and 70s, when cabin development had its first boom, several cabins were built by the coast due to a lack of regulations (Helgerud, 2021). This led to the privatization of coastline and land which directly contradicted and threatened the 'Outdoor Recreation Act' of 1957 which guarantees every Norwegian the right to use and enjoy Norwegian nature (Helgerud, 2021). These regulations, of course, had some positive consequences for nature, however they were based on an anthropocentric worldview and were mostly meant to preserve nature for humans. Therefore, we call for stronger and more ecocentric regulations going forward because cabin development should prioritize the protection of nature. One of the most important ways to do this is by achieving area neutrality, which is based on three principles: construction must avoid the destruction of nature, compensate for the land use, and restore the same amount of area that is going to be affected by human activities (UNCCD, n.d). This new paradigm has not yet been applied into official state regulations but has been put to effect in the urban planification of Trondheim which requires that developers fund the restoration of eventual destructed rivers or wildlife during the development (McCormack et al., 2022). This is one example of what these regulations could look like.

2. Time-sharing:

Not everyone can own their own cabin and most cabins are only used by one family on average 49 days a year (Mikalsen and Berglihn, 2015). By sharing our vacation homes, we can reduce the need for new cabins and the area used per capita. Websites such as airbnb and cabinweb.no where you can rent and rent out your cabin is a positive trend, and policy makers should look into proposing incentives for consumers that take part in this more sustainable way of owning and using cabins. One example: Several big corporations' own cabins and rent them out using cabinweb.no to their employees as a part of their benefits. Den Norske Turistforening, DNT, promotes the sharing of cabins. DNT owns 550 cabins with different kinds of accommodations (DNT.no, no date). They are of different sizes and standards, and they are open to both members and the public.

3. Green Architecture and biophilic design:

If we are going to continue building cabins, the construction needs to be more sustainable and on terms with nature. This includes maximizing energy efficiency using renewable energy and natural ventilation. Reuse of materials is also an important aspect of green architecture. The goal should be for every cabin to blend in with the environment and thus becoming less visually disturbing, and maybe offering habitats for wildlife. Biophilic sustainable design is about incorporating features in the built environment to bring people and nature together, it addresses the reconnection with nature and architecture. One example is grass roofs and vertical walls, with plants that would naturally grow on the area where the cabin is built, and thus recreating the habitat that was lost. These will also help maximize energy efficiency: 9-11% reduction in natural gas (USGBC, 2016) and it will help capture CO2, approximately 2.5 kg CO2 m-2 year (Kuronuma et al. 2018).

Conclusion/discussion

Cabin culture has long traditions and is engrained in the Norwegian population and lifestyle. However, alongside unprecedented growth and an increased upper-middle class, the development of newer, larger, and more technological cabins have increased in the thousands. This poses a threat to nature, and we are experiencing increasing losses in biodiversity, habitat, and the ability to sequester carbon. This calls for action and it is slowly becoming a topic in politics, research clearly shows that a reduction in the area that's changed, total number and the prevalence of cabins needs to go down. To achieve this we propose stronger regulations, green architecture and time-sharing of existing cabins rather than making new ones. If we want to meet the SDGs, we need to take this issue seriously and start to consider these solutions. Norwegian cabin culture has deep roots, and it will require a change in public attitude to make these necessary changes. Historically we know that these changes take time and a rather big collective effort, but they are possible.

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Attachments:

Attachment 1: (Jakobsson and Pedersen, 2020, p. 75) The graph shows the five major drivers of biodiversity loss and how greatly each driver affects the different ecosystems.

