

The predators, the prey and the arguments: Contested wildland management for large mammals in Norway



The Brief in brief

In Norwegian wildlands, free grazing of sheep is widespread, roe deer and moose populations are large and intensively managed for hunting, and populations of large carnivores (wolf, brown bear, lynx) are recovering from previous lows. Stakeholder groups differ in how they value the different ecosystem services provided by these large mammals, and the current management policy is hotly contested. To sway the debate in their favour, different stakeholders use different arguments. We identified three distinct lines of argumentation emphasising different value orientations – intrinsic, cultural, and utilitarian. Yet common to all was the appeal for clearer management practices to harmonise the policies of different sectors.

Context

For much of the 20th century wolves were extinct and brown bear and lynx populations were greatly reduced in Norway. With few large carnivores left in Norwegian wildlands, sheep farming practices evolved from sheep herding to free grazing in forests and alpine tundra. In addition, roe deer and moose populations were managed to proliferate and spread throughout the country to benefit hunters.

Subsequently, the recent return of large carnivores into the Norwegian wildlands has given rise to a heated debate over food production, rural policies, nature management, biodiversity protection, and the associated conflicting interests concerning the different uses of the Norwegian wildlands.

To examine the surrounding arguments in detail, we consulted a wide variety of written sources (journalistic, scientific, political), supplemented by informal discussions with stakeholders and experts. We identified 40 arguments about issues specifically concerning moose, roe deer, sheep, wolves, bears, and lynx in the wildlands in southeastern Norway. The arguments covered a broad range of different ecosystem services or disservices, dependent on stakeholder interests, and included arguments framed in positive or negative terms. We then asked key stakeholders from the different interest groups, including land managers, farmers, hunters, conservationists, and outdoor recreation organisers, to order the argument statements according to their perceived importance.

Arguments

From the interviews with representatives of key stakeholder groups, we identified three distinct lines of argumentation reflecting orientations towards intrinsic, cultural, or utilitarian values (Table 1).

Framing

The three stakeholder groups had distinct views on the role of humans in nature and their policy orientations differed accordingly. Group 1 framed the arguments along the lines of intrinsic nature

Line of argumentation	Agreed most	Disagreed most
Intrinsic values (group 1)	The Norwegian population targets for lynx, wolf and bear are too low to secure viable populations in the long-term and must therefore be increased	The lynx population ought to be kept low so as not to compete with hunters for roe deer
	Bear, wolves and lynx have a right to live in Norwegian nature	Wolf and bear conservation is a threat to traditional farming and a living countryside
	Norway must ensure that Norwegian populations of wolves, lynx and bears be conserved for the future, because Norway has committed to do this through numerous international agreements	The wolf is more of a burden to the Norwegian society than it is of value
Cultural values (group 2)	Sheep have long been a natural element in the Norwegian wild- lands	Traditional Norwegian sheep farming incurs larger costs than benefits for Norwegian society
	It is important to facilitate traditional sheep grazing so that future generations may experience Norwegian sheep farming the way it is today	Roe deer are a pest for many gardeners and therefore the populations must be diminished
	Today's sheep farming practices contribute to securing rare species and valuable cultural landscapes	The Norwegian population targets for lynx, wolf and bear are too low to secure viable populations in the long-term and must therefore be increased
Utility values (group 3)	Moose hunting is an important constituent of our Norwegian cultural heritage	Lynx mostly predate on sick and weak roe deer
	Roe deer hunting provides many positive experiences	The wolf is central to restoring the ecological balance in Norwegian nature
	The wolf is more of a burden to the Norwegian society than it is of value	The Norwegian population targets for lynx, wolves and bears are too low to secure viable populations in the long-term and must therefore be increased

Table 1. The arguments with which the three stakeholder groups with intrinsic (1), cultural (2), or utilitarian (3) lines of argumentations agreed, and disagreed most.

values. They viewed humans as a disturbance in nature and favoured increased carnivore populations with larger geographical distributions and strict nature conservation, i.e. limited human influence. Group 2 framed the arguments along the lines of cultural values. They argued that human use of cultural landscapes through (sheep) farming creates habitats for red-listed species and promotes biodiversity. Moreover, group 2 favoured strict limitations on carnivore distribution to separate sheep and carnivores, with farms inside carnivore zones being bought out and strict control of carnivores outside their zones. Group 3 framed the arguments along the lines of utilitarian values. They viewed human management of wildlife as necessary to ensure an ecological balance. Group 3 favoured the status quo except for wolves, i.e. stay at existing population targets for lynx and bears, and highly managed populations for moose and roe deer (hunted species).

Effectiveness

The three stakeholder groups clearly favoured different aspects of biodiversity and different ecosystem services. The services and the species that they valued most were sometimes in direct conflict with the

interests of the other stakeholder groups. Yet common to all stakeholders was the appeal for clearer management policies to harmonise environmental and agricultural objectives, even though this meant that the interests of some stakeholders would be compromised. Thus stricter, unambiguous management policies regarding large mammals in Norwegian wildlands could potentially lead to greater stakeholder acceptance for the intended policy.

Transferability

The debate over large carnivore management in relation to hunted game species and sheep farming is not unique to Norway. Throughout Europe, the return of large carnivores has sparked fierce debate over large mammal management and conservation policies. Thus, many of the elements identified through this case study would also apply to other European countries where large carnivores are returning. Conflicts between wildlife and agriculture also occur for other species, including cormorants, geese, cranes, and otters.

Lessons learned

- The stakeholder groups behind the three main lines of argumentation held fundamentally different views on the role of humans in nature and thus favoured different policy orientations.
- Depending on stakeholder interests, the same ecosystem services were sometimes perceived as a good to some, and bad (a disservice) to others.
- Common to all three stakeholder groups was the appeal for clearer management policies to harmonise management practices.

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This brief is a result of research carried out under the BESAFE project, and as documented in Bredin et al. forthcoming in Ecological Economics.[add doi reference] This brief was written by **Yennie Bredin** (yennie.bredin@nina.no) at NINA, with contributions from **John Linnell** (john.linnell@nina.no), **Jiska van Dijk** and **Henrik Lindhjem**. Further information is available in Part III of Deliverable 4.1 of the BESAFE project (<http://www.besafe-project.net/deliverables.php?P=4&SP=32>).

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