# **HUNTing for Sustainability**

- a summary of research findings from Norway



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Ketil Skogen and John D. C. Linnell

The HUNTing for Sustainability multi-discplinary research project has been funded by the European Union's 7th Framework Research Programme. The project involved cooperation with a range of institutions and included case studies from Norway, Sweden, Scotland, Spain, Slovenia, Croatia, Ethiopia and Tanzania.

The primary research activity in Norway has been related to the sub-project entitled "The cultural meaning of hunting". Hunting is an extremely important mode of human-nature interaction, but how people think about hunting is closely linked to culture patterns and value systems. To address hunting merely as an interaction between humans and animals, and manage it accordingly, will therefore miss essential dimensions of hunting as a social practice. In spite of this, hunting in modern societies has received limited attention from the social sciences. One of the objectives of HUNT has been to remedy this situation.

Through focus groups and individual interviews involving approximately 80 people (hunters, non-hunters and animal rights activists) we have mapped people's views on various aspects of hunting in Norway.

A secondary focus has been on the case study of lynx hunting from an ecological and wildlife management perspective. The data collection for this case study has been ongoing for more than 17 years and consists of long term monitoring data, the collection of biological material from animals shot or found dead, and radio-telemetry based field studies.

Within the context of HUNT we have analyzed this data with a view to developing practical tools to help wildlife managers in setting hunting quotas that are sustainable.

# **Hunting in Norway**

Norway has a wide variety of natural habitats and abundant populations of many wildlife species that provide good opportunities for hunting.

Hunting is an important outdoor recreation activity for many Norwegians.

# **Key figures**

Area: 385.155 km2

Protected areas: close to 15%

Population: 4.8 million

Number of hunters: 447 000 registered hunters, of these

200 800 paid the hunting license fee in 2011/2012.



# Big game:

moose (*Alces alces*), red deer (*Cervus elaphus*), wild reindeer (*Rangifer rangifer*), roe deer (*Capreolus capreolus*), Eurasian lynx (*Lynx lynx*).

## Small game:

willow grouse (*Lagopus lagopus*), ptarmigan (*L. mutus*), black grouse (*Tetrao tetrix*), capercaillie (*T. urogallus*), hazel hen (*Bonasa bonasis*), mountain hare (*Lepus timidus*) and beaver (*Castor fiber*). Many waders, ducks and geese are also hunted in some areas.





Photo © Camilla Næss/NINA

## **Hunting rights**

Land is either state-owned or private, and the hunting rights belong solely to the landowners, although wildlife remains the property of the state. No hunting is allowed without the landowner's permission. However, landowners are free to sell hunting permits or let their land and hunting rights to others.

# **Prerequisites for hunting**

In addition to obtaining hunting permits from the landowner, all hunters must pay the yearly hunting license fee prior to hunting. First time hunters must pass a hunting proficiency test, involving a 30-hour course and a theoretical exam. Big game hunting also requires passing a shooting proficiency test before each hunting season.

#### The hunter

The number of hunters has been stable in recent years. Annually around 190 000 persons pay the hunting license fee. Although hunting has traditionally been considered a man's activity, the number of female hunters has doubled over the last ten years. 6.8% of the hunting license fees paid in 2008/2009 were paid by women. A total of 3.100 foreign hunters were registered the same season, 7 out of 10 from Nordic countries.

#### Recruitment

There is a steady recruitment of hunters. 12 800 persons passed the hunting proficiency test in 2011/2012, of these 21% were women. However, many of these actually don't hunt. And the hunters average age is steadily increasing.

### The game

Ptarmigan are the most commonly shot small game, accounting for close to 50% of all small game, whereas cervids dominate the big game harvest. The stock of both moose, red deer and roe deer has increased considerably since the 1970's. 36.600 moose and 36.800 red deer were shot during the hunting 2011/2012 season.

### Management

Hunting seasons for the different game species are laid down by the Directorate for Nature Management. However, landowners may limit the season to a shorter period. The local authorities issue quotas for the relevant species in their area, with the quota being distributed among landowners based on the size of their properties. For some species like moose and wild reindeer such quotas are specified with respect to age and sex of each animal that can be killed.

### The rules of the game

The minimum age for small-game hunting is 16; for big game it is 18. Firearms, caliber and ammunition must be in accordance with the standards set for type of hunt and species. For moose, red deer and roe deer hunting it is required to have a trained tracker dog available so that injured animals can be tracked down and humanely killed. The use of lead shot in small-game hunting has been prohibited since 2005. Hunting, or pursuing game, is not permitted from any motorized means of transport. The use of artificial light during hunting is generally forbidden, the exception is for shooting foxes on bait.





Photo © Per Jordhøy/NINA

# Hunters as "stewards of the land"

Olve Krange, Anke Fischer and Vesna Kerezi

Debates over hunting revolve around the issue of hunters' relationship to the wildlife and the land they hunt.

Do hunters merely seek excitement and recreation, or are they in fact responsible conservationists?

In HUNT we wanted to find out how hunters themselves look upon these questions. We have studied how hunters in Norway, Scotland, Croatia and Spain understand their role in nature, and how they relate to conservation.

Historically the relationship between hunters and conservationists has been complicated, and often marked by conflict. Nevertheless, for many hunters the idea of *caring for* the wildlife and the land is crucial to their understanding of what hunting is about.

The basic thought is that since humans have already interfered with nature; nature also needs to be managed – not only for people's sake, but for nature's own sake. Nature, once tampered with, simply cannot be left alone. Otherwise chaos will result. This chaos will also make animals suffer, because populations will not be managed, and animals will die from starvation, diseases and predation, much worse than the humane bullet from a hunter. There is also a notion of an ideal *balance* in nature. While this balance may once have been "natural", hunters have for hundreds of years been a crucial part of the system that is needed to sustain it. This engagement with wild animals is thought of as part of a deeper unity with nature, which means being *part of* nature in physical sense.

This, according to hunters, distinguishes them from many conservationists, who are said to only *observe* nature. If we humans are to be part of nature, we must also engage with it, e.g. as predators, but also as caretakers, stewards.

The idea of hunters as stewards of the land contributes to a moral justification of hunting, and, importantly, underpins a symbolic appropriation of the land where hunting takes place. Despite differences, hunters and conservationists share many thoughts and values. Both groups are concerned with habitat loss and dedicated to protection of wildlife. The idea of stewardship that many hunters nourish, points to a potential platform for increased cooperation between the two groups.

"Do hunters merely seek excitement and recreation, or are they in fact responsible conservationists?"



Photo © Helene Figari/NINA

# Norwegian hunters' notions of legal and moral property

Ketil Skogen

Access to hunting, and emerging commercialization of hunting that may affect cost and access, are crucial issues in a Scandinavian context, where hunting in principle has been open to everybody at a very low cost.

While few hunters challenge the legal link between property rights and hunting rights, hunters who are not landowners often think of themselves as being morally in possession of the land where they hunt. This pertains particularly to local hunters, but also to non-residents who have hunted an area for a long time. Their attachment to the land is often strong, and their knowledge about their hunting grounds extensive.

This notion of moral possession may be universal, but is probably strengthened by factors that are distinctly Scandinavian:

- 1) The public has an ancient right of access to all private land for recreational purposes.
- 2) Up until recently, the hegemonic social democratic ideology discouraged commercialization of hunting and angling.
- 3) Landowners have normally not demarcated their back-country property rights, or have only done so in inconspicuous ways (due at least in part to moral obligations to local communities), and have thus aided moral appropriation of the land by non-owners, and also avoided conflict.

Moral appropriation of the land, regardless of legal property rights, is a strong factor in collective identity constructions in rural areas. This notion of possession is tied to an emotional belonging that is both widespread and deep. It may create barriers towards outsiders, but at the same time it appears to yield a commitment to stewardship and conservation that could rival that of the legal landowners.

However, it may also lead to opposition against the emerging commercialization of hunting that an increasing number of landowners now engage in, and which is currently encouraged by the authorities.

"In principle hunting has been open to everybody at a very low cost."



Photo © Helene Figari/NINA

# The authenticity of hunting: ideas and practices

Helene Figari and Anke Fischer

Technically, hunting can be understood as the shooting or killing of wild animals. There are however numerous examples of forms of hunting in which the act of killing itself does not seem to be the key motive for the hunt.

If hunting is not primarily represented as the killing or shooting of wild animals, what then characterizes the hunters' ideas of "true" hunting and "real" hunters?

Qualitative analyses of the Norwegian and Scottish data shows that authentic hunters are supposed to show modesty while interacting with their hunting companions. Informants commonly underplayed their own qualities as hunters, and bragging or "showing off" is considered as particular inappropriate behavior. In interviews and focus group discussions, the issue of authenticity revolved around the relationship between the hunter and the game.

"Real" hunters are expected to prefer forms of hunting in which the prey has a fair chance to escape, seeking to achieve a balance in the relationship between the hunter and the hunted: an easy kill is not a worthy kill. "True" hunters know how to hold the back the shot, demonstrating a mature, calm and controlled attitude to the killing part of the hunt.

In the view of the informants, authentic hunters act like "indians"; they are described as outstanding trackers, at one with nature, noiseless and with a profound knowledge of local nature and most importantly of the prey. And they have the capacity of connecting with the prey.

Hence, hunting seems to represent a way of engaging with authentic nature, with the wild, embodied in the game. At the level of representation, "real" hunters gain some of their authenticity from their privileged contact with true wildness. The ideal of holding back the shot is probably just one small piece in the construction of some hunting communities' identity from the inside. It contributes to demarcate their community from the other not so authentic hunters. Motives for hunting thus seem to vary according to the circumstances and the scene for discussion.

In the context of identity construction, refraining from shooting seems to be the practical counterpart to one of the most noble of motives: bonding with wildlife.

"What characterizes the hunters' ideas of "true" hunting and "real" hunters?"



Photo © Helene Figari/NINA

# Young hunters and reproduction of working-class culture

Ketil Skogen

We know that hunting is a practice that carries significant cultural meanings. What is the role of the cultural dimension when young people first encounter the world of hunting?

This study explored one particular cultural route into hunting, namely one that is closely tied to male working-class culture.

Participant observation and interviews with two groups of very young hunters (boys aged 15 to 21) in two semi-urban areas outside Oslo demonstrated that for some youngsters with a working-class background and working-class occupational prospects, hunting may be an arena for the reproduction of typical working-class culture elements – even in areas that are not typically rural.

The hunting culture which these boys are socialized into is typically informal, collective, comprises a certain element of physical masculinity and – not least – it represents a "productivist" perspective on human relations to nature and entails the mastery of "tools" like guns, GPS-units and even dogs. These cultural traits correspond to core elements in a typical male working-class culture, such as it has been described in numerous studies.

However, economic and social change has eroded its material basis, and reproduction of significant culture elements increasingly takes place in the sphere of leisure, where many activities bear a distinct class stamp. This includes a certain element of "cultural resistance" against norms and regulations seen as imposed from above, without respect for the valuable practical knowledge of "ordinary people". Our young hunters contested the ban on lead shot and the protection of raptors, to some extent by taking the law into their own hands.

Importantly, the young hunters expressed a deep admiration for their fathers and other adult male relatives and their lifestyle, and exposed a strong sense of continuity across generations. This is in line with previous studies of typical father-son relationships in the traditional working-class culture. The boys also expressed disdain for contemporary youth cultures, and emphasized the value of tradition.

The finding goes against popular notions of class-less, free-floating identity projects in the so-called post-industrial era. It also shows us that understanding opposition to hunting regulations and dominant norms related to hunting cannot be understood outside a wider cultural context.

"We explored one particular cultural route into hunting that is closely tied to male working-class culture"



Photo © John D. C. Linnell/NINA

# Legitimising and de-legitimsing hunting – morality discourses on hunting in Europe and Eastern Africa

Anke Fischer, Vesna Kerezi, Beatriz Arroyo, Miguel Delibes-Mateos, Degu Tadie, Asanterabi Lowassa, Helene Figari and Ketil Skogen

Talking about hunting often seems to mean talking about morality: Much of the public debate over hunting revolves around perceptions of moral acceptability of different types of, and approaches to, hunting.

# But what exactly is seen as moral, what is seen as a legitimate (or illegitimate) way of hunting?

Drawing on qualitative interviews and focus group discussions with hunters, non-hunters and anti-hunters in study areas in five European and two eastern African countries, we examined patterns in our informants' argumentations, and identified the attributes that are drawn on to legitimise hunting — or to undermine its legitimacy — including characteristics of the hunted animal, hunting techniques and approaches, and motivations. The latter factor in particular, i.e., ideas of legitimate and illegitimate motivations, seemed to underpin a large part of our informants' discourses. Almost consensually, non-hunters and many hunters across most study areas regarded it as unacceptable not to eat the game killed in a hunt. Similarly, hunting was often legitimised by a reference to the need for active

wildlife management, and to the cultural identity of the hunter's community that needed to be preserved. Our analysis identifies these common building blocks of argumentation for and against hunting in general, or certain types of hunting, and interprets them against the backdrop of wider societal discourses on livelihoods, cultural heritage and identity, and the need to make conservation count. We identified what may be termed a *moral hierarchy*, where motivations such as recreation and excitement are accepted – by hunters and non-hunters – only if the *moral imperatives* of meat consumption or responsible population control are fulfilled.

We argue that all ideas about the legitimacy of hunting are embedded in and expressions of such societal discourses, and should be interpreted in this context. Our analysis also suggests that there might be more overlap between argumentations of hunters and non-hunters (and partly even anti-hunters) than commonly thought.

"Talking about hunting often seems to mean talking about morality"



Photo © John D. C. Linnell/NINA

# Lynx hunting as serious leisure

Ketil Skogen

Hunting in modern societies is a leisure pursuit like many others. While meat consumption is widely seen as a moral prerequisite if hunting is to be morally acceptable, the meat itself is not the primary motive behind hunting in contemporary Norway. For some dedicated hunters, hunting may be an essential component in identity projects and self-presentation.

The theory of 'serious leisure' provides tools to account for the meaning leisure activities may hold for various groups. It explains how a leisure activity may become so serious as to be a fundamental block in the identity project of an individual or a group, and may take on a form that strongly resembles – or even exceeds – the dedication and knowledge normally associated with professional work.

Through fieldwork and interviews, we have examined the practice of lynx hunting in Norway as a form of serious leisure. Although the hunters are amateurs, they invest a significant amount of resources in their hunting. Their actions are characterized by a systematic and professionally oriented approach. At the same time they reveal a deeply emotional passion for hunting. The nature of this passion is investigated with a particular focus on its origins and how it is maintained throughout the hunt. The analysis emphasizes what appears to be a strong interaction between the hunters' close friendships on the one hand, and the way lynx hunting is carried out in a professional manner on the other. The combination of strong social bonds and a professional dedication appears to form an ideal basis for a collective identity project merging traditional and modern practices in distinctive and meaningful ways.



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# Hunting the hunters: research on lynx harvest in Norway

John D. C. Linnell, John Odden and Erlend B. Nilsen

The large carnivores are often associated with a high degree of protection under legislation which makes harvesting difficult from an administrative point of view, although Norway is unique in Europe by managing lynx as a normal game species.

Hunting large carnivores is both highly controversial and technically challenging. It is controversial because wide portions of the public regard the large carnivores as a special group of species because of their charisma and beauty while others regard them as unwanted pests. It is challenging because their ecological position as apex predators implies that they live at low densities and their elusive behavior makes them difficult to census. Harvesting such populations is always fraught with risk and uncertainty.

#### **Research questions**

Some of our main questions have focused on biological aspects of lynx demography, where we have tried to quantify the vital rates of lynx in Norway, determine at what age they mature and how many kittens they produce each year. We have worked with the management process, to evaluate the effectively of lynx hunters and their ability to respond to changing quotas and their selection for different ages and sexes of lynx. We have also

evaluated the effectively of the population monitoring system and summarized the changes in the management system over the past years.

#### Method

The study has built on the analysis of a body of data that has accumulated through 17 years of study. The data comes from ecological field work which has used radio-telemetry to study the individual life histories of several hundred lynx in Scandinavia and from a national large predator monitoring program that collates field data on lynx abundance as well as processing the carcasses of all animals shot. Various statistical analysis and modeling tools were applied to interpret patterns in the data and develop decision support tools. In addition, the present and historic policy context around lynx management was collated from relevant documents.

## **Key findings**

Lynx generally demonstrate high reproductive rates although there is considerable variation in the age at first reproduction between areas. Lynx in northern populations show a delayed start of their reproductive life. It also appears that animals that begin to reproduce early bear a cost in the next years' reproduction.

The management of lynx in Norway has changed over the centuries. Early policies of extermination stimulated with bounties gave way to unregulated harvest, before the present system of quota regulated harvest was developed in the early 1990's. Present management goals call for the population to be maintained at a stable level. This level is designed to balance the needs for achieving population viability and limiting conflict with livestock. Thus lynx hunting serves as both a form of recreational harvest and a means to limit damage. Since the introduction of the quota hunting system in 1994 the population has fluctuated around the management goal – going through two cycles of increase and decrease. The main cause of population change has been changes to hunting quotas.

The population monitoring system based on counts of family groups has been demonstrated to be an effective means of monitoring the population. Hunters are very active participants in this work. Lynx hunters in Norway are very effective, and are able to fill the vast majority of hunting permits issued under the quota system. It is only in years with very high quotas that they appear to struggle to fill the quota. Lynx hunters shoot a broad cross section of the lynx population, although males are over-represented in the harvest.

When combined these results indicate that managers have an effective monitoring tool to

track the population and that hunters can respond rapidly to changes in quota size. The fluctuations that were observed appear to be due to time lags in the way managers respond to changes in population size. The development of a prognosis tool to assist with quota setting should minimize this problem in the future.

## **Lessons learnt for best practice**

Lynx have the potential to support a harvest.

Effective monitoring tools exist to permit harvest to be managed in an adaptive manner, which should prevent over-harvesting and ensure sustainability.

Managers should respond quickly to changes in population size and adjust quotas rapidly, otherwise time lags will cause fluctuations.

"Hunting large carnivores is both highly controversial and technically challenging."



Please note that many of the research findings presented in this summary are still undergoing analysis, but will be peer-reviewed through submission to open-access academic journals.

For further information and research findings from HUNT please visit:

http://fp7hunt.net/

Editors: J. D. C. Linnel, K. Skogen and C. Næss. Layout: C. Næss. NINA 2012





