

Making place for the wild in the landscapes of 21st century Europe: the ultimate test of the "think global, act local" paradigm?

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Large Carnivore Initiative for Europe

A second chance

The 20th century was a close call for Europe's large carnivores. Wolves, brown bears, Eurasian lynx and wolverines were all early colonists after the various advances and retreats of the ice age. These four species thrived during all the dramatic environmental changes of the subsequent millennia. Even humans posed little serious threat to their survival until the development of effective firearms and poisons in the 16th and 17th centuries. However, by the early 20th century the combined effect of direct human persecution (with traps, guns and poison), extensive deforestation, and the near extermination of all large ungulates that are their main prey, led to dramatic reductions in the numbers and distributions of all large carnivores. By the mid 20th century it was touch and go for the persistence of these species throughout most of Europe.

The environmental movement starting in the 1960's and 1970's came just in time to save them from continental extinction. The dramatic changes in public attitudes and legislation that followed this movement coincided with the increase in both forest cover and the recovery of wild ungulate populations. The large carnivores have responded well to these improved circumstances. At the moment the situation of most populations, with a few important exceptions, is either stable or increasing. This has mainly occurred through natural expansion, although bears and lynx have benefited from reintroduction programs in some areas. As a result it is no longer a question of saving them from imminent extinction. In other words, we have been given a second chance to try and find a way to sustainably coexist with these

species. However, achieving this with large carnivores is not easy, as they present a number of unique challenges.

The modern European landscape

There is one issue that no matter how obvious it seems must never be forgotten. We have no wilderness left in Europe. The entire European landscape is human dominated. There are many areas of semi-natural habitat, often with high conservation values, but there are no large areas where carnivores can roam without coming into contact with humans. Our National Parks and other protected areas are far too small to contain populations of species such as large carnivores, and most of our protected areas are intensively used by humans. As a result this means that if we are going to conserve large carnivores in Europe, we must do so in the same landscapes where we live, work and play. This requires a conservation philosophy based on integrating people and nature into the same landscape – not separating them as is often done in places like Africa and India where conservation of large mammals is often relegated to protected areas from which humans are excluded.

A diversity of situations

One challenge for large carnivore conservation lies with the diversity of situations. We are lucky to have several really large populations where each species is represented by thousands of individuals – examples include bears and wolves in the Carpathian and Dinaric mountains or the Baltic region, wolves in northwestern Iberia or lynx in Scandinavia. There is no doubt about the viability of these populations. In complete contrast there are several small populations where each species is represented by less than 150, and

in some cases less than 50 individuals. Examples include bears in northern Spain, the Pyrenees, the Italian Alps and Abruzzo in central Italy, lynx in the southern Balkans, and wolves in Germany and Scandinavia. The long term viability of these populations is clearly not secure. Populations that differ so greatly, clearly require very different management practices. The situation can also vary between different parts of a population. For examples, bears in the Polish portion of the Carpathian population occur in a few small fragments, whereas the Romanian portion is several orders of magnitude larger and continuous.

The habitat that carnivores occupy also varies throughout Europe. Wolves probably show the greatest tolerance of different environments. In central Spain they live on open agricultural plains, with minimal forest cover and few natural prey. They are also found throughout the deciduous forests of eastern Europe and into the boreal coniferous forests of Scandinavia. Bears and lynx also show great tolerance of different environments. It goes without saying that the different environments provide very different conditions for large carnivores to survive.

Finally, there is enormous variation in the social and economic situation of the human societies with which they share the landscape. These vary from the richest to the poorest, from those for which large carnivores are something new, to those who have always lived together with these species. These differences result in widely different levels of tolerance for these species. As a result of all this diversity there can never be a “one size fits all” strategy for conserving large carnivores in Europe.

Difficult neighbours

For all their charisma, large carnivores do not always make easy neighbours. Under some circumstances they can be perceived

as the “neighbours from hell”. Under most situations, and for most people, the presence of large carnivores may even go unnoticed. However, they are associated with a range of conflicts with human interests that can occasionally be serious. Wherever large carnivores and livestock occur in the same area conflicts will occur unless the livestock are protected with measures such as electric fencing or shepherds accompanied by livestock guarding dogs. In areas where carnivores have always been present these measures are regarded as being standard, however in areas where livestock husbandry has adapted to the absence of carnivores, restructuring the industry to meet the new demands of large carnivores can be expensive. Hunters who harvest wild herbivores can also experience that the presence of large carnivores leads to reduced hunting quotas. This conflict cannot be mitigated as wild herbivores are the natural prey of large carnivores, and in addition wolves can kill hunting dogs. In northern Scandinavia, the persistence of large carnivores virtually requires that they prey on semi-domestic reindeer which are herded by the Sami people. Although the risk of people being killed by bears and wolves is impossibly small to calculate, it is not zero. People need to learn what to do in order to minimise risks and management is needed to ensure that risk factors are avoided. Bears have a famous love for honey, and unless beehives are protected bears can cause serious damage to apiaries. In addition, to these material and economic conflicts there are a range of more diffuse social conflicts associated with large carnivores, especially wolves. Part of these is motivated by genuine fear, however in many cases carnivores become symbolic of a range of wider conflicts, for example those between urban and rural or traditional and modern values. Recognising the existence of real conflicts is a prerequisite for finding solutions.

A problem of scale

A final challenge is due to the scale at which large carnivores use the landscape. Individual large carnivores almost always occupy living areas of greater than 100 km², in some areas individuals can roam over ten times this area. In addition, bears, lynx and wolverines are territorial. A result is that any given area only contains a very low density of carnivores and functional populations extend over areas of many thousands or tens of thousands of square kilometres. This implies that large carnivore populations rarely fit within any given administrative unit – be it a federal state or a country. Of the 33 large carnivore populations that we recognise in Europe today, only 4 do not stretch across international borders. This requires that neighbouring states or countries cooperate in developing conservation plans for the populations for which they share responsibility.

Think global.....

The European Union has commissioned the Large Carnivore Initiative for Europe (a working group of experts within the World Conservation Union's (IUCN) Species Survival Commission) to develop guidelines for supporting states and countries to develop population level management plans. Even cooperation between EU countries will not be large enough in some situations. Cooperation with other countries that are members of the Council of Europe will ensure a great deal of cooperation, however, to truly embrace the necessary areas there will also need to be cooperation with countries such as Russia that lie outside all these super-national entities. This is in order to embrace some populations such as the Baltic and Dinaric populations that stretch across EU countries, countries that are non-EU but are within the Council of Europe, and countries that lie outside both organisations. The goal of this population approach is to develop the overall coordinated frames that are necessary for the populations to survive into the future.

This requires that they are large enough to tolerate all of the chance events such as disease, poaching, habitat change and climate change that may befall them in the future. Within such an overall plan there should be a clear focus on maintaining a continuous distribution and a target number of individuals within the population, as well as maintaining connections to neighbouring populations.

Act local...

However, the details on how to achieve this goal may vary between populations, or even between different parts of the population depending on local ecological and social conditions. For example, bears in the Dinaric mountains are treated both as protected species and as game species in different countries. Both approaches may be compatible with bear conservation as long as they are carefully managed and monitored. Allowing space for this type of local adaptation of management strategy to local conditions, while never losing sight of the common goal is central to the proposed strategy – a concept that we call “freedom within frames”. Without adopting a pragmatic and flexible approach it is unlikely to gain the acceptance of local people who will have to live with large carnivores as their neighbours.

A new vision for the European landscapes

There should be no illusions about the difficulty of the task ahead. Integrating large carnivores into sustainable landscapes is not going to be easy. There are many difficult, technical and often expensive tasks that lie ahead to minimise conflicts and ensure the viability of their populations. These tasks include finding monitoring methods, reducing the barrier effects of highways, translocating individuals to reinforce small populations, adapting livestock husbandry practices, to name just a few. In addition, the greatest challenge is to change the way that we humans think. If we are to succeed, we

need to recognise that large carnivores are an integral part of our modern European landscapes. People will need to accept the right of these species to exist, and need to be willing to share space in the landscape and a part of nature's productivity with these wild animals. People need to be willing to live with something slightly wild close to their homes. This is a very new vision for the European landscape. A vision where humans do not seek to dominate and control every part of nature. A vision that leaves something for wildlife. Modern legislation at international and national level opens for this new vision. It's a bold idea, and now we have to make it work – with large carnivores being perhaps the ultimate test of our resolve. Large carnivores have repeatedly shown their ability to live with us humans – we just need to find a way to live with them. The paradox is that in our modern crowded world leaving space for the wild will require very detailed and coordinated planning at both the global (European) and local levels.