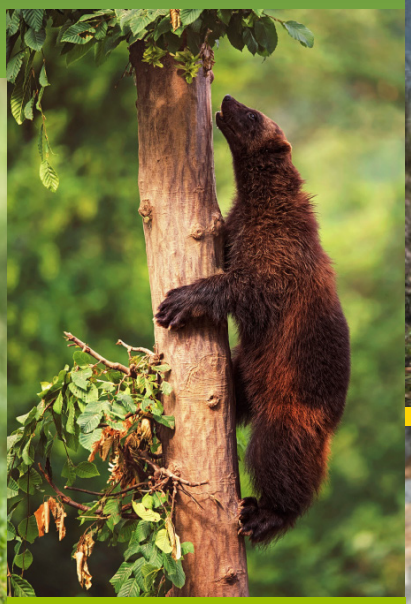
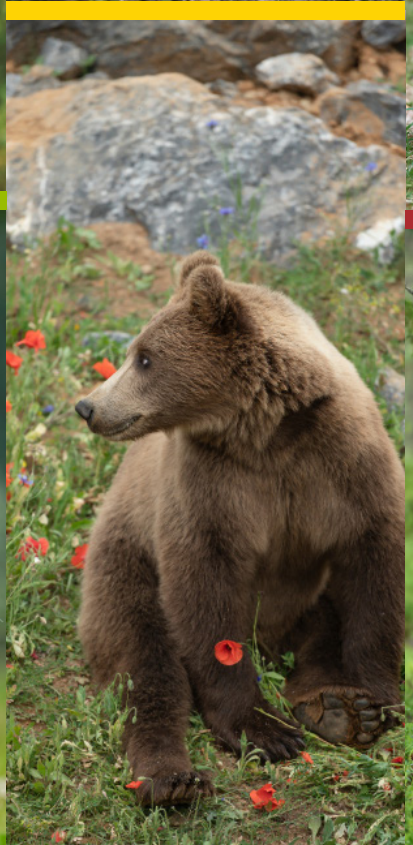
30 years of the Habitats Directive

the return of Europe´s large carnivores





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Introduction

2022 marks the 30th Anniversary of the Habitats Directive, which is conserving a wide range of habitats and species in the European Union. Together with the 1979 Bern Convention, the Habitats Directive ensures that all large carnivore (LC) species (Brown bear, *Ursus arctos*; Eurasian lynx, *Lynx lynx*, Grey wolf, *Canis lupus*; wolverine, *Gulo gulo*) in Europe have some level of legal protection.

Since 1988, the Bern Convention through its Group of Experts on Large Carnivores have been developing a noteworthy collection of recommendations and action plans focusing on bears, lynx, wolverines and wolves. To support the implementation of the Habitats Directive, the European Commission has also published guidance documents concerning LC and established an EU platform on coexistence to which FACE contributes.

Both legal instruments set the legal framework for countries on an individual level. Unfortunately, no strong provisions are made in either legislation for transboundary conservation actions fitted to the biological units of Europe´s LC populations. The specific protection status for each species varies from country to country, due to reservations made by several parties to the Bern Convention and country-specific differences established under the Habitats Directive[1].

Even though the quality of LC management, monitoring and research varies widely, LC conservation has been prioritised in Europe and there is a high degree of scientific cooperation. For instance, the Large Carnivore Initiative for Europe (LCIE) is an expert group that is giving advice to both the EU processes and the Bern Convention[2].
Through this increased knowledge exchange, legal protection, land use changes and growing ungulate populations, the population status of all LC but especially of the wolf has greatly improved in Europe.

Today, all mainland European countries have a permanent occurrence of at least one species of LC. While some species returned completely naturally to their previous distribution areas, others had to be supported by reintroduction projects (mainly the Eurasian lynx and the Brown bear).

To reflect this population increase in LC and to highlight scientific and technical progress, this document aims to:

- give an insight into the reporting obligations under Article 17 of the Habitats Directive;
- show the population developments of Europe's LC from their lowest population level (1950´s to 1970´s), over population estimates in the 90´s up to their latest IUCN assessments and/or most current population estimates;
- provide a short insight into the conflicts arising with increasing LC populations;
- how hunters envisage a lasting coexistence with LC in Europe´s countryside.

[1] Trouwborst (2015). Global large carnivore conservation and international law. Biodivers Conserv 24, 1567–1588
[2] Linnell et al. (2005). The linkage between conservation strategies for large carnivores and biodiversity: the view from the "half-full" forests of Europe. Large carnivores and the conservation of biodiversity, 381-398.

Reporting under the Habitats Directive (HD)

The reporting obligations under Article 17 of the HD is forcing EU Member States to assess every 6 years the conservation status of LC based on population status, range and habitat and future prospects. Even though the conservation status of LC is not reported based on the most appropriate unit (population level – as done by IUCN) but on biogeographical region per member state, some trends and information can be drawn from the results. With each new report, more populations were reported, and fewer unknown statuses were provided (see table 1). For example, while in the first reporting period (2001 – 2006) only 25 assessments for the wolf were reported, already 45 assessments have been listed in the last report (2013 – 2018). Having in mind that more countries joined the EU over the years, the increased assessments per Member States yet demonstrate the rapid range expansion of wolves in Europe.

Table 1 *Example: EU biogeographical assessments for Canis lupus*

2001 - 2006		2007 - 2012		2013 - 2018	
BGR	CS	BGR	CS	BGR	CS
ALP	FV	ALP	FV	ALP	FV
ATL	XX	ATL	XX	ATL	U1
		BLS	XX	BLS	U1
BOR	FV	BOR	FV	BOR	U1
CON	U2	CON	U2	CON	U1
MED	U1	MED	XX	MED	U1
PAN	XX	PAN	U1	PAN	U1

Grey wolf (*Canis lupus*)

The wolf had the largest distribution area in historical times. It occupied the entire continent of North America, Eurasia and Japan. At the end of the 18th century, wolves were still present in all European countries apart from Great Britain and Ireland. However, in the years following the Second World War, wolves were exterminated from all central and northern European countries under government policies. In the last twenty to thirty years, the species has been recovering naturally almost all over of Europe with some wolf populations displaying nowadays reproductive rates of over 20 % (e.g. in France and Germany). The wolf is listed as **Least Concern** in the latest IUCN assessment from 2018.

Their wide-ranging populations span over many national jurisdictions and multi-use landscapes. The result is that wolf conservation and management must consider both their ecological requirements and the cultural, economic and social needs of people from local to transboundary level.

	1950 - 1970	1995 - 1998	2018
Estimated number of individuals (geographic Europe)	ca. 4,830 – 5,250	ca. 12,390 – 13,550	ca. 17,000

Brown bear (*Ursus arctos*)

Brown bears are non-territorial and solitary carnivores with a promiscuous mating system. They originally occurred throughout mainland Europe, but later disappeared from most areas as the human population grew, suitable habitat was lost due to deforestation and agriculture, and the species was persecuted by humans. Today, the total number of Brown bears in Europe is about 15,000-20,000 (not including Russia). While large Brown bear populations exist in Europe (e.g., Scandinavia, Karelia, Carpathian Mountains) several small and isolated populations that are threatened by habitat loss, fragmentation, and human–bear conflicts also persist [3]. In the latest assessments, Brown bears are considered by the IUCN as species of **Least Concern** globally and on a European level.

	1950 - 1970	1995 - 1998	2018
Estimated number of individuals (geographic Europe)	ca. 3,560 – 3,820	ca. 14,000	ca. 15,000-20,000

Eurasian lynx (*Lynx lynx*)

The Eurasian lynx is a largely solitary and territorial carnivore. Historically, the species could be found in the forests of the Palearctic from Western Europe to East Asia. During the 19th and 20th centuries, lynx populations became locally extinct in several regions in Europe[3].
Today, the Eurasian lynx is considered to have large, generally stable populations in the Carpathians, the Baltics and Fennoscandia. The IUCN Red List of Threatened lists the Eurasian lynx as **Least Concern**.

From 1971 to 2006, 17 reintroduction and translocation projects have been taken place in Western and Central Europe such as in the Alps, the Bavarian–Bohemian Forest, as well as the Harz, Dinaric, Jura, and Vosges mountains. The main source of European lynx reintroductions across Europe has been the Carpathian populations. Until today, many of these fragmented and isolated populations suffer from low genetic diversity and increased inbreeding[4].

	1950 - 1970	1995 - 1998	2018
Estimated number of individuals (geographic Europe)	ca. 1,720 – 2,020	ca. 7,450	ca. 8,000 – 9,000

[3] Chapron et al. (2014). Recovery of large carnivores in Europe's modern human-dominated landscapes.
[4] Mueller et al. (2022). Genome-wide diversity loss in reintroduced Eurasian lynx populations urges immediate conservation management




Wolverine (*Gulo gulo*)

The wolverine is the rarest LC species of Europe. Like all other LC of northern Europe, wolverines have undergone a dramatic population decline during the 20th century but have slowly recovered, likely as a result of the protection starting from 1968 in Sweden and 1982 in Norway and Finland. In 2021, ca. 1390 – 1540 individuals were estimated to roam the northern parts of Fennoscandia[5]. The latest IUCN assessment from 2018 listed the wolverine as **Vulnerable** at the European level.

In Fennoscandia, wolverines are managed to maintain viable populations while aiming to minimize damage to free-ranging livestock (mainly semi-domestic reindeer) by applying legal harvest.
In Sweden, the minimum population size is set to 600 individuals to sustain a favourable conservation status while Norway has a national management goal of 39 annual reproductions. In northern Finland, the Finish government supports the selective removal of individuals causing serious damage while ensuring a well distributed wolverine population across the reindeer husbandry area to maintain a connection from Russia to Scandinavia. Outside the reindeer husbandry area, hunting is prohibited.

	1950 - 1970	1995 - 1998	2018	2021
Estimated number of individuals (geographic Europe)	ca. 510 - 780	ca. 495	ca. 1,000 – 1,300	ca. 1,390 – 1,540

[5] Lansink et al. (2022). Potential for increased connectivity between differentiated wolverine populations

The complexity of conflicts

The return of LC in Europe is a clear conservation success. However, coexistence with LC is a challenge in Europe's highly modified and populated landscapes.
With an increase in LC usually comes an increase in human-wildlife and human-human conflicts. The conflicts are diverse, ranging from attacks on livestock, being excluded from decision-making after years of successful management, impact on game populations from high LC densities to loss of valuable hunting dogs. Type and intensity of conflicts also vary based on species, socio-economic contexts, landscape types and political situations.

Lack of participation and not affording any real influence of relevant stakeholders into decision-making processes hinders successful conflict prevention and mitigation. This leads to situations where many authorities and wildlife managers struggle to manage the conflicts based on the tools given by national and European legislations while remaining accountable to local concerns[6].

A way forward

The last 30 years together with the latest technical and scientific progress proof that LC have in general learned to adapt, survive and thrive in Europe´s multi-use landscapes. This trend is set to continue.
Today, the limiting factor to successful co-existence with LC in Europe is not habitat availability, but factors such as human acceptance and favourable policies[7]. Creating effective and socially acceptable LC management systems will therefore depend on policies that can be amended to each country's unique conflict situation and population status.

The involvement of relevant stakeholders that share their everyday space with LC is key to create successful conservation and management measures. Hunters have been and always will be key players in the conservation and management of LC in Europe. FACE continues to promote the importance of hunters in the conservation, management and monitoring of LC populations across Europe, thereby contributing to the important collection of data on reproduction, distribution and density of LC at regional and local levels. This facilitates their conservation, enhances coexistence and guarantees sustainable hunting of LC populations.

For more information see FACE´s position on wolves in Europe and FACE´s policy requests on large carnivores.

[6] Bennett et al. (2022). Addressing the Swedish Large Carnivore Controversy: Identifying Roadblocks in Collaborative Governance to Reduce Conflict

[7] Cimatti et al. (2021). Large carnivore expansion in Europe is associated with human population density and land cover changes. Diversity and Distributions, 27(4), 602-617.

FACE - European Federation for Hunting and Conservation

Rue Belliard 205
B-1040 Brussels
www.face.eu - info@face.eu