Get inWolfed! International Wolf Conference, NABU, September 2015

Defining Favorable Conservation Status: Ecological & Legal Considerations

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SLU

92/43/EEC “Habitats Directive”

The EU Birds and Habitats Directives

For nature and people in Europe

NATURA 2000

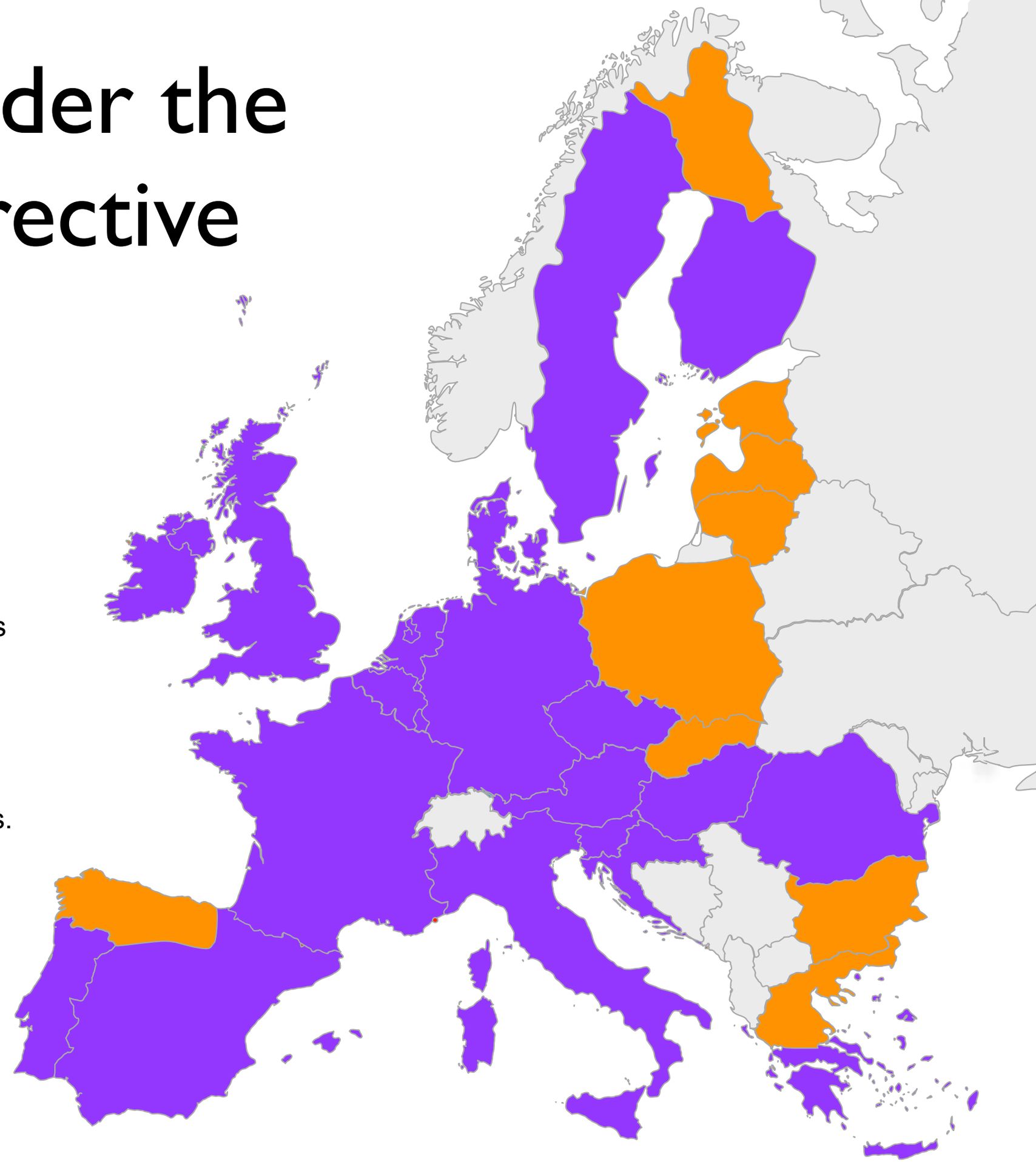
The wolf under the Habitats Directive

Annex IV (strict protection)

Annex V (management)
Spanish populations north of the Duero, Greek populations north of the 39th parallel, Finnish populations within the reindeer management area as defined in paragraph 2 of the Finnish Act No 848/90 of 14 September 1990 on reindeer management, Bulgarian, Latvian, Lithuanian, Estonian, Polish and Slovak populations.

Non EU countries

Both annexes IV and V require FCS



Favourable Conservation Status (FCS)

Article 1 (i) of the Habitats Directive:

(i) *conservation status of a species* means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2;

The *conservation status* will be taken as 'favourable' when:

— population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and

— the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and

— there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis;

Wolves recovering in Europe

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REPORT

Recovery of large carnivores in Europe's modern human-dominated landscapes

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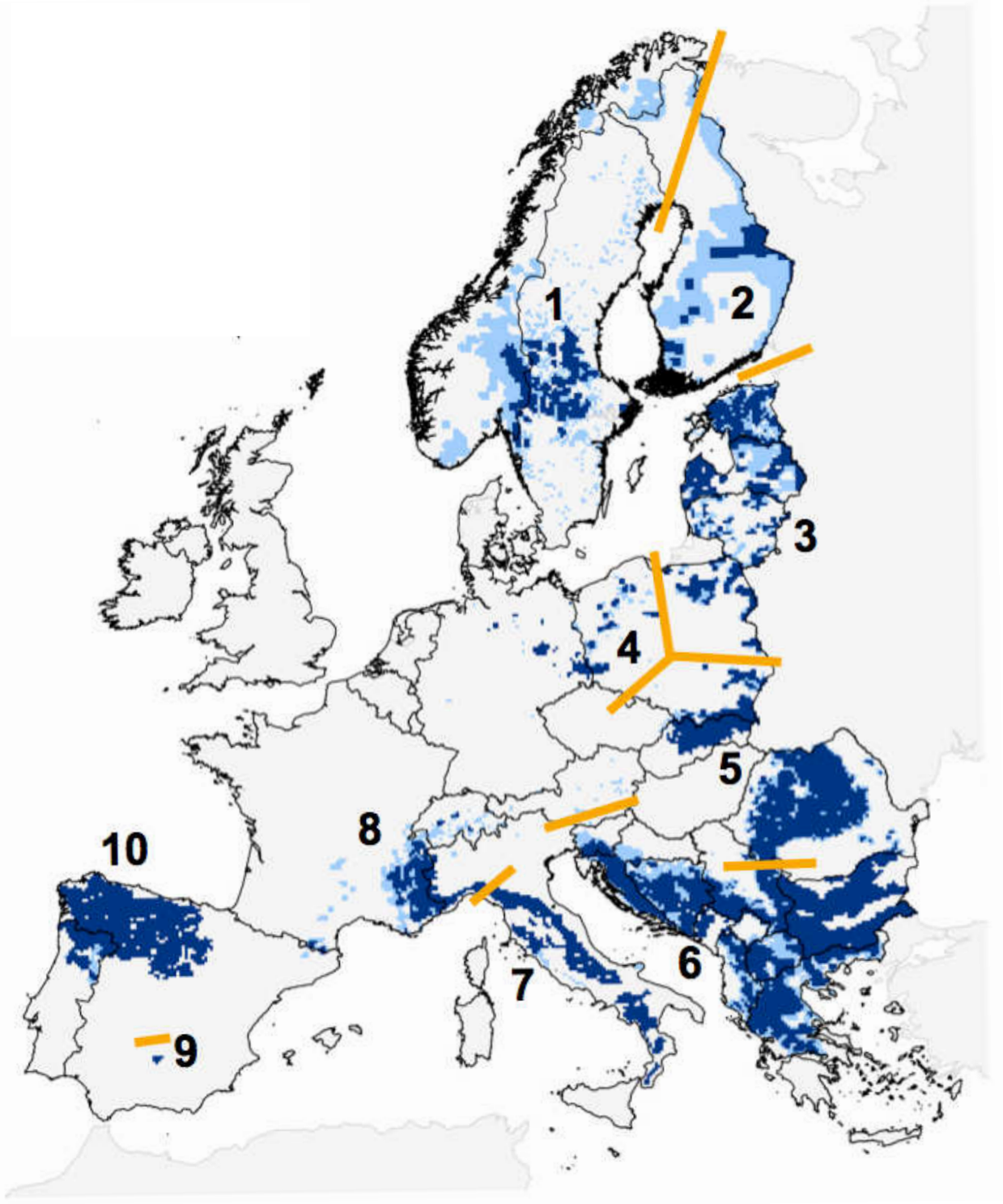
ABSTRACT | EDITOR'S SUMMARY

The conservation of large carnivores is a formidable challenge for biodiversity conservation. Using a data set on the past and current status of brown bears (*Ursus arctos*), Eurasian lynx (*Lynx lynx*), gray wolves (*Canis lupus*), and wolverines (*Gulo gulo*) in European countries, we show that roughly one-third of mainland Europe hosts at least one large carnivore species, with stable or increasing abundance in most cases in 21st-century records. The reasons for this overall conservation success include protective legislation, supportive public opinion, and a variety of practices making coexistence between large carnivores and people possible. The European situation reveals that large carnivores and people can share the same landscape.



Wolf populations (map 2013)

Questions

1. At what level should FCS be measured (European, population or country)?

2. Should FCS be measured from extinction or carrying capacity?

3. What does it mean for a species to be a "*viable component of its natural habitats*"?

4. How long is a "*long-term basis*"?

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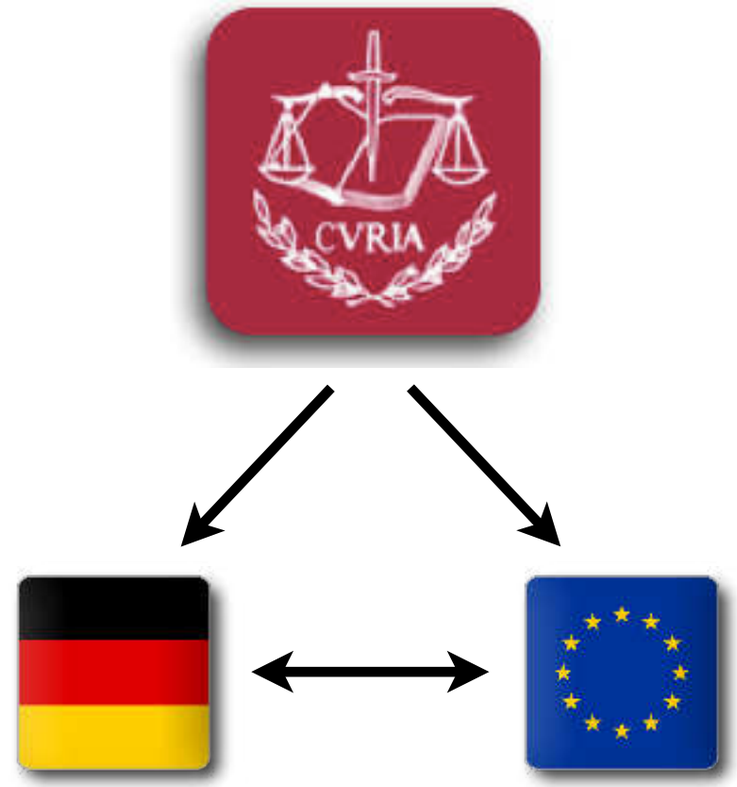
Interpreting the Directive (1)

- The only legally binding texts are the Habitats Directive and its interpretations by the ECJ.

- Guidance documents by the Commission indicate only the Commission's interpretation and are not legally binding.



Interpreting the Directive (2)

- ECJ has made clear the provisions in the Directive to reach FCS "*must be interpreted strictly*" (C-6/04, C-342/05).

- Article 2(3) "*Measures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics*".

- ECJ considered in C-371/98 that Article 2(3) was not a reason to derogate from the provision of Article 3(1) and its goal to reach FCS.

Q1: At what level should FCS be measured? (1)

- Case law suggests FCS should be at national level.

- In C-342/05 (Commission v Finland), the government of Finland called attention (*) to the pups born annually in the immediate vicinity of Finland on the Russian side of the border.

- However the ECJ did not keep that argument in its rulings.

(*) Letter of observations from Finland to the European Commission dated 05th July 2001.

Q1: At what level should FCS be measured? (2)

- Case law also favors a narrow interpretation of what is a population.

- In C-383/09 (Commission v France), ECJ considered individual populations: "*there were no populations of the species in Alsace which reached its minimum viable population threshold*".

- ECJ ignored the fact that French hamsters were the extreme Western patch of a much larger meta-population ranging as far as Hungary (in Annex V).

Q1: At what level should FCS be measured? (3)

- LCIE advocates a population approach in the "Guidelines for Population Level Management Plans for Large Carnivores".

- However, including animals occurring outside a Member State borders to then claim the species has reached FCS within this Member State is neither supported by the Directive nor by case law by ECJ.

Q2: Should FCS be measured from extinction or carrying capacity? (1)

- FCS contains the word "*Favourable*" suggesting it is more than escaping extinction.

- The commission guidance documents also consistently emphasize that FCS is better assessed as a "*distance from some favourable state*" rather than distance from extinction.

Q2: Should FCS be measured from extinction or carrying capacity? (2)

- FCS can be said to be reached when population becomes closer to carrying capacity *K* than extinction (*N* > *K*/2).

- This is consistent (albeit less ambitious) with Poland's approach to estimate FCS (1260–1335 wolves) by using a habitat suitability model and calculating the potential number of wolves at carrying capacity.

Q3: What does it mean for a species to be a "*viable component of its natural habitats*"? (1)

- Textual analysis of the Habitats Directive reveals an emphasis of the ecological role of the species.

- The adjective "*viable*" refers to the "*component of its natural habitats*" and not just the species.

- Demographic viability not sufficient, albeit necessary, as a viable ecological role requires first demographic viability.

Q3: What does it mean for a species to be a "*viable component of its natural habitats*"? (2)

- There is limited research on exactly what the quantitative threshold should be for a species to fulfill its ecological role.

- Ecological viability may be defined as the species also being at half the carrying capacity in its natural habitats, when density dependence becomes stronger.

Q4: How long is a "*long-term basis*"? (1)

- Preamble of the Convention on Biological Diversity (CBD) indicates conserving biodiversity is for "*the benefit of present and future generations*".

- The importance of CBD for interpreting Habitats Directive is underscored by EU biodiversity strategy to 2020, which implements Strategic Plan for Biodiversity and Aichi Biodiversity Targets adopted under the CBD.

- Populations should remain viable forever.

Q4: How long is a "*long-term basis*"? (2)

- In practice, this implies long-term evolutionary viability with *Ne* = 500.

- In C-383/09, ECJ accepted reasoning based on *Ne*=500: "*minimum viable population threshold, which is estimated at 1500 individuals*".

- 2011 Article 17 guidelines cite Laikre et al. 2009 and Traill et al. 2010 recommending *Ne* = 500.

- IUCN Criteria E recommended by LCIE is inadequate (1 extinction out of 10 populations in 100 years).

FCS for wolves in Germany

- Germany comprises enough highly suitable habitat for a minimum of 154 packs to a maximum of 1769 packs, with average model suggesting 400 packs (Fechter & Storch 2014).

- Other existing wolf habitat models (Knauer et al, unpubl., Eggerman 2009) predict suitable habitat for 400–441 wolf packs in Germany.

- Models should however be <u>interpreted with caution</u> as very sensitive to assumptions (Fechter & Storch 2014).

- There appears anyhow to be plenty of available habitats for wolves in Germany (~ 400 packs).

- Discussions whether the German wolves (35 packs) have now reached FCS are premature.

- Evolutionary viability (*Ne*=500) likely implies > 1600 wolves (~ 200 packs).

- Based on today's knowledge, 200 packs can be seen as a preliminary estimate of FCS.

- In case the ECJ would consider that Member States can include animals outside their borders to reach FCS (which has never been suggested by case law):

- It is very unclear which part Germany would play in a trans-boundary population.

- The wolf would still need to be a "*viable component of its natural habitats*" in Germany and population get closer to some favourable state.

- Same preliminary estimate of FCS at 200 packs.

And when FCS is reached

- There is no provision in the Habitats Directive indicating that Annex V-like management becomes lawful.

- The species still remains strictly protected in Annex IV and Article 16 is the relevant one for derogations.

- Some countries have assumed that license quota hunting is possible for Annex IV species when at FCS, however they do not have the mandate to bend the Directive and the ECJ has never validated this approach.

Linking FCS to hunting makes it prone to abuse

- Sweden has claimed improving poor genetic status (through hunting inbred wolves) was urgently needed to reach FCS, but then ditched this approach to suddenly claim the species had FCS.

- Sweden does so by splitting FCS between demographic and genetic components, relying on foreign or non-EU countries for genetics.

- Sweden then claims to have reached FCS based on promises for genetic connectivity that have never been fulfilled.

Down-listing to Annex V

- Article 19 defines the procedure to amend the Annexes: "*Such amendments as are necessary for adapting Annex IV to technical and scientific progress shall be adopted by the Council acting unanimously on a proposal from the Commission*".

- Unclear whether wolf recovery falls under "*technical and scientific progress*".

- Annex V species must also have FCS, discussing down-listing needs to plan for up-listing back to Annex IV, and for listing new species.

- The wolf nevertheless remains a "strictly protected species" in Annex II of the Bern Convention.

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Claws & Laws

An interdisciplinary research project
in large carnivore ecology and environmental law

participants:

SLU

UPPSALA UNIVERSITET

funder:

NATURVÅRDSVERKET

A dialogue between law and ecology

During the past few decades, countries have ratified a growing number of international agreements relevant to biodiversity conservation. In the European Union, the Habitats Directive requires that populations of wild species of conservation interest reach a Favourable Conservation Status (FCS). These legal instruments however remain often abstract and may not be amenable to concrete interpretation pertaining to real world decisions affecting population recovery and management.

In this project, we will establish a dialogue between law and ecology to interpret the Habitats Directive in ecological terms and use quantitative ecological models to quantify FCS and delineate conservation and management policies in line with the Directive. We will take the example of large carnivores – wolf (*Canis lupus*), lynx (*Lynx lynx*), wolverine (*Gulo gulo*) and brown bear (*Ursus arctos*) – for which recoveries are particularly

Events and publications

- Project presentation at the Forskningskonferens på Naturvårdsverket den 30 januari 2014 "Generationsmålet i fokus"
- Project website launched on 20th January 2014

Svensk sammanfattning

Europeiska Unionens medlemsstater är bundna av art- och habitatdirektivet (AHD) och därmed av kravet att återupprätta eller