

Biodiversity conservation using ideas and instruments of species protection



The Brief in brief

This brief explains how ideas and instruments for species protection have evolved and contribute to an integrated biodiversity conservation strategy in Europe. The brief considers the roles of Red Lists of threatened species and the legal priority given to species listed in the Annexes of the European Commission Habitats and Birds Directives and the Appendices of the Bern Convention of the Council of Europe.

Intended audience

The brief is intended for stakeholders and decision-makers at all levels across Europe who wish to involve species conservation in direct or wider argumentation for biodiversity protection.

Topic

The role of species protection in Europe - background

Biodiversity conservation has its roots in species protection. In the early days, emphasis was placed primarily upon protecting species that were recognised to be somehow 'rare' and also charismatic, mainly birds and mammals. Protecting nature was equated with protecting beautiful and aesthetically appealing species, in the belief that total extinction is irreversible.

Then it was recognised that species are being threatened with extinction because their habitats are being destroyed, so attention was directed to protecting habitats and the designation and management of protected areas (see the separate brief on habitats and protected areas). It is now clear that both approaches are essential for the protection of biodiversity. However, the dilemma as to whether to use limited and usually inadequate human and financial resources to pursue the conservation of particular species or whether to invest in the management and protection of habitats that are of notable biological value remains a critical issue in practical conservation management and policy.

The strong scientific and legislative emphasis placed upon conserving particular species dominated throughout the 1980s and early 1990s (even if the words "and their habitats" were sometimes tacked on to the end) and was associated with a proliferation of "Red Lists" of species deemed to warrant particular conservation effort. The strategy was applied to all types of organisms, from birds, reptiles, mammals and all types of plants to insects and other invertebrates. This occurred across widely differing geographical scales, from global down to national, sub-national and local levels. Unfortunately, such lists were highly subjective and of limited value to the effective implementation of conservation policy because they were most often compiled by local specialists in the different groups, reflecting personal judgements and definitions. At that time the formal categories defined by IUCN - The World Conservation Union to distinguish different degrees of rarity and threat, even when applied, were themselves highly subjective.

The Species Survival Commission of IUCN recognised the problems and undertook a major revision of their Red List categories, first published in 1994, and centred upon clear quantification of the criteria used to define the categories. For the first time, the criteria included specific reference to aspects of

population sizes and temporal dynamics in combination with spatial information on geographical range and area of occupancy of the species concerned. This forms the basis for the present version of the IUCN Red List categories and criteria that are widely in use [1]. However, it is essential to recognise that this is merely a system developed for classifying some types of organisms according to their perceived risk of extinction. The practical application of the criteria to assess this risk remains in many circumstances highly problematical and controversial. The most widespread difficulty here is that for the vast majority of species of organisms, the necessary information on biology and populations is simply not available: most of what constitutes the mass of biodiversity – invertebrate animals, lower plants, fungi – remains invisible as “Not Evaluated” or “Data Deficient”.

Policy instruments: the species lists of the Bern Convention and the Habitats Directive

Of much more direct conservation policy relevance in Europe, though perhaps in some respects equally controversial, are the lists of threatened animal and plant species that have been prepared by the Council of Europe under the Bern Convention [2] and by the European Commission in their Habitats Directive [3], which was partly based on the Birds Directive [4].

The lists of species in the Appendices of the Bern Convention and the Annexes of the Habitats Directive (HD) do overlap considerably in some places - the interactions between the two have a long and complex history. Both have also relied heavily upon subjective expert opinions in choices of species and they also grossly under-represent invertebrate animals and other organisms, such as lower plants and fungi. However, the lists in the HD Annexes are generally more extensive than the lists in the Bern Convention Appendices. It is worth stressing here that the Council of Europe, with its Secretariat in Strasbourg, France and presently 47 Member States, is not at all the same as the European Union, with its Commission based in Brussels, Belgium and currently with 28 Member States. It is surprising how much confusion this has caused in the past and continues to cause now. Indeed, the European Commission has, as a single entity, ratified the Bern Convention and is obliged to honour its commitments with appropriate legislation, which may be taken to include protection of all of the species listed under the Bern Convention.

In addition to the differences in the numbers of Member States and the related geographical coverage of the two sets of legislation, there is also a considerable difference in the political and legal power that can be exerted by each. This has major consequences for the formulation and effectiveness of arguments for biodiversity protection in which legal obligations are of relevance. The European Commission Habitats Directive (and other Directives including the Birds Directive) is supported by “hard law” in which failure of a country to comply is punishable by the European Court of Justice. This provides a considerable incentive and strong arguments for species protection, but may also provoke conflict in some situations.

Examples of some of the different ways in which HD-listed species may be employed in biodiversity argumentation can be taken from the BESAFE case studies.

First, it may be useful to make lists of the species present in an area of biodiversity interest and then argue that because a number of HD-listed species have been found, the area requires protection in order to conform to European law. This argument was used as one of many for achieving full protected area status for part of the Lower Danube catchment in Romania during the period of that country’s accession to the EU. Species of mammals, amphibians, invertebrates and others listed in the HD, as well as birds listed under the Birds Directive were cited to emphasise legal obligations at the European level (see the Romanian Danube catchment case study).

Second, and along somewhat similar lines, it may be established that an area of biodiversity interest is home to a listed species that is also widely recognised and “emblematic” in some way. Any species with such a

“flagship” role, in combination with the legal obligations of its protection, can provide strong grounds for argument that the area in which the species occurs must be protected and managed appropriately. This was one of the lines of argument employed to advantage in implementing management of the Doñana National Park in Andalusia, Spain. Adoption of an appropriate management strategy for livestock within the park was aided by arguments for the protection of the Iberian lynx, which is listed in the HD and the Iberian imperial eagle, which is listed in the Birds Directive (see the Andalusia National Parks case study).

A third role of the HD-listed species in biodiversity argumentation is where species are cited in Environmental Impact Assessments. This is usually in relation to some form of planned or ongoing human activity that could have negative impacts on the environment. The legal obligations to ensure the species’ protection can be a powerful argument in such situations. Thus, throughout the construction and operation of an underwater tidal turbine within a marine protected area in Northern Ireland, the well-being of the local population of the HD-listed harbour seal played a central role. The potential risk of seals (and other animals) colliding with the turbine rotor blades ensured the application of the precautionary principle throughout an overall continuous monitoring and adaptive management process designed to protect biodiversity at the site. (See the marine turbine case study for more information).

Fourthly, there are some situations in which the legal obligation behind the HD-listing is a powerful argument, but at the same time may be strongly resented by some of the stakeholders involved, being viewed as top-down forcing of governmental policy. The protection of Europe’s large carnivore species is often made complicated in this way. These are by nature “conflict species” whose protection usually requires much discussion with stakeholders at the local level. The case study of management of brown bear, lynx and wolves in the wildlands of Norway in relation to herbivores, such as sheep and reindeer provides one example (and see also the brief on argument as a process of dialogue).

The above examples illustrate biodiversity argument situations in which compliance with European Commission obligations has considerable legal force. The Bern Convention species lists of the Council of Europe involve a similar appeal to European obligations, but with less strength in legal back-up. The Council of Europe makes official “Recommendations” to the contracting parties to the Bern Convention and compliance is expected by the Standing Committee. A variety of control mechanisms is in place to ensure such compliance. These include a case file system for dealing with complaints, a regular reporting system, and on-the-spot appraisals by experts visiting on-site. Together, these provide a “soft law” framework and discussion platform for handling disagreements in conservation issues.

Usefulness and Transferability

The protection of species remains an extremely important and useful aspect of overall biodiversity conservation strategy and is of considerable relevance to all stakeholders concerned with nature conservation, including governmental departments and other decision-makers. The principles and central arguments involved are widely transferable to different contexts across countries and geographical scales.

The overall usefulness of Red Lists has broadened because of the adoption of the objective, quantitative criteria developed by the IUCN, although this is still limited by large gaps in necessary scientific knowledge about the biology and population dynamics of the vast numbers of species of insects and other invertebrates that constitute the greater part of species diversity [5].

The usefulness and transferability of the species lists attached to the EC Habitats and Birds Directives or to the Bern Convention is generally high, but limited by the nature of each of these legal instruments. The strong legal force behind the European Commission Directives species is only useful and transferable in situations arising within the EU Member States, while the Bern Convention lists are useful and transferable in many contexts across many more European countries, as well as some in North Africa, but with less legal power.

Lessons learned

- **Species protection remains an important and active aspect of biodiversity protection strategy, particularly when integrated with the protection of habitats and designated areas.**
- **Red Lists of threatened species that are based on quantitative criteria, such as those developed by the IUCN, provide a useful means of identifying and prioritising species conservation effort in situations where there is enough information about the species to enable the degree of threat to be assessed. This is problematic for many invertebrate animals, lower plants and fungi that remain “Not Evaluated” or “Data Deficient”.**
- **Species protected at the European level by being included in the Annexes of the EU Habitats Directive and Birds Directive afford strong argument for biodiversity protection because of the legal obligations that are enforced and punishable by the European Court of Justice. However, this is restricted to EU Member States.**
- **Species protected at the European level by being included in the Appendices of the Bern Convention of the Council of Europe afford good argument for biodiversity protection. This is valid for all contracting parties to the Convention, extending into Eastern Europe and North Africa.**

References

1. IUCN (2012) IUCN Red List Categories and Criteria: Version 3.1. Second edition. Gland, Switzerland and Cambridge, UK: IUCN. iv + 32pp.
www.iucnredlist.org
2. Council of Europe (1982) Convention on the Conservation of European wildlife and Natural Habitats. European Treaty Series 104, Council of Europe, Strasbourg. 37pp.
3. European Commission (1992) Habitats Directive. Council Directive 92/43/EEC.
http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm
4. European Commission (1979) Birds Directive. Council Directive 79/409/EEC.
http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm
5. Haslett J.R. (2007) European Strategy for the conservation of invertebrates. Nature and Environment 145. Council of Europe Publishing, Strasbourg. 91 pp.

Looking for more information on effective arguments for biodiversity?

For more BESAFE results, including separate briefs focusing on other case studies and various aspects of argumentation, see <http://www.besafe-project.net> and BESAFE toolkit <http://tool.besafe-project.net>.

Results referred to in this brief can be found in the BESAFE deliverables D2.2, D2.3, D3.1 and D4.1 part II, D4.1 Synthesis and D5.1. All BESAFE deliverables are available from <http://www.besafe-project.net/deliverables.php?P=4&SP=32>

This brief is a result of research carried out under the BESAFE project. This brief was written by **John Haslett** (john.haslett@sbg.ac.at).

The **BESAFE** project is an interdisciplinary research project funded under the European Community's Seventh Framework Programme, contract number: 282743.