Biodiversity conservation using ideas and instruments of habitat and area protection networks



The Brief in brief

This brief explains how ideas and instruments for habitat protection have evolved and contribute to an integrated biodiversity conservation strategy in Europe. The brief considers the protected areas designated and managed under the Habitats Directive of the European Commission and the Bern Convention of the Council of Europe, with reference to spatial networks and the conservation of biodiversity outside protected areas.

Intended audience

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

Topic

The role of protected habitats, areas and networks in Europe – some background

The protection of species and their habitats through the designation and management of protected areas is central to present biodiversity conservation efforts across Europe. 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 has been and remains a critical issue in practical conservation policy (But of course, we do need both! See also the separate brief on species protection).

In Europe in 1979, the Birds Directive of the European Commission [1] made specific provision for the creation of a system of "Special Protection Areas" to maintain populations of bird species within the European Union. Independently, but at about the same time, the Council of Europe drafted the Bern Convention as an instrument to conserve European wildlife and habitats [2]. Together, these documents formed part of what was to become a new and major shift in emphasis, from the previous focus on conservation of particular species towards greater inclusion of habitat and ecosystem protection.

The adoption of the European Commission Habitats Directive in 1992, [3] which was partly based on the earlier Birds Directive, gave further credence to the importance of habitats and protected areas and remains as the definitive biodiversity legislation instrument within the European Union. The Habitats Directive also makes provision for marine and coastal protected areas, as presently required under the Marine Strategy Framework Directive [4]. It is worth stressing here that the European Union, with its Commission based in Brussels, Belgium and currently with 28 Member States is not at all the same as the Council of Europe, with its Secretariat in Strasbourg, France and currently 47 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 of the Council of Europe and is obliged to honour its commitments to the Convention with appropriate legislation. The interactions between the two institutions concerning biodiversity conservation issues have a long and complex history.

Protected areas and networks in Europe

During the early stages of this concentrated focus on habitat protection in Europe, the potential connections and flows between protected areas were barely considered. Conservation areas were seen as "islands" of nature, managed to exclude or at least minimise human influences, amidst the otherwise highly planned and intensively used landscapes of Europe. Now, those policies of isolated site-based conservation that developed during the Twentieth century have been replaced by policy with a focus on spatial networking. Ecological networks that link protected areas via habitat corridors, green veining and greenways to provide a green infrastructure [5] are accepted as a much more effective, indeed essential approach to biodiversity conservation. Networks should reduce species extinction risks by facilitating movement of organisms through the landscape. But in addition, and of crucial importance to current European environmental and conservation policy, these should help to ensure that protected areas function as components of their wider landscapes and that they are integrated with the lives of the local communities of people. All this conforms to the provisions of Article 8 of the Convention on Biological Diversity (CBD) on in situ conservation [6].

As examples of such social-ecological integration, the BESAFE case study of the Andalusian national parks in Spain highlights the management issues and arguments involved in the incorporation of traditional livestock practices within the ecologically and culturally valued national park landscapes (see the case study on Management Plans for the Andalusian national parks, Spain and the associated brief). In a very different, but rather parallel situation the case study on the management of the Bialowieza Forest National Park in Poland focusses on protracted discussions of traditional forestry practices and modern conservation management (see the case study on the Bialowieża Forest conflict and associated brief).

European network policy instruments

The Emerald Network of protected areas [7] was set up under the Bern Convention by the Council of Europe and provides for a network of sites covering each Contracting Party to the Convention. Thus it includes a large area of Europe, extending into Russia and some countries in North Africa.

The Natura 2000 network of protected areas [8] was created under the EC Habitats Directive to cover all EU Member States, and includes the Special Bird Protection Areas of the Birds Directive and the requirements for protected areas under the Marine Strategy Framework Directive. As the European Commission is also a Contracting Party to the Bern Convention, the Natura 2000 sites could be considered as the contribution from the EU member states to the Emerald Network.

In addition to the obvious differences in the extent of geographical coverage of these two overlapping networks and their 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 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.

Thus, for example, in the Romanian Lower Danube catchment, legal obligation to protect the area as a Natura 2000 site (also with other protection designations) became a very effective argument once the country had been admitted as a Member State of the EU (see the case study on Nested Socio-Ecological Systems in the Romanian Lower Danube River Catchment and associated brief). However, in The Netherlands and in Hungary, even at the early stage of deciding upon which areas should be designated as Natura 2000 sites, attempts to enforce governmental "top down" legal decisions to comply with European requirements proved counter-productive. Instead clear, informed dialogue with local stakeholders

to take their interests into account was essential for making progress in decision-making (see the case studies on Implementing the Natura2000 network in The Netherlands and on Implementing the Natura2000 network in Hungary and the associated case study briefs).

The Bern Convention Emerald network of protected areas of the Council of Europe involves a similar appeal to European obligations, but with less strength in legal back-up. The Council of Europe makes of-ficial "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.

Of course, not all protected areas across Europe have been designated as Natura 2000 or Emerald sites. Equally, many of the network sites also have additional protected designations from different initiatives or organisations. There is a wide range of types of protected area and the IUCN has made a broad global classification into six categories based on management objectives [9]. These categories serve as a useful guide and are recognised internationally by many governments and institutions.

Biodiversity outside protected areas

Although protected areas and networks certainly form the essential backbone of biodiversity conservation, most of the land in Europe is not protected, and much of Europe's biodiversity is still to be found outside the borders of designated protected areas. As noted earlier in this brief, networking policies and conservation strategies that include or acknowledge biodiversity external to protected areas imply an acceptance that biodiversity conservation is integrated into all aspects of human society. Spatial planning processes become involved, particularly in intensively used landscapes and conflicts reflecting different stakeholder interests are common. BESAFE examples include the concerns and argumentation surrounding biodiversity protection in the face of growing demands of urban land use in the Greater Manchester area in England (see the case study on Arguing for biodiversity in practice: A case study of a local biodiversity action plan area, UK and the associated brief) and the Helsinki metropolitan area in Finland (see the case study on Long-term management of urban green areas, Finland and the associated brief).

Importantly, the role of biodiversity, whether within or outside protected areas, is to ensure ecosystem function and also the sustainable provision of ecosystem services across the wider landscape. A BESAFE review [10] of the scientific evidence on the connection between ecosystem services and biodiversity (Deliverable D4.1 Part I and see also the associated thematic brief) found that higher biodiversity usually promotes the delivery of ecosystem services, although over-exploitation of particular services can be detrimental to other aspects of biodiversity. As a large part of biodiversity and associated ecosystem services are found outside protected areas of Europe, protection must extend to the wider landscape and encompass presently widespread and abundant species.

Usefulness and Transferability

The protection of habitats and designated areas is 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. Protected

areas may be used to aid conservation of populations of particular species, or entire ecosystems and landscapes, which also includes integration with non-protected areas and human usage. The principles and central arguments involved are widely transferable to different contexts across countries and geographical scales. However, the strong legal force behind the European Commission Habitats Directive Natura 2000 network of protected areas and the lists of habitats attached as Annexes to the Directive are only useful and transferable in situations arising within the EU Member States. The Bern Convention Emerald network of protected sites is less useful within the EU, but valuable/beneficial and transferable in many contexts across many more European countries, as well as some in North Africa, but with less legal power.

Lessons learned

- Habitat and designated area protection is the backbone of biodiversity protection strategy and policy in Europe, integrated with the protection of the wider landscape.
- Protected area categories, such as those developed by the IUCN, serve as a useful general guide and are recognised internationally by many governments and institutions.
- Habitats and areas protected at the European level under the EU Habitats Directive and Birds Directive afford strong arguments for biodiversity protection because of the legal obligations that are enforced and punishable by the European Court of Justice. This is restricted to EU Member States.
- Attempts to enforce a governmental "top-down" application of legal obligations about protected area designation and management can be counter-productive if local stakeholder interests are not discussed and taken into account.
- Habitats and areas protected at the European level under the Bern Convention of the Council of Europe afford good arguments for biodiversity protection. This is valid for all contracting parties to the Convention, extending into Eastern Europe and North Africa, but has weaker enforcement.
- The Natura 2000 network of protected areas of the European Commission and the Emerald network of protected areas of the Council of Europe under the Bern Convention aim to reduce risks of species extinctions by facilitating movement of organisms through the landscape. Equally, they should also help to ensure that protected areas function as components of their wider landscapes and that they are integrated with the lives of the local communities of people.
- Much of the biodiversity in Europe is found outside protected areas and includes widespread and abundant species. Such biodiversity is essential for the sustainable provision of most ecosystem services and requires protection.

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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

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