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COMMENT

Transboundary biosphere reserves: a new framework for cooperation

Introduction

Despite the increasing call for cooperation amongst the states parties to the 1992 Convention on Biological Diversity (UNTS 3069; see especially its Articles 5, 17, 18 and 20), the management of protected areas adjacent to political borders is rarely thought of as a common necessity for neighbouring countries. Setting up a zone dedicated to conservation is already a formidable challenge in the face of strongly competing interests for land. Bringing this about with two or more sovereign states sometimes seems a 'gratuitous layer of complexity that spells almost certain failure' (Westing 1998*b*). Nevertheless, transboundary protected areas are becoming increasingly common (IUCN, unpublished 1998). In fact, no less than 136 such protected area complexes involving over 406 individual protected areas and 112 different international boundaries (Zbicz & Green 1997) have been identified around the world. If proposed areas are also included, this figure can be pushed up to 200 complexes (Brunner 1998).

Transboundary cooperation in protected areas, also referred to as transfrontier or transborder cooperation, can be understood as the convergence of at least four issues, three of which are ecological, and one political. The first issue relates to scale, since linking protected areas across political boundaries does help 'to achieve protected status for an area of sufficient size to insure its ecological integrity (e.g. to maintain an adequately diverse and sufficiently large gene pool, or to encompass the range necessary for large mammals)' (Westing 1998*b*; see also Hamilton *et al*. 1996). The second issue, in direct consequence of the first, is the increasing importance of the network approach used in nature conservation, physically and administratively linking protected areas across the landscape (Jongman 1995*a*; Prillevitz 1996). The third is that ecologically valuable sites that would most repay conserving often happen to straddle the 220 000 km of land boundaries (Westing 1998*a*). The fourth variable in transboundary cooperation in protected areas is the opportunity of using the field of environmental management for fostering good neighbourly relations, cementing and reinforcing confidence between states through the joint management of protected areas (Hamilton *et al*. 1996; Brunner 1998).

The biosphere reserve concept: a framework for cooperation

The main obstacle to transboundary cooperation is getting two or more different systems, ways of work and outlooks to collaborate successfully, while maintaining a sufficient distinction between each component to avoid threatening the sovereignties of the countries involved, since there is often intense resistance from states to accept any binding agreements or bilateral conventions that would limit their possible actions in their area of authority (Bilderbeek 1992). However, for cooperation to be effective 'a transboundary territory comprising several management units – protected areas situated in different countries and even operating under different legislative frameworks, has to be understood as an integral unit' (Guziova 1996).

One framework that has been applied successfully in an increasing number of transboundary cases is the Biosphere Reserve Statutory Framework (UNESCO 1996). The biosphere reserve concept was formulated in 1976 to wed conservation and sustainable development (Bridgewater & Cresswell 1996), seeking to form a pack between the local community and society as a whole (J. Robertson Vernhes unpublished, 1997). Performing the complementary functions of biodiversity conservation, development and logistics for research and training, biosphere reserves are a special kind of conservation area, containing a combination of zones under differing management intensities (UNESCO 1996), drawing protected areas into a broader landscape context (IUCN 1994).

Initially classified under the IUCN categories system for protected areas as a category in their own right, biosphere reserves are now regarded as an international designation under special status, containing zones subject to different management regimes according to national laws (UNESCO 1996; Batisse 1997).

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Transboundary biosphere reserves

Within such a coordinated international network, the step from cooperation between actors to co-operation between countries is a logical progression. In fact, six such transboundary biosphere reserves currently exist around the world (J. Robertson Vernhes, personal communication January 1999). By using the logistic support available through the UNESCO World Network, neighbouring protected areas can benefit from the formalized designation procedure recognizing the unique transboundary status of the proposed biosphere reserve, promoting the cooperative approach at every stage. By providing a neutral viewpoint and external advice, the MAB International Coordinating Council, comprising members from 34 member states elected by the General Conference of UNESCO, can assist the respective countries in building a common project, in collaboration with the national MAB committees present in each country. Once established, the internationally-recognized transboundary biosphere reserve will also benefit from follow-up procedures and periodic reviews available to designated sites. In addition, the network can provide a framework for comparative studies in different parts of the world (Batisse 1985), thereby drawing on other similar experiences.

A case study: the Eastern Carpathian International Biosphere Reserve

One of nine transboundary protected area complexes in Central and Eastern Europe, the Eastern Carpathians Biosphere Reserve has the ambition of uniting protected areas from three countries, namely Slovakia, Poland and Ukraine (Fig. 1), in a transition area between the West and the East Carpathian mountains' ecosystems, roughly covering 164 000 ha. Despite setbacks and internal political problems, the Polish and Slovak parts of the Eastern Carpathians Biosphere Reserve were formally accepted into the UNESCO-MAB network of biosphere reserves in 1993, although it was only formally approved as a trilateral reserve including parts in Ukraine in December 1998 (J. Robertson Vernhes, personal communication January 1999).

In this particular case, the actual implementation of transboundary cooperation within the trilateral biosphere reserve has come up against many obstacles, and initial objectives have had to be scaled down, or delayed. Attempts at creating a new area for ecological management based around the shared mountain range have systematically come up against the stronger territorial structure of political borders, with remaining problems concerning zonation and border passage for humans and fauna. Indeed, up until now, the project has remained largely theoretical, and common management plans are a long way off (Z. Guziova, personal communication August 1998). Double metallic

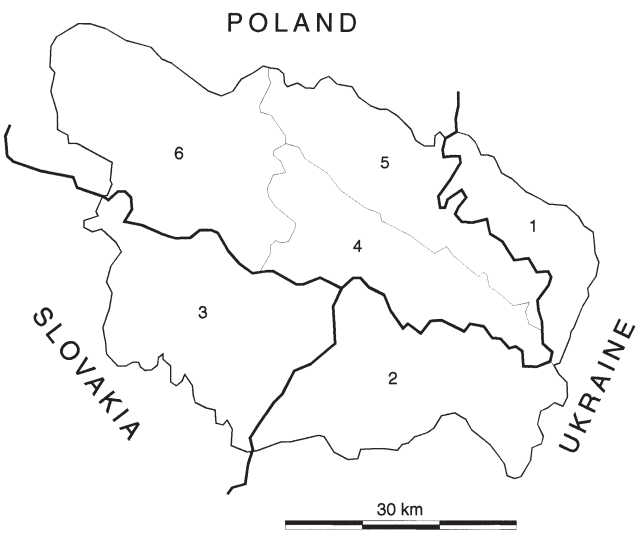


Figure 1 General location and constituent parts of the Eastern Carpathians Biosphere Reserve: (1) Nadsianski Regional Landscape Park (Ukraine), (2) National Nature Park Uzhanski (Ukraine), (3) National Park Poloniny (Slovakia), (4) Bieszczady National Park (Poland), (5) Dolyna Sianu Landscape Park (Poland) and (6) Tsisniany-Vetliny Landscape Park (Poland).

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fences still guard the Ukrainian border, for example, making movements of large animals unlikely. Communication between the three administrations is still sketchy, for human and technical reasons, and relies more on personal motivation than common structures. In addition, because all three countries are joining political entities such as the European Union at different speeds, they might in future be less autonomous in defining their respective border policies.

Effective decision-making on a regional level has been made even more difficult with recent political centralization, despite a certain number of local initiatives promoting transboundary co-operation. The Euroregion model, for instance, which aims to create a geographically defined area for encouraging cooperation in several fields limited to parts of each of the countries concerned (Zilahi 1998) has been applied in the area, alas resulting in few concrete actions and sparse results.

Conclusion

The Eastern Carpathians Biosphere Reserve has played the interesting role of pioneer, setting a precedent for trilateral cooperation in European biosphere reserves, even if its growing pains have shown the limitations of transboundary cooperation in an area where lack of confidence in neighbouring countries is still very much part of the political climate. At a time when protected area planning is increasingly seen in the wider landscape context, transboundary biosphere reserves provide an interesting example of large-scale management, forming one link in a continent-wide ecological network of protected areas.

The biosphere reserve concept, however, offers managerial flexibility in adapting to individual political situations, involving the various parties concerned at all stages of elaboration, providing a sophisticated tool for promoting transboundary cooperation through regional planning by giving international visibility to efforts of cooperation across borders. However, the particular example of the Eastern Carpathians Biosphere Reserve has also shown that any large-scale ecological planning has to take into account local and national political resistance if it is to succeed, and that ultimately, the success of transboundary initiatives rests with the countries concerned.

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JULIET J. FALL
Department of Geography
University of Geneva
Blvd Carl-Vogt 102
CH–1211 Geneva 4
Switzerland
Tel: +41 22 705 83 43
e-mail: juliet.fall@geo.unige.ch

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