

Wild biodiversity: definition, issues and Europe's commitments and limits

Biodiversity in the official texts

For several decades, conservation of species and habitats has been the subject of International Conventions. In 1971, the Ramsar Convention on the conservation of wetlands was signed. In 1979, 44 States (therefore practically all the States of Europe) signed the Bern Convention on the conservation of European wildlife and natural habitats through cooperation between States. It came into effect in 1982.

The convention on ecological biodiversity of 5 June 1992 defines the term biodiversity as being the “variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”.

Despite these resolutions, biodiversity is still threatened.

The State of wild biodiversity in Europe^[1]

The reduction of biodiversity concerns ecosystems, species and genes. Below are a few tendencies and figures at European level:

- Only 1% to 3% of European forests are considered not to have been modified by man.
- Since 1950, Europe has lost over a half of its wetlands and most of its agricultural land with a high natural value.
- Most of the major fish stocks are below the biological security limits and are therefore insufficient to ensure renewal of stocks in the long term.
- 800 plant species are threatened with total extinction.
- Over 40% of indigenous mammals, birds, reptiles and even butterflies are threatened.

The causes mentioned of the decline of wild biodiversity

The naturalists' community now agrees that today the planet is going through the sixth major crisis of species extinction since the beginning of life on earth some 3.8 billion years ago. Unlike the five previous crises, spread over thousands or even millions of years, the present crisis can be counted in tens of years or centuries, thus endangering the adaptation ability of species. This rapid rate tends to prove that the extinction factor is undoubtedly human activity. The current extinction rate is at least 100 times higher than the natural extinction rate.

The main threats to biodiversity are:

- The **fragmentation, deterioration and destruction of habitats** through the **intensification of production systems, abandonment of traditional practices and the**

introduction of invasive species. According to the millennium ecosystem assessment, this factor threatens biodiversity in Europe more than elsewhere.

- At world level, population growth is leading to an **increase in consumption of natural resources and growing artificialisation of environments** (urbanisation, housing and transport infrastructures) particularly in the developing countries.
- **Climate change** is already bringing about a modification in the behaviour in certain species.

The arguments made to preserve wild biodiversity

The question of the importance of this biodiversity for human societies is already under discussion. To justify a substantial effort to maintain biodiversity, two types of argument are used:

Arguments in terms of **services to man**:

- production of goods (food, textiles, fresh water, wood, pharmaceutical resources, soil cycles);
- regulation services (climate regulation, cleaning-up of water, pollination, cycles of nutritive elements, regulation of populations of animals/insects that cause damage, carbon sequestration). Biodiversity factors interact and are closely interlinked: the threats to one are threats to all. The stability of ecosystems depends on the host of adaptive behaviours found in life;
- cultural services (recreational and aesthetic benefits).

Arguments concerning the **intrinsic value of nature** in which each element (genes, species, ecosystems) is the result of and the completion of biological evolution over thousands of years. Man does not have a “right” to destroy this biodiversity and even has a duty to protect it.

Current wild biodiversity conservation policies in Europe and their limits

In the first stage, European countries imported the principle of nature parks developed in the United States. However, this model ran up against two limits:

- already there was no virgin or lowly anthropised space left in Europe in comparison with Yellowstone, and this had been the case since the end of the 16th century;
- Europe’s density did not allow large spaces to be re-naturalised.

This is why the idea quickly developed of the necessary cohabitation between human activity and natural biodiversity. This general philosophy sets out a whole series of territories ranging from the less anthropised (small areas practically closed to the public but very limited in size) to the more anthropised (such as the creation in cities of nesting facilities for birds).

Similarly, we have moved on from a policy of targeted protection of emblematic species to greater interest in all the species that are present, i.e. common biodiversity.

Natura 2000

At present, the European Union is basing itself on two “Nature Directives” (the “Bird” Directive passed in 1979 and the “Habitat” Directive of 1992) in order to set up a network of sites of a very high natural value called Natura 2000. This network covers 18% of the area of Europe of 15 and represents 200 of the main types of European habitat. Extension to the 10 new members is well under way. In concrete terms, the sites in the network are the subject of biodiversity assessment and monitoring and a management plan run by a local management body (public or private). These bodies are financed for environment restoration and conservation measures by the European Union and by the Member State concerned.

The European Union also supports conservation plans for each species threatened with extinction.

Measures in sectoral policies

This network does not cover the whole territory and a large proportion of biodiversity is excluded; Europe is therefore concentrating on taking the preservation of biodiversity into account in its agricultural, fishery and other policies. However, the Member States are responsible for the concrete implementation of these sectoral policies, which leads to disparate application among the Member States. In France, for example, reform of the Common Agricultural Policy is not applied with a view to favouring preservation of the environment and biodiversity.

State policies

Most States and territorial communities, Regions in particular, introduce policies in favour of biodiversity by financing public bodies or nature protection associations so that they can manage natural sites and raise public awareness. Some communities can also set up a construction taxation system used to acquire sites of a high natural value and apply conservation management for species and habitats. As far as coastal and lakeside areas are concerned, public establishments such as the “Conservatoire du littoral et des rivages lacustres” in France pursue a land development policy aimed at the definitive protection of fragile or threatened natural areas.

The particular case of the overseas territories

France, having kept part of its colonial empire established in the XIXth century, is a special case as it controls tropical and equatorial island areas which are particularly rich in biodiversity: French Guiana and New Caledonia. There it is faced with the same problems of a contradiction between economic development based on the exploitation of natural resources and the protection of sites. One of the answers sometimes introduced is ecotourism.

The means being explored at present to prevent the erosion of biodiversity

➤ For all species to be taken into account

Preservation of biodiversity does not only concern a few species threatened with extinction. It also involves the creation of new lifestyles and production methods respecting all species, from the most common to the rarest

➤ **For the development of agriculture guaranteeing the conservation of common biodiversity**

At European level, the Common Agricultural Policy is still too weak as far as biodiversity is concerned and is unevenly applied across the territory. What is necessary is a rebalancing of aid to the detriment of production and in favour of protection of the environment. In this connection, aid for **organic farming**, must be increased and firmly established in time.

The creation of different plots of land (grass strips, hedges) and the adaptation of agricultural practices to suit the environment (late reaping, delayed grazing on certain meadows, reduction in pesticides and fertiliser spreading, etc.) must also be supported.

➤ **For connection between sites of a high environmental value**

Maintaining populations depends on the area covered by their habitats but also the interconnections between environments allowing the movement of species. Reflections are being conducted on these subjects and should quickly be given tangible form.

➤ **For the raising of awareness concerning protection of biodiversity**

Biodiversity will be even better preserved if the local populations are in charge of its management and preservation. For this, local communication and consciousness-raising mechanisms must be set up to allow the players to get to know each other and to evaluate the environments making up their territory.

➤ **For the development of education and research in ecology**

For several decades, research into the determination and knowledge of species in the ecosystem has been watered down considerably, to the detriment of research in genetics. Ecology must have a preponderant place in research as a global science encompassing the social, economic and biogeographical aspects. It must allow the policies proposed to be characterised and evaluated.

➤ **For improved governance of biodiversity at each decision-making level**

Despite an arsenal of regulations and international and European conventions, the biodiversity crisis continues unabated. It is therefore necessary to create discussion and decision-making bodies with the means to implement effective policies for the preservation of biodiversity.

Sources:

- **Pour le Biodiversité – Manifeste pour une politique rénovée du patrimoine naturel**, Ligue ROC, AVENIR Editions, May 2005, 315 p.
- **Biodiversité: le fruit convoité**, FPH/SOLAGRAL, June 1993, 100 p.
- **Halting biodiversity loss by 2010 and beyond – Preserving ecosystem services for human well-being**, European Commission, 22 May 2006.

A few Internet sites:

<http://www.biodiversite2007.org/>

<http://www.natura2000.fr/>

<http://www.greenfacts.org/fr/biodiversite/index.htm>

http://ec.europa.eu/environment/nature/biodiversity/current_biodiversity_policy/biodiversity_com_2006/index_en.htm

<http://www.natura.org/>

[1] Source : the Millennium Ecosystem Assessment, www.maweb.org

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