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*Nature:  
the common  
heritage  
of humankind*

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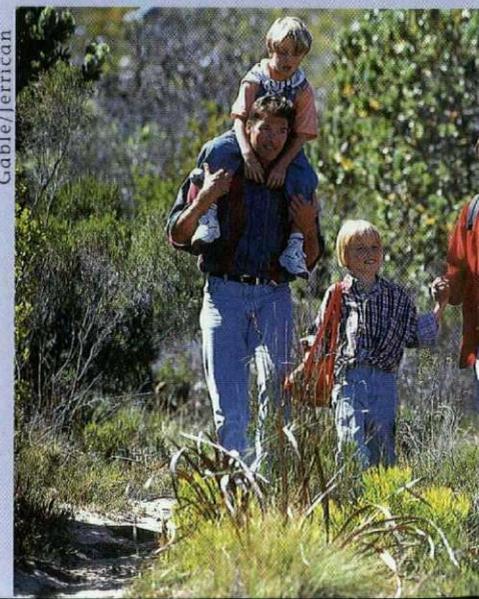
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## A living heritage for Europeans

*At its last summit of Heads of and Governments – in October 1997 – the Council of Europe decided to organise an awareness campaign on the cultural and natural heritage of Europe.*

*This Campaign, entitled “Europe, a common heritage”, was launched in Bucharest and Sibiu (Romania) last September and will last for a whole year.*

*It is not by chance that the Committee of Ministers of the Council of Europe has decided to start the new century paying particular attention to the heritage we Europeans share. Heritage contributes to our common identity, to our sense of being part of the same history, of the same land. Europeans need to face the challenges of the coming century knowing where they come from, what they have achieved, and what is their heritage.*

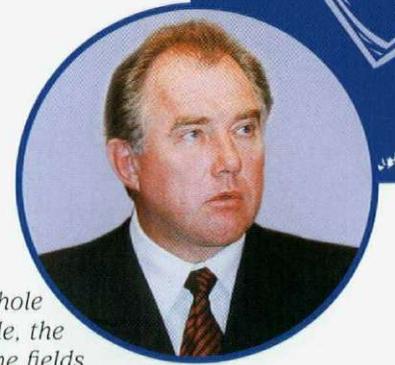
*The Campaign will make Europeans aware that their natural and cultural heritage is a vital resource for their lives, for their intellectual and moral development as well as for their wellbeing. Heritage is a shared asset that conveys both a sense of belonging to a place and to a nation and the recognition of how much we owe to other communities. It is also a vehicle for tolerance, for mutual understanding and for admiration of the works of others.*

*We are also convinced that, through the Campaign, Europeans will become much more aware of the great value of the natural and cultural heritage we share and of the role that heritage can have in the construction of democratic security and peace.*

*This issue of Naturopa will contribute to the Campaign by dealing with the different aspects of natural heritage and by presenting nature as a common heritage of humankind. Promotion of information, public awareness and a positive perception of nature*

*conservation have been one of the Council of Europe’s fields of action for many years, and Naturopa its mouthpiece.*

*Too often the natural heritage is narrowly understood as a few, rare spaces of great biological value away from the cities where most Europeans live.*



*But, our natural heritage is the whole of the living environment of people, the quiet and deep forest as well as the fields we cultivate. It encompasses the mountains and countryside that collect and filter the water we drink, that purify the air we breathe. It is the oceans and seas which connect people and provide us with fish, the land which feeds us, the physical space which humans share with many other living creatures. It is our common house.*

*The reader will be able to know more about natural heritage, to learn that the variety of biological forms and landscapes surrounding us have great scientific and cultural interest not devoid of economic utility, of aesthetic and recreational value.*

*A harmonious living environment is equally important for the body as it is for the mind. One article will discuss the concept of the common heritage of humankind, a term that was coined in the 1960s, at the same time some people started to worry about the health of our planet.*

*Other articles will invite the reader to discover and enjoy this rich heritage by means of interpretation techniques, to learn of the important role that botanical gardens and museums of natural history play in conserving our heritage.*

*Examples of the management and protection of natural heritage in Belgium and the Slovak Republic will be presented, as well as the case of Lake Baikal, the greatest mass of freshwater on our planet, now protected through inscription in Unesco’s World Heritage List.*

*All these articles, although on different levels, carry one main message: our heritage is worth our attention and respect.*

**Halldór Ásgrímsson**

*Chairman of the Committee of Ministers  
of the Council of Europe  
Minister for Foreign Affairs of Iceland*



# The scientific and environmental values of nature

## *The plant kingdom*

The status of the Earth's flora is assessed world-wide on a continuous basis in the name of biodiversity. Once they have been carefully identified, species are listed according to the threats they face and divided into five categories: extinct, endangered, vulnerable, rare, or not endangered. For, like the animal kingdom, the plant kingdom is an essential part of our natural heritage.

### **Endangered species**

The difference between species that are extinct and those threatened with extinction may be imperceptible. It is estimated that several hundred of the world's species are currently reduced to a single specimen or no more than a few specimens, often scattered over a single site. The last remaining specimen has only to be destroyed as a result of inadequate protection measures for example<sup>(1)</sup>, and the whole species disappears for ever, unless in the meantime its seeds have been planted and cultivated in specially-

converted botanical gardens and conservatories. This is what happened with Duprez's cypress. Cry's violet, on the other hand, was not so lucky.

The extent to which the general public remains unaware of these phenomena is surprising, especially given the reaction triggered by pollution or quality of life issues. An extinct species produces no emotion and no information, for the simple reason that no one is even aware of it. That a plant species can be threatened with extinction may even seem incongruous. Yet, each time a species becomes extinct, there is a part of Life that disappears, and for ever. An extinct species is irretrievable. Each time a species disappears, a part of our world heritage dies with it.

### **The right to be different**

Biodiversity conjures up one of the few new values to have developed during the 20th century, namely the right to be different. What goes for humans also goes for plants. Just as the human race displays a multiplicity of cultures, ethnic groups, and languages, so too the plant kingdom offers itself up in the great diversity of its species.

Put in extreme terms, it is possible to imagine a world where the only species left would be the fifty or so which, by themselves, account for 90% of the plants we use. A world of wheat and potatoes, spruce forests, and row

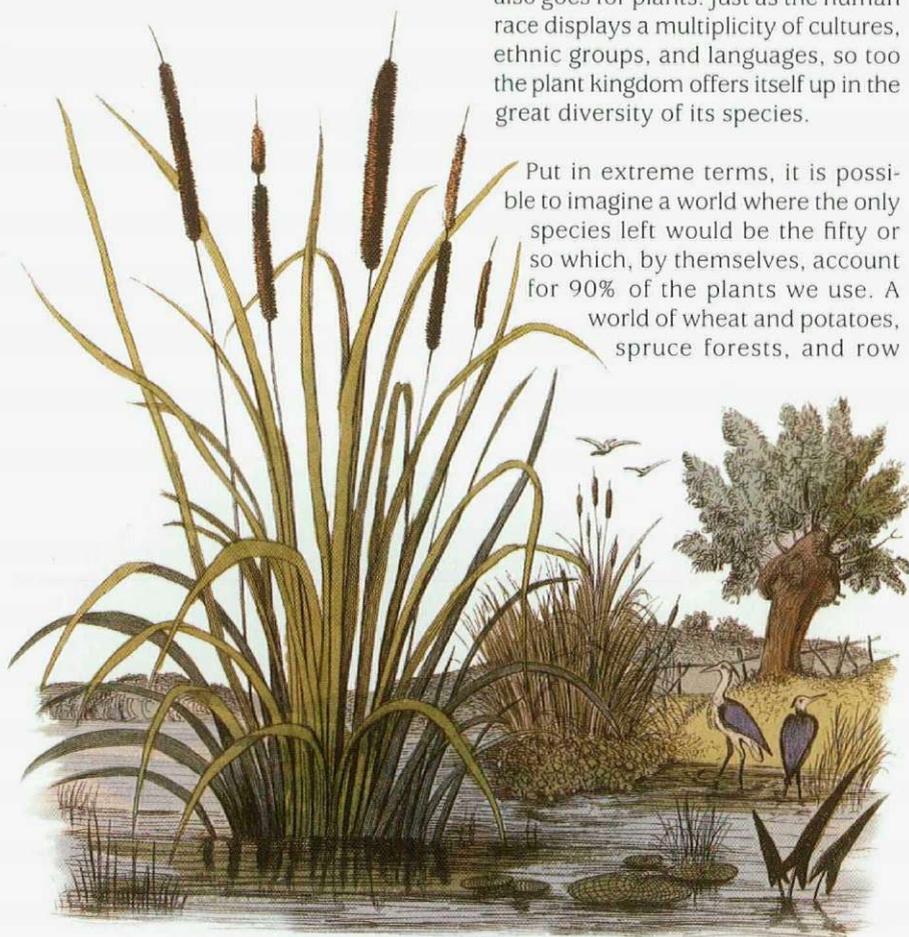
upon row of roses and tulips, etc. No more wild grasses, or wild plants. No more swamps, because we get sucked down in them, no more mangroves, because we get lost in them, and no more violets, cornflowers, poppies or chestnut trees, because they are of little use.

### **Why bother?**

Why should we defend endangered species? Why go to such lengths to protect species that are of no use, or, to be more precise, of no use to us? The answer is, purely and simply, because we are all part of, and one with, this living world in which we are rooted by our very bodies and by emotions such as those that bind us so tightly not only to our kinsfolk but also to our dog, our garden and our houseplants, etc. A living world built everywhere of the same molecular bricks (DNA, proteins, sugars), subject everywhere to the same needs (the need to grow, breathe, feed and reproduce), and competing and co-operating everywhere with other living organisms. For Life is One in the rich diversity of its progeny. It is as if each time we cause a part of Life to be lost, we suffer the same loss ourselves. Large-scale awareness of environmental issues is awakening us to this world which, much more than simply our "environment", is the vital mainstay of our emotions.

### **Balance of nature**

Within the vast network linking all living beings, each species has its own place and it is impossible to imagine a world reduced to only those species that are of use to man. There is the question of nature's survival, which would be inconceivable without the diversity by which it is ruled. In the absence of such diversity, what would become of the world's vast ecosystems? Could we still talk about great balances being at work in nature? What would be the effect on the animal kingdom, bearing in mind that 50% of insects, for example, feed on very different plants. And what would



*Colour dictionary on natural history and natural phenomena, edited by a society of naturalists, 1833-34*  
© Edimédia

be the effect on climates when we know the extent to which they depend on these great plant formations?

### Scientific values

Can we, who always think in terms of what is "useful", and by which we essentially mean of use to us, be absolutely sure that those plants which are now extinct would never have served any purpose? What if one of them had contained a substance active against cancer or AIDS? And what if another had had a scent that will never now be discovered because it was so rare as to have never been identified? Might it not be possible to acclimatise new plants effectively as horticultural species? What new medicine could be obtained from plants from families known to be rich in species with pharmacological properties? And what if we discovered new foods, new timber woods, new textile fibres? In short, we know hardly anything about the vast majority of plants that make up the enormous plant kingdom. What we do know, however, is that with each plant that disappears, each species that becomes extinct, a little of this kingdom's potential is lost.

What we must do is learn to look at nature and plants in a different light. Any action in and upon nature needs to be carried out wisely and cautiously and with a little show of love for all nature's creatures, especially as in practice the most immediate threat is not always easy to spot.

**Jean-Marie Pelt**

*Excerpts from Plantes en péril (Fayard, 1997)*  
President of the European Institute of Ecology  
1 rue des Récollets  
F-57000 Metz

(1) Pressures on plants include overgrazing, the use of pesticides and other chemicals, the destruction of forests through fire or felling, the widespread recourse to agrarian and forest monocultures, the construction of hydroelectric dams, water drainage and pollution, the devastating effects of industrialisation and urbanisation, mining and quarrying, the construction of roads and railways, tourism along coastlines and in mountain areas, damage caused by off-road vehicles, excessive trampling, competition from plants introduced by man, the picking of botanical specimens with pharmaceutical or cosmetic properties, or rhizomes and bulbs for horticultural purposes, not to mention the spontaneous dwindling of plant populations which, once the number of individuals falls below a certain threshold, lose all ability to reproduce.



*The elder is febrifuge and sudorific, it calms chronic inflammations of the respiratory tract and also has diuretic and antispasmodic qualities*  
© Edimédia

## The economic, recreational and cultural values of nature

*Not everything that counts can be counted and not everything that can be counted counts.*

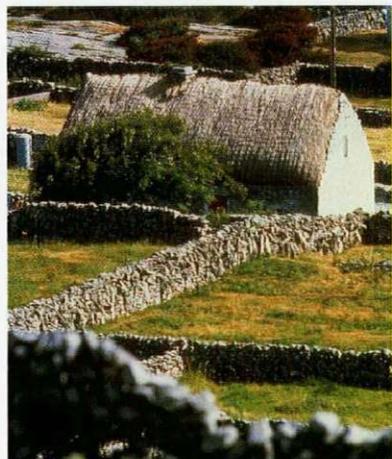
*Einstein*

Nature is beyond value, for it sustains life. Yet it is under severe pressure from human activity. There is no time to evaluate the benefits of nature, now is the time to act to protect our natural environment. And to act globally. Science has taught us how interconnected nature is and how our impacts affect the whole world. Humankind's first sight of Earth from the Moon offered a wonderful symbol of this interdependence.

### Economic values

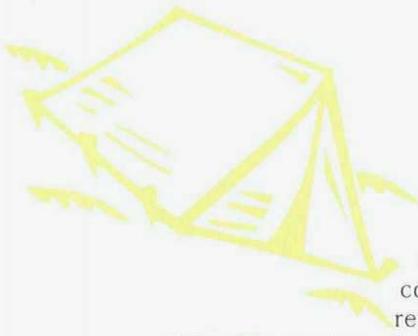
The total number of people employed by the State in Ireland in direct nature conservation is 263 and the operating budget for 1999 is 29 million euros. This investment did not necessarily

arise from economic analysis. Much of the allocation is in response to legal obligations, such as the implementation of the EU Habitat Directive. However, the impact of nature conserva-



*Environmental quality is one of the cornerstones of Irish tourism*

tion on other sectors was a factor in securing funding. Tourism is one of the key sectors in the Irish economy creating an industry worth 4 billion euros in 1998 and providing 8.2% of all jobs in the nation. One of the cornerstones of the tourism industry is the need for a good quality environment – by far the most popular activity of overseas visitors to Ireland is hiking and hillwalking. Visits to heritage properties – both natural and cultural – received particular attention and 67 million euros were invested in visitor facilities at State-owned properties in the last five years. These include national parks and nature reserves as well as gardens and historic properties. The contribution of nature conservation to tourism is well understood by political leaders in Ireland and is increasingly appreciated by local communities who benefit from the economic activity.



Indeed, globally, ecotourism is considered to represent a considerable portion of world tourism. In one study the estimate was that ecotourism accounted for some 40-60% of international tourism: "Global tourism (domestic and international) is the largest and fastest growing industry in the world, accounting for 12% of the world gross national product ... the groundwork analysis presented here brings us to the conclusion that ecotourism and wildlife-related tourism probably have much more economic significance than many conservationists had initially imagined".<sup>(1)</sup>

Nature also supports many other economic sectors. To return to Ireland, the aspiration for agriculture here is to produce quality food with minimal levels of chemicals. This requires that the quality of the environment is maintained and enhanced. In Ireland more research is needed into the economic value of nature across a variety of sectors – monetary values need not become the primary reason for nature conservation, but such research can assist in conservation decision-making.

## Recreational values

Time was that humans feared nature. The Alps were the abode of evil spirits. The idea of someone climbing mountains was considered to be odd to say the least. In my own walking experience, I have seen the Wicklow Mountains in Ireland very much empty of ramblers and the few that did go there were treated with some bemusement by farmers who saw the hills as an economic resource for sheep.

All is changed. In the last 20 years in Ireland the number of walkers has risen dramatically. There is footpath erosion in places where it would have been unimaginable before. In Britain walking is considered to be the biggest recreational pursuit. It is not only the volume of activity but also the variety – mountain biking, white-water rafting etc.

Why? Is it the flight to the cities in the last decades? John Muir, one of the founding fathers of the US conservation movement, anticipated the move to nature: "Thousands of tired nerve-shaken over-civilised people are beginning to find out that going to the mountains is going home; that wilderness is a necessity, and that mountain parks and reservations are useful not only as foun-

concern for conservation has not happened suddenly: "The long fight to save wild beauty represents democracy at its best. It requires citizens to practice the hardest of virtues – self restraint."<sup>(2)</sup>

A sense of restraint probably underpins the concept of sustainable development. It influences and, in turn, is influenced by our cultural values. But



Today the tourism industry represents about 6% of total direct employment in western Europe (OECD, 1994)

tains of timber and irrigating rivers, but as fountains of life".

## Cultural values

This view of nature as a source of leisure is a cultural view. Over the millennia the perceptions of nature have changed. For the ancient Celts, for example, nature was crucial to their spirituality. Water was significant. In Ireland holy wells became St. Brigid's wells with the advent of Christianity. Today, many of these wells still hold a sense of spirit. In rural Ireland the connection with the land was strong. In the folk music many of the dance tunes were named after animals or natural phenomena. Nature viewed solely as a utility is probably more associated with the industrial age. Now we have nature as a source of pleasure and, for some conservation activists, it has become a religion in itself.

Our attitude to nature will, therefore, never be static and our present

now we are straying into ethics, the subject of Mr J.-P. Ribaut's article.

**Dave Fadden**

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(1) *The Economics of Global Tourism*. Fern L. Fillon, James P. Foley, and André J. Jacquemont (from *Protected Areas Economics and Policy*, ISBN 0-8213-3132-9)

(2) Edwin Way Teale, *Circle of Seasons*

# Nature's intrinsic and ethical value

*Weiter, schneller, mehr* (further, faster, more): this trilogy marks the excellent study *Zukunftsfähiges Deutschland* (sustainable Germany) and accurately describes the objectives of contemporary society.

The hunt for profits is omnipresent, obsessive and unacceptable when we measure the price, in terms of mergers of industrial and financial giants, redundancies and so on.

To many people, striving to protect the beauty of nature and its intrinsic worth comes as a surprise, that is when they do not find such an attitude ridiculous, childish or absurd. "By all means safeguard nature because it is useful, and supplies us with raw materials, water or game. But please let's not take it any further!"

But regardless of our religious or spiritual convictions, do we have the right to destroy or debase what we have not created and does not belong to us? What about future generations?

## Untold value

So what is the value of nature? Undoubtedly it has an economic value, which in some cases we can quantify: for example the latex that gives us rubber, crude oil or the stag that becomes game. But what value do we attach to that same stag as a stag, or to the robin redbreast warbling his autumn song as I write these lines? Or to a beautiful sunset?

Our obsession with quantifying and securing a return on everything has its limits. It is possible, albeit approximately, to estimate the economic value of a national park, and indeed this has been attempted on a number of occasions. But how does one assess the pleasure that is derived from the beauty of its landscapes, the sound of a waterfall and so on, and how does one then quantify the economic effect of this pleasure and a weekend's relaxation on, for example, individuals' behaviour (perhaps making them more relaxed or less aggressive)? How does one quantify the impact of nature on the health insurance system, via our health?

## The approach of indigenous peoples

Indigenous peoples have much to teach us in this debate, as we have learnt from the Klingenthal symposiums, which periodically bring together representatives of all ways of spiritual thinking – not only of the major religions but also of various of the world's indigenous peoples, as well as rationalists and atheists – to consider a particular environmental problem. Whereas our approach to nature is essentially utilitarian, with an automatic tendency towards domination, native peoples regard themselves as an integral part of nature, and therefore respect it, and its component parts, as they respect their fellows.

"The earth is like our mother and father. Invading our land is like cutting us off

"I believe a leaf of grass is no less than  
the journey-work of the stars,  
And the pismire is equally perfect,  
and a grain of sand, and the egg of the wren,  
And the tree-toad is a chef-d'œuvre  
for the highest,  
And the running blackberry would  
adorn the parlors of heaven,  
And the narrowest hinge in my hand puts  
to scorn all machinery,  
And the cow crunching with depress'd  
head surpasses any statue,  
And a mouse is miracle enough to stagger  
sextillions of infidels."

Walt Whitman, *Song of Myself*  
Extract from *Paroles de nature*,  
Albin Michel Jeunesse, 1995

Just published in this same series, *Paroles de sagesse éternelle*,  
Albin Michel, October 1999

from our parents. A bulldozer that rips open the earth sheds its blood and crushes its bones, even if our ancestors can no longer speak."<sup>(1)</sup>

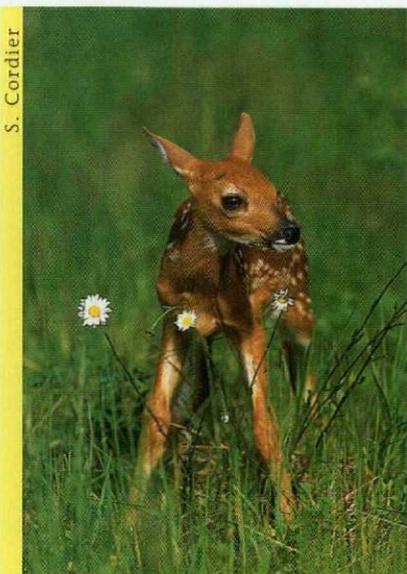
"We are a part of the earth, and it is part of us... the earth is our mother; everything that happens to the earth happens to the sons of the earth. If men spit on the ground they spit on themselves... the earth does not belong to man, man belongs to the earth... everything belongs together, as blood unites a single family."<sup>(2)</sup>

Our justification for conserving nature and its natural resources is essentially economic, with an emphasis on sustainability and future generations, and that is a good thing. But nature will only be saved in the long term if we learn to love, respect and appreciate it in its own right.

Jean-Pierre Ribaut  
Chair of the *Sauvegarde  
et gérance de la Création*  
(protecting and managing creation) Committee  
Pax Christi  
27 rue Rabié  
F-33250 Pauillac

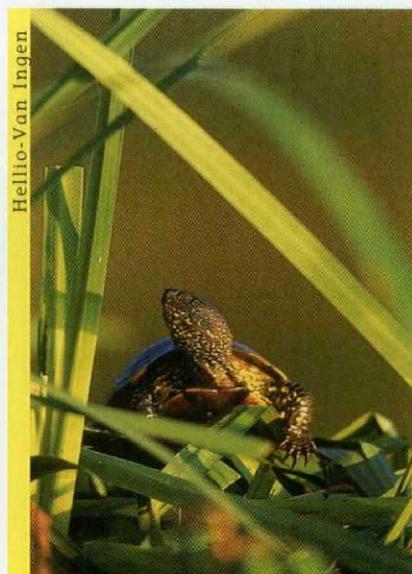
(1) Malaysian Penan aborigine

(2) Seattle, Indian chief Duvanish, 1853



S. Cordier

Fawn



Hellio-Van Ingen

European pond turtle

# The aesthetic value of nature

*Interview with Frédéric Back*

*Born in 1924, Frédéric Back lived in Strasbourg and studied at the Ecole des Beaux Arts in Rennes before settling in Montreal in 1948. With the coming of television in the 1950s, his career turned towards animated films.*

*With "Crac!", the story of a Quebec rocking chair, "The man who planted trees" based on the text by Giono, and "The mighty river", tribute to the St Laurent river, Frédéric Back is now internationally recognised for his animated films. His entire work is marked by its poetic content and is a witness to his commitment to environmental protection.*

*His films have been awarded an Oscar and have won prizes at many festivals. Today they are shown all over the world in the educational and environmental protection fields.*

Could you tell us about your career, in the course of which you have made several animated films about nature or the environment in general, such as "The man who planted trees", "The mighty river" or the one you're working on at the moment.

I've always liked drawing, especially animals and the farm work I used to help with when I lived in Alsace. When a student at the École Estienne in Paris and then the École des Beaux-Arts in Rennes from 1939 onwards, I had the extreme good fortune to be taught by Mathurin Méheut<sup>(1)</sup>, whose paintings depicting life underwater and on land are so beautiful and so powerful. Without being able to match his talent, I applied myself to studying and draw-

ing the symptomatic features of a changing world, first in Brittany, then in Alsace and Canada. When a graphic arts studio was set up at the Radio-Canada television company in 1952, I was able to share with the public the innovative creations of a group of bold programme-makers. My work connected in illustrating and designing models, sets, and special effects for music and science programmes also occasionally included producing an animated film, but it was not until Hubert Tison set up his animation studio in 1968 that I came to devote all my time to perfecting this particular art form. Through my active involvement in several animal rights' and environmental protection associa-

tions, I also took part in annual exchanges of animated youth films on behalf of Radio-Canada and the European Broadcasting Union, creating messages which, when conveyed in this highly attractive form, can help to develop awareness of urgent causes.

Thirty years ago, consumption levels were running sky-high as we deliberately ignored the consequences of wasting natural resources and the harm caused by pollution. Solar and wind-powered energy, like ecologists themselves, were considered old-fashioned. The future lay with nuclear power.

**What is the most important message about nature you try to convey in your films?**

Nature is the best example of adaptability and long-term survival. Knowledge of the laws of nature should encourage us to use such laws for inspiration but, all too often, we only study them in order to find better ways of circumventing them. Past populations showed that it was possible to live off natural resources without exhausting them and without eradicating other living species. Unfortunately, however, conquerors came and were in a hurry to exploit this wealth until there was none left. At the heart of such behaviour is the quest for happiness through possession. I, for my part, try to align myself with the messages of people who heed the lessons learnt from history, experience, and wisdom. In the face of the population explosion which self-destructively devours so much energy and so much of the natural environment, such solidarity is vital. I described this destructive, insatiable



F. Back

*The mighty river, 1993*



rapaciousness that renders all happiness impossible in my film "Tout-rien"<sup>(2)</sup>, the title of which was inspired by "L'histoire du soldat" by Stravinsky and Ramuz. There are more than six billion of us on our miraculous planet Earth, which is lost in an infinite nothingness. If our life is to have any meaning, the diversity and beauty of this Earth must be preserved.

**How do you deal with the beauty of nature through your films?**

Most of the time I work alone on animation, so I have to confine myself to alternating between great riches and extreme poverty. With a short film, there is very little time in which to familiarise the audience with characters, different settings, and a subject. I believe that content is more important than the visual means of conveying it, so that film scenes need to conjure up the works of known and loved artists, like a familiar piece of music that instantly strikes a chord. It is all the more thought-provoking as a result.

**You've been living in Canada for many years. How does the appreciation of nature differ between Europe and North America?**

In North America, there is still great variety in the way people appreciate, need and use nature. In Europe, traditions and laws have maintained regional differences, which go to make up coherent wholes, integrated with the natural environment of each area. North America, on the other hand, is marked by individualism. The short life-span of buildings and the taste for change have left mere vestiges of the past. Technological developments, urban sprawl and industrial production have ousted family farms and rural crafts, replacing them with huge agricultural concerns. With the disappearance of animals and farm workers from our fields and fishermen from our seascapes, gone are so many sources of artistic inspiration. Unfortunately, these intensive farming methods, ghastly suburbs and interminable shopping centres have found their way across the water. More and more, cities resemble an untidy jumble of individual samples, and to

reach nature we first have to wind our way through a purgatory of incoherent displays.

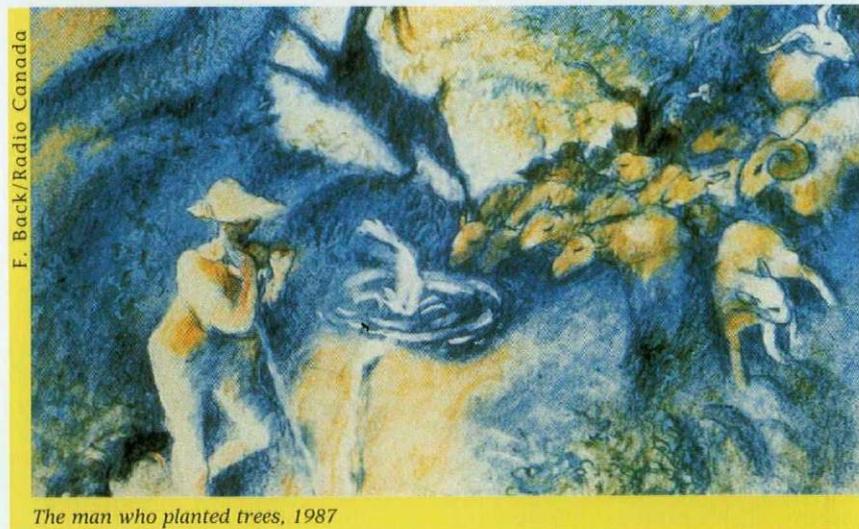
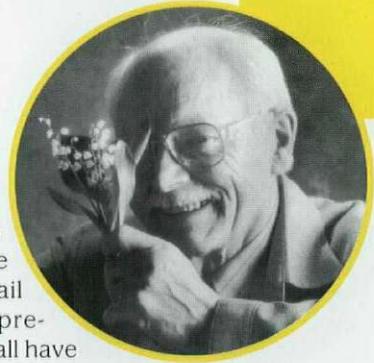
**What has been your greatest satisfaction as a producer in this field?**

It was a privilege to be able to address such important themes with the help of fabulous technology, the co-operation of a talented musician and the support and advice of Hubert Tison. The continuity of my work in the environment field has helped to reinforce my message. The awards I have received and the use made of my films have confirmed the need that exists in a field few producers have ventured to explore. I hope that my own suc-

cess offers encouragement to others. The world needs their creations.

actions have consequences on a scale we often fail to comprehend, but all have an influence on the future of our world. The power of the individual is a reality.

The present extent of environmental awareness was unthinkable 30 years ago and, even though we still have a long way to go, now at least there is hope. Let us keep up the good work.



F. Back/Radio Canada

*The man who planted trees, 1987*

**Frédéric Back**  
3514 avenue Kent  
Montreal  
Canada H3S 1N1

cess offers encouragement to others. The world needs their creations.

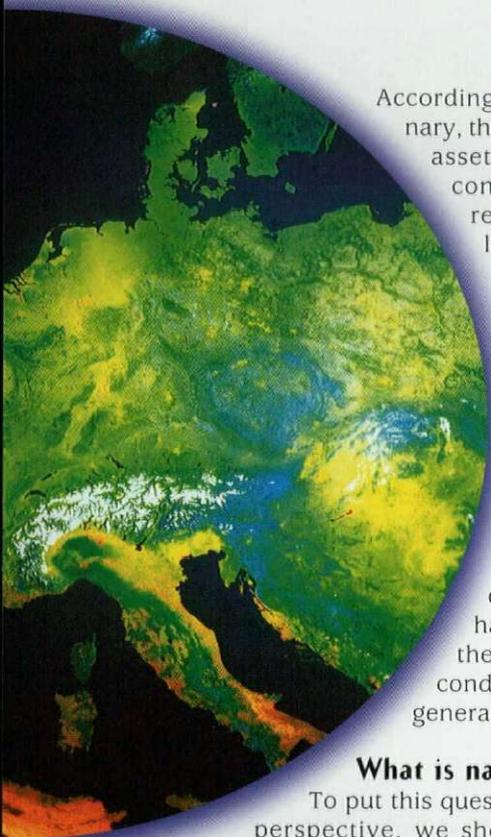
**We know that since the release of "The man who planted trees", there have been many attempts to emulate the hero of this film. In your view, what is the magic ingredient we need in our awareness-raising efforts to ensure people don't stop at knowledge of a problem, but go on to try to find a solution?**

The ingredient of success is rarely magic. It is only through hard work, sincerity, perseverance and patience that we manage to galvanise people into action and change things. Jean Giono's beautiful tale gives us the roots of a happiness within everyone's reach: generosity which is its own reward. Like the acorns planted by Elzéard Bouffier, our words and our

(1) Mathurin Méheut, Honorary Painter to the Navy, Museum in Lamballe (Côtes d'Armor, France)

(2) All, nothing, to have everything is to have nothing. One happiness is complete happiness. Two is as if happiness does not exist...

# Nature, the common heritage of humankind



According to the dictionary, the heritage is an asset shared by a community and regarded as a legacy handed down from our ancestors. Nature certainly fits this description: it has been bequeathed to us by our forebears and we must conserve it and hand it down in the best possible condition to future generations.

## What is nature?

To put this question in its true perspective, we should consider human beings' place in the history of our planet Earth. The Earth has existed for some four and a half billion years and, it would seem, can expect to go on for a comparable period. Human beings first appeared about two million years ago, but have an indeterminate life expectancy. Anything which existed before the origins of the human race is independent of it and can thus be regarded as nature. Nature has been transformed by our ancestors, sometimes to an extent verging on the disastrous, with the result that people wonder whether it is still possible to call it "nature", except perhaps for a few parts of the Earth that have remained relatively untouched by human activity, such as the polar regions or a number of large forests or very high mountains.

However, it may be argued that the term "nature" should not only be confined to particular parts of the planet. The planet as a whole forms the biosphere, the only place in the universe – as far as we know – where higher life forms are possible, a system in the scientific sense of the term. Its existence is governed by mechanisms that are independent of human inter-

vention: indeed, we refer to it as "the Earth's ecosystem". Although some of the fundamental components of our living environment – the atmosphere, water, oceans, animal and plant life – may have been damaged by human activities, the system still functions, at least until further notice. Its fundamental mechanisms include the assimilation and use of solar energy, the water cycle, the regeneration of organic matter and other systems governing the various life forms. It may be argued that nature is in fact not only the Earth and living creatures, but also that which forms the basis of its existence, the series of processes enabling the Earth's ecosystem to function.

## The meaning of the term "heritage"

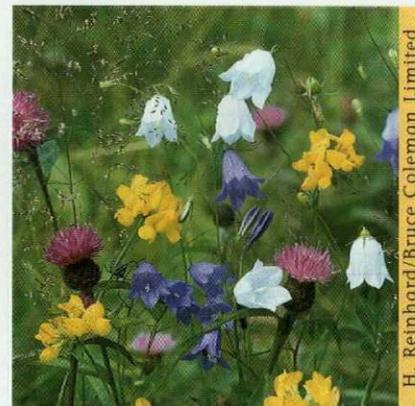
The foundation of our heritage, then, is first and foremost made up of the series of processes governing the biosphere. The situation in which we find ourselves is rather like that of someone who inherits not only the assets of an industrial firm – the buildings, raw materials, and so on – but also all the things needed to make the factory operational: energy resources, machines, organisation, the workforce. Clearly, we must preserve all these and pass them on to future generations, whose lives will depend on them: that is precisely the meaning of the term "heritage".

Why should this heritage be "common"? It follows from the definition of nature that it cannot be cut into pieces to suit the whims of private owners or borders. It is in the interests of the entire human race in the first place to conserve the processes governing all life on Earth, that is, fundamental parts of nature. That is why an international convention to which almost all States have acceded, the 1992 Framework Convention on Climate Change, declares that the Contracting States have a duty to protect the climate system for the benefit of present and future generations.

## Response at international level

It is obvious that public interest includes the preservation of the tan-

gible part of the biosphere that has not been essentially transformed by humankind. The 1973 Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) declares that wild species in their many beautiful and varied forms are an irreplaceable part of natural systems and must be protected for present and future generations, and that peoples and States should be the best protectors of such species. The 1979 Bonn Convention on Migratory Species of Wild Animals reiterates this idea, adding that each generation of humankind holds the resources of the Earth for future generations and has an obligation to ensure that this legacy is conserved



H. Reinhard/Bruce Coleman Limited

and through wise use. For its part, the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitats states that wild flora and fauna constitute a natural heritage of aesthetic, scientific, cultural, recreational, economic and intrinsic value that needs to be preserved and handed on to future generations.

Hence it is generally acknowledged that the biosphere's fundamental processes and certain of its component parts constitute a heritage which we cannot merely treat as we wish. Nevertheless, the term "common heritage", which offers the best prospects for safeguarding the public interest, met with considerable opposition during the preparatory stage of the 1992 Rio de Janeiro Convention on Biological Diversity. The concept itself was misunderstood: many States felt that it encroached upon their sovereignty

nd

and upon individual ownership rights. Should humankind be deemed to be invested with all rights over nature and its products, in particular genetic resources? Such fears are reflected in the preamble to the Convention, which, while declaring that the conservation of biological diversity is a common concern of humankind, immediately adds that States have sovereign rights over their own biological resources.

**The Unesco definition**

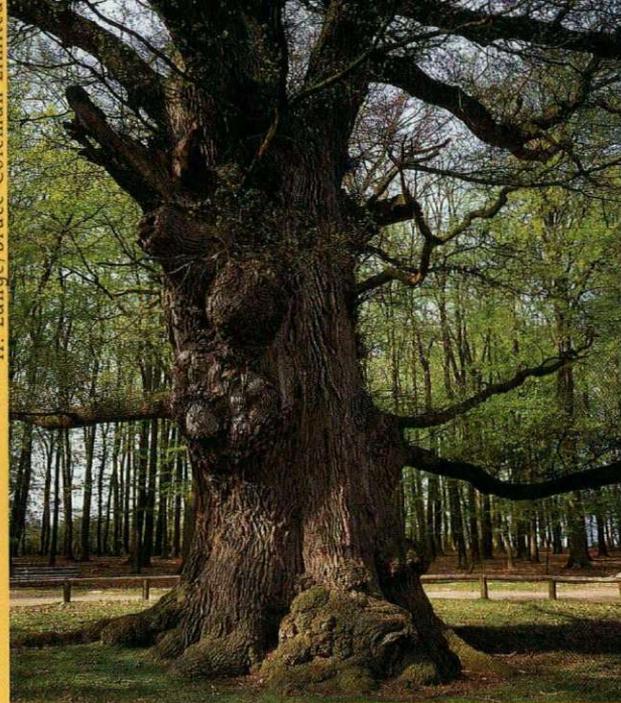
A better understanding of the very concept of the "common heritage of humankind" makes it easier to appreciate its significance. The 1972 Unesco Convention concerning the Protection of the World Cultural and Natural Heritage provides that the identification, conservation, enhancement and transmission to future generations of the cultural and natural heritage are primarily the responsibility of the State on whose territory these heritage items are situated. A distinction is thus made between, on the one hand, sovereignty or even individual ownership rights over assets constituting the common heritage of humankind and, on the other, the duty to conserve this heritage and pass it on to future generations. World heritage assets, such as castles, entire towns or natural parks indisputably

fall within the jurisdiction of States or private owners, but those who hold such assets have an obligation to conserve them and pass them on to present and future generations.

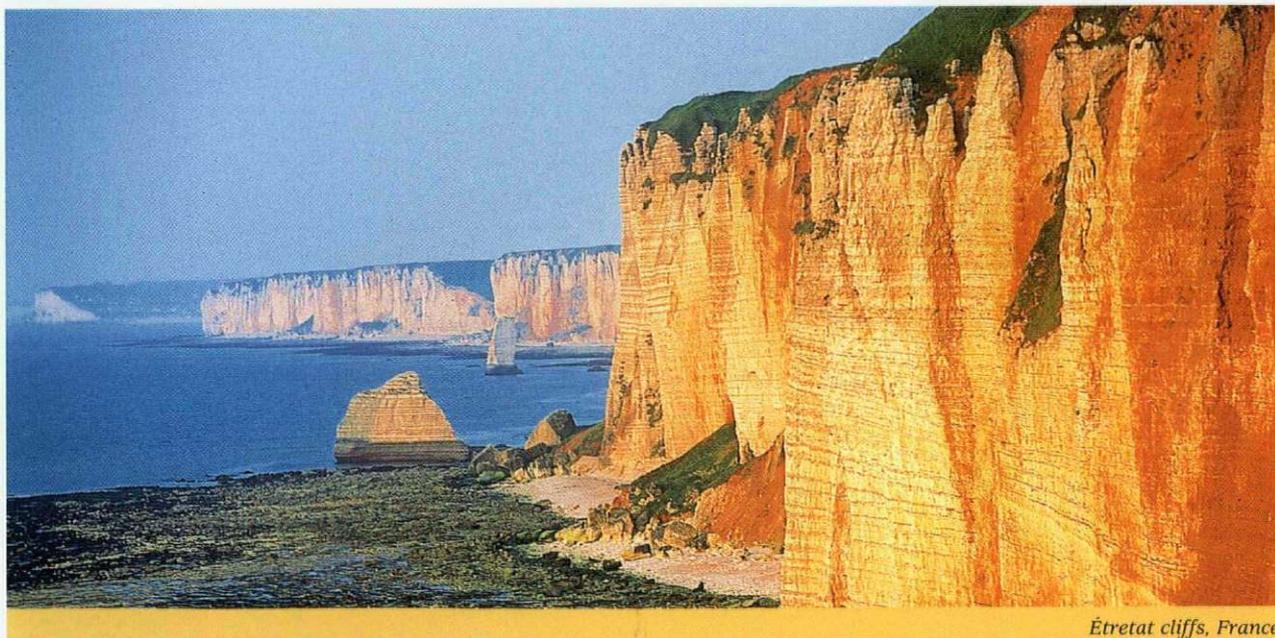
That is why we can and we must see nature in terms of the common heritage of humankind. We are free to enjoy nature's benefits and resources, but we must ensure that they are passed on to generations to come: "We do not inherit the earth from our ancestors; we borrow it from our children and grandchildren".

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H. Lange/Bruce Coleman Limited



Ancient oak about 1 200 years old, Ivenach Castle park, England



S. Rasmussen/Sipa Image

Étretat cliffs, France

A common heritage - why?

# The sea, our common heritage

The commonness of the sea is not a newly declared fact. The well-known Roman law concept of *res communis* denotes that the sea cannot be appropriated, and should be considered as something common for the use by all. The principle of the freedom of the high seas as enunciated by the Dutch lawyer Hugo Grotius in the beginning of the 17th century was a reiteration of the status of the sea as an asset for common use by all.

"Common heritage" is a more recent concept with respect to the sea. It was first Arvid Pardo, Malta's representative to the United Nations, who declared in the UN General Assembly in 1967 that the high seas are the common heritage of humankind. He was particularly addressing the status of the seabed and ocean floor beyond the limits of the national jurisdictions, as well as their resources. Malta's concern at that time was basically economic. Common heritage was supposed to be the guiding principle for regulating the rights of all States in the enormous mineral resources of the deep seabed.



G. Lacz/Sunset

Before it was commercially exploited, the humpback whale's world population was estimated at 150 000 individuals. From 40 000 individuals in 1930, it has fallen today to 6 000...

## United Nations Declaration of Principles

Three years later, in 1970, an important Declaration of Principles was adopted by the UN General Assembly to solemnly declare the deep seabed and its resources as the common heritage of humankind. Common heritage, which, like *res communis* concept, had

until then a focus on the economic aspect of the uses of the sea, received an environmental dimension in the Declaration of Principles. This new dimension is more concerned with the obligations of States rather than their rights.

Paragraph 11 of the 1970 Declaration of Principles declares that, due to the status of the high seas as a common heritage of humankind, States should take appropriate measures for the prevention of pollution and contamination and other hazards to the marine environment, including the coastline, and of interference with the ecological balance of the marine environment. It further stresses that States should also take measures for the prevention of damage to the flora and fauna of the marine environment.

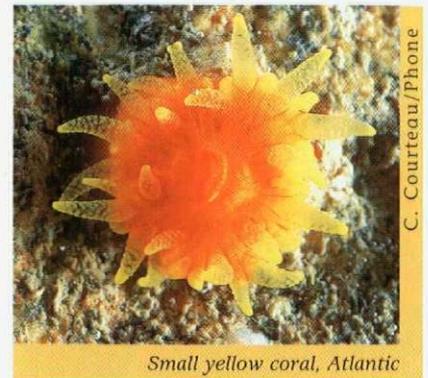
## Barcelona Convention

As regards the European seas, in its preamble the 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution designates the whole sea area covered by that Convention as a common heritage. The Barcelona Convention is in fact the first and so far one of the few purely environmental conventions which have applied the concept of "common heritage" to denote a sense of shared interest and concern for a common valuable environmental resource.

The application of the "common heritage" in the marine environmental context during the 1970s had, as its point of departure, emphasis on the cooperation of States. The 1992 Rio Conference on Environment and Development and its Agenda 21 extended the duty of protecting and preserving the marine environment as a common heritage to all. The idea is that the sea is not the common heritage of States. Although States have the primary obligation for adopting concrete and co-ordinated measures to protect the environment as a whole, it is a shared duty of all – States, legal persons and individuals – to contribute consciously to such protection.

## Concept of sustainable development

The modern interpretation of the rights and obligations related to the sea as a common heritage is closely connected



C. Courteau/Phone

Small yellow coral, Atlantic

to the way the concept of sustainable development is conceived. This grand norm is now the governing principle in almost all international environmental agreements and in a great number of national environmental legislation. One of the main ideas behind sustainable development is that environmental resources should be managed with a view to meet the needs of the present generation without jeopardising the possibility of the future generations to meet their own need in those resources. In this sense "common heritage" has been complemented with other similar concepts such as "common concern of humankind".

The commonness of the sea either as a heritage left from previous generations to us to be rationally used, or as a common asset whose proper administration is assigned to us as trustees, entails a number of legal obligations for all of us. The right to enjoy the sea and to use it and its resources is subject to the obligations of preserving it and protecting it against deterioration and exhaustion of its resources. The obligations are not limited to actively taking measures to that effect in the form of, for instance, diminishing or stopping emission of pollutants into the sea. It is an obligation that we think about the consequences of all our activities, even those that apparently have no or very remote relevance, on the marine environment. It is also an obligation that we take precautionary measures even when we are not sure about the adverse effects of our activities on the marine environment.

Finally and most importantly – and that is worth repeating and emphasising – the common heritage character of the sea implies a shared responsibility for its protection. Protective measures should be taken by all and at all levels.

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# The protection of the marine heritage outside the jurisdiction of States

## *Example of the Mediterranean*

In the spirit of Professor Mahmoudi's article opposite, is it not the case that humankind took on a responsibility towards nature as a whole in Rio de Janeiro in June 1992 by placing itself "at the centre of concerns for sustainable development" and reasserting the intrinsic value of biological diversity?

### "Regulation-free" areas

It is true that the greater the distance from the coast, the more national law loses force and is replaced by international co-operation and diplomacy. Is the right to control always a matter of choice? For conservation purposes, is it not actually more of a duty? Are coastal States which choose not to exploit fishery resources outside of their territorial waters for their own exclusive benefit not assuming the role, in the eyes of the international community, of guarantors for the careful use of these resources and compliance with the international measures that lay down the rules for such use in the areas under the jurisdiction of States?

Marine currents, these fertile ocean expanses without borders; could they not benefit from the approaches considered for protecting the sterile atmosphere of outer space?

The responses to these challenges still too often employ conventional conservation tools and are still too much inspired by concepts suited to land environments, the transposition of which sometimes hinders imagination.

### Intergovernmental agreements

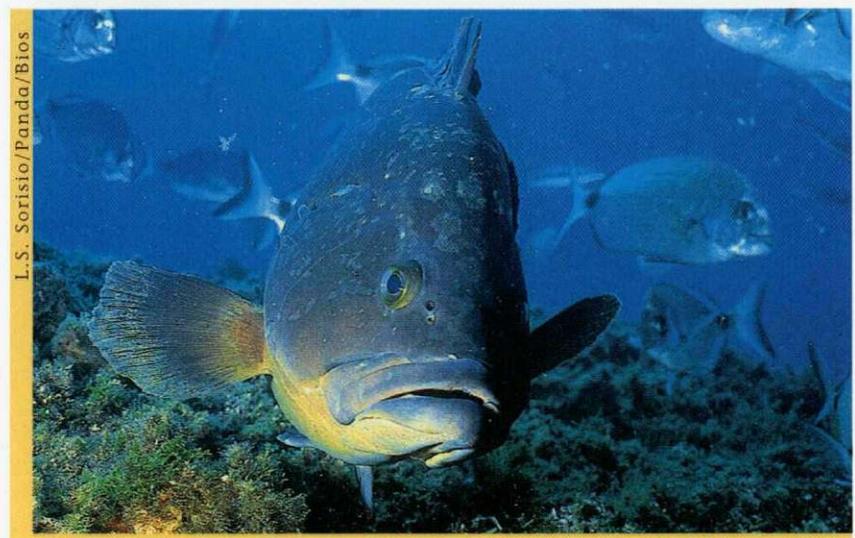
Somewhat removed from this traditional context, and out of a desire not to divide the sea up into a large number of exclusive economic zones (EEZ), the States bordering on the Mediterranean have adopted almost simultaneously:

- a new Protocol to the Barcelona Convention concerning specially protected areas and biodiversity. This covers a large number of pelagic species and offers the possibility of establishing vast, multinational protected areas extending beyond the areas under national sovereignty or jurisdiction. One example is the 100 000-km<sup>2</sup> refuge which has just been established in the

zone stretching from Provence through the Ligurian Sea to the Tyrrhenian Sea and covers the hot spot of pelagic biodiversity formed by the Ligurian current and its meanders;

- an Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area;
- the amendments to the Appendices to the Bern Convention aligning it with

give effect to the report on Oceans and the Law of the Sea presented each year to the General Assembly. Alongside the intergovernmental structures, the Independent World Commission on the Oceans, set up in 1995, proposed in its final report the creation of a Global Ocean Observing System. This "watchdog" of our seas should be capable of providing States with essential information to per-



L.S. Sorisio/Panda/Bios

*Admired but often illegally fished, the dusky sea perch is now in serious decline*

the Barcelona Convention and enabling many marine species, primarily pelagic ones, to enjoy the protection of this dynamic legal instrument.

It is only through a network of innovative, harmonised and coherent intergovernmental agreements that the desire of the riparian States to protect their common heritage can be consolidated.

### The future

On the world level, however, this complexity of agreements and multiplicity of institutions is becoming increasingly cumbersome to manage and its impact is being felt even inside the national monitoring structures. The need to co-ordinate all these actions was highlighted at the last meeting of the Commission on Sustainable Development and has resulted in the creation of an Advisory Group to the Secretary General of the United Nations – a Group intended to

mit them to govern collectively all of our maritime zones.

If we put the territorial obsessions of past centuries behind us and follow the example of what was done for Antarctica, one day we will perhaps pay as much attention to the marine environment as to our vegetable and flower gardens, our forests and our mountains. Will these vast regulation-free areas, where the boundaries between what is legally correct and what is not politically acceptable are unclear, find salvation in the near future in the concept of "governance" that has been put back on the agenda by the Independent World Commission on the Oceans?

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# Forests

*Why should they be considered a common heritage?*

Who has never suffered from being stuck on a motorway in the middle of a heat wave? Conversely, who has not welcomed being able to park in the shade of a tree?

3 000 years ago, virgin forest still covered most of Europe. Vast areas were subsequently cleared to meet the needs of agriculture and shipbuilding and to supply the necessary energy for glass manufacture, the metallurgical industry and saltworks.

## The role of the forest

Only when this unbridled exploitation provoked landslides, avalanches and floods, and human beings suffered its consequences themselves, did people realise the protective role played by the forest and – late last century – introduce legislation in this sector.

Today, we are aware of the many functions of the forest ecosystem: it is a source of energy, a producer of timber, a regulator of climate and water resources, a living environment and a place of recreation. In ethical terms, this awareness means that economic interests have to be reconciled with respect for life. The more a government protects the cultural heritage consisting of biotopes unique by virtue of their beauty and variety of species, the better it fulfils its moral responsibility towards future generations.

## A very diverse environment...

Unfortunately, less than 1% of Europe's virgin forests remain intact. In some European countries today, as well as in Japan, the proportion of woodland is increasing thanks to cheap imports of wood and energy, whereas forests are being depleted in the tropics. Unlike arid areas, where the decline of the forest is related to the local population's need for fuel, rainforest areas have never been short of firewood.

As well as representing enormous quantities of wood, the last intact areas of rainforest in South America, Central Africa and South-east Asia host extremely diverse fauna and flora. Compared to the one hundred or so species of European trees and shrubs, Malaysia alone has over 700 identified species of trees available for commercial exploitation.

Yet rainforests are first and foremost home to populations such as the Pygmies in Congo and Cameroon and the Penan in Borneo. For thousands of years they have lived in harmony with these forests. Long ago, they were already implementing the Rio recommendation on sustainable use of forests. As hunters and gatherers, they live – so to speak – off the interest from the forest without touching its capital: the trees.

sands of deaths and of damage costing billions, the principal victims being the local population.

Sand from African deserts on Alpine glaciers, the Chernobyl disaster, the hole in the ozone layer and DDT in Inuit mothers' milk all show that the inhabitants of this earth are linked to one another by winds and ocean currents. The climate is warming up.



Virgin forest in Sarawak

## ... but one that is under threat

But now, major companies obtain concessions in rainforest areas, on every continent, deriving short-term commercial profits from the delivery of these jungle giants – cut up and made into broom handles, floorboards, skirting boards, picture frames, curtain rails, doors, various articles of furniture and so on – to consumers in industrialised countries.

In this way, the forest-dwellers are being deprived of their only asset and life-support system. Industrial exploitation of virgin forests is bound to lead to the decline of these magnificent, still largely unexplored ecosystems, some of whose trees are over a thousand years old.

The floods in Thailand in the 1980s, those caused by the overflow of the Yang Tse in China last year, the cyclones in Central America and the forest fires of human origin in Brazil and Indonesia were all brought about by the over-exploitation of forests. The result: thou-

## Time for action!

In order to protect forests, which are our common heritage, two principles must be implemented at national and international level:

- absolute protection of the remaining intact virgin forests, with a total ban on road construction and exploitation for international trade;
- sustainable use of all other forests for the production of timber, with due regard to the environment.

The aim might be to classify some 20% of land as biotopes and forests to be protected in view of their significance. Industrialised countries could come to the assistance of third world countries in preserving this common heritage.

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# Landscape: a natural and cultural heritage

Over a quarter of a century after European Architectural Heritage Year (1975), the Council of Europe has launched the "Europe, a common heritage" Campaign with the aim of promoting a more up-to-date and wider concept of heritage encompassing movable and immovable assets, sites, the natural environment, non-material assets and the landscape. Indeed, the landscape, given that it has been shaped by both human beings and nature, is a particularly appropriate theme to represent the Campaign message.

Acknowledgement of the importance of landscape is by no means recent: back in the late 19th century, several European countries introduced legislation to protect regions of particular interest. It is only recently, however, that a more sophisticated vision of landscape has emerged at international level, resulting from the pooling of research in a range of disciplines. As a result, the concept of landscape today encompasses a variety of discrete values, enabling landscapes to play a bigger part in the context of our common heritage. The landscape has environmental value as part of an ecosystem; cultural value as the historic evidence of a site and the transformations it has undergone or as a feature to be learned about and studied, and which provides inspiration to writers and poets; aesthetic value as a visual and representative expression of the relationship forged over the centuries between human beings and their environment; and social value, in that it increasingly reflects human identity.

## A broader definition

This change in the concept of landscape is the result of a series of processes deriving from human and scientific disciplines. The Italian ability to identify and preserve elements of its heritage dates back to the Roman era, when particular care was devoted to religious artefacts. Subsequently, art works were included in the heritage to be conserved and then, much later, the major archaeological remains, monuments, their surroundings, minor architecture, historic town centres and the landscape.

Furthermore, not only was there an increase in the number and size of heritage items, but the field of interest was extended to include documentary sources. Landscape, no longer regarded simply as a beautiful vista, has developed along similar lines, together with the acknowledgement of environmental values and the need for nature conservation, primarily under the influence of the countries of northern Europe, where the concept of landscape is traditionally linked to the natural features of the territory.

## A wider scope

The approaches of the traditional disciplines, the natural sciences and the humanities tend to merge today with regard to the landscape since there is virtually no European virgin territory left, given the impact – both positive and negative – of human activities on the environment.

This cross-sectoral approach to landscape requires us to abandon approaches focusing merely on the conservation of regions which are particularly rich in terms of natural, cultural or aesthetic features at the expense of those where any transformation is possible. In contrast, the concept of landscape, because of the multiplicity of values it encompasses, must be extended to the whole of the territory. However, because these values vary in terms of concentration and the degree of impairment sustained, action taken on the landscape must



G. Stompfler/Pluritel

*Landscapes are the expression of the relationship that develops between humankind and the environment*

be diversified and range from conservation to reclassification, and include rehabilitation and creative development in order to bring about a better quality of life for the people living there.

## Manuel Roberto Guido

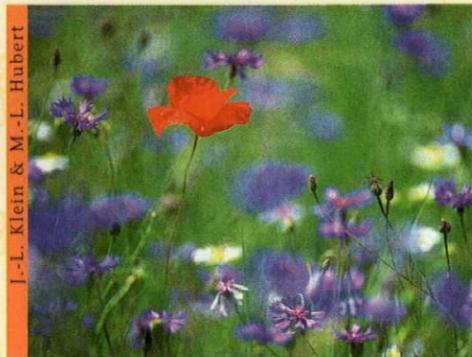
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B&G Ferrara

*The Abbot's Tower, near Ferrara, Italy*



J.-L. Klein & M.-L. Hubert

**“What is a weed?  
A plant whose virtues  
have not been  
discovered.”**

Ralph Waldo Emerson  
*Extract from Paroles de nature*  
Albin Michel Jeunesse 1995



P. Clement/Bruce Coleman Limited



Moulu/Sunset



C. Sams & P. Arnold/Bios

Vivaldi, “The four seasons”  
Score reproduced with the kind permission of Schott Musik  
International – Mainz/Paris

Mankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients.

Civilisation is rooted in nature, which has shaped human culture and influenced all artistic and scientific achievement, and living in harmony with nature gives man the best opportunities for the development of his creativity, and for rest and recreation.

Every form of life is unique, warranting respect regardless of its worth to man, and, to accord other organisms such recognition, man must be guided by a moral code of action.

Man can alter nature and exhaust natural resources by his action or its consequences and, therefore, must fully recognise the urgency of maintaining the stability and quality of nature and of conserving natural resources.

Lasting benefits from nature depend upon the maintenance of essential ecological processes and life support systems, and upon the diversity of life forms, which are jeopardised through excessive exploitation and habitat destruction by man.

The degradation of natural systems owing to excessive consumption and misuse of natural resources, as well as to failure to establish an appropriate economic order among peoples and among States, leads to the breakdown of the economic, social and political framework of civilisation.

Competition for scarce resources creates conflicts, whereas the conservation of nature and natural resources contributes to justice and the maintenance of peace and cannot be achieved until mankind learns to live in peace and to forsake war and armaments.

*Extract from The World Charter for Nature*  
Adopted and proclaimed by the United Nations  
General Assembly on 28 October 1982

# Interpretation: a discipline for heritage

Among the varied environmental communication strategies (pedagogical-didactic, diffusion campaigns, mass media, etc.), heritage interpretation stands out particularly because it is carried out *in situ*, in other words, it takes place where visitors are, in places of heritage significance, which can be protected or not protected areas. This means that all those persons who are not usually in touch with other communication strategies, can be reached at one moment or another when "visitors" in a natural, rural or cultural environment. All of us can be "visitors", from Europe or from abroad, without forgetting the local inhabitants of the areas being visited.

As mentioned above, interpretation practice is not only limited to the natural protected areas (national or regional parks, etc.), it also refers to a large range of places with heritage values. It would be anachronistic – if not erroneous – to separate today the cultural and historical heritage from the natural. The natural environment is strongly influenced by the human (historical) action. Therefore, I use here the concept "heritage" in a wide sense.

## **In situ discovery**

Our Spanish Association for Heritage Interpretation has adopted the definition of interpretation as "the art of *in situ* revealing the natural, cultural or historic legacy to the public visiting these areas in their leisure time", a definition which is inspired in others, but emphasises the context: the general public visiting a site of heritage value in their leisure time.

This large group – the general public – is very heterogeneous: different age and origin (local people or tourists), and the level of interest and type of group (families, friends, couples, etc.) are also diverse. However, it being their leisure time, one thing is clear: these persons are not looking for "educational" or any other activities that can remind them of school. They probably do not look for interpretation either. And this is the challenge: to make attractive a set of activities that have, with no doubt, an "educational intention".



Helio-Van Ingen

*Interpretation tries to make educational activities appealing. Here, a bird-watching observatory in a wetland*

The interpretive media and messages are the visible aspects of interpretation. Visitors will find offers like guided or self-guided trails, leaflets, interpretive signs and other media, which contain a message revealing the site significance in a stimulating and provoking way, and, best of all, in a clear way. As well as showing the site significance, interpretation has the mission of contributing to the prevention or solution of a problem: avoiding environmental or cultural damage on a local or global basis. That is to say, the fact of being *in situ* should not be an obstacle to the positive attitudes that can surpass the limits of the visit itself.

## **Well chosen messages**

How to achieve effectiveness in interpretive practice? Effectiveness is the objective achievement; interpretive facilities should succeed in improving the conservation conditions of a particular place. And in the interpretive message, which I would define as the imaginative treatment of the information to be presented to the public, lies the achievement of this goal. It is the "language" used that determines, in part, the success of this action. As with publicists, we look for a suitable message for a particular audience. However, there is a critical difference between interpretation and advertisement. Interpretation is not looking for a sale – in the commercial sense – it "just wants to bring up the

values hidden in the heritage features" that generally would be only understood by specialists and researchers. Europe is full of places and landscapes of great significance, not only from the ecological point of view, but also by their history, and the visitor often does not have the keys to appreciate what he is visiting.

Interpretation must attract the visitor's attention, it has to be significant and easily understood, and it has to be interesting and amusing. It must contain relevance to the visitor's ego, so it can captivate him or her in a personal way, through strong, provoking and evocative words. It has to be structured around an easy-to-remember idea, a complete sentence synthesising the message like a newspaper headline. This sentence can also be the headline of panels and brochures or of the interpreters' activities.

Without these ingredients, the hardest efforts will not achieve real communication and will be sterile. To tell you the truth, I must say that in Europe the interpretive discipline is not sufficiently developed, except in those regions with a strong Anglo-Saxon influence, where there is a major theoretical and practical knowledge. Many institutions of different countries use the term interpretation incorrectly, not corresponding with the essence of the discipline, which is to reveal the meaning of a particular

place instead of giving facts and data, and to stimulate curiosity more than merely satisfy it. There are cases of "environmental information" that are far from being interpretation. Let us hope that the imminent creation of the European Interpretation Network will enhance development of this discipline in our region.

### An effective management tool

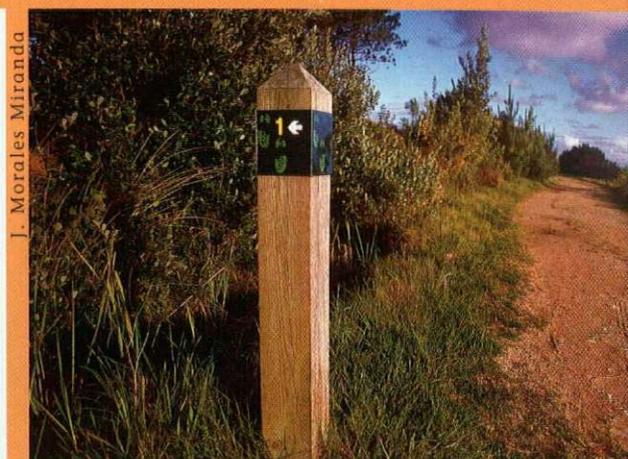
I would like to emphasise that interpretation is a management tool. Through good interpretive programming, the benefits are synergically passed to other management plans such as for administration or finance, those in the area of maintenance and security, and those in charge of public relations – the image of the institution. Interpretation which is in tune with the public will promote a positive behaviour on the site, making people aware of the importance of its conservation. Appropriate designing of trails, centres or interpretive points helps to make optimal use of the space, moving the visitors from vulnerable sites to others with a higher carrying capacity.

Finally, whether we want it or not, interpretation will always be the "public face" of the institution supporting it. It is therefore inevitable that poor (or non-existing) interpretation will negatively affect the institution's image. On the contrary, good interpretive services will give a positive public image of an institution. And I

am not talking about propoganda, but about support and collaboration, which can be legitimately used to help the institutions to better realise their functions as guardianships of our heritage, undoubtedly a great task.

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J. Morales Miranda

### Creation of an interpretation network

The Council of Europe is setting up a network of natural heritage interpretation centres. The aim of this network is to promote education and communication as tools for conservation policies for the European natural heritage and to create a real communication platform between its members, in order to:

- ensure contact between professionals working in different structures but with common aims;
- develop a system of continuous training for persons responsible for programmes within these centres and to encourage the exchange of material and experience;
- promote the setting-up of regional or international initiatives, in particular on east-west co-operation;
- present the interests and opinions of experts who are members of the network when policies concerning their fields are elaborated.

The launching of this network is foreseen for September 2000 (see article pages 28-29).



C. Gotti/Vanoise National Park

Warden supervising a school outing in the Vanoise National Park

To know, appreciate and protect our heritage



# Role of botanic gardens

There are almost 350 botanic gardens in the European Union member States that are visited by more than 20 million people every year. Although many people think of them simply as parks with a collection of exotic plants preserved in cultivation, they contain valuable plant collections which are grown for particular purposes – for reference, research, conservation, plant breeding and for restoration programmes. Many botanic gardens also have facilities such as germplasm banks, herbaria, and ethnobotanical and palaeobotanical museums. With their expertise and facilities, botanic gardens can make a significant contribution to the conservation of Europe's plant and landscape heritage through their conservation, scientific research and educational activities. Botanic garden managers see this as the most important long-term aim and justification for their institutions.

## Conservation and scientific activities

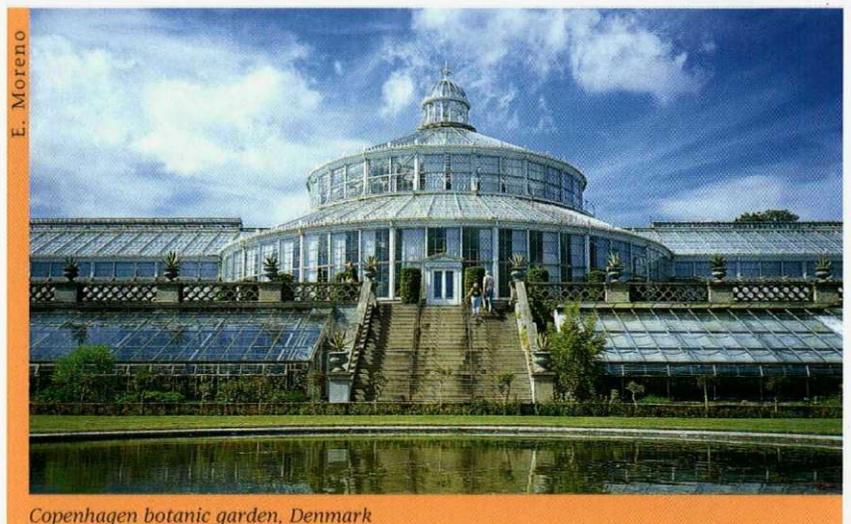
Many European botanic gardens are important research centres. They already undertake research in taxonomy, biology and the traditional uses of wild plants, as well as investigating economically useful plants such as fruits, medicinal and aromatic plants, land races and ornamentals. Increasingly they are becoming more involved in biodiversity conservation and have become important centres not only for *ex situ* conservation but for fully integrated conservation.

One major factor in the degradation of the European environment is the utilisation

of, and commerce in, wild plant resources. Over-collection has a direct impact on wild populations and plants with medicinal uses suffer in particular. Botanic gardens are one of the groups of institutions that are addressing this issue, by monitoring the impact of this trade and by bringing plants into cultivation to take the pressure off the wild collections. Botanic gardens such as Royal Botanic Garden Edinburgh Scotland and Royal Botanic Gardens Kew UK are researching

because they are situated close to large urban populations. These gardens are in a prime position to assist in the protection of European natural heritage through programmes of environmental education.

The ultimate aim of these programmes is to develop attitudes and values in visitors that lead to positive actions towards protecting and nurturing the environment. People are encouraged to appre-



Copenhagen botanic garden, Denmark

the horticultural cultivation of endangered species such as *Origanum dictamnus* from Greece, to reduce the pressure on natural populations from over-collecting.

The seed banks of European gardens also play a vital role in the conservation and protection of Europe's natural heritage. The Sóller Botanic Garden in Spain has created a seed bank to conserve the diversity of native Balearic plants for the benefit of present and future generations. Its priority is to conserve the germplasm of wild species that are under threat from tourism and building development. It also works with the Balearic government, and other institutions like national parks, to carry out reintroduction programmes, enhance existing wild plantings and provide seed for use by local people.

## Education activities

Developing an awareness of the need to conserve wild plants amongst the general public is already seen as a priority by botanic garden managers. The majority of botanic gardens are easily accessible

to the natural world and value biodiversity, as a first step towards making an active contribution to the protection of Europe's natural heritage.

## Of considerable importance

Botanic gardens can play an important role in contributing to the protection of Europe's natural heritage by:

- conserving a broad range of the genetic diversity of endangered taxa and locally useful plants;
- contributing to broad-based recovery programmes for threatened taxa;
- enhancing the long-term survival of plant populations in the wild;
- raising the awareness of the public and decision-makers of the contribution that botanic gardens can make to protecting Europe's natural heritage.

Lucy Sutherland

Education Officer

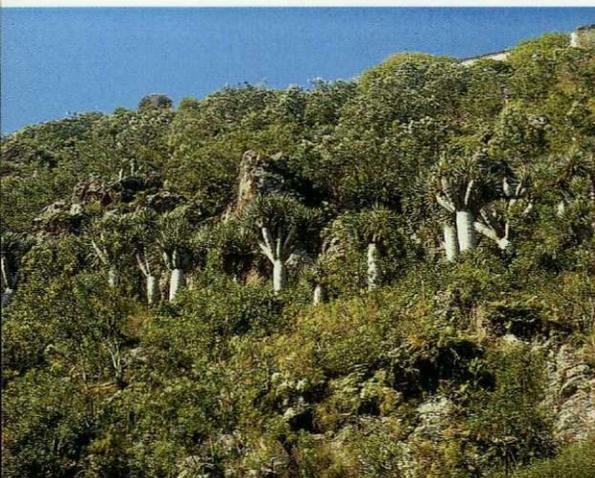
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Successful programme on restoration of the last laurel forests on the Gran Canaria island and on reintroduction of the dragon tree (*Dracaena draco*) in the wild, led by the Viera y Clavijo Botanic Garden

Botanic Garden Conservation International

# Role and challenges of natural history museums

The museum concept was conceived at the end of medieval times and was based on the collections of royal families. At that time gathering of the material was mainly aimed at ostentatiously displaying the power and influence of monarchs and it was not accessible by the public. The 19th century represents a radical change in the history of museums since the public are now allowed to enter. Museums now serve a constantly increasing number of visitors as well as the demand for the transmission of knowledge and communication.

The field of activity of museums has widened with the creation of natural history museums, scientific museums, etc. following the rapid development in natural and earth sciences, new technologies, new environmental concerns and the efforts to offer new products.

## A change in philosophy

The "typical visitor" no longer exists for natural history museums. Visitors vary greatly in their social class, origin, age, education and interests. To deal with these different groups the museum has to adopt a new attitude: the visitor is now treated as a guest, with the museum endeavouring to meet his demands and needs.

The architectural design of the museum must accommodate equally the public, the collections, the laboratories and staff. Comfortable facili-



The Goulandris natural history museum, Athens, Greece, founded in 1964

M. Katsakiori



Natural history museum, Vienna, Austria

G. Boutin/Sipa Image

ties for reception, information, refreshment and recreation must be provided.

However, the most radical change has been in the philosophy of the natural history museums. The old-style museum was a treasure house of dead memories (for example, collections of stuffed animals), the possessor of rare and unique species, an official place, the realm of silent authority, repelling questions, analysis or criticism. Its contemporary counterpart is a place alive to documentation and interpretation, open to questions, listening to its public, cultivating a living experience of the past and a faith in the future of civilisation and of our environment.

## Interactive museums

New times bring new markets, clients and needs and thus objectives must change too. The museum has under-

stood that it must convince the public of its importance, charm them through its collections, exhibitions and events, attract visitors through its image and the services it offers, preserve the message of the past in the midst of the endeavours of the present, come up with new answers and new products. In order to achieve this, it has sought originality, offered information, cultivated dialogue.

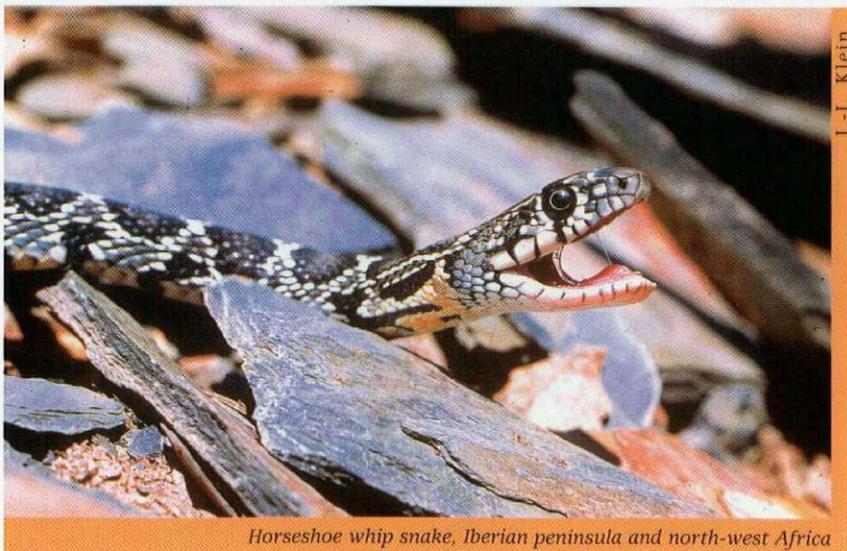
Presentation methods are more educational and have given way to dialogue. Dialogue sharpens the powers of observation, serves the process of learning, enriches one's imagination and powers of reflection and enhances environmental sensitivity.

The visitor can select different programmes to suit his own education and interests and time available to him, and make use of various means of communication: texts, maps, drawings, audio-visual aids, multi-media.

The contemporary museum has given its visitors the chance "to learn, to discover, to seek, to enjoy, to enhance their sensitivity, to refresh their minds, to find new awareness, to discover inspiration through every possible means".

**Maria Katsakiori**

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Horseshoe whip snake, Iberian peninsula and north-west Africa

J.-L. Klein

# Caves – hidden but magnificent elements

*Example from the Slovak Karst*

Of the current list of 582 World Heritage sites, four occur in Slovakia. Three of them are listed as a cultural heritage<sup>(1)</sup> and the only natural heritage site are the caves of the Slovak Karst. These caves became a World Heritage site in December 1995 as a part of the bilateral nomination project Caves of the Slovak and Aggtelek Karst, a common heritage of the Slovak Republic and Hungary.

## Values to be preserved

The Slovak and Aggtelek Karst represent a typical karst plateau region of the temperate climate zone, with several genetic and morphological types of caves and abysses. Of the total area of 600 km<sup>2</sup>, about two-thirds is situated in Slovakia and one-third in Hungary. At present over 800 caves and abysses with diverse carbonate speleothems are known.

For the World Heritage nomination project, 21 caves were selected among the most valuable and typical ones (11 in Slovakia<sup>(2)</sup>, 9 in Hungary<sup>(3)</sup> and one crossborder cave system at Domica-Baradla).

## National and international protection

Slovak and Aggtelek Karst are protected by national legislation. According to the Act No 287/1994 of the Legal Codes on Nature and Landscape Protection, all caves in Slovakia are protected as nature monuments, for which the most strict level of protection is valid. The most important ones have been declared national nature monuments. To preserve the whole area, the Slovak Karst Protected Landscape Area and the Aggtelek National Park have been designated.

Protection and visits to all caves open to the public are under the responsibility of the Administration of Slovak Caves in Liptovský Mikuláš, while the protection of the other caves is a duty of the Slovak Environmental Agency. Both bodies are organisations of the Ministry of the Environment.

Listing sites in the World Heritage List means not only confirming outstanding values, but at the same time

implies an important commitment on the part of the signatory. A management programme was therefore developed and approved by the Ministry of the Environment in January 1997.

## Specific management measures

Complex care for caves means a lot of different activities – survey, research, monitoring, practical management, technical measures to enable visits to caves from the entrance buildings and underground tours. Under the co-ordination of the Administration of Slovak Caves many other professional and voluntary bodies are actively involved in implementation of management plans. Activities to preserve the World Heritage Site are concentrated on four caves that are open to the public. In all of them, measures have been taken to raise public awareness (permanent exhibitions or information panels). To eliminate growth of lampflora inside the caves, new less intensive lights have been installed. Specific measures have been implemented in particular caves to solve the main problems.

### The Domica Cave

As the most dangerous problems are possible floods and water pollution from the soil sediments due to agri-

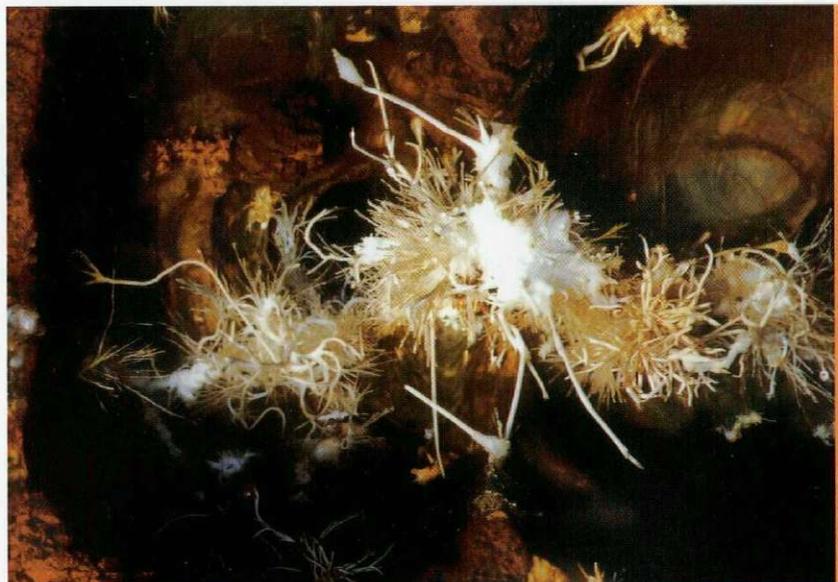
cultural activities, in 1997 hydrological monitoring of the underground water streams was commenced. In 1996-97 a geophysical survey was carried out to identify unknown underground space in the western part of the cave system. A unique result was evidence of viseit which may be found only in two other sites in the world. The barrier of the Certova diera Cave entrance was installed in 1996 preventing “uninvited” visitors entering into this cave system.

### Gombasecka Cave

To limit agricultural activities in the infiltration zone in the Silická Plateau, a proposal for the protective zone is being developed as the cave is occasionally flooded. In 1997 a technical project was carried out to direct flood water. The Silicka ladnica Cave is also a part of the Silica-Gombasek hydrogeological system. In 1998 a barrier was built to separate the ice and non-ice parts of this cave in order to stabilise speleoclimatic conditions for the ice formation. This barrier also prevents entrance into the Archeological Dome.

### Jasovska Cave

The monitoring of chiropteroфаuna over the past years is done with the co-operation of volunteers. Speleo-



*The Ochtinská Aragonite Cave is famous for its unusual dense and diverse forms of aragonite filling*

M. Elías

therapeutical procedures have been implemented since 1995 and the building of a new entrance was finished in 1996. In 1997 the Slovak Museum of Nature Protection and Caving finalised the inventory of historical letters. In 1998 an entrance corridor was adjusted for better safety of visitors. Volunteers of the Slovak Speleological Society compiled documentation on the whole Jasovska Rock cave system. At present geomorphological research is being carried out on the genesis of these caves.

### Ochtinska Cave

Deciding on visitor carrying capacity has been identified as the most important problem due to the risk that condensation and increased CO<sub>2</sub> content might damage aragonite filling. However, results from the monitoring in 1996-97 did not prove negative changes of the cave's climatic conditions due to visits. Possible changes in temperature and humidity stabilise very soon after visitors leave the underground spaces and

no condensation of water on the aragonite filling was observed.

### Positive bilateral co-operation

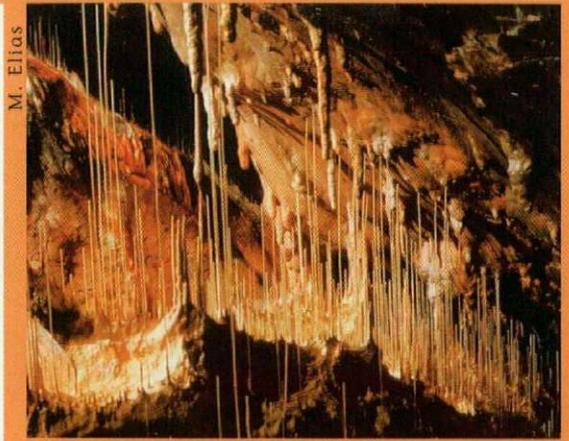
Slovak and Aggtelek Karst is just one example of a natural heritage and common management programme of bilateral co-operation between Slovak and Hungarian nature protection authorities. The most important project is to keep nature protection on the political agenda, to promote co-operation and to guarantee adequate resources for survey, research, monitoring and practical management measures.

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Straw stalactites in Gombasecka Cave

- (1) The Vlkolinec (folk architecture reserve), the Spišsky Castle, and the historical town of Banská Štiavnica.
- (2) Silická ľadnica Cave-Gombasecka Cave, Krasnohorská Cave, Hrusovská Cave, Skalický potok Cave-Kuníň Abyss, Drienovská Cave, Jasovská Cave, Snežná diera Cave, Zvonivá Abyss, Diviacka abyss, Obrovská Abyss and Ochtinská Aragonite Cave.
- (3) Vecsem-bukk Abyss, Vass Imre Cave, Meteor Cave, Rejtecká Abyss, Szabadság Cave, Kossuth Cave, Beke Cave, Rákóczi 1 Cave and Rákóczi 2 Cave.

## Caring for the natural heritage

*The example of Wallonia, Belgium*

It has become normal practice to refer to nature in terms of heritage. However, what distinguishes the natural heritage and how will this influence the way we care for it?

However prestigious, dictionaries rarely define heritage satisfactorily. Of course, they include the notion of the transmission of a legacy from generation to generation, but their approach is often relatively passive.

We will therefore adopt the definition given by Henry Ollagnon<sup>(1)</sup>,

since this seems to meet our expectations concerning the natural heritage.

The heritage is "all the material and immaterial elements which combine to maintain and develop the identity and autonomy of its 'proprietor' in both time and space through a gradually evolving environment". In other words, the heritage does not exist as such in the absence of a property relationship with a "proprietor" who invests in it and manages it.

### What is at stake?

A heritage in which there is no investment, and which is abandoned by its "proprietor", is a heritage that is falling into ruin and disappearing. While this notion is readily understandable in the context of, for example, architectural heritage, when there is someone – owner or just tenant, private or public, individual or collective – who has certain options for managing it, this is not the case with the natural heritage.

The elements that constitute this heritage – birds, dragonflies, butterflies, the water in the streams and so on – are often considered to be examples of *res nullius*, that is an element that does not in itself belong to anyone.

How then can individuals be motivated to care for all or part of a heritage that belongs to no one as if it was their own?

This is the purpose of the Municipal Nature Development Plans (MNDPs), first established in Wallonia in 1996. To date, 41 of the 262 Wallonian municipalities have subscribed to this pilot scheme.

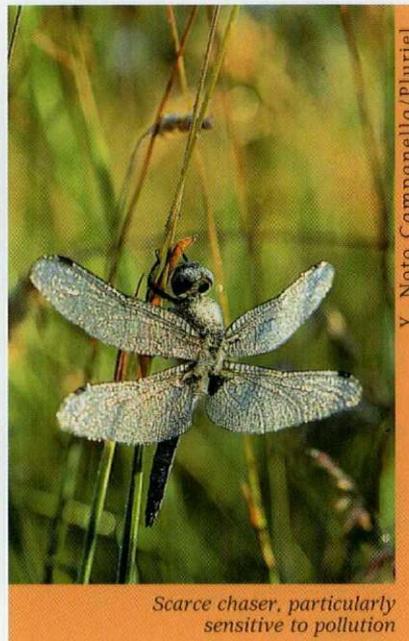
**MNDPs: an active approach**

There are two elements to this approach: municipal ecological networks and partnerships of all those concerned.

Ecological networks have a twin role. Their establishment undoubtedly helps to improve biodiversity and landscapes and they must also be seen as a way of persuading those who have hitherto shown little inclination or tendency to accept responsibility for the natural heritage to do so.

Partnerships are needed because traditional forms of individual or collective management are not suited to a modern, geographically comprehensive biological and landscape diversity conservation strategy.

The natural heritage must now be placed in the hands of, and managed by, a community of individuals and/or bodies – in other words, a diverse range of individual or collective action centres – that jointly apply a series of negotiated rules of conduct in managing a particular element of the heritage, whether or not this is “owned” by them. When problems arise, the community of participants in this process must act as one. All acknowledge a common interest in the quality of the natural environment and in finding solutions to the problems it raises. These are the foundations of a new inte-



Y. Noto Campanella/Pluriel

Scarce chaser, particularly sensitive to pollution

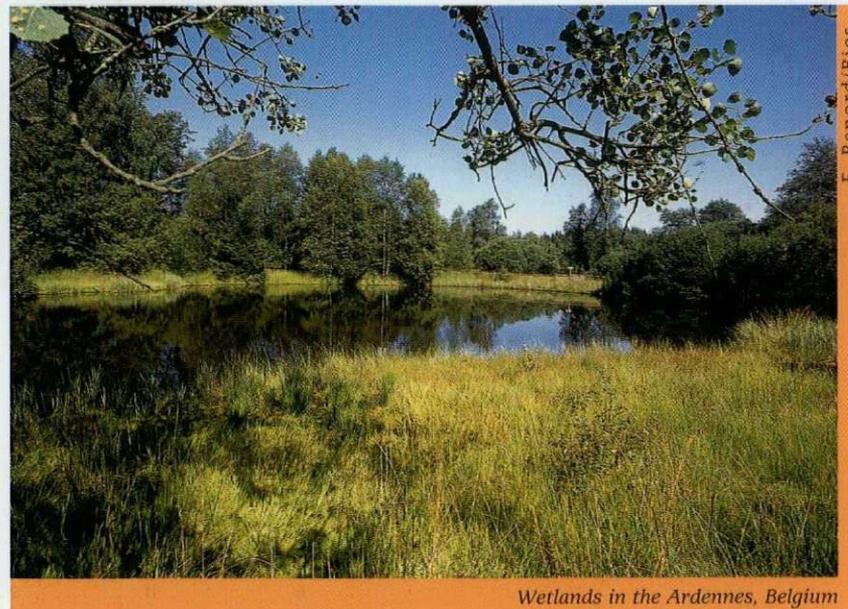
grated approach to the natural heritage, which must be managed as common property.

In practical terms, this approach calls for the setting-up of well organised and well led partnerships, in which each participant – decision-makers, community leaders, specialists, facilitators, and so on – understands his or her own role and that of others, and in which everyone’s own identity and special skills are strengthened.

This is the approach, based on the above considerations, that is being tested in Belgium, in the Wallonian Municipal Nature Development Plans. It offers a response to the present need to accept responsibility for the natural heritage at the local level.

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(1) Ollagnon, H., 1990 – Stratégie patrimoniale pour la gestion des ressources et des milieux naturels, proceedings of the colloquy *Gérer la nature?*, Trav. Cons. De la Nat., 15/1: 195-222



F. Renard/Bios

Wetlands in the Ardennes, Belgium

# Unesco World Heritage List

## Inscription of Lake Baikal

For the Russian people, and the world, Lake Baikal is a natural treasure. Located in Siberia near the Mongolian border, the lake holds 20% of the world's fresh water and harbours more endemic species of plants and animals than any other lake in the world. Surrounded by mountains, forests and wild rivers, the lake is an amazing and breathtaking example of physical beauty. Its international significance as a natural site, was recognised in December 1996 when it was inscribed on the World Heritage List.

Compared with other great lakes of the world, Lake Baikal is enormous: 636 km long and 80 km wide. The length of the coastline is about 2 100 km. Baikal's volume (23 600 km<sup>3</sup>) is greater than any other freshwater lake and at 1 637 m, it is the world's deepest lake.

### A profusion of life

Baikal's water, called "living water" is famous for its spiritual and medicinal qualities. The water is fed by a series of springs and these, along with the lake's depth, volume and geographical position, explain Baikal's self-purification qualities and why it is alive with aquatic life.

The wildlife in and around the lake is equally rich. Animals living in the surrounding taiga include brown bear, sable, Manchurian deer and elk and the lake is home to the world's only freshwater seal, the nerpa.

### Ancient culture

Baikal is steeped in culture. Buryats and Evenks are a living link to Baikal's past. Evenks, the area's oldest indigenous peoples, live in scattered valleys around the lake. Buryats, Mongolian people who have made the area their home long before Genghis Khan swept through Asia in the 13th century, are now integrated into Russian society. Since 1923 they have occupied their own autonomous republic on the lake's eastern and northern shores, the Buryat Republic. Buryat culture still retains its own identity as evidenced by the lake being a sacred site and a focus of many regional legends.

### Recent threats

Industrialisation in the later half of the 20th century has made its mark on the landscape and the waters of Baikal. Sixteen nearby towns and about 50 indus-



M. Bonneville/Sipa Image

365 rivers flow into Lake Baikal

trial enterprises have increased the lake's pollution levels. The construction of the Irkutsk Dam has raised the water level contributing to a decrease in fish population and the erosion of the northern barrier islands. While officially protected, poaching of wildlife around Baikal is a growing problem. In addition, and of great concern to environmentalists, there has been a marked increase in timber felling.

### International recognition

Because of its ecological importance, in the early 1980s the Russian Government began to review the possibility of nominating Baikal to the World Heritage List. In 1996 Lake Baikal was inscribed by the World Heritage Committee on the basis of it being an outstanding freshwater ecosystem, containing examples of the major stages of the earth's history and outstanding geological features, examples of on-going ecological and biological

processes, superlative natural phenomena and an area of exceptional natural beauty and aesthetic importance, and significant and important habitat for threatened species.

Since inscription there has been increasing activity to protect the lake. Of note has been the April 1999 adoption of the Law on Lake Baikal by the State Duma of the Russian Federation, providing a framework for further protection. In addition, the region has seen a number of efforts to implement sustainable development plans and projects, including support from international organisations.

### Current preoccupations

Today, the Unesco World Heritage Centre and the World Conservation Union (IUCN) work with the State Party and with organisations around Lake Baikal to monitor its state of conservation. The World Heritage Committee has expressed serious concerns about the pollution problems facing the site and the urgent need to re-profile the controversial Baikalsk Pulp and Paper Mill. In the future these immense conservation issues will need the continuing collaboration of the Russian and international communities to support those programmes that safeguard this unique ecosystem.



J.-L. Klein & M.-L. Hubert

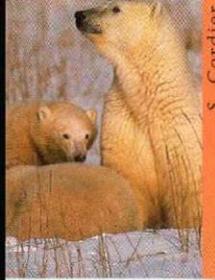
260 bird species have been recorded on the south bank of the lake. Here, a female capercaillie

Art Pedersen and Mechtild Rössler

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S. Cordier

# Interrelation between nature and civilisation

*The Sami, indigenous people of the North*

The European Arctic can be defined as the transnational Euro-Arctic Barents region, including the northernmost parts of Russia, Finland, Sweden and Norway respectively. Within this vast area, stretching from the Atlantic coast in the west to the Urals in the east, from the Arctic ocean to far south of the polar circle, there exist several indigenous peoples, with the Sami, the Komi and the Nenets (or Samoyeds) as the most known. The last two – the Komi and the Nenets – live in Russia, while the Sami inhabit all four countries in question. Of the approximately 50 000 Sami, 30 000 live in Norway, 15 000 in Sweden, 4 000 in Finland and 2 000 in Russia. Nevertheless, the Sami consider that the national borders do not exist. Moreover, it is also the only people of the Nordic world with status as indigenous people. The Sami culture and language are common across the borders, and since 1986 the Sami have had a common flag and a national song. They also possess their own information channels – newspaper, radio and television.<sup>(1)</sup>

## Man and nature's symbiosis

Initially the Sami were a hunting people – living by fishing, hunting and trapping, and breeding reindeer as a supplementary means of support. The local society – *sii'da* – was composed of families that lived together for part of the year and divided into smaller groups to move between sea-

sonal living quarters. Since the 16th century, colonisation and new ways of life have influenced Sami culture. These have resulted in the formation of diverse cultural groups characterised by different settlement areas and activities. The designations most known are Reindeer-herding Sami, Settled Inland, and Coast Sami. Nowadays these cultural features are less apparent as an increasing number of Sami are taking up non-traditional occupations. Nevertheless, reindeer-herding is still an important part of the Sami economy and the Sami people still retain much of their distinctive culture. Food habits, living conditions, employment or subsistence activities are some of the characteristics in which Arctic populations differ from others.

However, the most important thing is that in the Sami's world view, man and nature are inseparable. The Sami pre-Christian religion contains many gods who steer the powers of nature.<sup>(2)</sup> Thus, people live close to and in respect of the environment. Their life is intimately linked to local resources that provide a substantial proportion of energy and protein requirements, as well as most vitamins, essential elements, minerals, as well as spiritual connections to the environment. Thus, traditional food is still given greater place. Although whales, seals and seabirds are an important source of local

## Arctic environmental threats<sup>(4)</sup>

In comparison with most other areas of the world, the Arctic is still relatively clean, although no longer unspoiled. It is affected both by emissions from industrial activities within the region and by long-range transport of pollutants from other parts of the world. Atmospheric and ocean transport pathways meet in the Arctic, which thus functions as a sink for various types of pollutants. Current regional threats are mainly caused by pollution but the danger comes also from habitat fragmentation, degradation or destruction; over-harvesting of biological resources; tourism in vulnerable areas; and introduction of alien species and diseases.

The first AMAP's<sup>(5)</sup> assessment report (Oslo, 1997) shows that certain Arctic population groups are among the most exposed in the world to certain environmental contaminants. Persistent contaminants accumulate in animals that are used as traditional foods. The Sami and Nenets peoples are mainly exposed to radioactivity due to reindeer consumption, whereas the Inuits of Greenland, Canada and Alaska, living off the sea, are exposed to persistent organic pollutants (POPs) and mercury.

## Main threats

The most serious environmental threat to animals high in the European Arctic food-chains – polar bears and glaucous gulls – is commonly considered to be POPs, such as DDT, PCBs, chlordane, etc. They are especially insidious for people and wildlife as they break down very slowly. This persistence in the environment allows them to accumulate in animals, and to pass through the food chain.

The Arctic is also exposed to acidification and radioactivity. Oxides of sulphur are the major acidifying compounds in the Arctic that cause the death of trees and erosion. They are formed when fossil fuels burn and when sulphide ores are smelted. Most sulphur in Arctic air comes from industrial areas further south. Eurasia and eastern North America are the major global sources. Contami-



GRID Arendal, Norway/Norwegian Polar Institute

The Arctic climate is extremely harsh and is characterised by great variations in light and temperature, short summers, abundant snow and ice in winter as well as vast areas of permafrost

nants that cause acidification are also involved in the phenomenon of Arctic haze, which obscures visibility when the sun finally returns to the Arctic after the long polar winter. Radioactivity is accompanied by the emission of ionizing radiation, which can damage living cells. Even if human exposure to radionuclides has declined since the cessation of above-ground nuclear weapons testing, Arctic peoples are exposed to higher levels of radionuclides than people in the temperate zone. Other sources come from by routine releases from European nuclear fuel reprocessing plants, the Chernobyl accident, and local contamination from dumping of nuclear waste, storage of radioactive waste, and spent nuclear fuel. Furthermore, Arctic people are also exposed to important natural and anthropogenic sources of heavy metals, such as mercury, cadmium and lead; and oil pollution connected with the level of oil and gas prospecting and extraction activity. Finally, climate change, ozone depletion and ultraviolet radiation increase the amount of ultraviolet radiation reaching the earth's surface. Reflective snow cover can make the effects especially pronounced in the Arctic.

**Effects on health**

The growing brain is particularly sensitive to contaminants and the influence on foetal development is of special health concern. Methyl mercury and several POPs cross the placental barrier and in some groups of people PCB and mercury levels in mothers' blood approach and exceed those thought to cause developmental effects in children. For a number of POPs, health concerns also include child development, reproductive impacts and effects on the immune system. The future of Arctic people depends on preventing the degradation of the Arctic environment.

**Challenges to be faced**

The presence of contaminants in umbilical cord blood, in human milk, in food, air, and water presents a political, social and public health challenge. For certain geographic areas, current dietary exposure to POPs, to methyl mercury and to cadmium are high enough to indicate a need for public health measures.

Old practices are still in used and very few regulations ensuring particular concern for environmental

Davvi Girji. OS, Karasjok/Tromsø Museum, Universitetsmuseet

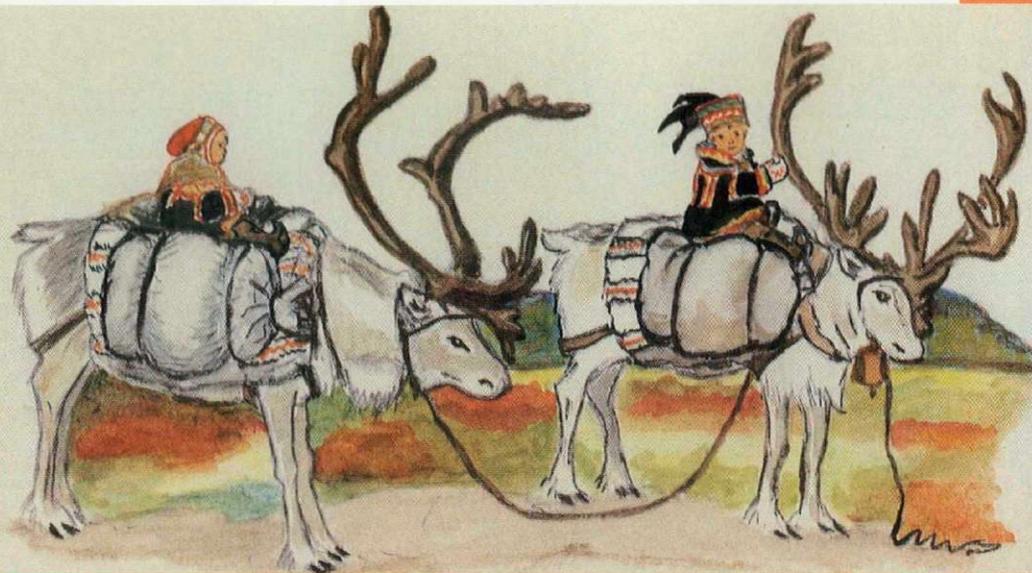


Illustration by Margarethe Wiig taken from the first school book to be published in the Lapp language in 1951

safety are in force at both national and international levels in the European Arctic, as the region is "still seen as 'the last frontier' where it is not always necessary or possible to 'go by the book' with respect to environmental safety"<sup>(6)</sup>. Based on the current threats, future development trends and long-term goals suppose the urgent development of legislation including inspection as well as integration of environmental concerns into economic and industrial activities in concrete terms. Investments should be realised to ensure for instance safe storage of radioactive waste and operation of nuclear facilities. Efforts should continue to internationally restrict the production and use of environmentally hazardous substances to reduce long-range transportation of pollution to the Arctic. Other goals must focus on sustainable management of European Arctic marine living resources and ecosystems, and on the protection of European Arctic wilderness areas and important habitats.

**An inestimable asset**

The significance of the Arctic goes well beyond the region as such. In 1996, the Lapponian Area (Sweden) was registered as a mixed natural/cultural World Heritage property<sup>(7)</sup>. Europeans should recognise the unique values of the European Arctic environment – one of the world's largest ecosystems and areas of quasi-untouched wilderness – and its biodiversity which need to be protected and sustainably managed, and should see it as their common responsibility to protect these values for the bene-

fit of today's and future generations. The Arctic area offers opportunities for research, which can lead to new knowledge and add to our understanding of the world around us. It is of inestimable value as part of the world's common humankind heritage. By protecting it, we protect ourselves.

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This article has been written following the Seminar "Environmental problems in the Arctic" organised on 30-31 August 1999 in Tromsø (Norway), on the occasion of a meeting of the Committee on the Environment, Regional Planning and Local Authorities of the Council of Europe's Parliamentary Assembly.

Our thanks to Lars-Otto Reiersen, Executive Secretary of the AMAP and to Einar Niemi, Professor at Tromsø University for their valuable collaboration, as well as to the Norwegian authorities.

- (1) Niemi, E., *Indigenous peoples of the North*. Seminar on "Environmental problems in the Arctic", Tromsø, 1999; site web: [www.sametinget.se](http://www.sametinget.se)
- (2) For the beginning of this part, data have been extracted from: Sami-Ethnographic Exhibition, Tromsø Museum
- (3) Northern-Norway: *A Way of Life*, Tromsø University, Tromsø Museum, 1997
- (4) Data extracted from: *Arctic Pollution Issues: A State of the Arctic Environment Report*, AMAP, 1997
- (5) Arctic Monitoring and Assessment Programme. It was established in 1991 under the Arctic Environmental Protection Strategy (AEPS).
- (6) *The State of the European Arctic Environment*, EEA Environmental Monograph No. 3, 1996
- (7) Site web: <http://www.unesco.org/whc/sites/774.htm>; [http://www.wcmc.org.uk/protected\\_areas/data/wh/lappon.htm](http://www.wcmc.org.uk/protected_areas/data/wh/lappon.htm)



# Europe, a common heritage

At the Second Summit of Heads of State and Government in October 1997, the Council of Europe decided to organise a public awareness Campaign on the cultural and natural heritage of Europe.

This Campaign, entitled "Europe, a common heritage", was officially launched in September 1999 in Bucharest and Sibiu, Romania, and will continue for a whole year.

The objectives of the Campaign are to:

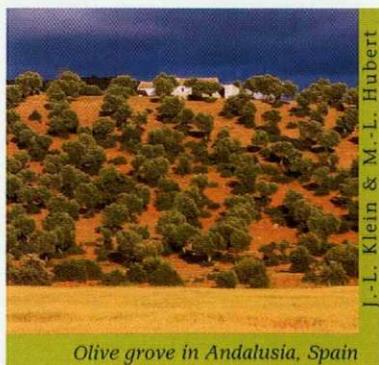
- raise public awareness of the conservation, management and development of the cultural and natural heritage;
- highlight the human dimension and social cohesion function of the cultural and natural heritage;
- promote a common sense of belonging by emphasising the European way of life;
- stress the importance of awareness of a shared cultural and natural heritage for the construction of a vast area of democratic security in Europe.

The spirit of this Campaign is to promote an extensive definition of the heritage. It covers both the natural and the cultural heritage: the architectural environment, objets d'art, natural resources, sites (natural, historic, archaeological, etc), landscapes and the non-material heritage.

The Centre Naturopa is contributing to this Campaign by taking charge of the following projects linked to the natural heritage.

## Council of Europe Landscape Award

The landscape, which is a crucial element in people's living environments and contributes to local and regional cultures, is a basic component of the European natural and cultural heritage. The theme of landscape has therefore been identified as a major focus of the Campaign.



Olive grove in Andalusia, Spain

J.-L. Klein & M.-L. Hubert

Owing to their close contact with the public, local and regional authorities and NGOs (non-governmental organisations) are very often responsible for protecting, managing and developing landscapes in Europe. It is therefore very important to acknowledge their role and their efforts to improve people's living environment in terms of the landscape.

The Award is intended for specific practical initiatives (either completed or nearing completion) in the field of landscape quality, conducted in one of the following three categories:

- awareness, education and participation;
- scientific and technical activities;
- protection, management and development.



The landscape is one of the fundamental elements of the cultural and natural heritage

Hellio-Van Ingen/Phone

Accordingly, at the suggestion of its Congress of Local and Regional Authorities of Europe, the Council of Europe has proposed launching the Council of Europe Landscape Award. The Award goes to local and regional authorities and NGOs that have implemented specific practical initiatives in the area of landscape quality.

All the local and regional authorities and NGOs of Council of Europe member States are invited to enter the running for this Award. Initially, the national authorities will select the best initiatives from one NGO and one local or regional authority, granting them the National Landscape Award. In the second phase, the national authorities will transmit the winning initiatives to the Council of Europe Secretariat with a view to the granting of the Council of Europe Landscape Award.

The deadline for entries that have received national awards is 31 May 2000. An international panel of landscape experts will meet in June 2000. The Awards have a symbolic value and will be presented at the close of the Campaign in autumn 2000.

## Pan-European Network of Natural Heritage Interpretation Centres

"Nature museums" and other broadly associated structures (eg natural history and zoological museums, botanical gardens, open-air museums, information centres in protected areas or natural sites, etc) are valuable tools for the preservation of the European natural heritage because they fulfil important functions relating to management and protection, research, education and public awareness-raising. Unfortunately, not all such bodies have experts in all three of these

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fields, and in fact many of them lack resources and expertise.

Interpretation of the natural heritage is a form of communication aimed at promoting understanding of the functioning and appreciation of the value of the components of our natural environment. It is a specialised and skilled activity, because in order to communicate effectively with people during their leisure time interpreters must be knowledgeable in the environmental sciences and able to promote conservation values imaginatively, with tools borrowed from formal education, entertainment, public relations, marketing and the media.

The objectives of the network are:

- promoting biodiversity conservation;
- supporting the conservation, research and awareness-raising work of the institutions in the network;
- promoting education and communication as tools for conservation policies for the European natural heritage;
- making the utmost use of the potential of these privileged reception sites to heighten public awareness of the interest of their natural heritage and the need to protect it;
- lastly, creating a veritable platform for communication among all members.

This platform should ensure contact between professionals working in different structures but with common aims, develop a system of continuing training for persons responsible for programmes in these centres and the exchange of material and experience, promote the setting up of regional or international initiatives, in particular on east-west co-operation, and present the inter-

ests and opinions of experts belonging to the network during the formulation of policies relating to their particular fields.

This network will be installed in several stages:

- initially, an evaluation should be conducted of the current situation in the various European countries in order to draw up an inventory of existing facilities: the main "nature museums", regional, national and international programmes, networks of experts in communication and environmental education, etc.
- subsequently, wide-ranging consultation will be conducted with the inventoried institutions, networks and initiatives in order to agree on the aims, partners, resources and the implementation programme of the network;
- lastly, the operational phase will be launched.

An international conference will be organised on the occasion of the launch of the network's operational phase in autumn 2000.

## European Photography Competition

This competition is open to all professional or amateur photographers. The theme chosen for the competition is the Campaign theme, "Europe, a common heritage".

The photographs may, therefore, reflect any of the myriad aspects of the Campaign, such as the built heritage, rural, agricultural, coastal or mountain landscapes, university, monastery or castle gardens, botanical or zoological museum collections, caves, the

tourist and travel heritage (grand hotels, harbours and railway stations, boats and ships, seaside and spa facilities), regional and national nature parks, and all other forms of European heritage: sports, industry, cinema, music, science, etc.

Entries must be 13 x 18 cm unmounted and unframed colour prints. A maximum of three photographs per person may be submitted. The main criteria for selection are:

- relevancy to the theme;
- photographic research based on the theme;
- photographic criteria: composition, difficulty in taking the shot, artistic merit, technical quality, etc;
- originality of the photograph.

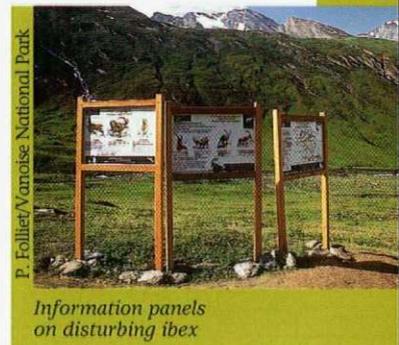
There is no entry fee, but photographs will not be returned. The deadline for entries (date as postmark) is 31 May 2000.

An international panel made up of professional photographers and heritage specialists will meet in June 2000. The prizes are:

- 1st Prize: FRF 15 000 (2 286 Euros)
- 2nd Prize: FRF 10 000 (1 524 Euros)
- 3rd Prize: FRF 5 000 (762 Euros)
- 4th to 15th Prize: FRF 1 000 (152 Euros)
- 14th to 50th Prize: 10 photographic films.

Prize-winners must grant reproduction rights to the Council of Europe and the Campaign national organising committees free of charge for use in any publication concerning the Campaign. The Council of Europe guarantees that the photographer's name will be clearly mentioned on all printed material.

For any additional information on these projects, please contact:  
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Information panels on disturbing ibex



Exhibition by the Centre Naturopa



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# Centre Naturopa



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### The National Agency in Belgium

As one of the Council of Europe's founder members, Belgium has had a National Agency since the Centre Naturopa's inception. However, its structure and organisation have been adapted to reflect the country's institutional reforms. Until the early 1990s, when many powers were transferred to the regions and communities (Flemish region, Walloon region, Walloon-Brussels community, German-speaking community), the National Agency was managed nationally, and there are certainly those who will recall successive officials like Marc Segers and Jean Renault.

Today, the three regions distribute documents published by the Centre Naturopa to their target readership. However, they do not confine themselves to this. The National Agency has participated directly in certain issues of the publication *Naturopa* as special adviser or the author of articles. It has also suggested authors for forthcoming issues or for the *Questions and Answers* series of brochures. It has disseminated and publicised the existing brochures: Biodiversity, Agriculture and Biodiversity, Tourism and Environment, etc. It has contributed to colloquies coinciding with the annual meeting of National Agencies. Finally, the address list for recipients of Centre Naturopa publications has been revised to ensure that strategies developed by the Council of Europe are brought to the attention of Belgian decision-makers.

In order to receive *Naturopa* or to obtain further information on the Centre Naturopa or the Council of Europe, please contact the National Agency for your country (see list opposite).

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*The Council of Europe celebrates its 50th anniversary!*

*Created in 1949, just after the war, this intergovernmental organisation works towards a united Europe, based on liberty, democracy, human rights and the rule of law.*

*With its 41 member States, the Council of Europe is a privileged platform for international co-operation in many fields - education, culture, sport, youth, social and economic affairs, health - including environment and regional planning.*

*The aim of the Centre Naturopa, information and documentation centre on nature conservation in Europe, is to raise awareness among Europeans. At the origin of important information campaigns, it also produces several publications, including the magazine Naturopa.*

*Naturopa is published three times a year in five languages: English, French, German, Italian and Russian.*

*In order to receive Naturopa regularly, please contact the National Agency in your country (see addresses on pages 30-31).*

*Next issue's theme  
**Employment and environment***