



**WILD
EUROPE**

**WILDERNESS
IN EU POST 2010
BIODIVERSITY STRATEGY**

Suggestions from
members of the Wild Europe partnership

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Wilderness in the EC Post 2010 Biodiversity Strategy

1) Background

Despite substantial progress in recent years, Europe's biodiversity is under continued pressure linked principally to habitat destruction, pollution and climate change as well as the impact of invasive alien species.

At the same time, there is a growing support for wilderness areas (Note 1) and appreciation of their value, as characterised by five aspects in particular:

- Development from 2005 of the Wild Europe partnership, a group of key conservation organizations (Note 2), promoting a coordinated strategy on protection and restoration of wilderness areas
- A Resolution for Wilderness in November 2008, signed by around 150 conservation NGOs and other organisations across Europe
- A special Report of the European Parliament calling for improved protection and funding of wilderness areas as well as endorsement of the Wild Europe initiative, adopted on 3rd February 2009 by 538 votes to 19 (Note 3)
- The Prague Conference on Wilderness and Large Natural Habitat Areas organized by the Wild Europe partnership and jointly hosted by the Czech EU Presidency and the European Commission, producing an Action Agenda of policy recommendations in May 2009
- The CBD Global Biodiversity Outlook Report of May 2010 stressing opportunities for 'rewilding' restoration on a landscape scale across Europe (Note 4)

2) Wilderness in the EU Biodiversity Strategy

Protection of the last remaining wilderness areas, together with appropriate restoration, can make an important contribution to achieving the EU biodiversity objectives for the post 2010 strategy, particularly with reference to the Headline Target:

"Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss"

Therefore the Wild Europe partnership suggests incorporating the following reference to wilderness in the post 2010 strategy:

Wilderness is a unique part of our natural heritage. It represents a proportion of the European continent that is very small – around 1% - and shrinking. Many areas are under threat from logging, development of infrastructure, climate change and other factors.

At the same time, there are unprecedented opportunities throughout Europe for restoration of large areas of natural process and habitat, linked by biological corridors into a functioning ecosystem.

Because of their size, relative remoteness and natural condition, wilderness and wild areas can significantly strengthen the effectiveness of the Natura 2000 network and form a key element in Europe's green infrastructure.

If appropriately protected and restored, they can also offer substantial environmental, economic, social, and cultural benefits - for local communities, landholders and society in general.

3) How wilderness can support EU Biodiversity Strategy

The outcomes of wilderness and wild area protection and restoration can be related to individual Sub-targets within the EU Post 2010 Biodiversity Strategy:

Sub-target 1 (ST1) Integration and sustainable use of resources

- Wilderness can provide substantial income and employment opportunities through nature tourism together with recreational, educational, social programme, corporate training and other non-extractive initiatives of relevance to both rural development and urban needs agendas. In marketing terms alone, wilderness is a strong 'brand' – underwritten by experiential impact and size: the latter enabling a scale of activity that might compromise conservation objectives in smaller traditional reserves. For example, Oulanka National Park in Finland generates over 14 million euro per year in income effect (including local multiplier) and employs 183 personnel (Note 5). Studies in the Bayerischer Wald National Park (Germany) indicate a similar impact (Note 6).
- The size and intactness of wilderness areas enables large-scale provision of high quality ecosystem services, of particular relevance in addressing climate change. There is significantly higher carbon storage capacity in undisturbed forest, peatland and wetland as against their more managed counterparts. The same arguments can apply to flood mitigation (in both watershed or lowland sink locations), improved water-table retention and pollution alleviation.
- Such ecosystem service benefits can be more likely to attract a wide and sustainable range of funding support - often from public and private sources not normally associated with conservation: carbon offset and credit income for sequestration from

power utilities, industry with high energy-usage, and the general CRS and PR agendas of the corporate sector; in one 30,000 hectare region in the Carpathians alone 22 million euros of carbon offset finance from old growth forest protection was identified in 2010. Substantial hydrology related funding can also be available from water utilities, insurance companies, local authority and statutory agencies keen to reduce the high cost of downstream flood prevention, water treatment and compensation claims.

- This opportunity applies as much to restoration as to protection projects – for example the reduction in climate changing gas emissions (carbon dioxide, methane and nitrous oxide) resulting from the transformation from net positive emissions on marginal agricultural land to net negative emissions on restored habitats. Regarding flood mitigation, a report published in July 2010 by WWF cites some 800,000 hectares of floodplain restoration potential along the Danube, bring important savings in costs of flood damage and alternative investment in prevention schemes.
- Such economic benefits can be particularly significant in remoter regions where traditional land uses are becoming increasingly unviable, resulting in widespread rural decline and land abandonment. The ‘multiplier’ effect of income injections in the local economy can be disproportionately strong in such areas.
- The wilderness brand label can also help with marketing goods and services from adjacent productive areas, eg organic wild area beef or lamb, whilst property values can be enhanced by proximity to wilderness (not always a beneficial effect).
- Wilderness is increasingly used to address urban social issues such as youth development, drug addiction, healthcare and conflict resolution. The effectiveness of these programmes is underwritten by 1) the large scale of areas involved, enabling such activities to occur without compromising biodiversity goals; and 2) the psychological attributes of large wild areas that can facilitate a range of relevant remedial therapies.
- Additionally to the income and employment they bring, the societal value of such programmes can be quantified – in terms, for example, of the financial benefit to society of custodial expenses avoided, lower criminal reoffending rates or lower medical costs from improved physiological healthcare results. They also enable engagement with the all-important urban political arena where conservation traditionally has a relatively low policy and budget profile.
- Cost per unit area of non intervention management can be significantly lower

Problematic issues:

- There can be some local reduction in income and employment resulting from exclusion of extractive activities such as logging and commercial grazing from core areas, but these involve minimal overall productive capacity and are usually of marginal profitability. Any such loss can be counter-balanced by the funding and income potential together with employment benefits outlined above.
- The attitude of local communities towards wilderness and its wildlife can be problematic, and appropriate awareness raising of their benefits should form part of any protection or restoration programme.
- Lack of service infrastructure can prevent local communities in areas adjacent to wilderness from benefiting fully from tourism and other opportunities. Training,

business counselling, quality accreditation and marketing support are often needed to ensure maximum value added is gained.

- Whilst all activities outlined above are non-extractive, it is important that their scale and conduct does not undermine the very wilderness values they are intended to help support. Clear management guidelines and codes of professional conduct are needed.

Sub-target 3 (ST3) Fragmentation and Green Infrastructure

- Wilderness and large wild areas have the potential to provide key ‘cornerstone’ building blocks for an ecological network; this applies at international level through mountain ranges (eg Carpathians, Pyrenees, Alps), and at country level – for example in highly developed Holland the ‘Eco-net is’ projected to cover 17% of the country by 2018.
- The strength of the ecosystem services provision of wilderness areas, described above, can bring substantial benefits in helping promote and fund the concept of green infrastructure generally.
- The socio-economic benefit-based approach that can be applied to wilderness has the potential to generate significant policy and funding support – thus promoting the restoration both of large individual areas and the connectivity corridors between them – and potentially adding to both the size, number and level of ecosystem integrity of smaller, more fragmented areas of habitat. This impact would strengthen both the N2000 reserve network and the green infrastructure within which it is embedded.
- Whilst understandably centred on EU territory, Biodiversity Strategy related to N2000, green infrastructure and connectivity initiatives would not cease at the EU boundaries. Through effective neighbourhood and other policies, supported by replication of the above benefit-based valuation and utilization initiatives, the threats and opportunities relating to wilderness and wild areas in non EU European states can also be addressed.

Sub-target 4 (ST4) Invasive Species

- The remote condition of wilderness areas and their species provides some obstacle to access by many invasives.
- This together with the predominantly natural and healthy functioning of their ecosystems can provide greater relative resilience to such invasives.
- Insofar as such resilience is also likely to be an important factor in withstanding the impact of climate change, this should doubly help wilderness areas – as against smaller, more trammelled habitats whose ecosystems and species are undermined by climate change, rendering them more susceptible to the impact of invasives. Such impacts may well become more marked over time, if the natural ranges and tolerance levels of different species become increasingly disrupted.
- Overall, wilderness areas can provide a natural baseline against which the ecological health of smaller and more modified conservation areas, as well as natural processes generally, can be measured. This role may become increasingly valuable if such

disruption increases in calibrating the relative impacts of invasives, and determining appropriate strategy to address this.

- Insofar that wilderness areas can support funding generation, as against their relatively lower unit maintenance costs, this can also contribute towards cost of invasive control programmes – which are likely to rise substantially with shifting climate patterns and growing volumes of trade and travel related species introductions.

Sub-target 5 (ST5) Nature Conservation

- Conservation of wilderness, with (near) wholly intact ecosystems and capable of maintaining itself through a natural succession governed by natural processes can be regarded as a valid biodiversity objective in its own right, and a keynote element in Europe's natural heritage.
- A range of species (including invertebrates) benefit from these intact ecosystems, where natural processes operate in undisturbed conditions.
- Wilderness is also important for preserving species that require large, compact and relatively remote areas
- Because of their size wilderness areas can support more extensive gene pools for long-term species sustainability, and facilitate opportunity for adaptation and migration in response to climate change. This effect is reinforced by their provision of more resilient ecosystems, which as noted previously can also help resistance against invasive species.
- As applies to Sub-targets above, the role of wilderness as a natural baseline against which the ecological health of smaller and more modified conservation areas can be measured, will become increasingly important for relative comparison and development of appropriate conservation strategies. It can also help guard against what is regarded by some conservationists as a 'baseline shift' whereby over time progressively lower levels of biodiversity richness, however measured, become an acceptable standard for achievement.
- The socio-economic benefit based approach that can be applied to wilderness can, as with the above Sub targets, contribute substantially to arresting the decline in biodiversity by enabling enlargement of existing reserves, creation of extensive new ones, and provision of effective biodiversity corridors between these. Quantification of the full range of wilderness benefits, involving conventional Return on Capital, Discounted Cash Flow or other methods, enables cost:benefit related calculation of their value as against alternative forms of land use – particularly in remoter and more marginal areas of agriculture and forestry where opportunity costs and profit margins in related to traditional land use are lowest.
- The indirect impacts of wilderness in enhancing political support for conservation can also be significant; its ability to contribute, through economic and social benefits usage, to rural development programmes and urban social needs strengthens direct linkage between biodiversity conservation and key political concerns.
- As outlined above, wilderness can also prospectively generate substantial funding opportunity, with potential for correspondingly lower management costs often pertaining.

- Given that the majority of wilderness areas are located within N2000 areas, the above benefits will all contribute to the strengthening both of this network, and through impact on Sub target 3 above, broader green infrastructure on a landscape scale.
- Such benefits can be seen in the individual initiatives being developed for wilderness areas: eg the Wilderness Register which will identify all key areas of natural habitat and process with a view to supporting enhanced protection - including those areas currently lying outside the N2000 network - thus prospectively contributing to further expansion its physical coverage (if individual circumstances are appropriate).

Problematic issues:

- There is sometimes reference to conflict between wild areas and maximization of biodiversity, for example with species that are dependent on agricultural or multiple land use. However any localized loss is offset by gains in wilderness-specific species, particularly given the substantial potential for restoration, and can also be readily mitigated by using cost-effective naturalistic management such as herbivore grazing to maintain habitat mosaics in wild areas. Furthermore, to place the issue in context, wilderness represents a very small proportion of the EU: 1% as against 17%+ for the Natura 2000 network.
- Any prospective conflicts between the non intervention principles of wilderness and commercial forestry - related to windblow, bark beetle and fire risk – necessitate more focus on establishing cooperative mechanisms, large scale spatial planning and clarification of underlying scientific issues. However, this can be readily achieved within a framework of practical cooperation, and there is also great potential for achieving mutual benefit – eg through enabling funding from wilderness related tourism and ecosystem services for forest owners, particularly in areas of marginal profitability. As a quid pro quo for protecting given areas of forest it may also be feasible to raise commercial productivity in neighbouring districts.

Sub-target 6 (ST6) Contribution to global biodiversity

- Protection and restoration of wilderness and wild areas within the Biodiversity Strategy will respond to the recommendation of the 3rd CBD Global Biodiversity Outlook report which cited the potential for restoring 200 000 km² in Europe (of which roughly 86,000 km² in the EU). Europe's existing and future world class models of wilderness conservation could thus be profiled and regarded internationally within EU strategy.
- EU wilderness policy has even wider implications for global conservation. If we in our highly populated and developed continent are seen to be protecting and restoring substantial areas of wilderness – and doing so moreover for socio-economic as well as biodiversity motives – that sends a powerful message to countries elsewhere with much larger relatively intact ecosystems which are considering future land use options.

Sub-target 2 (ST2) Over-exploitation

Because support for attainment of this target by wilderness and wild land involves a combination of benefits already referred to above, this is only cited briefly below to avoid repetition.

However, such areas can help to tackle the effects of overgrazing, inappropriately located logging and intensive farming – eg landslides, flooding, seasonal aridification, contamination of water supplies and general pollution.

Their size and non intervention status can help species of fauna and flora to recover and repopulation regions where more intense human impact has depleted or even eliminated native elements.

As with address of the above sub-targets, they can also provide a baseline of relatively intact ecosystems against which the impacts of such over-exploitation can be measured and best means of addressing it developed accordingly.

4) Implementation of wilderness strategy

To support achievement of the above outcomes it is recommended that wilderness strategy includes four key elements, as proposed for example by the Wild Europe initiative.

4.1 *Translating the strategy into practice*

- A threefold emphasis is suggested: involving protection (eg the Wilderness Register and associated protection plans), restoration and communication strategies
- Design and implementation of strategy should involve economists, forestry, agricultural and business specialists working alongside conservationists.
- A spatial approach involving core, buffer and transition zones in and around wilderness areas can achieve practical reconciliation of different land use objectives and activities while enabling operation of key wilderness principles.

4.2 *Ensuring inter-sectoral coordination*

- A practical consensus should be sought between interested parties: landholding, forestry, farming, business and urban social as well as conservation.
- This can be echoed through close coordination between the relevant European Commission DGs, based on awareness of the value of wilderness areas

4.3 *Coherent approach to spatial planning*

- Protection and restoration projects can be viewed as part of a broader 'regional mosaic' of land uses that includes commercial forestry and agricultural land use

areas, and promotes links with wider recreational, hydrological, environmental and urban social requirements.

- The zonation approach used by the Wild Europe partnership - involving core, buffer and transition zones - can help achieve practical involvement with these land uses and requirements.

4.4 *A multi-source funding strategy*

- Initiatives should be carefully budgeted with a view to long-term sustainability
- New as well as traditional funding sources should be identified, through the private sector (philanthropy, general corporate, recreation and tourism) and public institutions (education, healthcare, probationary services) in addition to more traditional NGO, agency, governmental and EC provision.
- This agenda is as much about promoting appropriate policy as actual sourcing: eg facilitating linkage between ecosystem services and relevant funding flows.
- A valuation approach closely aligned to the TEEB initiative is needed, promoting a cost-benefit framework for project work.

5) **Notes to the above**

1. Brief definitions

Wilderness

Large areas without human habitation, artifact, or significant modification, where natural processes govern.

In addition to their intrinsic, spiritual and aesthetic qualities, wilderness areas can provide important economic, social and environmental benefits for local communities, landholders and society at large.

Wild areas

Smaller and often fragmented areas, where the condition of natural habitat and relevant species is either partially or substantially modified by grazing, sporting activity, forestry or general imprint of human artifact.

They are scattered across the continent and need to be connected through functional ecological corridors

2. Membership of the Wild Europe initiative

Wild Europe Steering Group per 17/06/2010

Ladislav Miko (Chair)	Director Natural Environment EC
Toby Aykroyd	Director, Wild Europe Initiative
Boris Barov	European Manager, Birdlife International
Michael Bucki	DG Climate. Was Forest Sector, AFS, EC B1
Eladio Fernandez Galiano	Head of Biodiversity, Council of Europe
Hans Friederich	Acting Director, IUCN Regional Office for Europe
Sonja Gantioler	Institute of European Environmental Policy
Paul Gregoriev	IUCN Regional Office for Europe
Natarajan Ishwaran	Head of Biodiversity, UNESCO
Hans Kampf	Director, Large Herbivore Foundation, OBO ECNC
Zoltan Kun	Director, PANParks Foundation
Jeffrey McNeely	Chief Scientist (retd), IUCN Global
Vance Martin	Chair, IUCN Wilderness Task Force
Federiko Minozzi	Europarc Federation
Olli Ojala	Natural Environment, EC B3
Gert Polet	WWF Netherlands
Feiko Prins	Former Europe Coord, Natuurmonumenten
Ernst Schulte	Head of Forest Sector, AFS, EC B1
Erika Stanciu	President, Europarc Federation. OBO WWF DCP
Magnus Sylven	International consultant, former director WWF Europe & Middle East
Twan Teunissen	ARK Foundation
Tony Whitbread	Royal Society of Wildlife Trusts (UK)
Sebastian Winkler	Former Coordinator, Countdown 2010
Ladislav Miko (Chair)	Director Natural Environment EC

3. A special Report of the European Parliament led to a motion for a Resolution of 15/12/2008 (<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A6-2008-0478+0+DOC+XML+V0//EN>) adopted on 5th February 2009.

4. The CBD Global Biodiversity Outlook Report (<http://gbo3.cbd.int>) page 75

“.....There are opportunities for rewilding landscapes from farmland abandonment in some regions – in Europe, for example, about 200,000 square kilometers of land are expected to be freed up by 2050. Ecological restoration and reintroduction of large herbivores and carnivores will be important in creating self-sustaining ecosystems with minimal need for further human intervention.”

A smaller, but still very significant, land area applies within EU territory.

5. Oulanka National Park in Finland, income and employment statistics. see whole METLA study at: <http://www.metla.fi/julkaisut/workingpapers/2010/mwp149.pdf0>
6. A study on the value of wilderness to tourism in the Bayerischer Wald National Park (in German) can be found at: <http://www.nationalpark-bayerischer->

wald.de/detail/veroeffentlichung/publikationen/d_berichte/doc/studie_job_kurz_ba.pdf>