

Communicating values and benefits of protected areas in Europe

Edited by Sue Stolton



Results of a Seminar organised by BfN and the EUROPARC
Federation at the International Academy for Nature
Conservation on the Island of Vilm, Germany,

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1 “Communicating values and benefits of protected areas in Europe” – A summary

1.1 Seminar aims and summary

The 2007 Europarc Federation strategy included a section on “benefits and values of protected areas”. To further develop this topic the Europarc Federation and BfN held a workshop on “Communicating values and benefits of protected areas in Europe” at the International Academy for Nature Conservation on the Island of Vilm, Germany in April 2009. Better communication of values and benefits of protected areas is also a major concern of the CBD and related initiatives.

Seminar Aims

- To present the range of arguments available for protected areas and discuss them in the European context
- To discuss some of the benefits and values in more depth in order to fully explore their meanings and usefulness in the European context
- To work with WWF’s “Protected Areas Benefits Assessment Tool” (PA-BAT) in order to equip the participants with a method to identify and assess the values and benefits of their own protected area
- To discuss ways of better communicating and using the values and benefits for the various strategic target groups and stakeholders in order to generate political will, create public awareness, and mobilize an increased funding for protected areas.

Target group

Protected area professionals in Europe, in particular those tasked with strategic planning and communication, especially:

- Protected areas managers
- European protected area agencies and environmental ministries
- NGOs

Outputs

- Review of values and benefits of protected areas relevant in Europe
- Exchange good practises of communicating values and benefits
- Develop recommendations to help protected area professionals to better communicate the values and benefits of their protected areas

-
- Establish a network for the better communication of values and benefits of protected areas in Europe

Outcomes

- Increased awareness of the range of values and benefits delivered by protected areas
- Participants able to work with WWF's Protected Area Benefits Assessment Tool (PA-BAT)
- More political, general and financial support for protected area in Europe due to the demonstrated multitude of services they deliver

The seminar was attended by 27 participants representing 13 European countries. A mix of presentations and working sessions (reported in full in these proceedings) concluded in an 11 point action plan (see next section) to further the understanding and communicating of the wider benefits of protected areas in Europe.

1.2 Recommendations from the seminar

Preamble

The participants at the seminar, coming from the countries of Bulgaria, Czech Republic, Denmark, Estonia, Finland, Germany, Poland, Slovenia, Spain, Turkey, UK and from international organizations and networks such as WWF International, EUROPARC Federation, Regional Environmental Center, IUCN-WCPA:

- ✓ Recognise the full range of protected area values and benefits – including the importance of intangible benefits such as spiritual, cultural and historical values
- ✓ Acknowledge that different stakeholders appreciate different values and include these in communication and management activities of the protected area
- ✓ Note the need to ensure that the linkages between the core biodiversity values and the wider values and benefits of the protected area are clearly communicated
- ✓ Recognise the need to develop effective communication campaigns which include assessment of the impacts of the campaign activities

Recommendations

EUROPARC Federation and partners

1. *Activity:* Develop and implement a strategy to influence the mid-term evaluation of EU funding (happening in 2010-2011) to ensure protected area values and benefits are considered in EU policies and future funding streams

Lead person/Implementer: Richard Blackman

2. *Activity:* Together with the sections, encourage to explore new partnerships and share good examples of how these partnerships have been developed, i.e. with insurance companies concerning health and disasters and water companies, for example:

- ✓ Use their communication channels to support protected areas
- ✓ Explore financial support possibilities

Lead person/Implementer: Richard Blackman

3. *Activity:* Consider to carry out thematic communication campaigns (e.g. one 'value' theme per year) to explore the values and benefits of protected areas in Europe on a range of issues e.g. drinking water; health; agro-biodiversity; disaster mitigation etc using a mix of events, publications and development of case

studies focussing specifically on gaining new partnerships and support mechanisms for protected areas

Lead person/Implementer: Richard Blackman

4. *Activity:* To disseminate WWF's Protected Areas Benefits Assessment Tool (PABAT) with examples of its use to EUROPARC members via the web-site and encourage its use by protected area managers to help further understanding on the full range of values and benefits that their protected area can or could provide

Lead person/Implementer: Richard Blackman

5. *Activity:* Develop in conjunction with EUROPARC sections further training opportunities for protected area professionals (managers and scientists) in communicating values

Lead person/Implementer: Richard Blackman

6. *Activity:* Collect and disseminate (through the web site) relevant documents and encourage EUROPARC members to use them, in particular:

- ✓ Share the results of the Vilm workshop by disseminating the workshop report
- ✓ Develop communication strategies on the values and benefits of protected areas
- ✓ Use tools for assessing values and benefits (i.e. the tool for assessing economic valuation of tourism being used in Finland and the report of Assessing socio-economic benefits of Natura2000)
- ✓ Share resources and case studies (i.e. WWF Arguments for Protection reports; Delos Initiative Case Studies; case studies from Vilm Workshop)

Lead person/Implementer: Richard Blackman

7. *Activity:* To develop and disseminate guidance to protected area managers on issues relating to management and visitor interpretation and communication on the spiritual values of protected areas working with the WCPA Taskforce on Cultural and Spiritual Values to relate globally developed guidance to the European context

Lead person/Implementer: Richard Blackman, Josep-Maria Mallarach

8. *Activity:* Europarc send out copies of this workshop's report to national governments who are parties to the CBD and asking them to consider the wide range of protected area values and benefits when reporting on the CBD Programme of Work on Protected Areas (PoWPA)

Lead person/Implementer: Richard Blackman

BfN

9. *Activity:* Inform the CBD Secretariat about the workshop on Vilm and propose to make significant efforts in collecting information on the assessment of values and benefits of protected areas and producing a global overview

Lead person/Implementer: Gisela Stolpe

10. *Activity:* To explore the possibility of Germany taking the lead for promoting the values and benefits of protected areas in the revised POWPA

Lead person/Implementer: Gisela Stolpe

Participants

11. *Activity:* All participants at the workshop are asked to:

- ✓ Disseminate the experiences, lessons learned and materials shared with colleagues and networks back home
- ✓ Use the PA-BAT and share with WWF (Alexander Belokurov) how the tool was implemented and the results of its use
- ✓ Work with the WCPA Taskforce on Cultural and Spiritual Values/Delos Initiative to find representative case studies on outstanding areas where natural, cultural and spiritual values are effectively linked in protected area management
- ✓ Search for business partnerships to promote values and benefits of protected areas
- ✓ Report on the activities of these recommendations to BfN (coordinator) after six months

Lead person/Implementer: All

WCPA

12. *Activity*: Recommend to the CBD:

- ✓ a more comprehensive goal, target and activities relating to the assessment and communication of the full range of protected area values and benefits in the revision of the PoWPA
- ✓ to disseminate tools and case studies through CBD web-site

Lead person/Implementer: Sue Stolton

WWF

13. *Activity*: Disseminate the PA-BAT further and develop case studies on the use of the tool and results from its use

Lead person/Implementer: Alexander Belokurov

2 Introduction to values and benefits

2.1 Overview of benefits, values and services of protected areas

Olaf Ostermann, State Ministry for Agriculture, Environment and Consumer Protection, Mecklenburg-Vorpommern, Germany/Europarc Federation

Background

The EUROPARC Strategy on “benefits and values of protected areas” was agreed in 2007; it states: “EUROPARC is able to demonstrate and promote benefits and values of protected areas. Special attention will be given to:

- *biodiversity* and *cultural* values fostered by protected areas; and
- benefits in domains where EUROPARC has significant expertise and results such as *tourism*, or for domains with increasing significance such as *climate change*, *environmental services*, *health*, *well-being* and *employment*.”

The main actions and targets for 2012 associated with the strategy are:

“3.1 Highlighting values and benefits of protected areas

Target 3.1.1: Protected area values and benefits are better recognised by the European Commission (especially including DG Agri), national and regional governments (responsible: Council, sections)

→ Transforming natural and cultural rural heritage into financial values is also the goal of the EU in its efforts to support the sustainable development of rural areas.

→ contribution to evaluation of EU-Funding system for rural areas (DG Agri, DG ENV)

3.2 European Charter for Sustainable Tourism

Target 3.2.1: There are likely to be around 30 Charter Parks newly evaluated and certified by 2012”.

Activities to date in relation to the strategy include:

- Side meeting at EUROPARC Conference 2007
- Training session at EUROPARC Conference 2008
- “Parks & Benefits” Project under the Baltic Sea Regional Programme 2007-2013 (Interreg-IV B)

The main focus of activity is now to influence EU funding in relation to the benefits of protected areas. The current EU funding period runs from 2007-2013, with a mid-term evaluation of funding being carried out during 2010-2011. This evaluation will look at priorities for funding for the next period. EUROPARC hopes to influence the next funding period activities.

Definition of a protected area

Although protected areas primarily focus on the conservation of biodiversity, associated values and benefits are also increasingly being recognised as important – as highlighted by the number of organisations such as IUCN, WWF and TNC who have projects on identifying and communicating these wider values.

The importance of these wider values and benefits are recognised in the internationally agreed definition of a protected area as: “A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”. (Although note: IUCN also has a number of principles behind the definition including “For IUCN, only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority;”). This revised definition was published by IUCN in 2008.

Overview on values and benefits of protected area

Protected areas can offer a wide range of values and benefits.

The main values can be classified as:

- Biodiversity: genetic, species, ecosystem – including agrobiodiversity
- Cultural values, including: 1) Those that contribute to conservation outcomes (e.g., traditional management practices on which key species have become reliant) and 2) Those that are themselves under threat.) This could also include languages etc.
- Landscape character and features
- Traditions – social cohesion
- Ethical and spiritual values – including wilderness

The values can provide a range of service including:

- Environmental services – water

- Environmental services – soil
- Environmental services – air

IUCN defines ecosystem services in the categories guidelines as: “services that are related to but do not interfere with the aim of nature conservation. These can include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation, and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other nonmaterial benefits”.

Additional services include:

- Environmental services – quietness, tranquillity (darkness could be a value in some places)
- Carbon sink, carbon storage, mitigating effects and other effects related to climate change

The main benefits of protected areas are that they provide a basis for:

- Recreation
- Health and well-being, quality of life
- Quality of life
- Environmental education
- Sustainable tourism and transport
- Sustainable land-use (agriculture, forestry, fishery, hunting)
- Sustainable development of rural areas
- Regional and national identity
- Regional marketing
- Integrated regional development (including economic impacts)
- Employment (including economic impacts)

Main target groups for communicating values and benefits of protected areas include:

- Visitors
- Politicians
- Local people
- Businesses
- Scientists
- Others

2.2 Overview of international activities related to values and benefits of protected areas

Sue Stolton, Equilibrium Research

Many organisations are focussing activities on the understanding and communicating of the values and benefits of protected areas. As an overview to this subject this paper will review:

- The Convention on Biological Diversity (CBD) – Programme of Work on Protected Areas (PoWPA) targets and initiatives
- TEEB – The Economics of Ecosystems and Biodiversity
- NGOs – WWF; TNC; IUCN’s World Commission on Protected Areas (WCPA)
- Plus key research on ecosystem services – in particular related to financial value

CBD’s Programme of Work on Protected Areas targets

Various targets and activities related to the values and benefits of protected areas are included in the CBD’s PoWPA. The main goal related to the workshops subject is:

- **Goal 3.5 – To strengthen communication, education and public awareness**
Target: By 2008 public awareness, understanding and appreciation of the importance and benefits of protected areas is significantly increased
 - 3.5.1. Establish or strengthen strategies and programmes of education and public awareness on the importance of protected areas
 - 3.5.2. Identify core themes for education, awareness and communication programmes relevant to protected areas
 - 3.5.5. Incorporate the subject of protected areas as an integral component of the school curricula as well as in informal education

Other activities of relevance include:

- Review and disseminate by 2006 studies on the value of ecosystem services provided by protected areas (3.4.9.)
- Integrate economic valuation and natural resource accounting tools into national planning processes in order to identify the hidden and non-hidden economic benefits provided by protected areas and who appropriates these benefits (3.1.2.)
- Evaluate by 2006 national and sub-national experiences and lessons learned on specific efforts to integrate protected areas into broader land- and seascapes and sectoral plans and strategies such as poverty reduction strategies (1.2.1.)

And goals and activities in relation to local people and protected areas:

- **Goal 2.1 – To promote equity and benefit-sharing**

- Use social and economic benefits generated by protected areas for poverty reduction, consistent with protected-area management objectives (2.1.4.)
- Encourage the establishment of protected areas that benefit indigenous and local communities, including by respecting, preserving, and maintaining their traditional knowledge (1.1.7.)

The CBD will be reporting on the implementation of the PoWPA at the 10th Conference of Parties of the Convention (COP) in Japan in 2010. WCPA and CBD are currently working on an assessment and review of the PoWPA for the 2010 meeting. One element which could be discussed as an area which could receive more focus in the renegotiation of the PoWPA is a more comprehensive focus on the values and benefits of protected area.

TEEB

A major report on the Economics of Ecosystems and Biodiversity is being prepared for COP-10 by a range of authors funded by the EU. The CBD and WCPA are both closely involved and contributing authors to the study.

The project aims to:

- Evaluate the costs of the loss of biodiversity and the decline in ecosystem services and compare this with the costs of effective conservation and sustainable use
- Sharpen awareness of the value of biodiversity and ecosystem services
- Facilitate the development of cost-effective policy responses
- Prepare a 'valuation toolkit'

TEEB covers all aspects of biodiversity and ecosystem services but most TEEB reports contain sections on protected areas; and this process is stimulating a major review of the economic benefits of protected areas.

WWF-Arguments for Protection

The *Arguments for Protection* series is assembling evidence on the social and economic benefits of protected areas, to widen and strengthen support for park creation and management.

The idea came at a joint WWF/WCPA meeting on protected areas in Bangkok in 2000. A closing statement from Claude Martin and Adrian Phillips called for WWF to look beyond biodiversity conservation in advocating protected areas, and to draw up evidence about their practical and day-to-day values for ourselves. It fits clearly within WWF's overall mission.

The project's overall aim is to identify, and where possible quantify, a wide range of the benefits derived from protected areas in order to increase support for protection and strengthen management strategies. The project also has various objectives:

- Provide fresh incentives to support protected areas
- Talk with new audiences and establish new partnerships
- Research the benefits in detail, with expert partners
- Highlight values and benefits to local and global communities
- Disaggregate myth from reality
- Give pragmatic advice to managers and agencies
- Broaden and strengthen management strategies
- Support the CBD Programme on Protected Areas (PoWPA)

Reports published to date include:

- Running Pure (Drinking water)
- Beyond Belief (Sacred sites)
- Food Stores (Agro-biodiversity)
- Safety Net (Poverty reduction)
- Natural Security (Disaster mitigation)
- Vital sites (Health)

Tools developed:

- PA Benefits Assessment Tool

Book (summarising the above reports and other relevant research)

- To be published in Spring 2010 and launched at the Healthy Parks, Healthy People Congress in Australia in 2010.

Overall the project has characterised the various benefits in relation to poverty and its opposite, well-being, as defined by various development organisations:

- *Subsistence*: non-economic benefits that contribute to well-being, i.e. health, nutrition, clean water and shelter

- *Economic*: benefits which provide the ability to earn an income, to consume and to have assets
- *Cultural and spiritual*: pride in community, confidence, living culture, spiritual freedom, education
- *Environmental services*: role in environmental stability and provision of natural resources
- *Political*: relating to issues of governance and thus influence in decision-making processes

Some examples of protected areas which clearly encapsulate these well-being criteria (which are all highlighted in the Arguments for Protection reports) include:

- Macarao and Guatopo National Park's which have been protecting the water supply for the city of Caracas in Venezuela since the 1920's
- The Alto Orito Indi-Angue Medicinal Plants Sanctuary, the most recent protected area in Colombia: an initiative of indigenous communities and traditional medicine-men which aims to strengthen and restore their traditional culture
- Garrotxa Volcanic Zone Natural Park in Spain: conservation of traditional agriculture and livelihoods is contributing to protecting biodiversity
- Whangamarino Wetland in New Zealand is an important flood defence: since 1995 the wetlands have absorbed at least 11 potential floods
- Areas now in the Blue Mountains National Park in Australia were first set aside for the 'health, morale and intellectual advancement of the residents of Sydney' in the 1860's
- Gulluk Dagi National Park in Turkey contains Termessos, an important Roman city
- Xishuangbanna National Park in China protects the largest area of tropical forest remaining in the country and also one of the most important sacred mountains

IUCN's World Commission on Protected Areas

Various task forces which relate to values and benefits:

- Task Force on Cultural and Spiritual Values of Protected Areas (Delos Initiative on sacred natural sites in developed countries)
- Task Force on Economic Valuation of Protected Areas
- Protected Landscapes (Category V) Task Force

The Category V Task Force had recently developed a series on the Values of Protected Landscapes and Seascapes (funded by GTZ and partners). The reports are intended to document the various environmental, economic, social and cultural values of Category V protected areas. Each publication illustrates the specific values by use of a number of case studies, synthesis and lessons learnt sections. Reports published or planned include:

1. Protected Landscapes and Agro-biodiversity Values – published in 2008
2. Protected Landscapes and Cultural and Spiritual Values (published with the Task Force on Cultural and Spiritual Values of Protected Areas) – published in 2008
3. Forthcoming volume on biodiversity values to be published in 2010

TNC Valuing Nature Campaign

The Nature Conservancy's Valuing Nature Campaign aims to identify, systematise and disseminate information about the environmental, social and economic benefits provided by protected areas in order to:

- generate political will
- create public awareness
- mobilise and increase funding for protected areas

Putting a value on nature

As well as the specific projects mentioned above there has been a number of influential research projects which contribute to the debate on the values and benefits of protected areas; in particular the paper by Costanza *et al* which estimated that¹:

- The planet's annual ecosystem services could be valued at between US\$ 16–\$ 54 trillion, with an estimated average of US\$ 33 trillion or 1.8 times the current global gross national product
- Globally, the environmental services related to water regulation and supply, for example, account for some US\$ 2.3 trillion annually

In terms of protected areas valuation studies have found that:

- Environmental resources of the Pantanal wetlands in Brazil are valued at over US\$ 15.5 billion per year
- Sandimmun, one of world's top-selling drugs (total sales in 20 years US\$ 1.2

¹ Costanza R, *et al.* (1997); The Value of the World's Ecosystem Services and Natural Capital, *Nature*, Vol. 387

billion), was developed from properties in a soil sample from Hardangervidda National Park in Norway

- Costa Rica spends US\$ 12 million annually on national park management and generates US\$ 330 million in foreign exchange in return
- America's national park system generates at least US\$ 4 for state and local economies in return for every US\$ 1 the Federal Government invests in the parks' budgets

And a theoretical study in relation to marine protected areas published in the 2004 paper from Balmford *et al*² estimated that protecting 20-30 per cent of the world's seas would:

- Create around one million jobs
- Increase the sustainability of global marine fish catch (worth around US\$ 70–80 billion per year)
- Ensure the sustainability of marine ecosystem services with a gross value of roughly US\$ 4.5–6.7 trillion a year

² Balmford, A, P Gravestock, N Hockley, C McClean and C Roberts (2004); The worldwide costs of marine protected areas, *Proc Natl Acad Sci USA*, 101(26): 9694–9697.

3 Overview of individual values and benefits

3.1 Health: Challenges for intersectorial cooperation on nature and health: The call for evidence versus lay knowledge and the search for new health promotion windows

Jesper Holm, Roskilde University, Denmark

Since early modernity being outside in nature has been understood as a health promoter associated with “fresh air, bright light and purity”; urban children were sent to the countryside on holidays, scout movements were encouraged to live in nature, and many sports are outdoors. Besides we all had family who were either farmers, fishermen or foresters or we had nature in our backyards.

In radical modernity (i.e. in present times) we have lost this proximity to nature and have our links with the countryside as a means of production, as a source of cultural tradition and as a place for learning and for health.

Since the 1950's, however, the understanding of the role of nature in health promotion in Denmark has been increasing thanks to the work of wildlife observers and NGOs, holistic therapists, spiritual movements, rangers, ecologists.

The World Health Organisation's Ottawa Charter in 1986 was important in developing this wider health agenda, by focussing on well-being, resources and conditions; in particular by:

- Developing healthy public policies
- Enhancing supportive environments for health such as nature and ecological care
- Empowering local communities
- Developing personal skills for health – realising aims, fulfilling needs, change or cope with environment
- New orientation of the health sector

In Denmark this change in policy can be seen in a variety of ways. Doctors have in several areas, for example, adopted a scheme of “walking prescriptions” as alternative to medicine for coronary heart disease etc. There are currently some 350

nature interpreters in Denmark helping to fulfil these “walking prescriptions”, i.e. weekly walk with nature interpreters.

In order to differentiate this from the alternative therapy market “green walking” and “nature therapy” must justify themselves under the predominant discourses of evidence – does it pay, is it scientifically evident that it is curative, to which type of diseases, is it nature per se that makes a difference, which kind of nature? We have lost our knowledge about health and nature. Evidence based statistics, knowledge, randomised control experiments etc do not make any difference when motivating us to changing anything. But economic priorities and competing health systems may urge systems to find that evidence – to go or stop.

It is not always easy to present evidence of health factors:

The historical focus has been on treating illness and diseases, i.e.

Lack of illness ← Illness

The new orientation, is often modelled as:

Health ← Lack of Illness ← Illness

The term a sense of coherence (SOC) is often associated with well-being and health – but we still tend to monitor lack of diseases, depressions etc. It is difficult to document the three dimensions in SOC, i.e. meaning, comprehension, capability.

Evidence gained from many different studies, case studies, matched control groups, cohort studies, randomized control etc include qualitative self efficacy, quantitative statistics, measurements etc. There are two types of evidence to consider:

- Internal evidence involving practitioners and target groups in evaluating a specific practice for learning. But internal evidence may not be transferred.
- External evidence, general statements of causalities is more a scientific issue. But external evidence may not be useful in making a right choice for the specific problems.

Motivating and creating participation in health promotion depends upon existential, moral, self care virtues. Evidence differs as health differs: moral, aesthetic, existential.

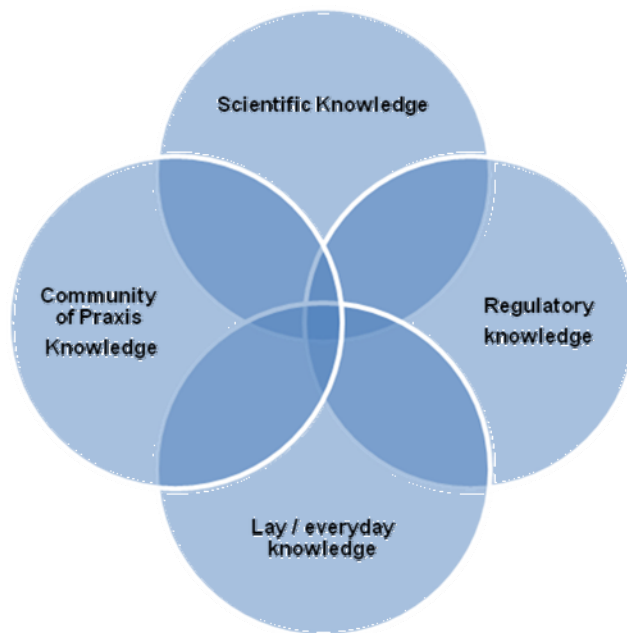


Figure 1: **Dominant knowledge systems on evidence**

Evidence for palutogenetic versus salutogenetic measures³ is an issue which brings general problems with creating evidence for sense of coherence, wellbeing, the role of nature, appreciation etc. So other types of knowledge are needed, i.e. explanatory, motivational, but sometimes the cry for evidence is absurd when what is trying to be proved is evident. Pioneering municipalities, rangers and parks involved in nature for health are few and are often met with demands of external evidence which are hard to meet.

Nature and Health as Sector Coordination

Engaging nature in health promotion may in institutional politics be seen as an effort of sector coordination or integration, as was called for in EU's "From Cardiff to Helsinki and beyond: Report to the European Council on integrating environmental concerns and sustainable development into Community policies".

Tools of coordination: merging story lines or imagined communities, linking goals, organisational efforts, and health impact assessments. Co-ordination is most often a question about how one sectors rationality dominates another, i.e. rangers forcing

³ The term describes an approach focusing on factors that support human health and well-being, rather than on factors that cause disease. More specifically, the "salutogenic model" is concerned with the relationship between health, stress and coping.

patients outdoor for walking or public health planners demanding hard evidence of outdoor activity. Who represents nature in this case? Preservationists, wild life org., nature interpreters, local citizens, experts?

Howard Frumkin gives a number of hints and references of evidence for what makes a good nature/place (Am. J. of Publ. Health 2003 no.9):

- Sense of place – spatial orientation, emotional feature, sacred, good for social gathering, health
- People are heterogeneous, this affects the experience of space – preferred landscapes also have health impacts
- A lot of manuals from academics – are simple aesthetic judgements,
- Some guidelines are deduced from philosophies as Feng Shui, biophilia or symbolism
- There exist some qualitative data from anthropological studies of well functioning patterns of space
- Environmental psychology gives some hints to preferred places
- A few experiments have shown nature as promoting recovery (e.g. Ulrich on postoperative patients recovery)

Examples of research on nature and health:

- Two large-scale population studies among elderly in Tokyo and Dutch population as a whole indicates positive direct links between nature and generic health indicators
- Indirect links: recovery from stress and attention fatigue, encouragement to exercise, facilitating social contact and encouraging optimal development in children
- Fewer sick calls visits among prisoners, improved attention for children with attention deficit disorders, decreased mortality among senior citizens, lower blood pressure among dental patients, enhancing emotional, cognitive, values-related development in children – but more research has to be done
- Swedish, Dutch, and British evidence research reveal some findings on: outdoor life for kids and development, stress relief, decreased mortality among seniors, specific relief and SOC for some patient groups
- Skov and Landskab therapy garden in Denmark will give more knowledge on stress therapeutic impacts.

The questions remain: What type of nature to enhance what aspect among whom?

External evidence may be supplemented by:

- Schools, kinder gardens, professionals, patient organisations, demanding nature proximity, events and curative activities as a precautionary health practise (as organic food now have removed evidence demand by risk assessment regulation)
- Finding intermediate explanatory evidence: architecture and planning enhancing well-being, activity, social contact by giving access to larger green areas/national parks
- Promote a culture of internal learning evidence
- Engaging volunteers and private corporations for health promotion activities: incentives tours, work intervention etc. for shaping a cultural horizon
- Current action research at Roskilde University in empowerment of elderly disabled in planning and gardening – cultural politics of nature
- National Parks in Denmark are not a very popular political subject and have been the loco for green backlash among local NGOs of peasants, hunters etc.

3.2 Climate change mitigation and adaptation: the carbon-biodiversity atlas of UNEP- WCMC

Jutta Stadler, BfN, Germany (based on a presentation by Barney Dickson of UNEP-WCMC)

Background

Emissions from land use change (mainly deforestation) account for ~ 20% of total anthropogenic greenhouse gas emissions (IPCC 2007). UNFCCC focus on reduced emissions from deforestation and degradation (REDD) in developing countries. Potentially this represents a win-win-situation by reducing carbon emissions and protecting biodiversity.

Carbon and biodiversity atlas

UNEP-WCMC has produced a 24 page demonstration⁴ atlas illustrating the potential for spatial analyses to identify the overlap between high carbon and high biodiversity areas (NOT prescriptive). The demonstration atlas includes: Global scale carbon data and biodiversity priorities; three regional maps (tropics) and six national-scale maps (Panama, Bolivia, Zambia, Tanzania, Viet Nam, Papua New Guinea).

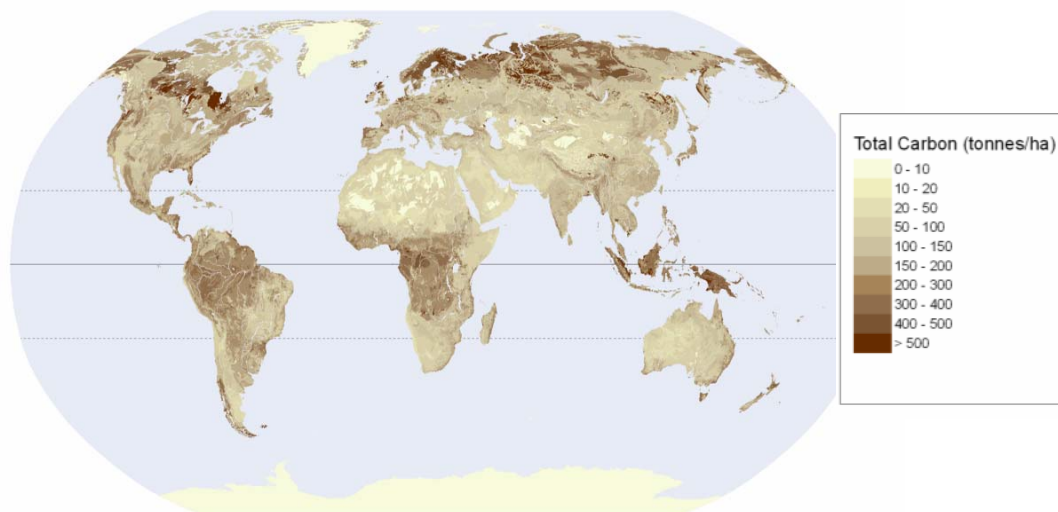


Figure 2: The global carbon map

⁴ For more information on the Carbon and Biodiversity – A demonstration atlas; UNEP-WCMC Biodiversity Series No. 29: see: http://www.unep-wcmc.org/resources/publications/UNEP_WCMC_bio_series/29.aspx

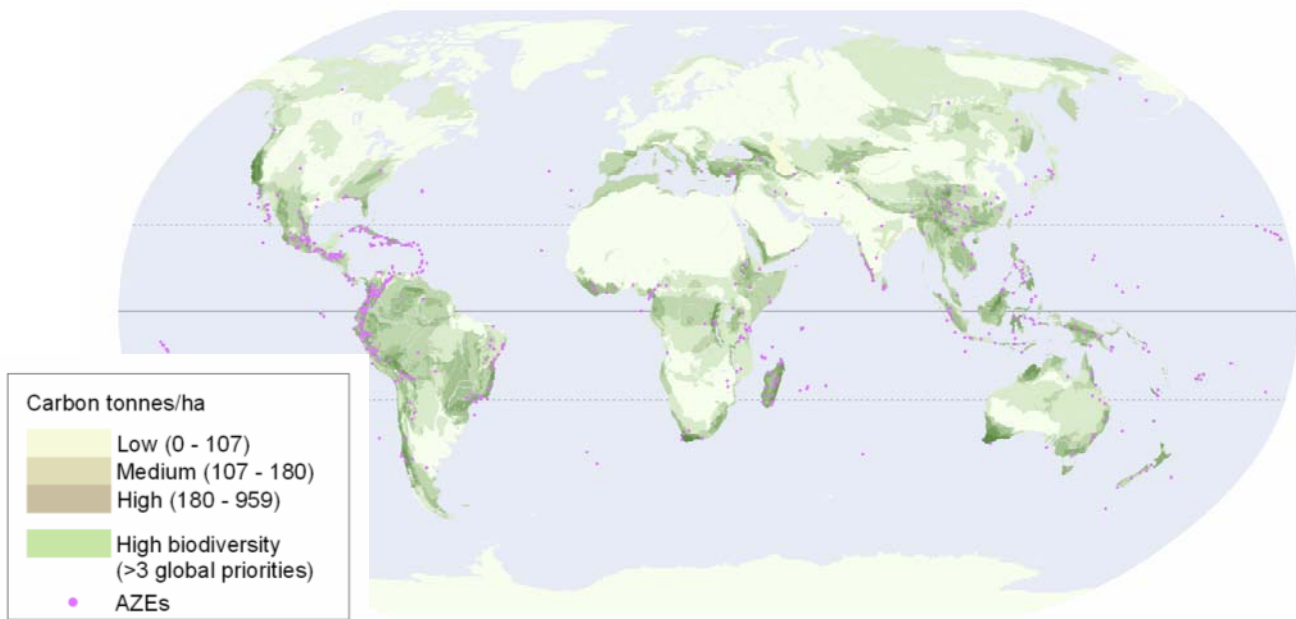


Figure 3: High biodiversity areas where at least four of global priority schemes overlap (i.e. Conservation International 's Hotspots; WWF 200 ecoregions; Birdlife International 's Endemic Bird Areas; Amphibian Diversity Areas; Centres of Plant Diversity; Alliance for Zero Extinction Sites)

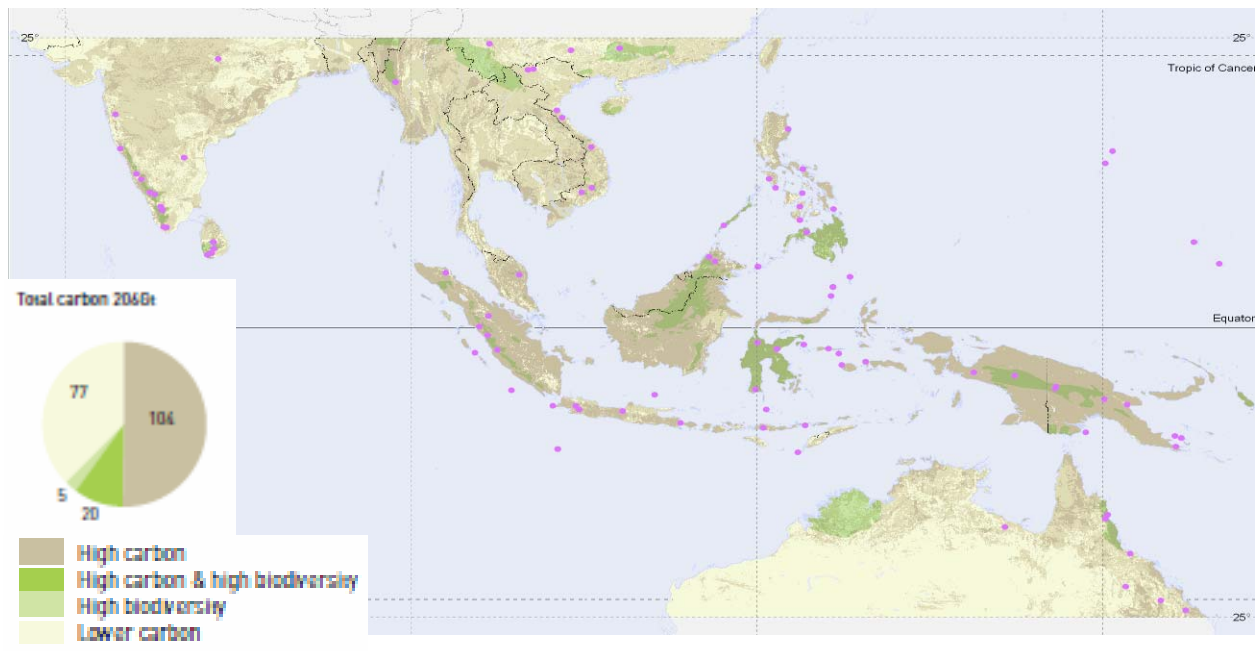


Figure 4: Regional Map: Tropical Asia and Oceania

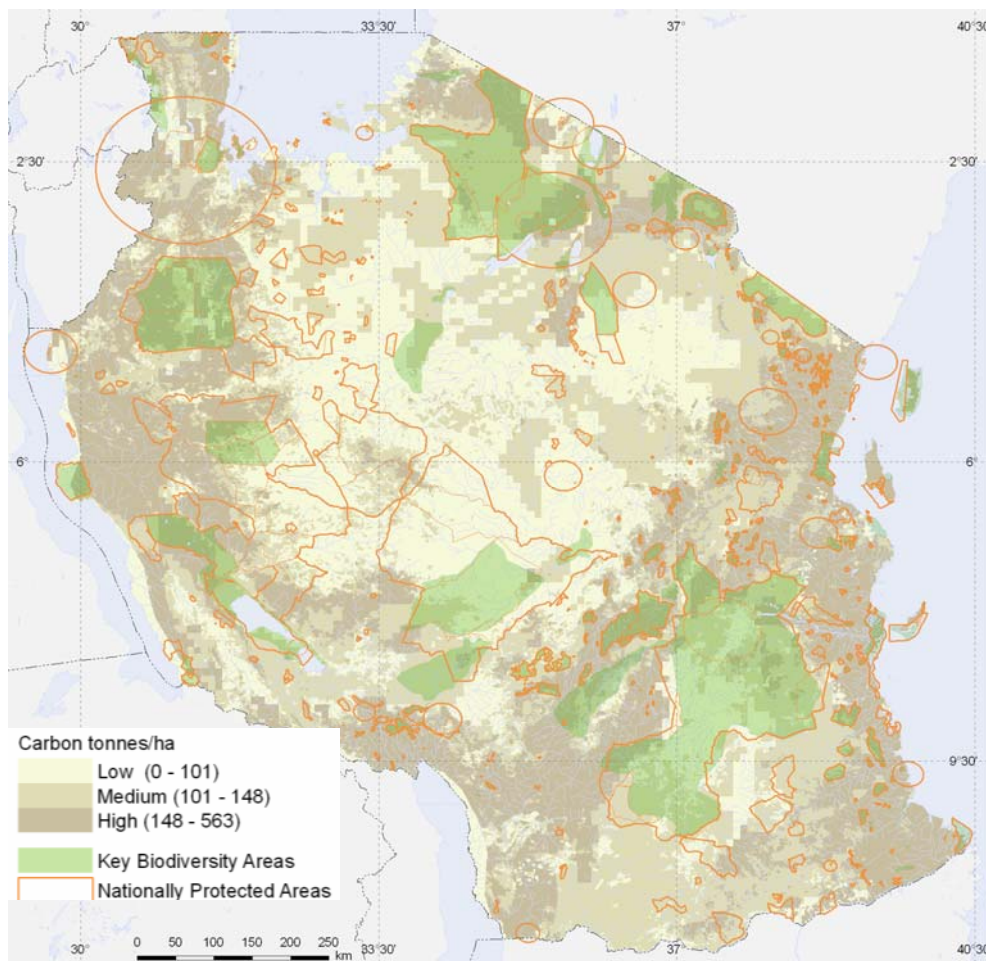


Figure 5: National scale map of Tanzania where 18% of the total carbon stock falls within high biodiversity areas and half of the high biodiversity areas are also high in carbon

Conclusion

At present the carbon map focuses mainly around the REDD debate for tropical countries. The demonstration carbon map thus has some limitation in relation to peatlands as carbon is only measured up to one metre under the ground and above ground; however many peat lands are up to 15 metres in depth. However an updated map is now in progression.

Overall, the map shows that there is overlap between high carbon and high biodiversity areas. These can be identified / visualized through mapping tools. There is significant potential for biodiversity benefits to be achieved through REDD (and e.g. voluntary carbon payment schemes). Finally, however it should be noted that there is a risk that high biodiversity areas which are not carbon rich areas may be seen as not so important. So care is needed with this argument.

3.3 The role of protected areas for tourism and the public perception of this benefit

Richard Blackman, EUROPARC Federation⁵

Role of protected areas for tourism ... not tourism for protected areas

Protected areas are prized assets for the tourism industry based on the beautiful natural resources they sustain. The tourist sector is reliant on having beautiful and attractive places – which are a source of wealth for the wider economy. Protected areas provide these special places, and tourist income is derived there from. Given that their continuing beauty and intact natural resources are the source of the benefit, it makes economic sense for the tourist sector to maintain strong levels of protection. Tourism however is often a double edged sword and can be harmful, but if managed in the right way can be beneficial to the parks, and to the wider regions. Tourism is often the most sizeable part of the local economy and therefore protected areas can be regarded as motors of (sustainable) regional and rural development. Many protected areas are designated for tourism or recreation purposes. There are variations from country to country. To summarise:

- Protected areas are resources and assets that can generate economic and social benefits through tourism.
- Protected areas can be a driver of sustainable regional economic development with tourism as a strong component.

Important research

1) Economic Impacts of Parks on Surrounding Communities: Findings from New South Wales by Nicholas Conner⁶ found protected areas are a resource for tourism (and wider regional economic development) and are public goods, but that the economic return can be public or private:

- Public goods: protection of a wide range of ecosystem services, provision of open space for visitors

⁵ The presentation is based on experience rather than research; and in particular on the author's experience in overseeing the development of the European Charter for Sustainable Tourism in Protected Areas since 2002, which has provided an insight into the connections between tourism and protected areas as well as how this relationship is perceived by others.

⁶ Chapter in Robyn Bushell and Paul F. J. Eagles (2007); In *Tourism and protected areas*, CABI, UK

- Private benefits: recreational experience, income for local firms from tourist expenditure in the regional economy, health benefits to individuals
- Private goods: private tours, harvesting hides, furs, meat, seeds, flowers, fruits, leading to private benefits such as income from sales of products
- Community benefits: community quality of life, benefits of protecting cultural heritage, benefits to welfare agencies using protected areas

More specifically benefits could be characterized in a number of ways:

Direct private, i.e.:

- income received by private park owners;
- harvesting;

Consequential private, i.e.:

- sale of goods and services provided by local firms to park agencies for park management;
- ecotourism industry operating in protected areas (tour companies);
- private business opportunities in parks (private firms operating concessions in protected area);
- local business opportunities from selling goods and services to visitors attracted to the area as a result of protected area (visitor expenditure on food, accommodation etc);
- local economic activity (incl. jobs) as result of flow-on effects of park management and visitor expenditure;
- recreational activity (value of recreational experience for individuals);
- use of ecosystem services as inputs into the production of goods and services

Policy principles in relation to protected areas and tourism

- park managers need to understand the potential economic benefits of different types of protected areas;
- an organizational culture is needed to support the role of protected areas in delivering economic benefits;
- park managers need to evaluate the capacity of the local economy to supply park management and park visitor goods and services;
- protected area managers need to enhance the level of public awareness of the benefits of protected areas;
- Managers need to promote the benefits of protected areas to communities near protected areas;

-
- Park managers need to understand social and equity issues arising from park establishment and management;
 - protected area agencies need to coordinate protected area planning and management with other government objectives and programmes.

2) Ökonomische Effekte von Großschutzgebieten, Hubert Job et al⁷

Study of the Müritznational Park, Hoher Fläming and Altmühl Nature Parks in Germany, found that parks made a considerable contribution to the regional economy through job creation (i.e. 261 / 211 / 483 additional jobs respectively). The research provided a good political argument to build more support for protected areas amongst decision-makers and in the population at large. It also resulted in the integration of protected areas in the region as building block of regional development, thereby increasing acceptance and efficiency of nature conservation. The conclusion was that tourism was a credible policy option for the development of structurally weak rural areas – mainly for nature parks and biosphere reserves where land can be used. National Parks are also a credible option for the development of structurally weak rural areas (for the surrounding area) and they generate a positive image for their region, representing healthy environment and pure nature.

Marketing leads to increase in knowledge of the parks especially through networks of hiking and biking trails. However they must be made attractive in the tourism market – as this is not a foregone conclusion. Economic benefits are clear but not always presented very well.

Public perception of this benefit

There are different groups, whose perception needs to be considered:

- The general public in its broadest sense, including groups such as holidaymakers and people spending time in protected areas such as hikers, skiers.
- Communities in and around the protected area, including political

⁷ Hubert Job, Bernhard Harrer, Daniel Metzler and David Hajizadeh-Alamdary (2005): Ökonomische Effekte von Großschutzgebieten – Untersuchung der Bedeutung von Großschutzgebieten für den Tourismus und die wirtschaftliche Entwicklung der Region; BfN-Skripten 135. Available for download at: <http://www.bfn.de/fileadmin/MDB/documents/skript135.pdf>

representatives and the local business community.

- The wider business community from large multinationals through to small alternative businesses.

General public

The survey on the attitudes of Europeans towards tourism, Flash Eurobarometer, March 2009 (Fieldwork February 2009) asked: What was the major motivation for your main holiday trip in 2008?

- Throughout EU 27, 6.3% said nature, [36.5% said rest / recreation].
- 14.6% of Czechs, 12.6% of Danes, 12.4% of Germans, 10% of Dutch, 9.8% of Belgians: prime motivation stated was nature.
- Divided fairly equally by gender, the older you are the more likely it is that nature will be your prime motivation.

Survey on the attitudes of Europeans towards biodiversity, Flash Eurobarometer, December 2007 (Fieldwork November 2007) asked: Why it is important to halt biodiversity loss?

- Moral obligation – we have a responsibility as stewards of nature: 61%;
- Our well being and quality of life is dependent on nature and biodiversity as it provides pleasure and recreation: 55%;
- Biodiversity is indispensable for the production of goods such as fuel, food and medicine: 50%;
- Europe will get poorer economically as a consequence of the loss of biodiversity: 44%;

And asked views on the following statement: Our well being and quality of life is dependent on nature and biodiversity as it provides pleasure and recreation

- Very much in agreement: 79.9% of Maltese, 77.5% of Greeks, 74.9% of Austrians, 74.6% of Romanians, 69.2% of Bulgarians, 67% of Germans, 66.3% of Slovaks;
- Women and older people likely to be more in agreement

For tourists in general protected areas tend to conjure up images of holidays. Many protected areas have a specific remit for tourism or recreation built into their legislation. Generally the more visitors know, the greater the sense of belonging and placing higher value on a park's existence. Demand for facilities – hiking and biking trails – meets supply and encourages more.

Local Communities

Can be sceptical about the benefits, especially if protected area and/or tourism plans are established in a non-participatory way. Culture of regional economy is important factor – as need for:

- Collaboration of all (Charter model!);
- Willingness to embrace change;
- Availability of qualified work force;
- Need for outward looking, entrepreneurial culture (or to foster one).

Business

Visits to protected areas are important elements in products offered by both high volume and specialist tourism companies. However they will need to be convinced of the business case for involvement in the protected area, and inevitably there will be a balance between this and conservation goals. Tour operators often prefer the idea of developing something that is long term and sustainable. Long term viability is in their interest.

3.4 The spiritual value of protected areas in Europe

Josep-Maria Mallarach, IUCN-WCPA, Spain

“National Parks or Nature sanctuaries, where they go looking for inspiration in the eternal beauty of landscape, in the sublime charms of forests, meadows and rocks. A veritable temple for the Lord, where soul and lungs breath new oxygen, and one gets strength to return to the strenuous life in the big cities” (Pedro Pidal 1909)

The designation, planning and management of today’s protected areas is usually based on approaches that only take into consideration a limited number of the multiple dimensions that can link people and nature. In many European countries, the general attitude of planners and managers with respect to protected areas is determined by the prevalent materialistic and reductionist outlook of modern science, which has caused a weakening, or even a loss, of the spiritual dimensions of nature, as well as other deeply rooted cultural connections related to the intangible values of natural areas. Many people, including the members and followers of some of the largest and oldest organizations of the world, feel their views and values are excluded.

Various processes have looked at the spiritual and cultural aspects of protected areas including:

- 2000 European Landscape Convention
- 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage
- 2003 – World Park Congress (WPC) – Action Plan + recommendation 5.13
- 2008 IUCN PA definition includes “associated cultural values”

IUCN Resolution adopted in the 2008 WCC of Barcelona

1. CALLS on the Director General to promote understanding that nature conservation as a human action is rooted in diverse, evolving cultures and worldviews
2. REQUESTS the Director General and Commissions to work with IUCN’s members to:
 - a. Strive to reflect and respect the full richness and the diverse ways that human cultures conceive of nature.

- b. Develop appropriate policy guidance to fully recognize the existing diversity of concepts and values of nature, in all the activities related to conservation and sustainable development;
- c. Promote and support conservation actions, practices and traditions that are rooted in culture and embody the cultural values of the diversity of peoples of the world.

There are also a number of efforts in different IUCN commissions and task forces. Most relevant is the Delos Initiative which focuses on the sacred natural sites (SNS) in developed countries throughout the world (such as Australia, Canada, the European countries, Japan, New Zealand and the United States of America); and which aims to help maintain both the sanctity and the biodiversity of these sites, through the understanding of the complex relationship between spiritual / cultural and natural values.

- Key challenge the project addresses: How can spiritual and intangible cultural values contribute to the conservation and wise use of significant natural areas in the technologically developed world?
- General purpose: The Delos Initiative aims to determine whether the spiritual and cultural values of a sacred site are compatible with its natural values and whether, and under which conditions, conservation efforts can create positive results for both.

Activities carried out by the Delos Initiative include:

- Organizing two international workshops (2006-07), publication and dissemination of the proceedings
- Web site (<http://www.med-ina.org/delos/>)
- Participation in international and national symposia, meetings, conferences: Japan, Greece, Spain, England, etc.
- Contributions to the revised IUCN Protected Area Management Categories Guidelines
- Contributions to the IUCN-UNESCO Guidelines on Sacred Natural Sites
- Volume on Cultural and Spiritual Values of protected Landscapes – 2008
- Contributions to the 2008 World Conservation Congress in Barcelona: resolutions on SNS and diverse concepts and values of nature
- Preparation of flagship case studies: 30 cases from four continents, related to Christianity, Islam, Buddhism, Shinto and 18 indigenous religions. Although all IUCN categories are included, most cases are Categories III, V and VI.

European experience of nature and spiritual values

A multitude of diverse and complex spiritual values is sometimes overlapping or recycled through history, including:

- Holiness of natural features: fountains, rivers, lakes, marshes, mountains, caves, trees, forests, etc.
- Holiness of natural sites related with presence of celestial beings
- Sanctity of natural sites related to hermits, holy people, either living or dead
- Sacredness of wild landscapes or seascapes, wilderness
- Symbolic values of natural sites related to belief systems, memory, etc.
- Sacred landscapes related to prehistoric cultures
- Sacred sites related to prehistoric cultures with remnants; rock paintings, labyrinths, etc.
- Sacred sites related to 'dead' historic cultures: from the megalithic civilization onwards (including some local revival): epics, sagas, etc.
- Sacred sites related to living indigenous spiritual traditions, e.g. Sami
- Sacred sites / pilgrimage routes related to long term established living religions, such as the Way of Saint James of Compostela /El Camino de Santiago
- Sacred sites related to recently established mainstream religions followed by immigrants, e.g. Hinduism, Buddhism.
- And, in most cases, silence, solitude and tranquillity as prerequisites for an spiritual experience of nature.

Examples include:

- Stone Labyrinths Solovetsky Islands, Russia
- Ukonvuori rock paintings, Finland
- Megalithic temples in numerous Mediterranean islands, e.g. Malta
- Ukonsaari island, Sami SNS, Finland
- Punic cave shrine, island of Ibiza, Spain
- Hellenic sacred sites in many northern Mediterranean countries
- Numerous SNS of the ancient religion of Estonia
- Cave hermitages of Chrysopigi, Crete island, Greece
- El Rocío pilgrimage in the Doñana wetlands, Spain
- Valley of Meteora and Athos peninsula, Greece
- Monastic landscapes of Moldavia, Romania
- Halla Sultan Tekke, Limassol wetland, Cyprus
- Yorkshire Dales National Park Management Plan: Beauty, silence and tranquillity, England, UK

-
- Holy Mountain of Ararat, Turkey
 - The new players: Holy Island of Arran interfaith Tibetan Buddhist centre, Scotland, UK

Conclusions

The sacred has been one of the most powerful drivers or realities for conservation, inspiring feelings of awe, veneration and respect. Sacred natural sites, landscapes, species, or particular elements have been one of the most effective forms of nature conservation over the ages, some of them being of local significance, whereas others have significance for wider groups, cultures, traditions, and regions. Nature has intrinsic values and meanings, including spiritual, and is understood by followers of various faiths and spiritual traditions as a divine manifestation of some deeper, sacred reality, however that may be conceived. Spiritual values are reflected in a number of European landscapes, which have been created and maintained by local communities sharing those values.

Conservation goals, programmes and messages need to be grounded in deeply held values, beliefs, ideas, and practice. This constitutes both a challenge and a great opportunity to build further support for the conservation movement, involving partners and stakeholders that up to the present have not been supportive, because they felt excluded by the materialistic outlook that nature conservation has often adopted.

The spiritual aspects of sacred sites in protected areas can contribute significantly to the conservation of natural heritage in various ways, mainly through raising awareness of faithful, inspiring people and involving them in conservation initiatives. Wise management of protected areas can enhance the maintenance of the spiritual values of SNS, thus creating positive synergy among natural, spiritual values not only for protected sites, but for nature in general. Spiritual well being is an intrinsic part of human health.

3.5 Arguments for Protection: The role of protected areas in drinking water supply and disaster mitigation

Sue Stolton, Equilibrium Research

The WWF's Arguments for Protection (www.panda.org/protection/arguments) project aims to identify and where possible quantify the wide range of the benefits derived from protected areas, to increase support for protection, identify innovative partnerships and financing mechanisms and broaden and strengthen protected area management strategies. Given the complexity of issues being addressed, Arguments for Protection is initially producing a number of authoritative reports on different aspects of protection. These reports, published with a range of expert partner organisations, will be drawn together to provide an overall analysis in a book to be published in 2010 and in individual short briefings for decision makers.

Drinking water supply

The first report, *Running Pure: The importance of forest protected areas to drinking water*, was published in 2003. The report was published with the World Bank and included the expert authors Larry Hamilton, David Cassells, Stefano Pagiola and Sara Scherr. The report included research; a global survey and detailed case studies from: Melbourne, Australia; Istanbul, Turkey; Singapore; New York, US; Caracas, Venezuela and Rio de Janeiro, Brazil.

Why drinking water?

- Half the world's population lives in towns and cities
- More than one billion city-dwelling people lack access to clean water – that is one-third of all city dwellers

Valuing water

- The value of watersheds is generally under-estimated or unrecognised
- Globally environmental services related to water regulation and supply is estimated at some US\$ 2.3 trillion annually
- In China: water storage function of forests are worth US\$ 1 trillion – three times the value of the wood in those forests
- In Kenya: forests on Mount Kenya saved the economy more than US\$ 20 million by protecting the catchment of two major river systems (Tana and Ewaso Ngiro)

Research results

- 105 of the world's largest cities were investigated in relation to the role of protected areas in the drinking water supply
- The results found that over 30% of these cities rely directly on protected areas for their provision of drinking water (these included: Mumbai (Bombay) India; Jakarta, Indonesia; Karachi, Pakistan; Tokyo, Japan; Singapore; New York, USA; Bogotá, Colombia; Rio de Janeiro, Brazil; Los Angeles, USA; Cali, Colombia; Brasília, Brazil; Santo Domingo, Dominican Republic; Medellín, Colombia; Caracas, Venezuela; Maracaibo, Venezuela; São Paulo, Brazil; Salvador, Brazil; Belo Horizonte, Brazil; Madrid, Spain; Vienna, Austria; Barcelona, Spain; Sofia, Bulgaria; Ibadan, Nigeria; Abidjan, Cote d'Ivoire; Cape Town, South Africa; Nairobi, Kenya; Dar es Salaam, United Republic of Tanzania; Durban, South Africa; Harare, Zimbabwe; Johannesburg, South Africa; Sydney, Australia; Melbourne, Australia; Perth, Australia)
- A further 10% obtain their water from sources that originate in watersheds that include protected areas or from forests managed to prioritise water providing functions

The hydrological role of forests is subject of debate

- Not all forests increase water flow in catchments – tropical montane cloud forests and some older forests are the exceptions
- But forests can supply relatively pure water – a benefit which is frequently overlooked
- Forests can reduce the need for expensive treatment for drinking-water and reduce costs of supplying water

Case studies: Melbourne, Australia

Melbourne Water supplies nearly 500,000 megalitres of water annually, the water has high quality due to the purity of the source. 90% of the supply comes from uninhabited mountainous catchments to the north and east of the city. 49% of the catchments are in National Parks; most of the remaining area is in State forests. Melbourne Water's major management activity is focussed on protecting forested catchments against the threat of bushfires. Forest disturbance can reduce the mean annual runoff by up to 50 % compared to that of a mature forest.

Disaster mitigation

Disasters are a major issue for us all. More people are affected by disasters than by war and at any one time some 25 million people are displaced as a result of disasters. The fifth report in the Arguments for protection series, *Natural Security Protected areas and hazard mitigation*, was published in 2008. The main partner was WWF US and International Strategy for Disaster Reduction contributed the preface. The overall conclusion found that protected areas can play a role in mitigation but relationship is complex and needs to be understood. The case studies looked at major disasters since 2000 and reviewed if protected areas could have helped.

The Millennium Ecosystem Assessment estimates that approximately 60% of the world's ecosystem services (including 70% of regulating and cultural services) are being degraded or used unsustainably and MEA states: "*Changes to ecosystems have contributed to a significant rise in the number of floods and major wild fires on all continents since the 1940s*". These assertions are backed up by the figures from insurance companies: between 1900 and 1940 about 100 disasters per decade were reported, this increased to 650 disasters during the 1960s, 2,000 in the 1980s and reached almost 2,800 in the 1990s.

Unnatural disasters?

Strictly speaking, there is no such thing as a natural disaster – there are natural hazards, such as cyclones and earthquakes. A disaster takes place when a community is affected by a hazard. Whether or not disaster strikes is determined by the extent of a community's vulnerability to the hazard. Vulnerability however is not natural, it is the sum of the environmental, economic, social, cultural, institutional, political and even psychological factors that shape people's lives and create the environment that they live in.

Avoiding disaster

- Disaster risk management needs a mix of activities including measures to avoid (prevent) or to limit (mitigate and prepare for) adverse effects of hazards
- Ecosystem resilience: the ability of a system to undergo, absorb and respond to change and disturbance, while maintaining its functions
- The extent to which natural ecosystems can absorb or deflect natural hazards is complex and variable and still surprisingly poorly understood

There is a long history of conservation and protection going hand in hand. The hima system of protected areas in the Middle East, was established over a thousand years ago to prevent grassland from eroding in an arid climate. In Japan, the concept of protection of forests was introduced back in the 15th and 16th centuries to counter landslides caused by deforestation.

Where properly planned and budgeted, protected areas can play three direct roles in preventing or mitigating disasters arising out of natural hazards:

- Maintaining natural ecosystems, such as coastal mangroves, coral reefs, floodplains and forest that may help to buffer against natural hazards
- Maintaining traditional cultural ecosystems that have an important role in mitigating extreme weather events, such as agroforestry systems, terraced crop-growing and fruit tree forests in arid lands
- Providing an opportunity for active or passive restoration of such systems where they have been degraded or lost.

Specifically in terms of individual disasters the role of protected areas includes:

Flooding

- Floodplains provide space for waters to disperse without causing major damage
- Natural vegetation absorbs the impacts of floods

Landslides, avalanches and rock falls

- Natural vegetation, particularly forests, conserved in protected areas can also in some circumstances, prevent and mitigate sudden earth and snow movements by stabilising soil and packing snow in a way that stops the slippage starting and slowing the movement and extent of damage once a slip is underway

Tidal waves and coastal erosion

- Protected areas can help to retain natural vegetation, reefs and landforms that can help block sudden incursions by seawater.

Drought and desertification

- Protected areas can provide barriers against the impacts of drought and desertification by reducing pressure (particularly grazing pressure) on land and thus reducing desert formation and maintaining populations of drought resistant plants to serve as emergency food during drought or for restoration

Fire

- Maintain traditional cultural management systems that have controlled fire
- Protect intact natural systems that are better able to withstand fire

Hurricanes and typhoons

- Role in mitigating floods and landslides
- Directly buffering against the worst impacts of a storm event (e.g. storm surge)

In the discussion after this presentation, the question was raised whether protected areas do mitigate natural hazards or it is rather due to the way they are managed. The management of the place plays the essential role; by installing a protected area, though, a long-term continuity can be reached which a business will not be able to assure.

3.6 Identifying values and benefits: Using WWF's protected area benefits assessment tool (PA-BAT)

Sue Stolton, Equilibrium Research

Why do we need to know about values and benefits?

- Understanding what people value and what benefits they can or do gain from these values is crucial for effective management and good stakeholder relations
- Communicating this wide range of values and benefits can help build support – financial and political
- Identifying the full range of current and potential benefits can help identify new revenue streams; research priorities; adaptive management strategies
- Standardising the approach to assessing values and benefits can aid system, regional or even global advocacy of protected area values

The Protected Area Benefit Assessment Tool (PA-BAT) aims to help collate information on the full range of current and potential benefits of individual protected areas. It is a contributory methodology for the overall *Arguments for Protection* series, but is also hopefully a stand-alone tool that will be of wider use to the protected areas community. The PA-BAT has been designed to collect information on ecosystem services and cultural values; it includes a standard typology of values and benefits. It is a simple tool which can easily be used with large numbers of stakeholders with minimal translation costs (assuming coordinators speak English). The PA-BAT is not designed to produce a “score” related to benefits, as summing up results will produce a bias towards multi-purpose reserves rather than protected areas focussing on biodiversity conservation.

The PA-BAT has been designed for use by protected area managers to work with stakeholders to identify important values and the benefits that they bring to a range of stakeholders, from local to global - and identify different opinions about values and benefits. The PA-BAT can also be used by local communities to identify values and benefits and by protected area advocates, such as NGOs, to help promote the range of benefits a protected area can provide.

What information does the PA-BAT collect?

- The PA-BAT aims to assess legal resource use and the benefits that could accrue

from that use

- It is not an assessment of overall resource use, which would include illegal use
- The PA-BAT includes the option to record economic information; but its primary purpose is to record the types of benefits and to whom they are provided
- The PA-BAT provides a framework and does not attempt to cover every possible situation; it can be adapted for increased relevance and can be used for different purposes and objectives

Main features of the PA-BAT

1: Background information datasheet: includes basic data about the protected area including management objectives and the areas contribution to well-being

2: Values datasheets: a set of 24 datasheets (assessing 27 values) which collect information about:

- types of benefits
- who they are important to
- level of importance – economic and non-economic
- relationship to the protected area
- times of year in which the value is important
- conservation and management issues

21. Is the protected area important for water quality and quantity (e.g. filtration, groundwater renewal, maintenance of natural flows)? (please mark first if yes or no: if yes complete the assessment below)								Yes		No	
Please provide details of the value:											
Use of the resource (please mark all relevant boxes in the matrix below)		Indigenous / traditional people living in the PA	Other local people living in the PA	Indigenous / traditional / local people near the PA	National population	Government	Industry	Global community			
The role of the PA in water quality and quantity has a minor non-economic benefit											
The role of the PA in water quality and quantity has a major non-economic benefit											
There is potential to increase the non-economic importance of water quality and quantity											
The role of the PA in water quality and quantity has minor economic benefits											
The role of the PA in water quality and quantity has major economic benefits											
There is potential to increase the economic importance of water quality and quantity											
Amount of PA currently involved: i.e. the proportion of the PA which contributes to water quality; please mark one option below and provide additional comments if necessary											
A: Small section of the site (5-10%)											
B: Several areas of the site (11-50%)											
C: Most of the site (51-100%)											
If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made				US\$		If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made			US\$		
Date:						Date:					
Conservation Impact: Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives											
What management is currently taking place in relation to these values/benefits?				What additional management responses are needed?							
Notes: further details, sources, caveats etc											

Figure 6: Example datasheet from the PA-BAT

Identification of values

The PA-BAT datasheets below identify nine main groups of value (Nature Conservation; Protected Area Management, Food; Water; Culture and Spirit; Health and Recreation; Knowledge; Environmental Benefits; and Materials), with 24 more detailed indicators for these:

✓ **Nature conservation values**

1. Is the protected area valued for its nature conservation?

✓ **Protected area management**

1. Does management of the protected area provide jobs (e.g. for managers or rangers)?

✓ **Values related to food**

2. Is the hunting of wild game permitted in the protected area?
3. Is the use of wild food plants permitted in the protected area?
4. Are fisheries (permissible fishing and/or contribution to fish stocks by protecting spawning area) an important resource in the protected area?
5. Is traditional agriculture (i.e. use of locally adapted crops (landraces) and/or practices) undertaken legally in the protected area?
6. Is livestock grazing and fodder collection permitted in the protected area?

✓ **Values related to water**

7. Is non-commercial water use (e.g. subsistence agriculture, drinking, washing and/or cooking) or commercial water use (e.g. for large-scale irrigation, waterways, bottling plants, hydro-electric power or municipal drinking water source) permitted in the protected area?

✓ **Cultural and Spiritual Values**

8. Does the protected area have cultural and historical values (e.g. archaeology, historic buildings including temples, pilgrimage routes and/or historic/culturally important land use patterns)?
9. Does the protected area include sacred natural sites or landscapes (e.g. sacred groves, waterfalls and/or mountains)?
10. Does the protected area contain wilderness values or other similar iconic values?

✓ Health and Recreation Values

11. Is the collection of medicinal resources (e.g. herbs) for local use or for the pharmaceuticals industry permitted from the protected area?
12. Is the protected area important for recreation and tourism?

✓ Knowledge

13. Is the protected area an important resource for building knowledge?
14. Does the protected area contribute to education (i.e. formal and informal dissemination of information)?
15. Is the collection of genetic material (e.g. crop wild relatives, tree species) permitted from the protected area?

✓ Environmental Services

16. Can the protected area contribute to climate change mitigation (i.e. by providing significant carbon sequestration and / or by ameliorating local climate impacts)?
17. Is the protected area important for soil stabilisation (e.g. avalanche prevention, landslide and erosion)?
18. Is the protected area important for coastal protection (e.g. mangroves, sand dunes, coral reefs)?
19. Is the protected area important for flood prevention (e.g. mitigation in small watersheds, flood plains and wetland protection)?
20. Is the protected area important for water quality and quantity (e.g. filtration, groundwater renewal, maintenance of natural flows)?
21. Is the protected area an important resource for pollination of nearby crops or for pollination products such as honey?

✓ Materials

22. Is the management and removal of timber, including for fuelwood, permitted from the protected area?
23. Is the extraction of other materials (e.g. coral, shells, resin, rubber, grass, rattan, minerals, etc) permitted from the protected area?

Together these values attempt to represent the main benefits to a wide range of stakeholders. As the PA-BAT has been designed to be used globally, the range of values and the benefits they provide is necessarily generic and not all will apply to every protected area.

4 Communicating the values and benefits – protected area experiences

4.1 “Healthy parks, healthy people”: Müritz National Park, Germany

Jens Brüggemann, Müritz National Park

Introduction

Activity in clean air, beautiful landscapes, emotional encounters, spiritual moments... there are plenty of healthy opportunities in national parks. Müritz National Park is located in the Mecklenburg Lake District between Berlin and the Baltic Sea. It covers an area of 32,200 has and protects a landscape with forests, lakes and bogs shaped by the last Ice Age. More than 2/3rds of the 0.5 million visitors per year discover the National Park on bicycle, about 20% go walking, 10% canoeing and about 2% go by horse or horse cart. The park authority provides visitor infrastructure, information and offers guided walks and environmental education programmes.

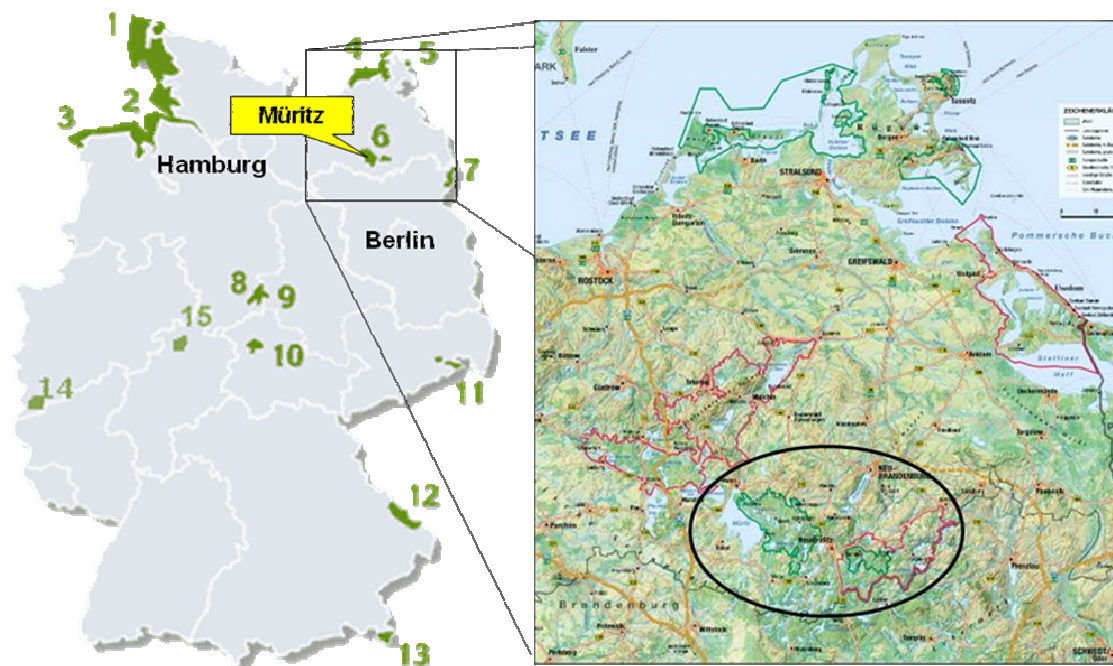


Figure 7: Location of Müritz National Park, Germany

National parks are the highest protection category in Germany. The park is made up of 13% lakes, 8% peatlands, 7% agriculture and the rest is forest. The area has major landscape values and is known as the “land of 1,000 lakes”. In the almost 20 years since its designation Müritz has developed good visitor infrastructure including signage, hides, etc. In total the park has 48 walking trails/ 457 km; 8 cycle tracks/ 145 km; 2 cycle connection tracks/ 10 km; 1 nature experience trail/ 4 km; 7 long-distance and regional; cycle routes/ 54 km inside park; 4 woodland paths; horse riding trails/ 49 km; canoeing routes/27 km; 189 information posts (most of them with map); 4,200 direction indicators, pictogram’s and tourist signposts in the area; 28 platforms and towers, 15 shelter huts, 68 benches, etc.

The villages around the park are important entry points to the park and people are encouraged to get people out of their cars through the provision of information, choice of activities – long/short walks, cycle path, etc.

Health initiatives

The park management is talking with regional representatives of health insurance companies working towards a partnership. The overall objective is to develop good publicity opportunities and coverage of the national park.

There is also a programme of cooperation agreements with tourist businesses, 30 businesses in total to date. Other regional cooperation includes the marketing of regional products (to promote the idea of good walking – good eating).

Surveys

Visitor surveys show that the age composition of visitors to the park has shifted towards people of 46 years and older. Visitors are however becoming more active. There are also more “wellness” packages being offered by the hotels and spa/ health resorts are being established in the area; generally there is a tendency towards greater health consciousness of visitors. This is being underlined by national campaigns to prevent health problems, including “3,000 steps more every day” and more sports events are being organised. A survey in 2001 found that visitors wanted a variety of experiences from the park: 82% observe nature; 75% enjoy quietness; 67% relax and recreate; 66% ride bicycle; 58% take up information offers; 50% take pictures of nature; 44% go walking without guide; 26% go swimming; 23% go by boat/ canoe; 19% go on guided walks and 2% ride a horse.

Events

The Müritz National Park Authority became involved in health issues by co-organising a one-day regional event on the 3,000 steps campaign in 2007 on the European Day of Parks. The event received prominent support by high-ranking politicians, sportsmen and women and celebrities from show business. The national park was visible as a location, through the presence of its members of staff and in the media. The event received excellent press coverage and furthered the interest of health insurances in the national park, which could lead to a new partnership in recognizing and disseminating the park's health benefit for people.

While the growing interest in sports events in the park initially became an issue of concern for the park authority due to possible negative impacts, it was also considered to be a chance to better communicate values and benefits of the park to a wider audience. The question came up, whether the people's desire for activity, the prevention interest of health insurances and the cognitive elements of education programmes could be combined in a an attractive and healthy national park offer? This can best be organised by joining forces with partners and taking advantage of their specialities, the park authority therefore decided to get involved as co-organiser in two events, a "national park run" and the "Wander-Ma(h)l".

The "Wander-Ma(h)l" is organised by a rural cooperative and combines healthy, guided walks inside and outside the National Park, and healthy food made of regional products. The tours inside Müritz National Park are guided by park rangers while meals are provided by restaurants and hotels, many of them being certified as "Müritz National Park Partner" – a partnership between the park authority and mainly tourism businesses within the region. Ministers and politicians of the regions are invited to inaugurate the day and its activities.

In summary

What did we want to achieve? Recognition of Müritz National Park's health value and benefits offered

Key audience: The visitor: Specifically local people and other organizations.
Secondary: politicians

Tools applied: Involvement in joint activities/ events; "national park run"; "Wander-Ma(h)l"

All which made the park's contribution to health visible (i.e. location, ranger, information, press coverage, inauguration with politicians).

4.2 Communicating about Scotland's protected areas and wild places

Richard Davison, Scottish Natural Heritage (SNH)

What do we mean by “wild land”?

In practice, there are several definitions used in Scotland.

- Wild land – relatively remote and inaccessible, well beyond roads and other human artefacts, minimal evidence of human activity. Looking at core areas of mountain, moor and remote coast⁸.
- Landscapes of wild character – landscapes which are relatively remote (3, 5 and 8 km from a road), with perceived naturalness (based on vegetation, land use and wildlife), low degree of human artefacts (buildings, pylons, tracks, fencing) and scale (physical challenge, sense of remoteness)⁹.
- Wild places and landscapes – parts of Scotland where the wild character of the landscape, its related recreational value and potential for nature are such that these areas should be safeguarded against inappropriate development or land use change¹⁰.

People in Scotland believe that the main features that make an area wild are their naturalness (75%), remoteness (32%) and the lack of modern artefacts (16%). Over 70% of people feel that it is very important that Scotland has wild areas, with the main reason being that it is part of our heritage and what Scotland is about. Its role in supporting wildlife and providing a place to escape to is also important.

Although there are lots of different protected areas in Scotland, wild land is not protected directly by any designation. A lot of wild land does not lie within a protected area. But wild land (and protected areas) generates many benefits:

⁸ see page 5 in McMarran, R., Price, M. F. and McVittie, A. (2006) A review of the benefits and opportunities attributed to Scotland's landscapes of wild character. Scottish Natural Heritage Commissioned Report No. 194, Edinburgh

⁹ McMarran, R., Price, M. F. and McVittie, A. (2006) A review of the benefits and opportunities attributed to Scotland's landscapes of wild character. Scottish Natural Heritage Commissioned Report No. 194, Edinburgh.

¹⁰ Market Research Partners, Edinburgh (2008). Public perceptions of wild places and landscapes in Scotland. Scottish Natural Heritage Commissioned Report No. 291, Edinburgh.

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- recreational – lots of people visit these areas;
 - economic – these visits generate expenditure which support over 20,000 jobs;
 - health, education and social;
 - a diverse and often fragile wildlife;
 - environmental;
 - non-use values;
 - cultural.

Some would argue that these benefits warrant the protection of wild land through some sort of new designation but this is very unlikely. If anything, simplifying and rationalising the already complex suite of designations is more likely. Some interests consider that there are already too many types of designations, each bringing different requirements and conditions. In short, designations are often seen as a constraint rather than an accolade or opportunity.

Studies of benefits

Various studies have been carried out:

- A review of the benefits and opportunities attributed to Scotland's landscapes of wild character
(www.snh.org.uk/pdfs/publications/commissioned_reports/report%20No194.pdf)
- Public perceptions of wild places and landscapes in Scotland
(www.snh.org.uk/pdfs/publications/commissioned_reports/report%20No291.pdf)
- Scottish Recreation Survey: annual summary report 2006
(www.snh.org.uk/pdfs/publications/commissioned_reports/B303773.pdf)

Findings

- Output from activities which depend on the natural environment is £ 17.2 billion and supports 242,000 jobs
- Scotland's hills, mountains, lochs – our wild places – is the top reason for people visiting Scotland
- About 170 million recreational day visits in 2006 to “natural areas” – 46 million to “mountains, hills & moorland” and “wildlife areas” = expenditure of about £ 2.5 billion
- Health benefits of Scottish woodlands estimated at £ 19 million a year (from avoiding illness through exercise)
- Educational benefits – outdoor learning

- Non-use values – contingent valuation of 300 Natura sites in Scotland showed total benefits of £ 213 million against costs of £ 27 million
- Ecosystem services: Water storage and impacts on flow regimes
- Some 20,000 sq km of peatland in Scotland = value in carbon sequestration and continued retention of existing stores of carbon
- Capitalised value of carbon sequestration by Scottish woodland in 2002 was up to £ 2.6 billion

Communicating the natural environment

Current communications often get caught up in the detail rather than on winning hearts and minds. In Scotland, SNH is working with the Scottish Government and other environmental bodies to simplify the language and find a way to present protected areas that is clear, simple, inspiring and understandable. This form of language would then be used across Government and its organisations, leading to visual branding on websites, maps, leaflets and signage.

Scottish Natural Heritage is now putting more effort into promoting National Nature Reserves in Scotland, with a simple brand that emphasises that these are “magical places with amazing wildlife”. Places like Loch Lomond, Beinn Eighe and St Kilda are familiar names but the fact that these places are National Nature Reserves is still a well-kept secret.

What does this mean in practice? We’re aiming to:

- keep the language simple and straightforward;
- be much clearer about the value of these places and why they’re important;
- promote much better awareness of these areas and the need to look after them;
- convert the perception of the need to look after these special places away from them being seen as a constraint to an accolade and opportunity;
- develop a stronger link in people’s minds between the values and benefits that these places bring and the need for them to be looked after in a particular way;
- get more people out enjoying the outdoors and increasing their support for looking after these places.

Ultimately, it’s about enabling access **and** helping people to see the value of these places and wild land more generally – in terms of economic value, cultural value, intrinsic natural value and a sense of national pride – these are the type of places that make Scotland what it is.

4.3 Cultural values: maintaining traditions and promoting social cohesion in Slovenia

Boris Grabrijan, Kolpa Nature Park, Slovenia

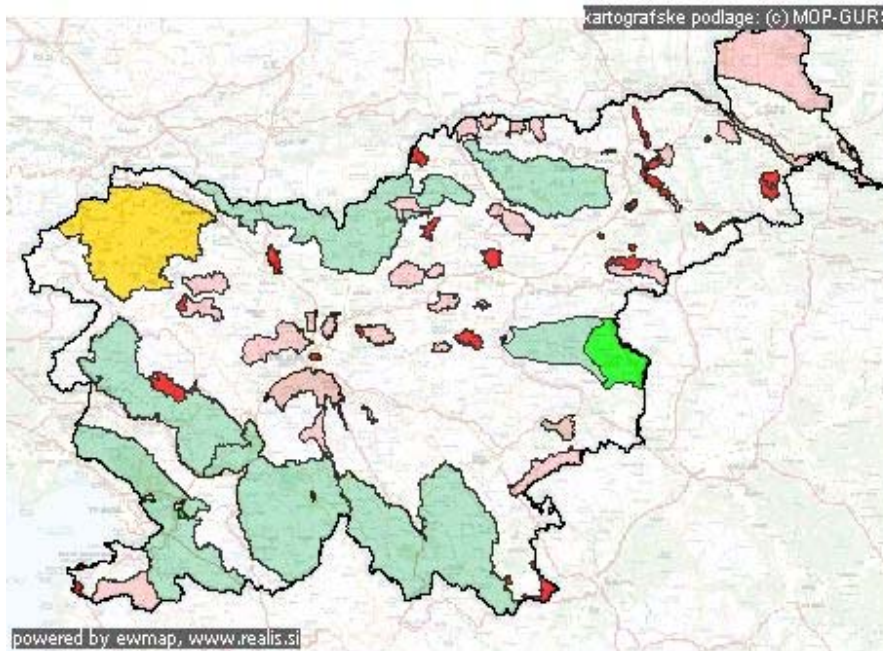


Figure 8: Protected areas in Slovenia

Slovenia has a rich biodiversity – more than a third of the country is classified as Natura 2000 sites. The country has many protected areas including one national park, two regional parks and many smaller landscape or Natura parks. Of the 46 parks only seven have management in place; in some parks communities are involved in management.

Kolpa Nature Park contains a rich mosaic of cultivated land where a typical regional landscape is connected to different elements of natural and cultural heritage. Nature Parks are intended mainly for outdoor adventures and are dedicated to preserving the landscape, the natural as well as the cultural heritage and also to restoring the natural balance. The park's biodiversity is rich; there are some 600 - 700 bears and the population is growing, and with 39 fish species it is the richest area in Slovenia for fish. The forest is predominately white birch forest; there are also 200 small caves.

The area has a diverse and mixed culture, mainly due to the area's turbulent history which led to many changes in populations. The area of Kolpa Nature Park was already settled in prehistoric times and the Kolpa valley was settled in the iron age

by the south Pannonian tribe of the Colapiani. In the 15th and 16th centuries, when the whole of Western Europe was experiencing a heyday of renaissance and peace, the lives of Slovenes were harshly struck by Turkish incursions. At that time many fortified castles and encampments were built against the Turks.

In the early 16th century, South Slavic refugees called Uskoki fled to the region (Uskoki meaning people escaping to a better place). The distinctive features which they preserved into modern times make the ethnic, linguistic and religious character of Nature Park Kolpa so diverse today.

The park is thus distinguished by the picturesque landscape – the combined work of nature and of man. There are currently 1,300 families living in the park with diverse ethnic backgrounds including Serbs, Montenegrins, Slovenians, Greek Catholics etc. This diversity is a result of intercultural mixing throughout the centuries. As a consequence various influences can be spotted in the architectural heritage of rural and urban areas, in buildings, customs and habits as well as in the people's dialect - all of which together create a rich cultural region. In Kolpa Nature Park numerous traditional crafts and customs have been preserved. Traditions included painted Easter eggs (these were sent in 1921 to the World Exposition in London – the most unique souvenir made by children, children received shoes as a reward) and wickerwork. Workshops in the park help retain these cultural traditions; the park management also wants to bring people outside the park to learn these skills. Linen production is also important and projects to encourage production and develop new products are taking place.

In the past the waters of the Kolpa River were used to drive mills and there were many water powered flour and saw mills. The river is thus partitioned by many dams, which are typically made of stones. Folk architecture is characterised by closed four sided farm with an inner yard; traditional building materials are wood, straw, stone and pebble. Many traditional agricultural buildings however have been lost with the industrialisation of agriculture. The Park administration manages a couple of buildings to preserve these traditions.

The park is also important for the conservation of agro-biodiversity such as traditional breeds of sheep. There were 116 sheep of rare breed in 1996 – now there are more than 850 sheep. There are many good reasons to preserve these breeds. For example, the widespread Suffolk breed of sheep is susceptible to scrapie whilst

traditional sheep species are immune to the disease. The park is encouraging both new and old uses of wool. Traditional sheep wool is better for handmade wool products; and wool products already have more value than meat. There are also traditional chicken and donkey rare breeds.

The park has a farm museum where visitors are received by people in traditional clothes, who make special breads to welcome guests. Rural women's organisations prepare traditional foods and have published a simple booklet of recipes. The museum includes examples of traditional farm living rooms where demonstrations of egg painting and linen production are carried out (there were 15 workshops to create painted Easter eggs in 2009).

Beekeeping is also important. There is an educational trail in relation to beekeeping and beekeepers have training sessions to be certified for honey production.

Conclusions

The Ministry concentrates on nature conservation – but the park administration understand that people come first and are vital in building support for the park. Conservation education is integrated into other cultural/traditional contexts and training – it is a much easier way to get people to listen and learn. There are for example nine red list species in the park – but if you told local people this they would want to catch them not conserve them!

The overall philosophy of the management is thus nature conservation *and* care for cultural heritage, but the people come first as they were protecting nature well before protected areas were invented.

In the discussion after this presentation, the question was raised whether people leave the rural area of the Kolpa nature park. The park can only offer a few jobs up to now, but the transport system to the cities nearby is much better nowadays than it was 10 years ago, so people can work there and still live in the rural region. The population which currently lives in the nature park wants to stay there.

4.4 Marketing agrobiodiversity: Rhön Biosphere Reserve, Germany¹¹

Doris Pokorny, Rhön Biosphere Reserve, Germany

The Rhön UNESCO biosphere reserve is committed to conserve agro-biodiversity through product development and regional marketing. Driven by the common vision and enthusiasm of the main stakeholders in the region to conserve the traditional cultural landscape of the Rhön, many promising projects have emerged. Although still limited to a niche market, the experiences in the Rhön demonstrate that the conservation of agro-biodiversity in protected areas is possible if it is based on close co-operation and networking on a regional scale. Practice has shown that the success indicator for conserving agro-biodiversity is mainly economic. Without a market agro-biodiversity cannot be conserved in the long run. Furthermore agro-biodiversity does not only depend primarily on the commitment of farmers (land owners), but mainly on the consumers' attitude and their willingness to pay "a little extra" for the positive side-effects. Adequate interpretation programmes are also needed. In the Rhön important ecosystem types such as species rich grassland and traditional fruit orchards have been conserved through the in-situ conservation of agro-biodiversity (Rhön sheep and apple varieties).

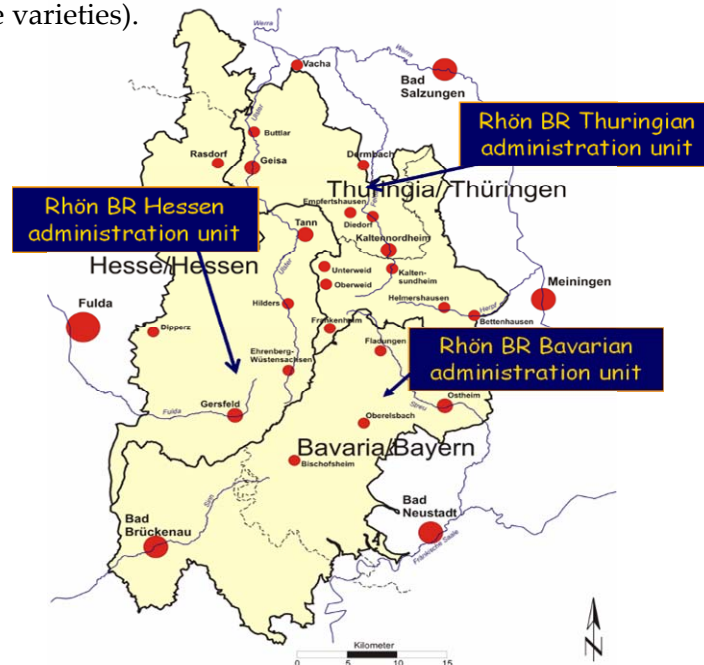


Figure 9: Rhön Biosphere Reserve

¹¹ This summary is largely based on the chapter Conservation by consumption: in situ conservation of agrobiodiversity in the Rhön UNESCO-Biosphere Reserve, Germany by Doris Pokorny in Amend T., Brown J., Kothari A., Phillips A. and Stolton S. (eds.) 2008. *Protected Landscapes and Agrobiodiversity Values*. Volume 1 in the series, Protected Landscapes and Seascapes, IUCN & GTZ. Kasperek Verlag, Heidelberg.

Introduction

The Rhön is situated in the centre of Germany, 150 km east of Frankfurt (see map) and was designated by UNESCO as a biosphere reserve in 1991. It is one of Germany's 13 biosphere reserves and covers an area of 1,850 km². The Rhön is a rural area with a total population of 162,000 (as of 2004) who live in numerous small villages and towns over 42 municipalities. Although pristine or natural ecosystems have long since disappeared, the area has high anthropogenic biodiversity values, mainly dependent on extensive grassland management. Conservation goals in the Rhön can only be reached by close cooperation between farmers and the nature conservation or agricultural authorities which provide grant schemes and programmes for adapted management.

The visions and goals for the Rhön biosphere reserve, developed through a comprehensive discussion process with stakeholders in the region, form the basis of the Management Framework for Conservation, Maintenance and Development of the reserve. The framework is not legally binding but is used as a "soft" planning tool.

Agro-biodiversity

Land use in the Rhön biosphere reserve is mainly characterized by agricultural and forestry activities. The area is made up of about 40% forest, 35% grassland, 18% ploughed land, 7% other, including settlements and infrastructure. The biosphere reserve includes about 3,000 agricultural enterprises of varying structure and size.

The conservation of traditional breeds is an essential part of the Rhön's management. A traditional breed which has become particularly important in the context of a nature conservation project focussing on low intensity grazing is the Yellow Franconian Cattle (Gelbvieh). The breed originated in Franconia (Northern Bavaria) in the early 19th century as a dual purpose animal for beef and milk production. It used to be quite common throughout the Rhön until the 1960s, but, for mainly economic reasons, it has almost disappeared in the region while it has become quite common overseas (e.g. in Canada, U.S. and South America). Although the breed is neither rare nor threatened from distinction, it can play an important role in conserving traditional agriculture.

Fruit orchards with high stem fruit trees are a typical feature of the Rhön. They are found as orchard belts around villages and along footpaths or roads. In 1993/1994 about 1,000 ha of fruit orchards were identified by remote sensing in the Rhön

biosphere reserve. Fruit orchards are culturally/historically, ecologically and economically important as they:

- provide additional income (through production, processing), thus contribute to the strengthening of regional marketing;
- contribute to an aesthetic landscape as remarkable and scenic landscape features, especially in spring and autumn;
- support the regional image of the Rhön as an eco-tourism region; and
- provide, when they are old, habitats for numerous rare and endangered wild life species, both flora and fauna.

Apart from this, the intrinsic genetic value of the numerous fruit varieties is important in the context of conserving *in-situ* agro-biodiversity. Old varieties often are more resistant and robust to diseases and pests and are better adapted to unfavourable climatic and soil conditions. Last, but not least, they have a more aromatic taste than their modern “relatives.”

In 1995, a transboundary apple initiative founded by local people for the conservation of orchards was set up in co-operation with the biosphere administrations. Today the initiative promotes organic fruit production in orchards and has about 2,000 landowner and producer members, including a core of active members representing areas such as gastronomy, fruit pressing enterprises, breweries, garden centres etc. A wide range of organic apple products has emerged and are sold in regional and even national markets. The main products are organic Rhön apple juice, or a mixed drink of organic beer and apple juice called “Apfelbier”. Other products include dried apple chips, apple champagne, cider, wine, vinegar, mustard and jam. An annual apple fair and market, an apple interpretation trail, four *in-situ* conservation sites for rare apple tree varieties and the publication of a recipe book for regional apple dishes are further examples of how conserving agro-biodiversity can be marketed. As a result, the price for apples from traditional orchards has increased four times since 1990.

The Rhön sheep is another traditional breed well adapted to cold and wet climate. It was due to its lack of competitiveness that the number of Rhön sheep dropped dramatically towards the end of 19th century until mid 20th century; by 1960 only 300 ewes were registered in herd books. In the mid-1980s the genetic value of traditional breeds was rediscovered, resulting in the setting up of a breeding programme in

Thuringia. At the same time, on the other side of the former Iron Curtain, an initiative of a nature conservation NGO helped save a small herd of 40 Rhön sheep by buying them and leasing them to a farmer in the Bavarian Rhön for further breeding.

Local initiatives have step by step successfully promoted the marketing not only of lamb meat but also lamb sausages. A cooking competition organised by the biosphere reserve association raised the interest of regional restaurant owners in Rhön sheep products. Since then Rhön lamb dishes can be found on the menu of selected restaurants. The producers have contracts with restaurants and private consumer can buy Rhön sheep meat and sausage from farm shops. The cooperation with the gastronomy association “From the Rhön – for the Rhön”, which promotes the consumption of local products, is key to this success.

Although the Rhön sheep is once more spread throughout Germany, the Rhön biosphere reserve still plays a significant role in conserving this traditional breed, as 48% of the total herd book population in Germany (6,860) is found there. The ultimate indicator of success is that the Rhön sheep is no longer considered endangered.

The Rhön quality labels

The most important strategy in the Rhön biosphere reserve for the conservation of agro-biodiversity is cooperation on various levels. To achieve this, setting up a close network between producers (farmers), processing enterprises (e.g. artisan butchers or bakers), grocers (e.g. farm shops, regional super market chains) is indispensable. And most importantly: the consumers need to be adequately informed and convinced of the quality of the regional products and services. In order to make sure that a quality standard is guaranteed, a regional label has been developed. Rhön sheep and Rhön apples take advantage of this scheme as the platform to promote their regional authenticity, although the label is not necessarily tailored to agro-biodiversity projects but to regional products in general. The Rhön quality labels can be used within the five Rhön districts, which mean the area goes beyond the Rhön biosphere reserve.

As a precondition for using the Rhön labels, the products and services need to meet the defined standards and criteria and then the enterprise needs to become a member of the private biosphere reserve associations which then qualifies it as “partner

enterprise of the biosphere reserve". Then the enterprise receives a plate and certificate and is involved in the network of information and cooperation, e.g. participation in promotion weeks, fairs etc. The labelling process will include a control mechanism, the procedure and details of which are still in discussion.

Conclusions

- Without a market agro-biodiversity cannot be conserved in the long run, although the provision of public grants will always be indispensable to a certain extent. Furthermore agro-biodiversity does depend mainly on the consumers' attitude and their willingness to pay "a little extra" for the positive side-effects of the products linked to agro-biodiversity.
- A common vision in terms of a management concept for the region is an important basis and process.
- Multilateral partnerships between and within administrations, the private sector, NGOs need to be fostered.
- Local actors with courage, vision and enthusiasm are needed who are prepared to co-operate in wide networks.
- Consumers' attitude needs to be addressed in interpretation programmes, with special attention to agrobiodiversity and food quality.

Communication Strategy of the Rhön biosphere reserve

Inside the biosphere reserve area:

- work groups, individual talks
- media, local press ("biosphere reserve media service"); publication of success stories
- interpretation programmes and presentations
- visiting programmes for extern groups

Outside biosphere reserve area:

- Work Group on Biosphere Reserves in German (AGBR) -> links biosphere reserves "from Länder to federal level"

Lobbying:

- through EUROPARC e.V. Germany: "Year of the biosphere reserves in Germany 2009"
- German UNESCO commission
- research partners

Search for strategic partners:

- organisations (e.g. GTZ, farmers' association, universities)
- private sector (e.g. co-op projects)

Strategies/ lessons learned:

- 1) Foster a creative and trusting process of overcoming sectoral limitations (spatial, jurisdictional, professional...)
- 2) Link activities horizontally, vertically, spatially
- 3) Find strategic partners for increased visibility through lobbying and cooperation
- 4) Not only "do" good projects, but... "document, write, publish, talk, present..."! for the sake of visibility and acceptance

Strategy: be visible wherever possible and make others talk and write about your area -> feedback to local actors

4.5 Development of an exemplary energy conception for a community in the Middle Elbe Biosphere Reserve

Thomas Hartwig, Middle Elbe Biosphere Reserve, Germany

UNESCO-Biosphere Reserve River Landscape Elbe is the largest of the thirteen biosphere reserves in Germany. Biosphere reserves are set up to protect large-scale natural and cultural landscapes. Their main aims are to preserve, develop or restore landscapes shaped by traditional diverse uses, along with their historically evolved diversity of species and habitats. They also serve as models for developing and testing sustainable operating methods in all sectors of the economy.

The Saxony-Anhalt component of the interstate biosphere reserve River Landscape Elbe, which was recognised in 1997, is the only biosphere reserve in Germany in which a mostly natural, central European river valley has been placed under protection. The Middle Elbe Biosphere Reserve extends along 303 km of the Elbe through Saxony-Anhalt. It is one of the two oldest UNESCO reserves in Germany. Rare species such the Elbe beaver, the white-tailed eagle, the iris and the water chestnut have their habitat in this biosphere reserve. The biosphere reserve is not merely a protected natural area. The focus is on the harmonious interplay of human beings with the surrounding nature. The goal is to devise concepts, to put them to the test and to ultimately live those that come closest to the goal.

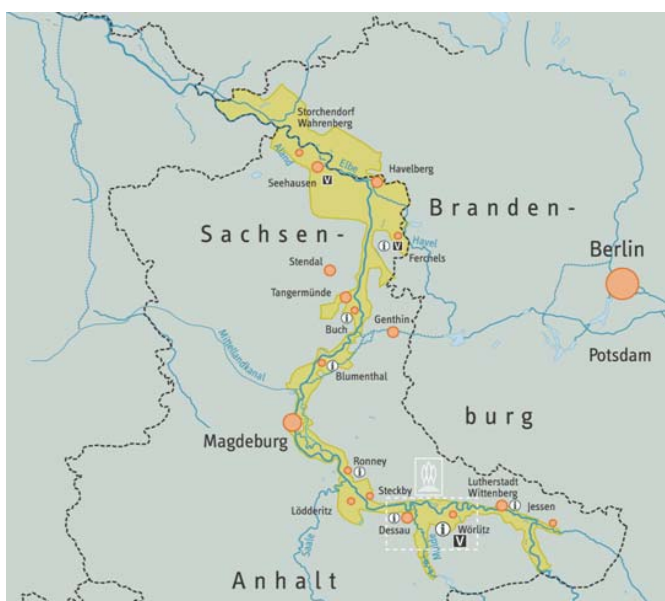


Figure 10: The Biosphere Reserve Middle Elbe

The reserve extends over almost a quarter of the federal state of Saxony-Anhalt but is only home to less than one-tenth of its population. The structural collapse in the 1990`s has profoundly changed the economic and social framework conditions for regional development in the Altmark. The area has a variety of issues to deal with including: low and falling population density, employment and training offers are at a comparatively low level, commuters to neighbouring regions are well above average, neither the economic nor the infrastructure are as yet extensively competitive and too little diversified.

The energy project

Project area is the town of Havelberg in Saxony-Anhalt. The most important target is the exemplary development of a modern energy supply through renewable energy to reduce dependence on oil and natural gas for communities in UNESCO-Biosphere reserve and to make a contribution towards climate change mitigation.

Havelberg is situated on the Havel river, and part of the town is built on an island in the centre of the river. It has a population of 7,687 (2004). In the long term the demographic change in Havelberg will be characterised by population reduction, ageing and increasing heterogeneity.

Havelberg and the administration of Biosphere Reserve are partnered in two projects; the “Development of an exemplary energy conception for a community in the Biosphere Reserve Middle Elbe“ and the programme of “Urban restructuring in the new federal states“. These two projects have joint targets:

- Analysis of the current energy situation
- Analysis of biomass production potential
- Increase, restoration and sustainable development of the Havelberg town forest
- Adaptation of the agricultural and forestry soil utilisation in context with the predicted climate change
- Preservation and if possible increase of biological variety
- Protection of the largest and most important non-coastal wetlands area in Central Europe
- Development of an transferable concept for new energy supplies to other comparable towns within the Biosphere Reserve
- Creation of a model region for sustainable development and climate protection as an essential part for BUGA-presentation (see below) in 2015
- CO₂ storage through raising of water levels in the wetlands around Havelberg

The BUGA

The BUGA is the German Federal Garden exhibition and is Germany's largest horticultural show. It takes place every two years moving between different eastern and western federal states. In 2015 the BUGA will take place along the River Havel between the towns Havelberg and Brandenburg. The exhibition runs from April to September and is a showcase of innovative projects in the respective regions; it is thus an ideal platform for showcasing our projects.

Restoration project in lower Havel

Over the next 13 years, the Naturschutzbund Deutschland (NABU) the Nature and Biodiversity Conservation Union, one of the oldest and biggest environment associations in Germany, together with the Federal Ministry of Environment, Nature Conservation and Nuclear Safety, and the federal states of Brandenburg and Sachsen-Anhalt will join forces to restore the lower Havel river valley. The nature restoration project entails the restoration of a highly used waterway to a natural river. This step-wise project will run from 2005 until 2018. The first step is the planning and voting on the most important development targets; the second to convert targets into action.

The aim is that Havel should once again become a natural river, full of life and offering a valuable habitat for the characteristic plants and animals of a river landscape. To achieve this, previous tributaries and tide gutters of the river will be restored, bank stabilizations will be built back, and fish migration assistance will be established. The project not only benefits nature and water protection, but also offers opportunities for development in the entire region. The Havel will remain open as a waterway for sports and leisure boats and the ports of Rathenow and Havelberg will remain integrated in the waterway network. Thus, this restored river in the Havelland will become an attractive location for both residents and visitors. Through raising of the water level of the Havel, CO₂ emissions will be reduced as well.

Conclusions

The Biosphere Reserve is linking the management of various projects such as the BUGA, the lower Havel restoration project and the development of energy production and use. Long-term objectives include:

- Increase of regional added value
- Protection and creation of employment
- Strengthening of sustainable development

-
- Implementation of new technologies to use renewable resources for energy and material production
 - Decrease of the consumption of fossil resources in order to reduce the emission of CO₂
 - Reduction of CO₂ emissions from formerly drained wetlands through rewetting
 - Creation of a local network between the five biosphere reserves within UNESCO-Biosphere Reserve River Landscape Elbe

Expected outputs

- Planning instruments and managing tools to support the sustainable growth of rural economy concerning material flow and land use.
- Initiation and development of regional value added chains using renewable resources and establishing value added partnerships integrating stakeholders out of economy, policy, administration and all other interested groups

4.6 Communicating protected area significance through creative experience in the NNRs of Wales

Shelagh Hourahane, Creu-ad Heritage Interpretation, Wales

Introduction

Britain's National Nature Reserves are IUCN category IV protected areas in which protection of wildlife is the priority. Sections 16-29 of the National Parks and Access to the Countryside Act and the subsequent 1981 Wildlife and Countryside Act allow for the establishment of nature reserves. These include National Nature Reserves, which are areas that are considered to be of national importance because they are habitats for important or rare species.

NNRs have the highest level of conservation protection under UK legislation. They are also Sites of Special Scientific Interest (SSSI). The designation also protects against any damaging operations and development on or near the site. Most are open to the public and many have high visitor numbers because they are visited for general tourism and recreation as well as for their nature conservation value. This can cause a conflict of interests for management and in deciding what values should be communicated and how.

Background

NNRs in Wales are designated by the Countryside Council for Wales (CCW). There are 71 NNRs in Wales ranging in size from half a hectare to 8,000 hectares. Some are owned and managed by CCW but others are owned by other bodies, such as the RSPB (Royal Society for Protection of Birds) and there are often several partners or stakeholders involved.

Because of the importance of these reserves and the popularity of some with visitors, information and interpretation is a key aspect of their management. CCW also has a duty to involve local communities in understanding the significance of their reserves and how they are managed.

A Sense of Arrival

In 2001 CCW decided to experiment with an interpretation project on five NNRS that they called *A Sense of Arrival*. The whole project was a learning experience for both

CCW and Creu-ad as neither had worked on this kind of project before.

The purpose of the project was to:

- Promote a wildlife experience for visitors
- To focus attention on the significance of NNRs
- To create a 'sense of arrival' through a sculptural installation/s
- To involve local people in the process of interpreting the reserve

Understanding Interpretation

'Interpretation aims to explain the meaning of things – places, objects, artefacts, activities, ideas – in ways that connect with people's lives'. Forestry Commission Scotland

'Interpretation enriches our lives through engaging emotions, enhancing experience and deepening understanding of people, places, events and objects from past and present'.
Association of Heritage Interpreters

CCW decided to work with artists on this project because:

It thought that it is important to engage with people about nature conservation on a personal and emotional level, which is not often achieved by more conventional interpretation.

- Many visitors to popular NNRS come for recreation and enjoyment and they may respond to innovative ways of communication
- It was seen to be a good way to work directly with members of the local community and especially with young people through schools

Creu-ad Heritage Interpretation was contracted to deliver this work and our role was to:

- Work with reserve wardens to decide on key values of each site and how the planned project would link with their work
- Develop design ideas and contract artists to carry them out
- Work with local community groups and individuals, if possible involving them in developing their own ideas about why the reserve was important

Two site experiences – Ynyslas Dunes and Cors Caron

- **Ynyslas Dunes:** Bar-built, drying, sand estuary; Dunes actively growing; Dune slacks are 'humid'; receives 200,000 visitors a year. The dunes are important for dune fungi, bryophytes, higher plant assemblage, mining bee particular to a few

dune systems in Wales, the *Agroeca dentigera*, a spider only known here in UK and many breeding birds.

- **Cors Caron:** Raised bog or 'mires' – largest in Britain south of Scotland; Peat; River Teifi runs through; Almost intact marginal habitats; receives 30,000 visitors a year. Landscape evolving over more than 12,000 years, three distinct habitats and associated with restoration of the red kite in Britain.

The process of engagement

- Examples of work with local people
- Workshop between wardens and artists to exchange responses to the site and ideas about how the arts could be used
- Development and discussion of initial designs – the interaction with CCW, and its partners
- Issues at some reserves, including nervousness about placing anything in such a highly protected environment

Creative communication is a process, you need to:

- Listen to the people who manage the site
- Identify key themes or messages
- Work with local communities
- Produce a plan
- Develop designs
- Consult everyone involved before implementing

Sensitivity to the site:

- Remember it is a nature reserve
- Place things with care
- Use appropriate materials
- Create an entrance situation like a temple

Evaluating the project

- Confusion between art and interpretation
- No visitor surveys
- Effects difficult to measure – may be lasting memories
- Impact on people who take part

4.7 The economic impacts of protected areas in Finland

Maija Huhtala, Finnish Forest Research Institute (Metla) / Metsähallitus Natural Heritage Services (NHS), Finland

Protected areas cover about 9% of Finland. Most of these areas, including 35 national parks, are managed by Metsähallitus Natural Heritage Services (NHS). Most protected areas are used for outdoor recreation, while having rules and regulations to ensure that this does not hinder nature conservation. The number of visits in national parks has been steadily increasing, being 1.75 million visits in 2008.



Figure 11: National Parks in Finland

The local economic impacts of protected areas have been studied in a number of case studies in Finland. These studies have suggested income effects that vary between 0.65 million and 12 million Euros and employment effects ranging from 7 to 163 man-years (Berghäll 2005; Huhtala 2006). The most obvious reasons for the differing impacts are the different characteristics of the areas resulting in diverse number of visits and visitor spending. The methods applied for economic impact estimation are also not comparable. The lack of a well-known, standardized method has led to a situation where every manager or researcher may estimate the impacts in a way that best fits his purposes.

Notes re economic impact

- Deals with local economic impacts of visitor spending on income (€) and employment (man-years)
- "Local" here means NP and its surrounding communities
- Estimation is based on the use-values reflected by visitor spending in NPs and surroundings
- How the money spent by visitors shows in local economy - or does it show at all?
- NOT the total value of the NP as non-use and non-market values are not taken into account

The effectiveness of parks and park management needs to be measured in four different aspects: ecological; social; cultural and economic. The first three of these have already been quite well covered but data about the economic effectiveness is still lacking.

Metsähallitus, together with the Finnish Forest Research Institute (Metla), has therefore launched a project which aims to build a standardised, easy-to-use tool for local economic impact assessment. As a model for the project the US Money Generation Model 2 (MGM2), an excel application constructed for national parks economic impact estimation, was evaluated as the most appropriate methodology to use. Basically the model requires three inputs which are multiplied by each other for each park separately: number of visits, average spending of the visitors, and multipliers, which reflect how visitor spending circulates and multiplies in the local economy. For the Finnish version the number of visits for each park and average spending are received from the Visitor Information Entity of Metsähallitus (ASTA) which contains data from annual visitor counting and regular visitor surveys. The multipliers are derived for this application from local input-output tables.

	Numb. of visits	Average spending / visit, €	Income effect, m€		Employment effect, man-years	
			Direct effect	Total effect	Direct effect	Total effect
Teijo 1998	30 000	22	0,65	--	7	--
Ruunaa 2003	60 000	64	2,5 - 3,5	4,2	30	--
Archipelago NP 2005	62 000	53	3,62	3,64	28	29
Pallas-Ounas NP 2006	100 000	216	9,6	12,1	145	163

Figure 12: Survey results (Total effects include direct and indirect effects. Direct effects arise when visitors spend money in local enterprises. Indirect effects occur when these enterprises buy products and services from other local enterprises)

Officially the project kicked off in January 2009. The first version of the application should be ready by the end of this year and it should be ready for the general use during 2010. As a result the direct and total income and employment effects for each area where visitor data is available are received. The application will also enable estimation of total, state-level effects by summing up the separate results.

How to communicate the results is still being planned. However, the information about the on-going project has already been spread in Metla newsletters and Metsähallitus customer magazine. The results are needed and will be communicated at three different levels: Metsähallitus requires local economic impact information to prove the financiers (Ministries) that NPs are important also in economic sense in the long run. In the short run the results will be used at regional level to increase general acceptability of the parks by promoting their economic significance. Thirdly, Metsähallitus needs the information for internal purposes such as planning and allocating investment funds. As Euros and man-years are easily understood measures, communicating the benefits should be easy. The biggest challenge will be to clarify that the figures presented in this context are only a fraction of the total value of protected areas.

References

- Berghäll, J. (2005). The regional economic impacts of nature tourism in Archipelago National Park. (In Finnish). Metsähallituksen luonnonsuojelujulkaisuja A 153. 65 p. Available in: <http://julkaisut.metsa.fi/julkaisut/pdf/luo/a153.pdf>
- Huhtala, M. (2007). Assessment of the local economic impacts of national park tourism: the case of Pallas-Ounastunturi National Park. *For. Snow Landsc. Res.* 81, 1/2: 223-228.
- Money Generation Model 2 (MGM 2). <http://web4.msue.msu.edu/mgm2/default.htm>

4.8 Communicating spiritual values in protected areas with monastic communities: the case of Montserrat

Josep-Maria Mallarach, IUCN-WCPA, Spain

Introduction

For more than ten centuries Christian monastic communities were established in most of Europe, often in unique sites or distinctive landscapes. In 2009 monastic communities are found in about 70% of Europe, including over 3000 male and female Orthodox and Catholic monasteries, and rapidly expanding in Eastern Europe after the fall of communism.

Numerous European protected areas had been established on present or old monastic lands, which had been carefully managed in previous centuries. Only a few dozen monasteries have been placed in existing protected areas. Lately, some protected areas have been promoted by monastic communities. European protected areas with monastic communities have diverse ownership and governance systems and styles concerning: boards, planning, management, public use, regulations, etc. As a result communication strategies differ very much, although usually aim at exclusive audiences.

Monastic communities, usually living in carefully selected natural settings, are the heirs of a resilient, millennia old, monastic lifestyles made up of silence, harmony, rhythm and beauty. Hermits living in solitude in nature are found near many monasteries. Some of the values they want to communicate include: awareness, serenity, interiority and self-knowledge. These values are conveyed through diverse means, usually addressing an audience attracted by spiritual reasons, distinguishing between guests and pilgrims. Traditional means include retreats, seminars, spiritual counsel, sacred art and liturgy, books, articles, etc. Modern channels include symposia, web pages, guided tours and publications in electronic format.

In addition, many monasteries produce an array of products and crafts, from books and CDs, to pottery, beverages, cheese, herbal remedies, etc. always aiming for excellence. Care for nature/ creation is at the base of the monastic tradition and there is a growing trend of increasing environmental coherence and communicating related values in many monastic facilities.

Case study: Montserrat, Catalonia, Spain

The Mountain of Montserrat combines outstanding spiritual, cultural and natural values, being considered by many as the spiritual and /or identity heart of Catalonia. Despite conflicting demands, and high pressures, there exist unique possibilities to attain positive results from developing synergies between spiritual, culturally-related and natural values.



Figure 13: **The monasteries and hermitages of Montserrat are mostly included in the Nature Reserve**

Montserrat has been considered a holy mountain over the centuries, and continues to be seen as such today by many people. Two components of the Monastery of Saint Mary motto – Nature and Spirituality – hold the key for this synergy.

Montserrat Natural Park is one of the most heavily visited protected areas of Spain with around 3 million visitors per year. Over 75% of the visits are concentrated around the Monastery of Santa Maria area. The environmental pressures and impacts of these visitors are significant: water and energy consumption, waste, noise, etc. especially around the Monastery and its access points. On peak days, congestion and traffic jams reduce the quality of the experience or even makes impossible to reach the Monastery.

There are also pressures from climbers and hikers in certain parts, which could affect some vulnerable flora and fauna species (these impacts are currently being analysed).

Using the current planning instruments there is a need to zone the protected area, so that selected portions of the mountain, connections to both Monasteries, the pilgrimage trails and the surroundings of the ancient hermitages, be devoted to silence, prayer and contemplation of nature. One portion of the existing nature reserve could be zoned as Hermit Nature Reserve, including the possibility of rehabilitating a certain number of hermitages devoted to periodical retreats for lay or religious people. Similarly, one hermitage with its surrounding gardens, water channels, cobble trails, ladders, etc. could become an interpretation centre for the hermit tradition of Montserrat.

Ongoing project

The consultancy Barcelona Media is currently working in the area to:

- create a coherent explanation of the site which is visually appealing and easy to follow
- develop means to guide the visitor to the top of the mountain using short messages and clear visual images
- make optimal use of existing facilities for displaying messages
- limit architectural interventions, improve structures and facilities that are not aesthetically adequate.
- complement explanations with the remaining stakeholders of the mountain

Recommendations

There is a need to elaborate a strategic plan to implement messages about the spiritual dimension of nature and the proper attitudes that it deserves, at all levels. This should include all the facilities of the nature park, the monasteries of Santa Maria and Sant Benet, the municipalities, and all the other organisations which are cooperating with them: from educational programmes, web pages, the train track, tour operators, guides, signposting, etc. Plan these messages so that they help to discover the relationship between nature and spirituality and the sense that have numerous signs and realities, such as bells, scattered little chapels, ambience of peace and celebration, etc. for three main audiences:

- Christian people attracted to Montserrat for explicit religious reasons
- People from other Faiths or beliefs having a general interest in spiritual matters
- Climbers and hikers, as differentiated groups

One of the goals of this cooperation should be to promote positive synergies between spiritual, cultural and natural values in all the messages designed for the general

public (i.e. Gateways of the Nature Park, the interpretative centres, and so on). These messages should underline the essential ideas, as well as the practical significance of all their implications, such as respect, silence, cleanliness.

Conclusions

- Authenticity and integrity are key
- Teaching environmental coherence by living example is most effective
- Guides, interpreters should be members of the monastic communities
- Few words surrounded by eloquent silence
- Symbolic language, e.g. sacred art supports, is powerful
- Separate, adequate styles are needed for hosts, pilgrims and other visitors
- Cooperation between monastic communities and conservationists can be very creative and rewarding

4.9 Valuing Nature Campaigns

Sue Stolton, Equilibrium Research (based on work of Luis Pabon, TNC)¹²

Introduction

Over the last two years the US-based NGO The Nature Conservancy (TNC) has been developing and piloting 'Valuing Nature Campaigns' projects, which aim to identify and communicate social, cultural and economic benefits from goods and services provided by protected areas. The identification of benefits at national and local/site level is done through a careful compilation and analysis of available data from existing research; by carrying out socio-economic valuation studies; and by gathering testimonies through stakeholder interviews. The results are disseminated to target audiences through communication strategies oriented to mobilise political will, build public support and increase domestic and international funding.

Examples of Valuing Nature Campaigns in Latin America

- **Peru**

Peru is a mega-biodiverse country with a rapidly expanding protected areas system. In the last 20 years, the area protected by the National System of Natural Protected Areas (SINANPE) has increased dramatically, from 4.4 million ha in 20 protected areas in the 1980 to more than 18 million ha in 2007. This progress in terms of geographic coverage and biological representation has not been matched by an increase in personnel or technological and financial resources needed for the management of a bigger and more complex system.

The Protected Areas Agency at the Instituto Nacional de Recursos Naturales (INRENA) therefore carried out a national level study to showcase the different benefits provided by protected areas to the national economy. The study demonstrated that the current and potential benefits of Peru's protected areas contribute over US\$ 1 billion per year to the national economy.

The project's objectives were to:

- Better position natural protected areas on the political agenda and on plans for national development

¹² The text here is based on the TNC publication by Pabon-Zamora, L., J. Bezaury, F. Leon, L. Gill, S. Stolton, A. Groves, S. Mitchell and N. Dudley. 2008. "Nature's Value: Assessing protected area benefits." Quick Guide Series, ed. J. Ervin. Arlington, VA: The Nature Conservancy. 34 pp. Available at www.protectedareatools.org

- Review the prospects for finding new financial resources for protected areas
- Look specifically at the contribution of protected areas to the development of sustainable tourism
- Review options respective to payment for environmental services schemes
- Develop alliances with the private sector
- Run joint projects with local and regional governments.

This was an ambitious project - eight key values were chosen as the focus of activities (Water human consumption; Hydro energy production; Irrigation; Tourism fees; Tourism economy effect; Non-timber forest products; Erosion protection; Carbon storage). There was very little primary information available in the country on the values, and thus the data collection stage of the project took about two years, followed by a further year to analyse the results and write up the findings.

Data were collected and reviewed for all the values identified. For example, for every US\$ invested in tourism in protected areas the return was US\$ 46; around 2.7 million people use water originating from 16 protected areas (value of approx. US\$ 81 million); 60% of the hydro-electricity comes from rivers in protected areas and in total current and potential benefits of protected areas contribute over US\$ 1 billion per year to the national economy.

- **Mexico**

Protected areas in Mexico are not isolated from the national economy. Their strategic importance to biodiversity conservation and the social programmes developed within them are seen as vital components in the goal to achieve sustainable development. But running a successful protected area system costs money. In the last few years the budget assigned to federal protected areas by the government has increased significantly thanks to the efforts of the executive and legislative branches of government, and of many protected area practitioners in Mexico, to highlight the multiple benefits derived from protected areas and associating this with the economic and social values they provide.

TNC has initiated a process for documenting goods and services provided by the country's protected areas including: tourism, carbon sequestration, water provision services, watershed protection, disaster mitigation and fisheries. As an example, Mexico is the eighth most important tourist destination in the world, with around 21.4 million tourists arriving in 2006. Preliminary results from TNC's analysis show

that federal protected areas currently receive around 14 million national and international visits per year. Tourist expenditure in these areas amounts to some US\$ 660 million dollars per year, which is equivalent to 5.5 per cent of the international traveller expenditures for the whole country.

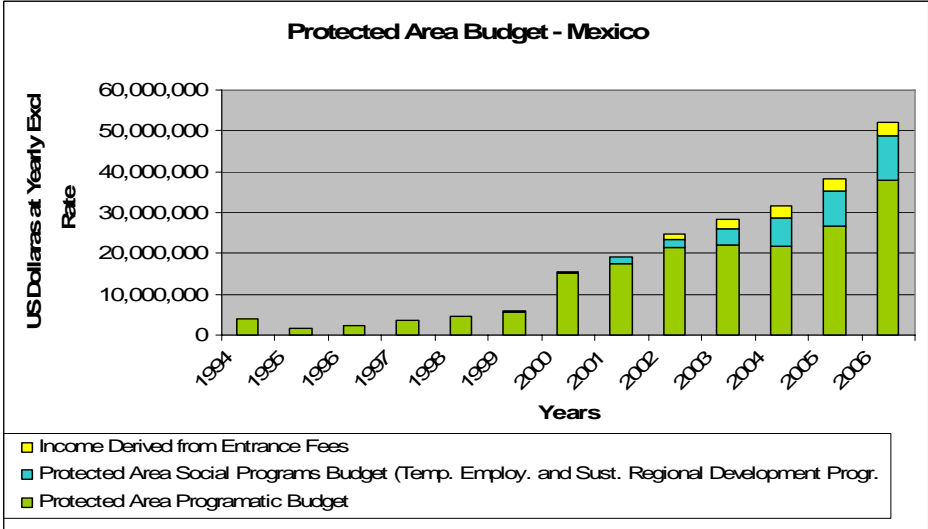


Figure 14: Protected Area Budget in Mexico

Mexico’s protected areas also have a global value. Researchers have tried to calculate the economic value of protected areas’ role in mitigating global climate change through reduced emissions from deforestation and degradation (REDD); finding that Mexican Federal and State protected areas store an equivalent of 5.6 years of Mexico’s CO₂ emissions (at the 2004 rate).

Valuing Nature Campaigns

TNC’s Valuing Nature Campaigns aim to identify, assess and disseminate information about the environmental, social and economic benefits provided by protected areas in order to:

- generate political will
- create public awareness
- mobilise and increase funding for protected areas

Figure 15 sets out some actions you need to take in order to implement a Valuing Nature Campaign. The process should be iterative and the steps may take place in a different order or some could be carried out simultaneously, depending on each situation. The two threads of Valuing Nature Campaigns – the assessments and the associated communications strategy – should however be considered throughout.

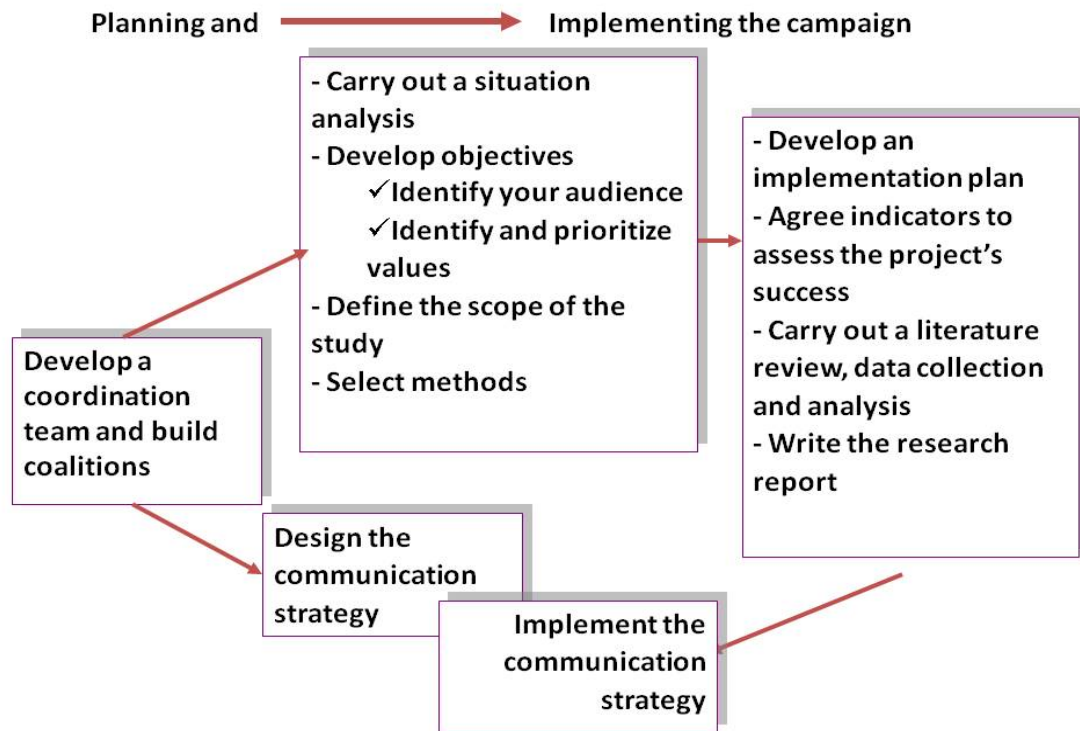


Figure 15: **The Valuing Nature Campaigns process**

- **Develop a coordination team and build coalitions**

Ideally, Valuing Nature Campaigns should rely on existing in-country coalitions working on protected areas (e.g. partnerships formed around the PoWPA). If no coalition is in place, an effort should be made to engage the right people at the beginning of the process, with teams and coalitions including: National government; environment and development groups; researchers; communication specialists; local stakeholders etc.

- **Situational analysis: Assessing the context**

The campaign should not take place in isolation from the policy context and from the people who will ultimately use the results in decision-making. To help shape the case the situational analysis should first review issues such as: need; political environment; practical implementation and community perceptions. The following list of questions can help frame the discussion:

- Urgency and need for action now?
- Consequences of not acting
- Impacts of the campaign: on PA objectives/on local communities
- Are there other alternative actions that could achieve these objectives?
- Availability of technical capacity
- Assessing the political environment – who and how to influence

- **Develop objectives**

Once you have carried out the situation analysis you should be in a good position to define the objectives of the campaign. These should be formed as specific statements detailing the desired accomplishments or outcomes. A good objective should be impact oriented, measurable, time limited, specific and practical, e.g., double protected areas budget by X year; create new protected areas to fill urgent ecological gaps in the system by X, secure government commitment to protect X per cent of all terrestrial and marine areas by X year etc.

- **Identify your audience**

In order to identify the objectives of the campaign it is important to know your audiences and the messages that will resonate to them. Issues to consider include:

- Highlight values that are relevant to the specific audience
- Who will be using the information in the decision-making process
- Individuals or groups who have the ability to influence the policy or public funding outcomes you aim to achieve

- **Prioritise Values**

To try to undertake a comprehensive assessment and valuation of all the services provided by a protected area system is probably asking the impossible. But by focusing on selected benefits of some carefully chosen values, a compelling case can be made to your target audiences. To help this prioritisation process it may help to think about:

- What values (benefits and services) have a major potential for being successfully communicated to target audiences?
- Is data available on the values selected? Have studies been carried out?
- Economic arguments alone are not always sufficient - cultural and social arguments are very important for most societies

- **Agree the methodology**

There are many different methodologies available; which one is chosen should be related to how you plan to communicate the benefits of the values the protected areas conserve. Examples:

- Mexico: Studied the goods and services provided by the country's protected areas including tourism, carbon sequestration, water provision services, watershed protection, disaster mitigation and fisheries

- Peru: Studied Human water consumption = National market prices; Hydro energy production = National market prices of energy transmission; Irrigation = National market prices of agricultural products, etc

- **Scope of work**

There are several important issues to consider when defining the scope of the project, including identification of:

- Financial resources available
- Time lines
- Geographical areas
- Type and intensity of consultation processes and participation

- **Implementation plan**

When planning is complete you can move into the implementation phase of the campaign. It is best to develop a thorough implementation plan to help guide the process and to develop measures of success to monitor achievements; this will include:

- List of main values, methodology and indicators
- Agree indicators of success (output and outcome measures)
- Literature review: Report on available data and information
- Comprehensive report on protected areas values, benefits and services including scenario analysis and alternatives
- Executive summary
- Communication materials designed and launched

- **Communication strategy**

The success of Valuing Nature Campaign will to a large extent depend on the effectiveness of the communication strategy and its ability to achieve the desired results. The development of the communication strategy should start at the beginning of the project. The strategy should inform the project on the best arguments to pursue or the target groups to focus the study and the communications campaign on. Issues to bear in mind when developing the communications strategy include:

- ✓ Set clear goals for communications that relate directly to the campaign objectives
- ✓ Identify target audiences for communications during the planning stages of the project

-
- ✓ Develop key messages based on the findings that present a compelling argument for target audience
 - ✓ Identify the most effective communications channels to reach target audiences and deliver key messages (media, launch events, workshops, print materials or paid advertisements)
 - ✓ Identify key spokespersons based on relevance to target audience
 - ✓ Have a communications strategy budget

Lessons learned from the implementation of pilots in TNC

Lessons include:

- Clear objectives, timelines, budgets
- Hire the right consultants to undertake research
- Develop communication plan from the beginning
- Have a simple but good implementation plan to guide you
- Peer-reviewed secondary information and studies
- Do not get overwhelmed with data
- Include cultural as well as economic values
- Produce short reports that people can understand
- An academic study will not fulfil the purpose

5 Working groups

5.1 Workshop introduction: participants' wishes, expectations and main questions

How do we communicate and to whom?

- How do you reach a wide audience about the values and benefits of protected areas?
- How do you communicate benefits to local people?
- How do we educate protected area professionals (i.e. those in higher education and protected area administration and management) to communicate the values and benefits of protected areas to non-professional audiences?
- Whose values are we trying to understand and communicate; and who is the audience?

What can we gain from better communication?

- Increase the relevance of protected areas
- Make the case for protected areas more effectively to decision and policy makers
- Use the values and benefits of protected areas to bridge the gap between nature conservation and local development

Understanding specific values and benefits

- Role of sustainable tourism as a major benefit
- Increase understanding about the economic impacts of protected areas
- Increase interest in nature conservation

Sharing and networking

- Share experiences and lessons learned – in particular about activities and events which communicate to local people and protected area professionals about values and benefits
- Developing networks to share experiences

5.2 Session on why protected area values and benefits are important

Why do they matter?

- Justification (for funding and gaining political support) for the existence of protected areas
- Need to relate to diverse values held by people
- Helps to involve people in protected areas
- Learning, sharing, understanding and finding a common ground
- Arguments to change behaviour and actions - changing lifestyles
- Making the case for economic and other benefits, i.e. those without a monetary value
- Health of ecosystem
- Protect and maintain protected areas
- Educational laboratory for everyone to learn about
- Cultural and traditional land uses which support nature and biodiversity

To whom?

- Everybody but they don't know it!
- Scientists, artists
- Users of the resources
- Visitors/tourists
- Local people
- Politicians
- Policy makers
- Tourism
- Educators (to reach younger audiences)
- Funders and NGOs
- Conservationists
- Agricultural organisations and water suppliers

Two key themes:

Justification – users, politicians, local people, educators, funders

Learning/sharing - educators, local people, policy makers, funders, NGOs, scientists

5.3 Feedback after training and review of PA-BAT

Following a training session to introduce the PA-BAT to participant's feedback on the use of the tool and suggestions for additions or adaptations were made by the groups.

- *Group 1*

Multi-purpose park – lots of minor (very minor) values and one major value

Important to include context comments

Amount of year – seasonal uses might be better wording

Why US\$?

More detail – more grades of assessment

Need better glossary

First value should be less than 10%

- *Group 2*

Useful – research/education especially difficult to assess

Difficult to assess different stakeholders

No values missed, some revaluation

Need empty column to add additional stakeholders

People living in protected area are a very broad number of stakeholders

Should we use one sheet for various values under one heading – or lump all values together?

Caveats – difficult term, use a different word

Knowledge (local knowledge) – get the wording right

Tourism related to educational facilities

- *Group 3*

Did raise some issues that had not been raised before – some food for thought

Needs flexibility for different people

Area involved – again range not wide enough

Which date to put in “period of assessment”?

Stakeholders who benefit

- *Group 4*

Good: it gets the thought processes going

See benefit of going through this

Whether the benefit was of minor or major importance was sometimes difficult to assess

Economic direct/indirect?

Climate change: reducing/avoiding emissions

Nature benefits but not necessarily benefits due to the overall existence of protected area

Defining stakeholders

Wetland areas (?)

Global community (?)

Public transport policies can reduce carbon

Soil erosion linked to bad management – difficult in relation to Cat V areas

5.4 Working groups on communications plans

Three groups were set different communication challenges.

Group 1: Develop a communications strategy in order to raise support for protected areas from local governments, local people

Define the scope

- Aspects that needs to be taken into consideration for defining the target groups
- Who are the decision makers?
- What level/levels of government have more direct connection with the PA?
- What level of government is local?
- Politicians may also be stakeholders as business, special group of interest, etc.

Communication objectives

- Going against the mainstream trends..
- Persuade local people that benefits to wider population are benefits to them
- Balancing the need to keep core traditional values with the desire of development
- Persuade politicians that PA is in their interest as politicians
- Reconcile different approaches to the PA

Communication targets

- People & institutions sitting on Board of PA

- Other relevant governmental institutions
- Allies / partners: local business, health professionals, spiritual leaders, school teachers, children, personalities
- Beneficiaries / users
- Problem groups: those that are behind the main threats

How to communicate

- Use expertise in conflict resolution, in communication psychology, interpreters
- Use a participatory approach, including opinion leaders
- Take into consideration the mindset of target groups: find the right language
- Use techniques that bring a scenario to life: play, poetry, music, film, etc.
- Build bridges between opposing stakeholders, aiming towards consensus
- Threat reduction participatory workshops

Evaluation

- Pre-campaigning analysis of situation
- Evaluation linked to the PA management evaluation
- Re-assess regularly
- Clear goals, indicators allowing measurement

Group 2: Develop a communications strategy in order to counteract development pressures that are supported by national governments or any other dominant stakeholder

Used the problem in Vitosha in Bulgaria – most visited PA near Sofia; major conflict with company wanting to enlarge existing ski area. Has approved management plan with zoning areas prohibiting new developments. Park admin found it difficult to get government or public support for the protected area objectives.

What do you want to achieve?

1. Build public support for the park and its management plan
... and through this stop the development of the ski area (short-term goal)
long-term goal (as this case may arrive again) – valuing nature and national parks

2. Whom is the communication targeted?

	For/against ski area	priority
General public – Sofia/Bulgaria	Neutral	Long term
Visitors to the park	Against but some support (3 million visitors)	Short and long term
govt	For – but complicated	
politicians	For – economic benefits	
Developers	for	
Service providers (within park)	70% against (will impact their business)	
Environmental NGOs	against	Short and long term
Skiers	For – some against	

Visitors and environmental NGOs are the key target groups in short term; plus general public in the long-term.

Use these groups to influence the politicians

Focus on visitors

What would help to influence visitors?

- ✓ Survey of visitors would help to understand audience and help to promote issue – include visitor count
- ✓ Ask some economic impact of park in survey
- ✓ Complete benefit assessment
- ✓ Identify champions (celebrities and public figures) who will talk in favour of the park – perhaps for each value of the park (perhaps involve Olympic committee)

What are the key messages?

Visitors to the park – message should be:

- ✓ Positive
- ✓ Management plan in place - summary of plan available

Suggested slogans:

“Your park is precious; it is close to you, look after it”

“The park is special, needs special management and is well-managed”

“There is only one Vitosha” “destruction of mountain by offshore investment bank”

(If visitors agree with these statements need to make it then clear what they should do: whether to sign a petition, lobby politicians, etc)

Dealing with politicians:

- ✓ It would be good to make them feel it would actually be useful for their political career to support a PA
- ✓ Make big events and give them the opportunity to appear in public
- ✓ Make partners speak out the PA benefits they perceive

Communication tools

- ✓ Adverts in national papers
- ✓ Major entrances to the park – places to convey messages
- ✓ Web site
- ✓ Schools and clubs – talk to classes, directors of education, visitor clubs etc, guided tours for pupils
- ✓ Leaflets inserted into local papers
- ✓ Major event 75th anniversary – oldest park in the Balkans, people have enjoyed the park for many years
- ✓ Find a well-know person who uses or knows the protected area to front a public campaign
- ✓ Consider setting up a "friends of..." scheme to promote wider ownership of the protected area

Evaluation

- ✓ Survey of public support linked to visitor survey
- ✓ How many volunteers involved in park (now and in a few years)

Question: Natura 2000 area – could lobby EC (??)

Group 3: Develop a communications strategy in order to influence EU policies and funding streams to take greater account of the values and benefits of protected areas

The group started by assessing in which of the key areas of EU operations would the PA values (as identified in the PA-BAT) be of relevance.

Values	Environment	Agriculture, Rural & Fish	Education & training	Regional development	Enterprise	Research
Biodiversity	✓	✓	✓	✓	✓	✓
Employment		✓		✓		
Fishing and spawning	✓	✓				
Wilderness	✓					✓
Recreation and tourism	✓	✓		✓	✓	
Traditional agri, grazing, pollination	✓	✓				
Climate change	✓	✓				✓
Water use and quality	✓					
Knowledge building			✓			✓
Education			✓			
Genetic material	✓	✓				✓
Soil stabilization	✓	✓				
Non-wood, timber, medicinal resources, wild plants	✓	✓				
Coastal protection integrated	✓			✓		
Flood prevention	✓			✓		

Group focussed on agriculture and rural development as the most important areas.

What do you want to achieve?

- ✓ More attention and support to protected areas
- ✓ Greater recognition of PA values
- ✓ More money to PAs (mid-term review of Common Agriculture Policy)
- ✓ Integrate Natura 2000 and PA systems

To who is the communication targeted?

- ✓ DG agriculture and rural development (A&D)
- ✓ Members of the European Parliament on committee for A&D
- ✓ Committee of regions
- ✓ National and regional ministries (create pressure from below) particularly those dealing with A&D

What are the key messages?

All values of protected areas contribute to sustainable rural development

What distinguishes PAs from surrounding areas – what is better (the answer is the key message)

- ✓ The area has specific management
- ✓ Best practice model
- ✓ LEADER+ schemes work better (use the language of the target group)

The higher the level of protection,

- ✓ the higher the biodiversity value
- ✓ the more effective the conservation
- ✓ Partnerships with farmers??

Safeguarding biodiversity and sustainable agriculture is best served through harmonised protected areas.

Key messages

- ✓ Employment in rural areas

Protected areas make a significant contribution to regional economy, including job creation, often through tourism

- ✓ Tourism

Protected areas are often important tourist destinations for alternative forms of tourism

- ✓ Traditional agriculture/grazing

Agri-environment measures are best served by protected areas and include traditional forms of agriculture, grazing in hilly areas

- ✓ Climate change

CC threatens some forms of land-use, PAs offer means to counter this threat (but difficult message)

- ✓ Soil stabilisation

Important for PAs with big agricultural sector – link to agri-environ measures, EU soil directive

✓ Products

Regional marketing derives from this value

Communication tools

Package of publications

Short statement of key messages – backed up by research and examples

Working together with allies and partners (NGOs, DG Env., MEPs) to coordinate activities and voices.

Networking and info events

Linked to CAP mid-term review

National and regional activities

Events in protected areas to bring together policy-makers and practitioners (top down/bottom up)

Press strategy at national and European level

How will you evaluate success?

Attention:

- ✓ Greater no. of MEPs taking interest in PAs and policy relevance (document)
- ✓ Evidence of a deeper relationship with DG agri
- ✓ No. of people attending events
- ✓ Media coverage

Understanding:

- ✓ Feedback from key persons (previously identified)

Positive recognition:

- ✓ Invitations to protected area experts in policy fora
- ✓ Possible influence on legislation

More money into protected areas from DG Agri funds – compare 2007-13 with 2014-2020

Protected areas and Natura 2000 not seen as separate.

5.5 Workshop lessons learned and take home actions

1. Take home message

- Focus right message to right people
- Need to send the right message to the right people; can reach everyone but need the right message
- Networking and greater understanding of cultural and spiritual issues
- New ideas and information – started the thought processes
- How you can communicate a wide range of values to a large audience
- Sharing of new experiences about old problems
- Learning more about heritage interpretation and how it can be applied to protected areas
- Greater understanding of spiritual values of protected areas
- Realisation of the issues protected areas need to communicate
- Learning about all the different values
- See the concrete way of assessing values and benefits using the PA-BAT
- Work on specific case studies
- A lot of work still needs to be done – great to establish new partnerships to help solve these problems
- Realisation that the park I work in does not have a communication strategy and what are the measures of success
- Try out PA-BAT
- Importance of creating an entrance point that signifies the value of the area (like a temple entrance)
- Use of art in understanding values
- Finnish example – developing a tool for system wide assessment and plans to communicate it
- Biodiversity is not a strong enough argument to ensure success of PAs
- Growing acceptance of intangible values
- The role of art, cultural values of Slovenia, PA-BAT a very useful tool could promote protected area practitioners to take into consideration full range of values
- Recommendations being targeted and clear
- Good to share diverse experiences across Europe

2. Main challenge

- Changing people's mind-sets
- Evaluating results of communication campaigns
- Putting these arguments across in the political environment where the natural environment has a low value
- Difficult to link biodiversity with the values that people understand
- PA-BAT how to analyse assessments – who to sell different targets to
- How to disseminate the results
- How to contribute what has been learnt over the last few days to local protected areas
- Further developing the use of the PA-BAT
- Protected area specialists are not trained in these issues
- How to keep up with all these new tools etc
- Big challenge to overcome other sectors
- Vision that other stakeholders and partners would talk about the values and benefits of protected areas
- Scientific ideology – science dominates the arguments and limits taking into consideration many other values to reach broader audiences; Latin words are not enough

3. Anything you missed

- Quite comprehensive
- More in-depth exercises, using more detailed case studies, needed more time
- Some countries missing to exchange experience
- Communications expert

Contribution	Mark	Comment
<p>Health: Challenges for intersectorial cooperation on nature and health - The call for evidence versus lay knowledge and the search for new health promotion windows</p> <p><i>Jesper Holm</i></p>	2.5	<p>Too complicated – what was the message?</p> <p>Interesting material but presentation too academic</p>
<p>Climate change mitigation and adaptation: The carbon-biodiversity atlas of UNEP-WCMC</p> <p><i>Jutta Stadler</i></p>	1.7	<p>Clear presentation, but relevance in relation to EUROPE?</p> <p>This can be really a great tool to show some values/benefits to different target groups</p> <p>It was great to learn about the Atlas. I definitely share it with friends working in our climate change dept. I already did.</p> <p>Interesting tool. Useful addition in evaluating PAs.</p>
<p>The role of protected areas for tourism and the public perception of this benefit</p> <p><i>Richard Blackman</i></p>	2.1	
<p>The spiritual value of protected areas in Europe</p> <p><i>Josep-Maria Mallarach</i></p>	1.1	<p>Enlightening</p> <p>New way and new point of view to look at the PA.</p> <p>Very interesting and new area for me.</p> <p>It was a whole new way of thinking for me, it was great.</p> <p>Useful and pleasant insight into a topic that has always been in the back lines when speaking of nature conservation.</p>

Contribution	Mark	Comment
<p>Arguments for Protection: The role of protected areas in drinking water supply and disaster mitigation</p> <p><i>Sue Stolton</i></p>	2.1	The publications will be useful in my work.
<p>Exercise on WWF's Protected Area Benefits Assessment Tool</p>	2.2	<p>Too short time, and not enough explanation.</p> <p>The tool needs to be made more precise and simpler.</p> <p>A bit too few instructions on using the tool.</p> <p>The guidelines were not quite enough about the tool and the time was limited for the activity.</p> <p>Through exercise like this is the best way to get to know a certain tool.</p>
<p>"Healthy parks, healthy people": Müritz National Park, Germany</p> <p><i>Jens Brüggemann</i></p>	1.2	<p>Great initiative, new way (for me) to think about communicating value/benefits.</p> <p>I liked the presentation and the information in it.</p> <p>Different view point opening new partnership possibilities.</p>
<p>Communicating about Scotland's protected areas and wild places – simplifying the language</p> <p><i>Richard Davison</i></p>	1.8	<p>Very useful information with "easy" understandable language.</p> <p>I think simplifying the language is very important so I appreciate the presentation.</p> <p>Concrete, useful and well presented topic.</p>
<p>Cultural values: maintaining traditions and promoting social cohesion in Slovenia</p> <p><i>Boris Grabrijan</i></p>	1.3	<p>It was a very inspirational example.</p> <p>Helping to understand all the different values existing in a protected territory.</p>

Contribution	Mark	Comment
Marketing agrobiodiversity: Rhön Biosphere Reserve, Germany <i>Doris Pokorny</i>	1.2	
Development of an exemplary energy conception for a community in the Middle Elbe Biosphere Reserve <i>Thomas Hartwig</i>	3.3	<p>Message not very clear Speaker quite difficult to understand (language barriers). The presentation was hard to follow for me. Not clear enough topic and messages Material interesting but presentation difficult due to speaker's lack of confidence in English.</p>
Communicating protected area significance through creative experience in the NNRs of Wales <i>Shelagh Hourahane</i>	1.4	<p>Very inspirational presentation and topic. A good insight into interpretation.</p>
The economic impacts of protected areas in Finland <i>Maija Huhtala</i>	1.8	<p>Very interesting tool can be maybe implemented in some other PAs in Europe. The presentation was a bit hard to follow for me but the topic was very interesting and important. Concrete way of assessing.</p>

Contribution	Mark	Comment
Spain: Spiritual case study <i>Josep-Maria Mallarach</i>	1.2	<p>Enlightening</p> <p>Very well prepared presentation and gives new look for PA values/benefits.</p> <p>Beautiful example. Silence is important. The presentation was very inspiring.</p> <p>Showing that every aspect in connection with nature protection should be taken into account. Insight into a topic I've never imagined could play a role in PA's management.</p>
Overview of The Nature Conservancy's "Valuing Nature" campaigns <i>Sue Stolton</i>	2.5	Too rushed
Working groups on developing communication strategies	1.5	<p>Relevant! But maybe better guidance needed by communication expert?</p> <p>Great part but too short time for more training</p> <p>We had the chance to talk and discuss and I liked all the friends, stories and I had very nice time and learned a lot.</p> <p>Could be of a benefit if we had experienced people to guide our work. Maybe having case studies for working groups would pay off.</p>
Developing and discussing recommendations	1.4	This is very important and useful to do such a thing at the end of the workshop

2. Which lessons learned will you take home? What can you implement in your (daily) work?

- The case studies
- There is no panacea. We have to think and work a lot. The biodiversity is not enough! All lectures were very interesting.
- Be more strategic and try to find indicators to measure success
- Finish example – I will think how to use this tool in our reality
- We need to work together
- About the spiritual case studies presentation
- Very good network. There is a diversity of different ways how people value protected areas but the challenge remains how to convey the messages of biodiversity protection in a way that respects and acknowledges local values.
- The complexity of the problems of defining and communicating PA values and benefits. Extend my work to communicate a fuller range of values.
- To think more targeted, when “selling” values + benefits to different recipients.
- People are same although they live in different parts of the world, so whenever I feel depressed and hopeless I will remember that and try to relax; always think about cultural & spiritual values in communication to reach people; and remember to have some fun because otherwise it is impossible to continue and to struggle.
- As a PA manager you can reach everybody and send your message. You just need to find the right way and time, and place, and method, and channel to do it.
- Ideas and information can be applied in work.

3. Which parts were the most important, relevant and why?

- Presentation
- All
- Spiritual values – new insights
- Last day – working groups, bring the most ideas to solve “local problems”
- All the parts!
- Discussion, work groups
- Those case studies that showed possible solutions (health, art-creation), group work
- Discussions because I am interested in the best and worst practices in different countries

- Methods of evaluation, wide range of benefits, importance of communication
- Working groups on Friday.

4. What was missing in terms of content or methods?

- Nothing
- Communication expertise
- Too short time in working groups
- The methods need a little corrections and to be tried in different region
- Maybe a bit discussion (could be more)
- Development of ideas into actual case study work.
- There could have been a little more facilitation which might have helped more relaxing and creative thinking.
- PR expert
- On this evaluation form there are two scales. You could use just one

5. What topics should have been given less importance or ignored?

- No one
- All relevant. A good range that revealed complexity.
- There were no topics of less importance but it should have been better to have more importance on actual communication methods.
- None of the discussed

6. Participation: To what extent do you feel you had an adequate opportunity to contribute your own views?

1: Not at all	2: Little	3: Average	4:Very good	5: Excellent
		X x	X x x	X x x x x x x

Average: 4.5

Comment: It was an excellent environment.

7. Were you satisfied with the facilitation?

1: No	2: Poor	3: Average	4:Very good	5: Excellent
			X x x x x	X x x x x

Average: 4.5

Comment: But it could have been better if we had more activities; The working groups were not always well facilitated

13. Other comments:

- Thank you!
- Thank you!
- Very positive workshop and very useful!
- A very enjoyable seminar. Good because it WAS 3 days and gave more time than usual to work through issues.

6.2 Participants

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6.3 Agenda



Communicating values and benefits of protected areas in Europe

April 14th – 18th, 2009

at the

International Academy for Nature Conservation
Isle of Vilm

organised by

The German Federal Agency for Nature Conservation (BfN)
in cooperation with EUROPARC Federation



Seminar Aims

- To present the range of arguments available for protected areas (PAs) and discuss them in the European context
- To discuss some of the benefits and values in more depth in order to fully explore their meanings and usefulness in the European context
- To work with WWF's "Protected Areas Benefits Assessment Tool" (PA-BAT) in order to equip the participants with a method to identify and assess the values and benefits of their own protected areas
- To discuss ways of better communicating and using the values and benefits for the various strategic target groups and stakeholders in order to generate political will, create public awareness, and mobilize an increased funding for protected areas.

Outputs

- Review of values and benefits of protected areas relevant in Europe
- Exchange good practises of communicating values and benefits
- Develop recommendations to help protected area professionals to better communicate the values and benefits of their protected area
- Establish a network for the better communication of values and benefits of protected areas in Europe

Outcomes

- Increased awareness of the range of values and benefits delivered by PAs
- Participants able to work with the PA-BAT tool
- More political, general and financial support for protected areas in Europe due to the demonstrated multitude of services they deliver

Tuesday, 14th April, 2009

18:20 *Registration and dinner*

20:00 Welcome, Introduction of participants
Gisela Stolpe, BfN, Germany

Wednesday, 15th April, 2009

07:30 *Breakfast*

INTRODUCTION

09:00 Overview of benefits, values and services of protected areas (PAs)
Olaf Ostermann, Ministry for Agriculture, Environment and Consumer Protection Mecklenburg-Vorpommern / Europarc Federation, Germany

09:45 Benefits and values: Why do they matter and to whom?
Facilitator: *Jens Brüggemann, National Park Müritze, Germany*

10:15 *Coffee / tea break*

10:15 Overview of international activities related to values and benefits of PAs
Sue Stolton, Equilibrium Research

OVERVIEWS OF INDIVIDUAL VALUES AND BENEFITS

11:15 Health: Challenges for intersectorial cooperation on nature and health - The call for evidence versus lay knowledge and the search for new health promotion windows
Jesper Holm, Roskilde University, Denmark

11:45 Climate change mitigation and adaptation: The carbon-biodiversity atlas of UNEP-WCMC
Jutta Stadler, BfN, Germany

12:00 The role of protected areas for tourism and the public perception of this benefit
Richard Blackman, EUROPARC Federation

12:30 *Lunch*

14:00 The spiritual value of protected areas in Europe
Josep-Maria Mallarach, Spain

14:30 Arguments for Protection: The role of protected areas in drinking water supply and disaster mitigation
Sue Stolton

15:00 *Coffee / tea break*

IDENTIFYING VALUES AND BENEFITS: USING WWF'S PROTECTED AREA BENEFITS ASSESSMENT TOOL (THE PA-BAT)

15:30 Presentation; discussion and working groups
Sue Stolton and Alexander Belokurov, WWF International

18:30 *Dinner*

20:00 Feedback from using the PA-BAT

Thursday, 16th April, 2009

07:30 Breakfast

COMMUNICATING THE VALUES AND BENEFITS – PROTECTED AREA EXPERIENCES

09:00 “Healthy parks, healthy people”: Müritz National Park, Germany
Jens Brüggemann

09:30 Communicating about Scotland's protected areas and wild
places – simplifying the language
Richard Davison, Scottish Natural Heritage

10:00 Coffee / tea break

10:30 Cultural values: maintaining traditions and promoting social
cohesion in Slovenia
Boris Grabrijan, Kolpa Nature park, Slovenia

11:00 Marketing agrobiodiversity: Rhön Biosphere Reserve, Germany
Doris Pokorny

11:30 Development of an exemplary energy conception for a
community in the Middle Elbe Biosphere Reserve
Thomas Hartwig, Middle Elbe Biosphere Reserve, Germany

12:00 Communicating protected area significance through creative
experience in the NNRs of Wales
Shelagh Hourahane, Creu-ad Heritage Interpretation, Wales

12:30 Lunch

13:30 Guided tour of Vilm nature reserve
Judith Jabs, BfN

15:00 Coffee / tea break

15:30 The economic impacts of protected areas in Finland
Maija Huhtala, Finnish Forest Research Institute

16:00 Spain: Spiritual case study
Josep-Maria Mallarach, Spain

16:30 Overview of The Nature Conservancy's “Valuing Nature”
campaigns
Sue Stolton

17:00 Discussion
Facilitated by Jens Brüggemann

18:30 Dinner

Friday, 17th April, 2009

07:30 Breakfast

COMMUNICATING THE VALUES AND BENEFITS

09:00 Introduction to working groups
Jens Brüggemann

09:30 Working groups (coffee break included)

12:30 Lunch

14:00 Presentation of working groups

15:00 Recommendations for individual protected areas, PA agencies, NGOs and EUROPARC Federation on how to promote the wider values of protected areas
Facilitated by Olaf Ostermann

16:00 *Coffee / tea break*

16:30 Open questions, conclusions and way forward
Sue Stolton

17:15 Evaluation of the workshop

18:00 Closure of the workshop
Gisela Stolpe

18:30 *Dinner*

20:00 Farewell party with traditional food, drinks, music, dances etc. brought by the participants

Saturday, 18th April, 2009

07:30 *Breakfast*

07:40 Departure of the boat from Vilm

08:05 Departure of the train from Lauterbach Mole

09:40 Departure of the boat from Vilm

10:05 Departure of the train from Lauterbach Mole