## Wilderness in the Czech Republic

Handrij Härtel, Bohemian Switzerland National Park (CZ)

## **International Frameworks**







### Conference on Wilderness and Large Natural Habitat Areas in Europe

Czech Presidency of the EU Council and European Commission 27-28 May 2009, Prague



EU2009.C2



### Conference hailed as a success - An action agenda for Europe's remaining wild areas

The EC Presidency conference on wilderness and large natural habitat areas duly took place on 27th and 28th May.

More than 240 participants from 40 countries from governments, nature agencies, conservation NGOs, academics, individuals and interested parties to landowners, agriculture, forestry, business and other sectors for the first time joined efforts to focus action on the remaining wild areas of Europe.



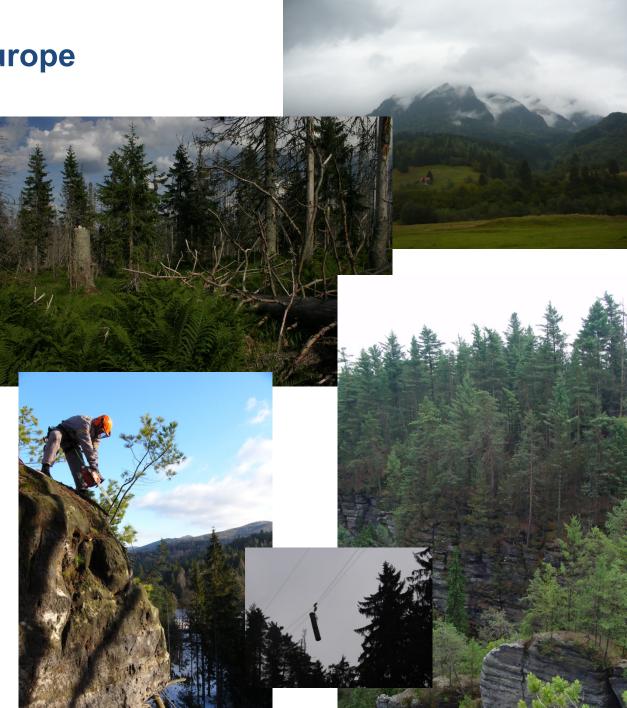
### **Wilderness in Europe**

## Conference Prague V 2009

### 3 pillars of "wilderness areas"

- pristine areas
- non-intervention areas
- restoration areas

## Significantly broader than IUCN category Ib





### Guidelines for Applying Protected Area Management Categories

Edited by Nigel Dudley





### Wilderness Protected Areas:

### Management guidelines for IUCN Category 1b protected areas

Prepared by the IUCN WCPA Wilderness Specialist Group Sarsh A. Casson, Vance G. Martin, Alan Watson, Angie Stringer, and Cyril F. Kormos, Volume Editors

Authors: Sarah A. Casson, Vance G. Martin, Alan Watson, Angie Stringer, Cyril F. Kormos, Harvey Locke, Sonali Ghosh, Steve Carver, Tom McDonald, Sharon Shay Sloan, Ilarion Merculieff, John Hendee, Chad Dawson, Susan Moore, David Newsome, Steve McCool, Roger Semier, Steven Martin, Robert Dvorak, Chris Armatas, Ralph Swain, Brad Barr, David Krause, Nicole Whittington-Evans, Lawrence S. Hamilton, Joel Holtrop, James Tricker, Peter Landres, Elizabeth Mejicano, Trimble Gilbert, Toby Ackroyd, Barbara Zimmerman and Jim Thomas





Best Practice Protected Area Guidelines Series No. 25



Convention on Biological Diversity





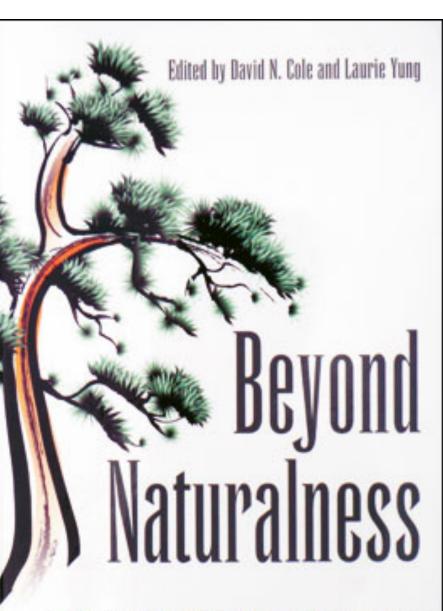


Commission

Technical Report - 2013 - 069

### Guidelines on Wilderness in Natura 2000

Management of terrestrial wilderness and wild areas within the Natura 2000 Network



Rethinking Park and Wilderness Stewardship in an Era of Rapid Change

Environment

## Naturalness concept

 Naturalness apears a guiding concept throughout protected area policy

## Many dilemmas and limits

- Influence by indigenous populations
- the rise of non-equilibrium dynamics
- shift from the nature balance to the flux of nature
- deterministic models are too simple to describe the complexity of nature dynamics
- stochastic processes (chance, events) play important role
- are we able to define what is *natural* ?

- The concept of naturalness does not provide sufficent guidance for wilderness stewardship
- Anthropogenic change is increasing in both extent and magnitude.
- The managers responsible for stewarding parks and wilderness areas must decide whether respond to such changes by intervening in ecosystem processes



## Various wilderness approaches:

Although there is substantial overlap among these approaches, each differs in its central emphasis

## Restoration of altered ecosystems

## (approximations)

and a

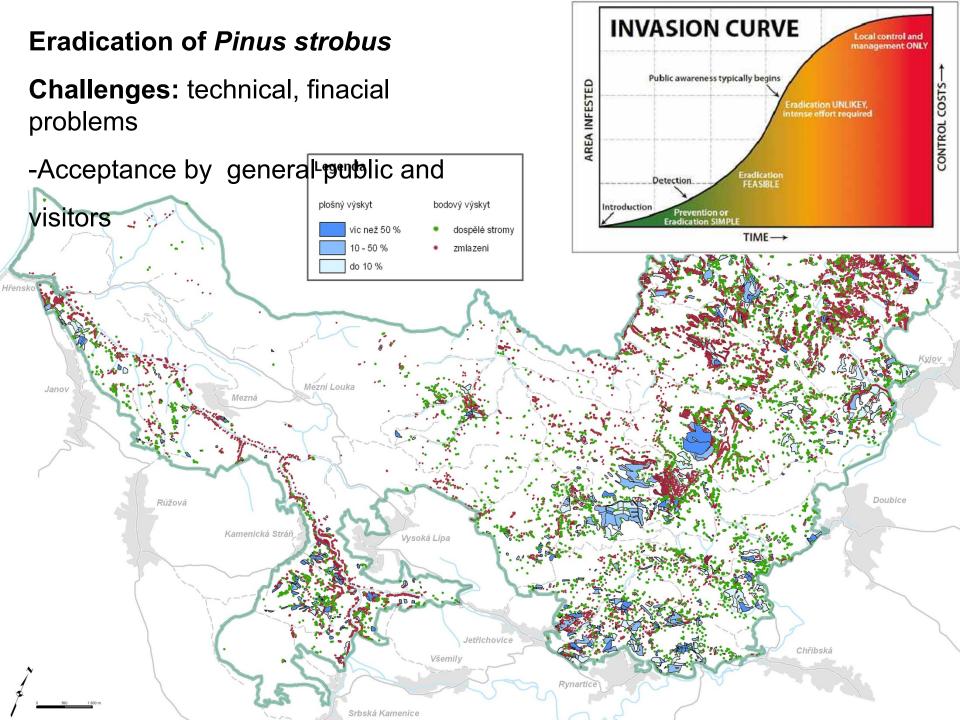
## **Challenges and questions**

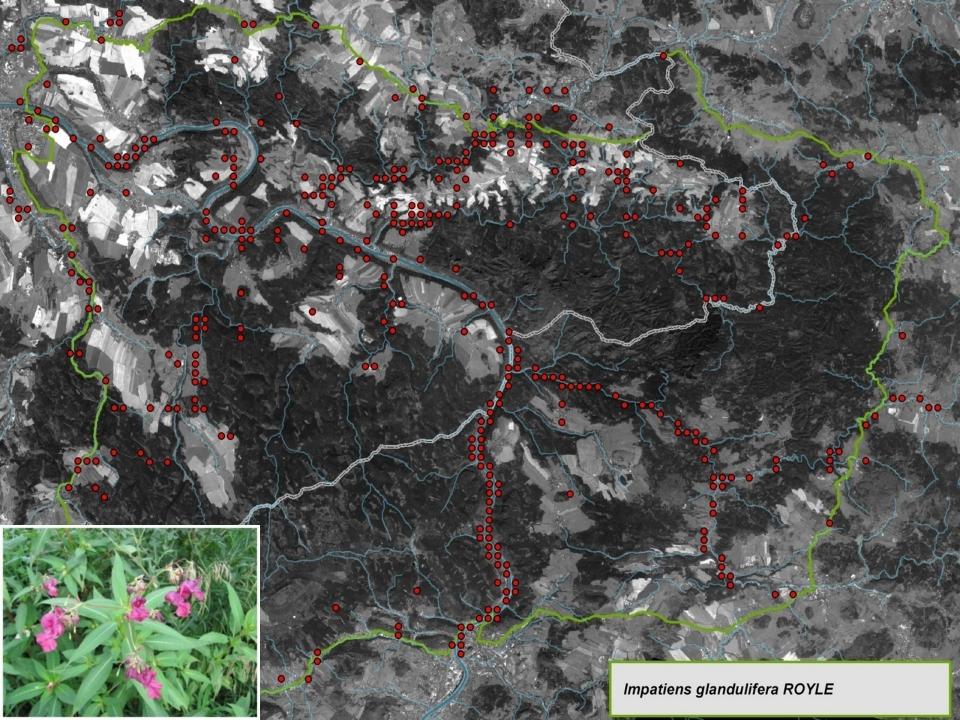
- Restoration to which period? Leopold (1963) recommended that the goal of interventions should be recreate "the ecological scene as viewed by the first European visitors"
- Problems of historical data:
- incompleteness of information about the past
- the time and space scale dependence of information

### Eradication / control of non-native species

White pine invasion (Pinus strobus)

other species: Fallopia spec., Impatiens glandulifera





• Reintroduction of regionally extinct species





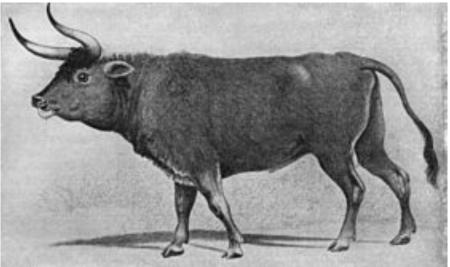




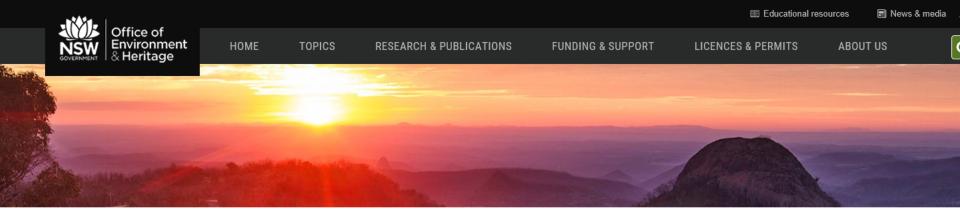
hazel grouse
(Bonasa
bonasia)

western
capercaillie
(*Tetrao* urogallus)

- Reintroduction of regionally extinct species
- Simulations of no longer acting ecological drivers ??
- hunting (in case of missing predators)
- why not simulation of missing large herbivors (motor scythe??)



- Reintroduction of regionally extinct species
- Simulations of no longer acting ecological drivers ??
- fire management (prescribed fires)



#### Parks, reserves and protected areas

Visit a national park	
Types of protected areas	~
Establishing protected areas	~
Park management	~
Fire	^
Managing fire in national parks	~
Current incidents and alerts	
Fire management strategies	
Staying safe and protecting your property	~
Impact of fire on plants and animals	~
Policies	~
Commercial activities in parks	

Development guidelines

Work as a ranger or field officer

Home > Parks, reserves and protected areas > Fire > Fire management strategies

## Blue Mountains National Park fire management strategy

The NPWS contact details displayed on the fire management strategy may be out of date. For the most up-to-date contact information see **National Parks offices around NSW** or the **National Parks Contact Centre**.

The format and structure of this publication may have been adapted for web delivery.

Page last updated: 07 May 2015



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About this publication

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- Publisher: Office of Environment and Heritage
- File name: FMSBlueMountainsNP.pdf
- File size: 6.73 MB
- Pages: 80



 can we speak about a natural process – or what is the sense of a "non-intervention regime" when we are controlling fires in an area where the fire was the key ecological driver ?

# Hands-off (non-intervention) approach

- leaving nature alone
- no care on single species, habitat types, invasive species, etc.
- preserves wilderness by restraining direct interventions
- an approach well fitted to the purpose of nature's autonomy
- Advantage: has no problems with trade-offs (easy to be consistent)

## very strong concept for promoting and supporting natural processes based on cyclic succession

# Hands-off (non-intervention)

## Limits:

- External interventions (impact)
- Can lead to completely non-natural ecosystem types: Is such an approach really protecting natural processes? (Invasive species!)
- Can be harmful to native species (biodiversity protection), paradoxically wilderness area can become centres for spreading of invasive species
- more feasible in large and remote areas
- least appropriate in areas where active management is needed for protection and maintenance of species or habitats (especially thereatened species)

Ecological integrity approach combining different approaches - non-intervention management - active management

All aproaches have their limits, barriers and trade-offs

How are the IUCN guidelines helpful?

### Issues for consideration

• Some wilderness areas include livestock grazing by nomadic peoples and distinctions may need to be made between intensive and non-intensive grazing; however this will pose challenges if people want to increase stocking density.

### **Category II: National park**

**Category II** protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.

Before choosing a category, check first that the site meets the definition of a protected area (page 8).

### **Primary objective**

• To protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education and recreation.<sup>3</sup>

### **Distinguishing features**

Category II areas are typically large and conserve a functioning "ecosystem", although to be able to achieve this, the protected area may need to be complemented by sympathetic management in surrounding areas.

- The area should contain representative examples of major natural regions, and biological and environmental features or scenery, where native plant and animal species, habitats and geodiversity sites are of special spiritual, scientific, educational, recreational or tourist significance.
- The area should be of sufficient size and ecological quality so as to maintain ecological functions and processes that will allow the native species and communities to persist for the long term with minimal management intervention.
- The composition, structure and function of biodiversity should be to a great degree in a "natural" state or have the potential to be restored to such a state, with relatively low risk of successful invasions by non-native species.

### Role in the landscape/seascape

Category II provides large-scale conservation opportunities where natural ecological processes can continue in perpetuity, allowing space for continuing evolution. They are often key steppingGuidelines for applying protected area management categories

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### IUCN Management categories Guidelines 2008 Restoration <u>through time-limited</u> <u>interventions</u> to undo past damage: one or more interventions to restore damage;

.....removal of invasive species – <u>not</u> <u>usually suitable in strictly protected</u> <u>category la or lb protected areas but</u> <u>usually suitable in other categories</u>.

### **2016 IUCN Wilderness Guidelines:**

Nonetheless, managers should be aware of the potential problems posed by alien and invasive species and take action to protect indigenous species wherever possible



## Conclusions

- There are 2 basic approaches:
- Wilderness (natural processes) as a conservation goal (PA as a large experiment or observation plot)
- OR
- Wilderness (natural processes) as a tool to protect ecosystems (and their biodiversity)
  - In a short-term the difference between both approaches can be almost unvisible, but in long-term ...!



## Heritage

## Hands-off

Different approaches in different countries (e.g. CZ vs. DE)

## Natural process as a tool to conserve ecosystem ecosystem diversity, species

diversity

## Natural processes

 $\geq$ 

**itself,** completely resigning from species conservation, accepting invasive species, completely eliminating hunting

### Approach to invasive species is a good litmus paper !

# Why difficult trade-offs: We combine different approaches

- Historical fidelity (naturalness) approach
- restoration zone
- reintroduction of species
- combat invasive species

## Hands-off approach

- non-intervention zones (even in modified areas)
- no ambition to restore the whole park or wilderness area and bring all extinct species back
- It is reasonable approach for the "old wilderness"

## **new wilderness** (post-mining, post-industrial sites): suitable for fundamental hands-off approach



## Conclusions

- We cannot preserve parks and wilderness by drawing a line around them and leaving them alone
- It is becoming increasingly clear that no single management approach can preserve the full range of wilderness purposes and values.
  <u>Trade-offs are necesarry.</u>
- However, park managers often find they are damned if they do intervene and damned if they don't

## Conclusions

- Managers should focus on outcomes and specific conservation goals rather than on wheater change is caused by humans or not
- Key is the **conservation objective**
- We should be able to change the management approaches in the future (adaptive management)
- IUCN criteria, rules, etc. are just tools
- We should not substitute tools for real conservation goals

