

Toward an interactive web portal & series of case studies highlighting cross-border conservation in Europe

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www.schickhofer-photography.com



Outline

❖ Overview & Motivation

- ForAdapt project
- Challenges & opportunities

❖ Approach

- Conduct survey
- Collaborate in case studies
- Design web portal



ForAdapt Project Overview

❖ Marie Curie International Incoming Fellowship

Decision support toolkit FOR ADAPTive management of forest ecosystem services across borders in the face of climate change and economic scarcity in Europe

❖ Objectives

- Learn about opportunities & challenges
- Engage managers to develop joint solutions
- Share solutions with conservation community

❖ Project runs until 2017

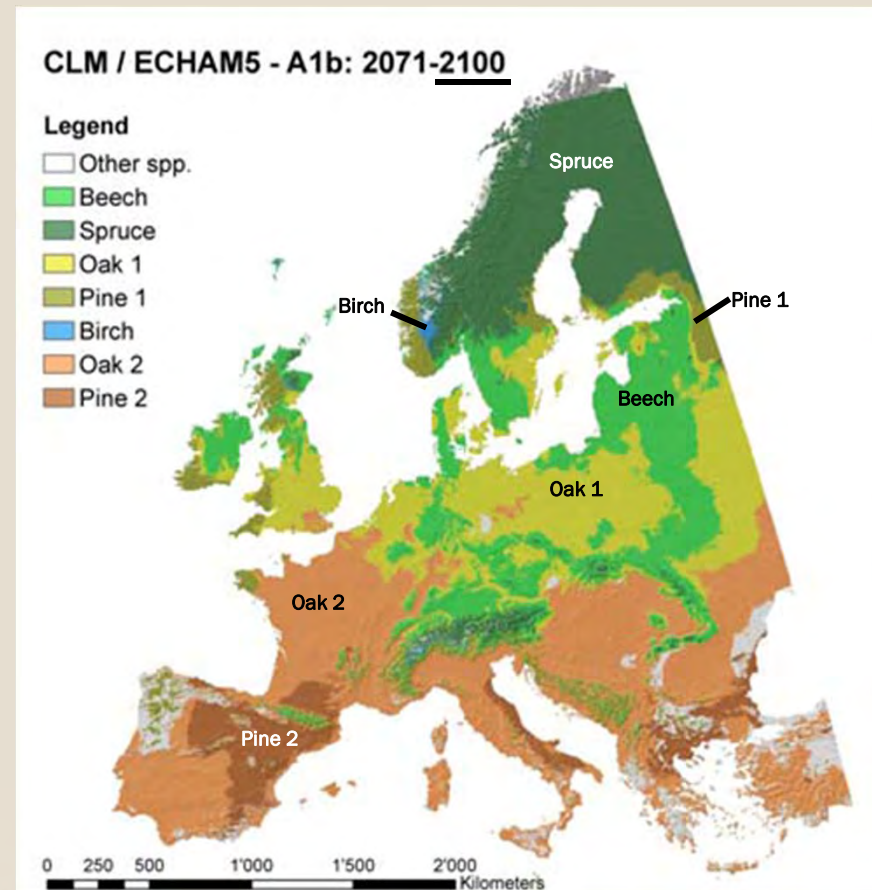
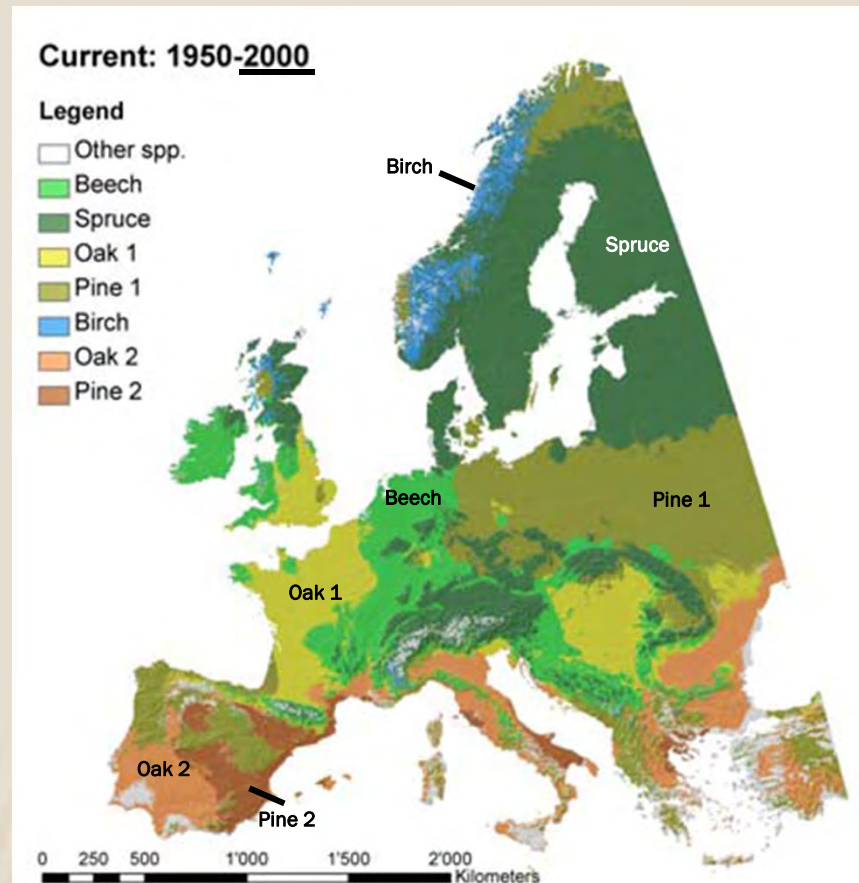


Key Motivating Challenges

- ❖ Climate change impacts
- ❖ Barriers to wildlife migration
- ❖ Nuisance species infestations
- ❖ Dense human population
- ❖ Scarce resources for conservation

Projected Shifts in Forest Biomes to 2100

Strong warming scenario

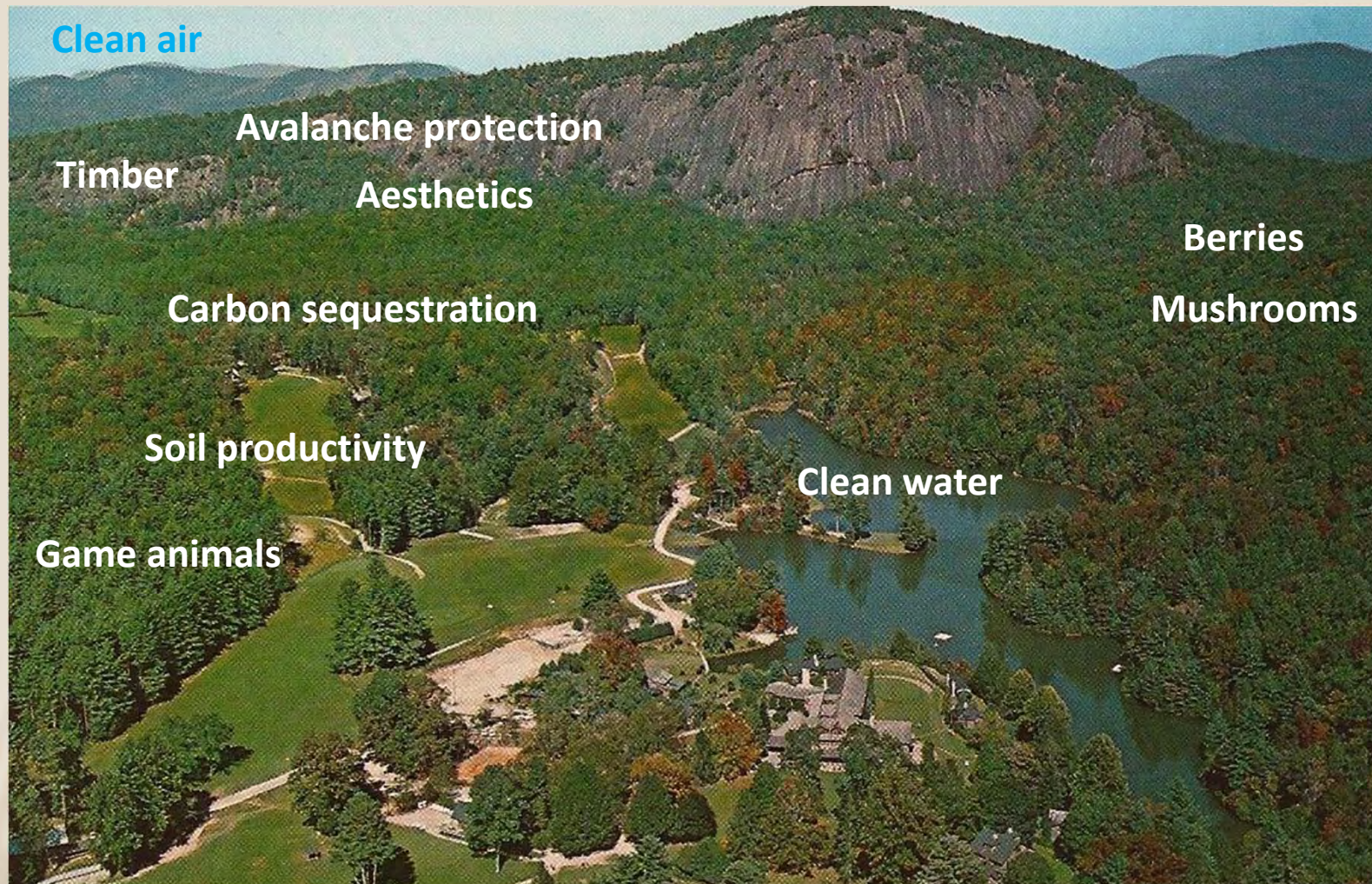


Oak 1 = white oaks; Pine 2 = *P. halepensis*; Hanewinkel et al. 2012

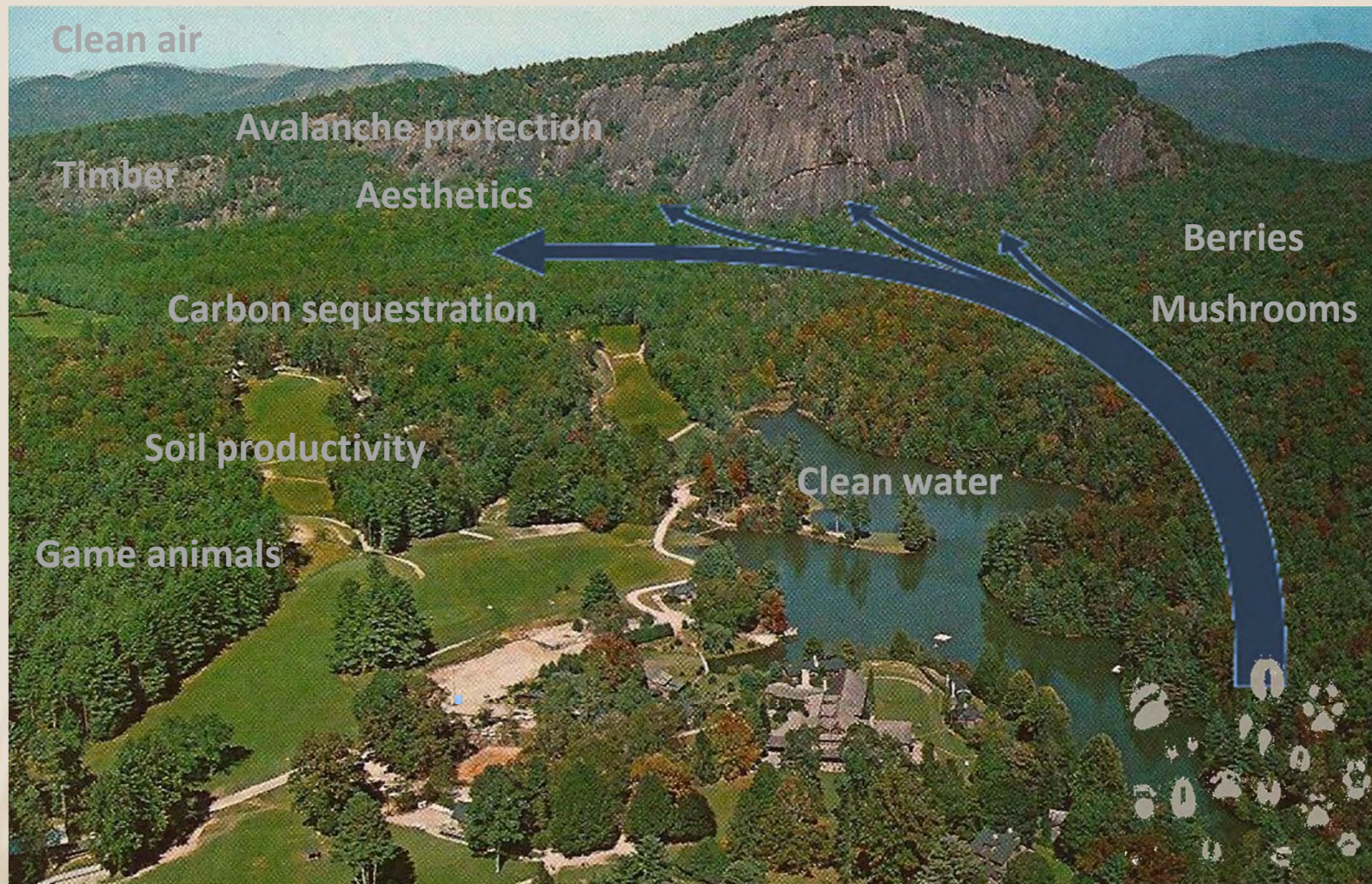
Disturbance



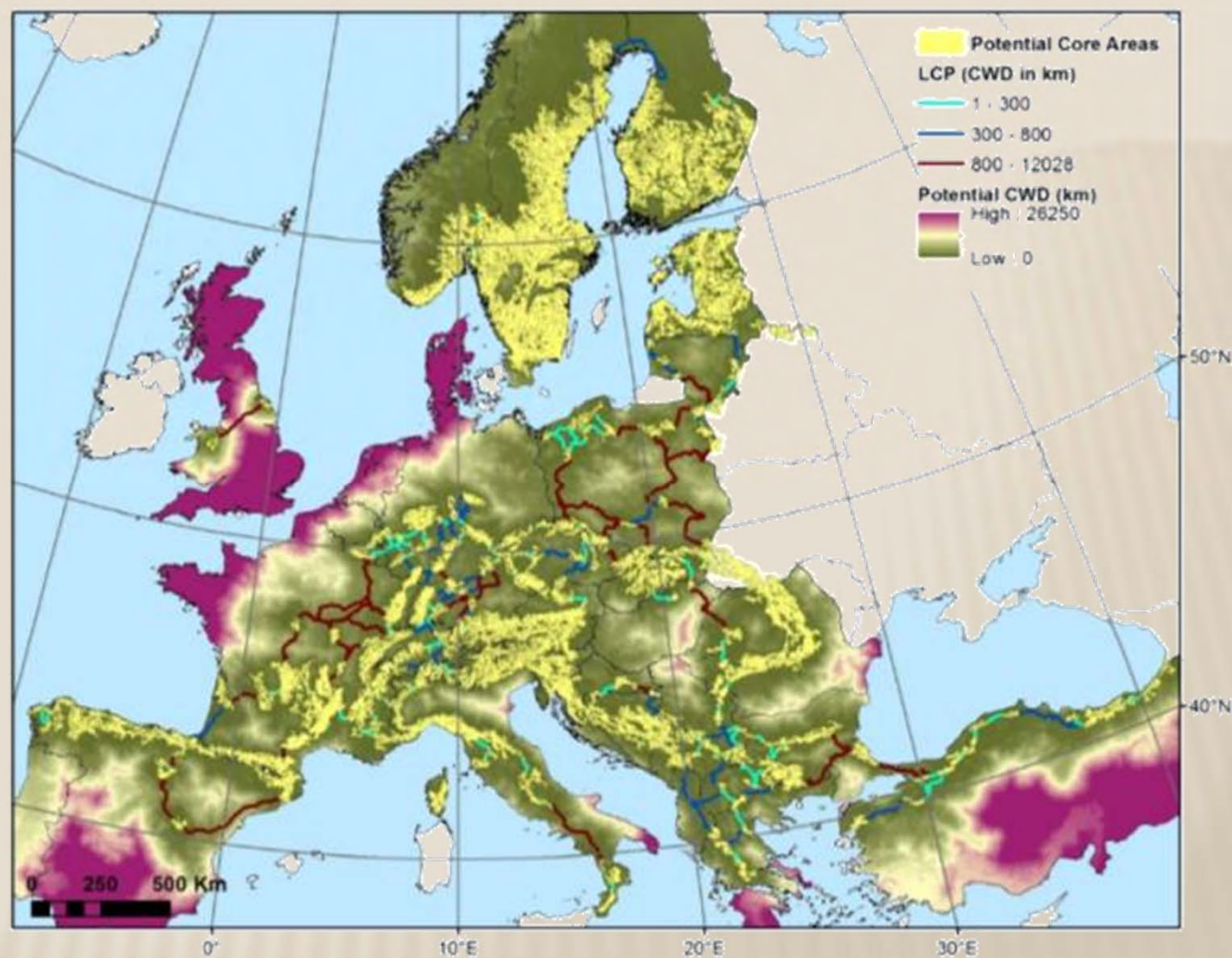
Forest Ecosystem Services



Forest Ecosystem Services



Forests offer Migration Corridors



CWD = cost-weighted distance for lynx; 30-m resolution
European Environmental Agency 2014

Migration to Buffer Mammal Diversity Loss

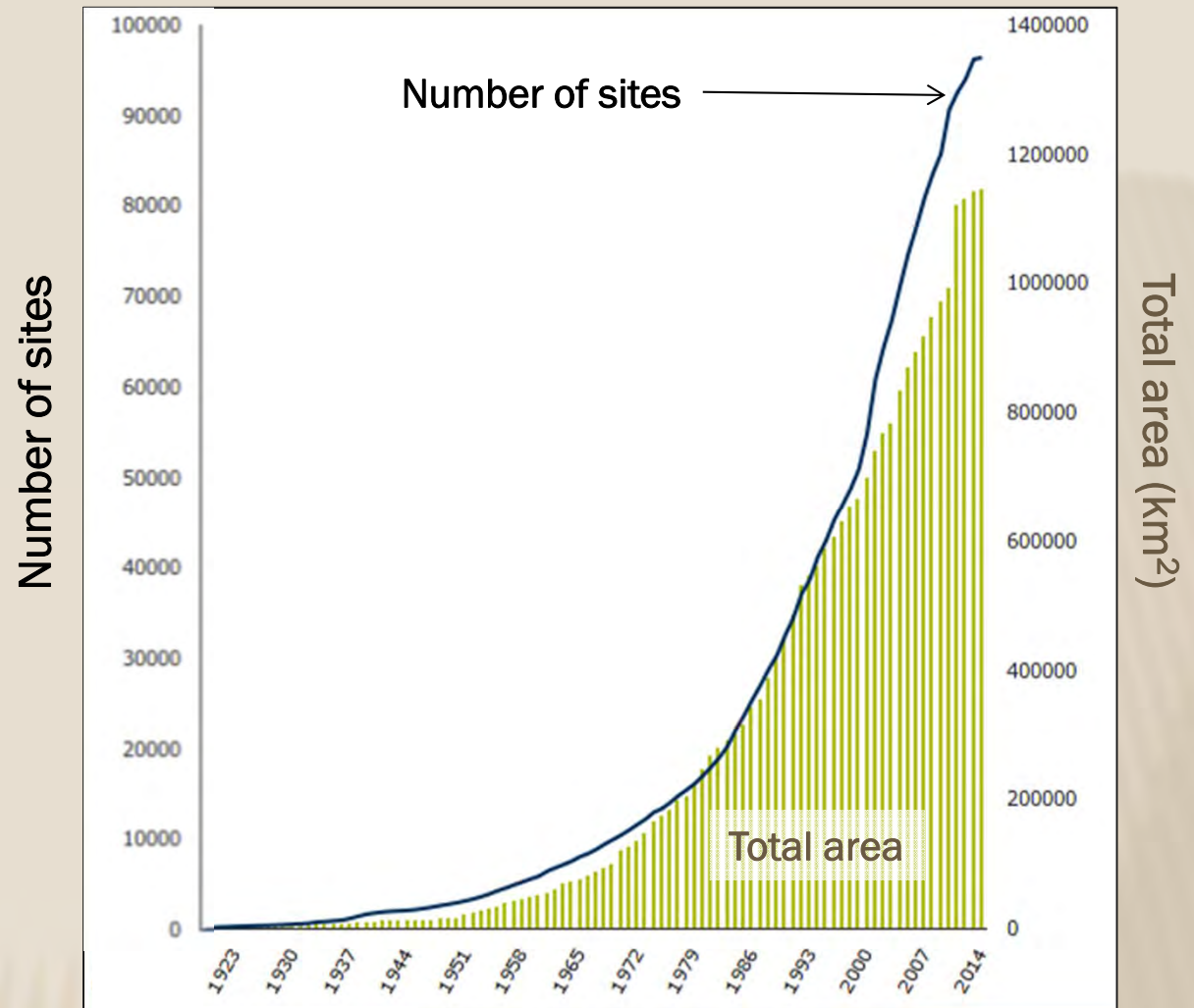
- Severe climate change scenario to 2100
- If all can migrate, 47% species become extinct or at-risk
- If no migration, 87% species become extinct or at-risk

n=111; Levinsky et al. 2007; European Environmental Agency 2012;

Increases in Protected Areas of Europe

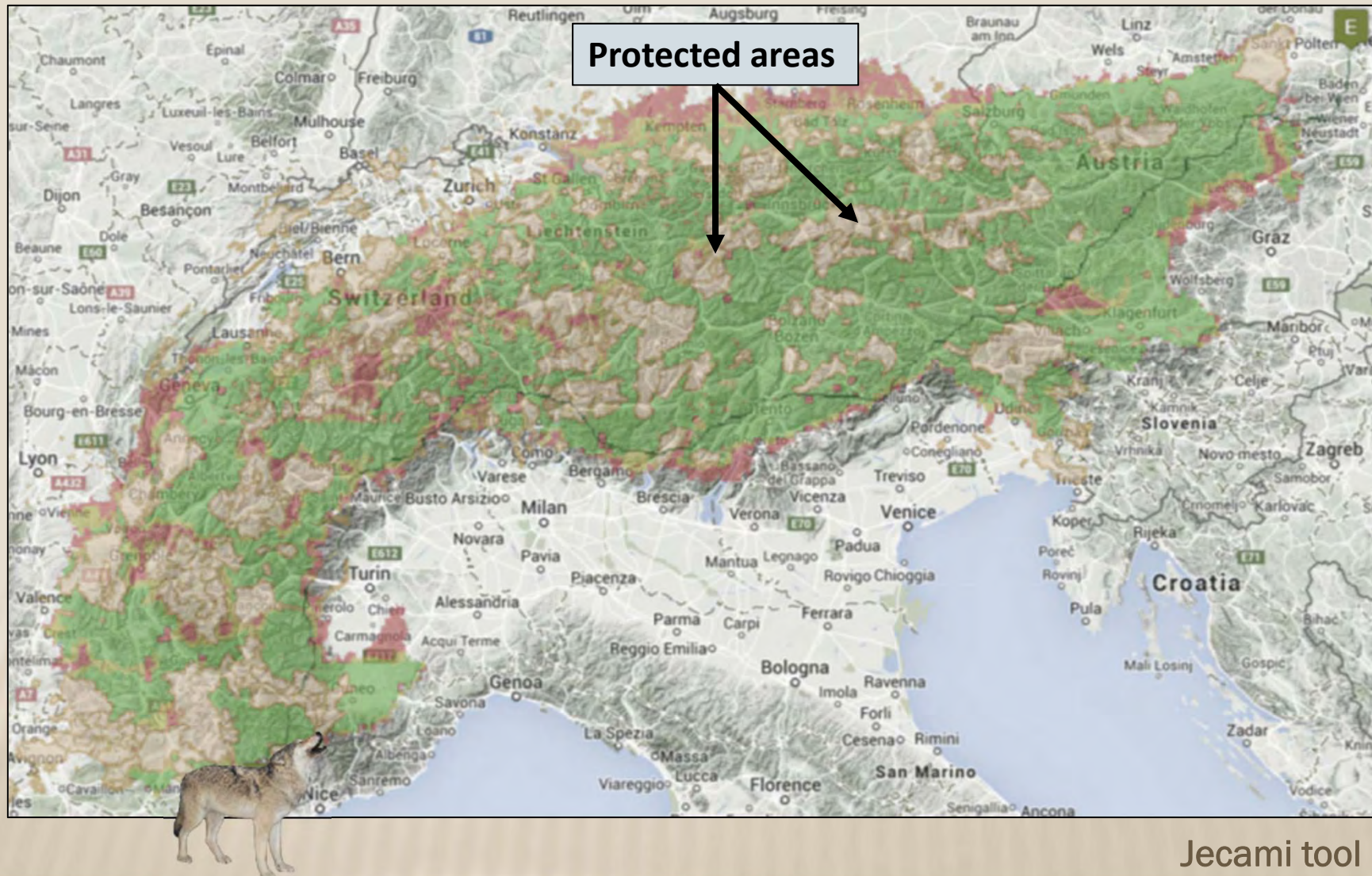
❖ Current assessment across 33 countries:

- ~100K sites
- >1.1M km²
- >10% land area



Images from European Environmental Agency

Least Cost Path for a Wolf through Alps



Least Cost Path for a Wolf through Alps



Transboundary Protected Areas

- ❖ **Cooperative management**
- ❖ **Major benefits**
 - **Biodiversity + ecosystem services**
 - **Environmental education + regional development**
- ❖ **EUROPARC TransParcNet leading the way**



ForAdapt Project

- ❖ Learn: opportunities & challenges
- ❖ Plan: joint solutions
- ❖ Share: web portal



Outline

❖ Overview & Motivation

- ForAdapt project
- Challenges & opportunities

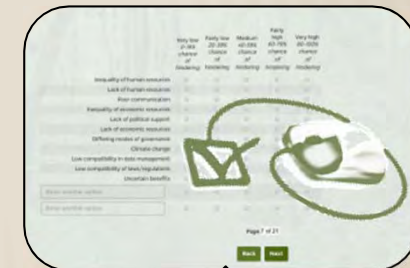
❖ Approach

- Conduct survey
- Collaborate in case studies
- Design web portal



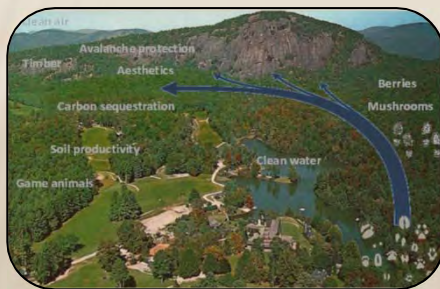
ForAdapt Approach - Summary

1. Conduct survey
2. Collaborate in case studies
3. Design web portal



Survey of Protected Area Managers in Europe

- ❖ Opportunities and challenges for cross-border conservation & management over next 10 years
- ❖ Preferred features for web portal
- ❖ *Survey supported by...*
 - *EUROPARC*
 - *IUCN WCPA's Transboundary Conservation Specialist Group*

A screenshot of a survey form. It features a rating scale from 'Very low' to 'Very high' for various factors like 'Frequency of human resources', 'Lack of human resources', 'Poor communication', 'Frequency of economic resources', 'Lack of political support', 'Lack of economic resources', 'Differing modes of governance', 'Climate change', 'Low compatibility in data management', and 'Low compatibility of laws/regulations'. Below the scale is a drawing area with a green outline of a tree and a box for 'Other comment section'. At the bottom, it says 'Page 7 of 21' and has 'Back' and 'Next' buttons.

Cross-border Management Survey

Challenges of Cross-Border Management, continued

[Click here for glossary of terms.](#)

8. How likely each challenge below will hinder your park in coordinating management of forests and/or wildlife with adjacent stakeholder groups over the next 10 years.

	Very low 0-19% chance of hindering	Fairly low 20-39% chance of hindering	Medium 40-59% chance of hindering	Fairly high 60-79% chance of hindering	Very high 80-100% chance of hindering
Inequality of human resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of human resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inequality of economic resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of political support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of economic resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Differing modes of governance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low compatibility in data management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low compatibility of laws/regulations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uncertain benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text" value="Enter another option"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text" value="Enter another option"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 20 minutes
- Email EUROPARC members
- In English, French, German, Italian, Spanish
- Open until July 7th
- Results inform design of web portal

Case Studies

- ❖ Workshops with pairs of parks
- ❖ Develop joint solutions
- ❖ Share solutions through web portal



Build from Existing Examples

1. Improving habitat connectivity
2. Co-managing invasive species
3. Co-managing visitor impacts
4. ...

- ❖ Combinations of above
- ❖ Many other possibilities
- ❖ Share solutions in web portal



Web Portal for Cross-border Conservation & Management in Europe

❖ Intended users

- Protected area managers & planners
- Other conservation professionals & researchers



❖ Goal

- Support conservation of forests & wildlife across protected area borders in Europe



Cross-Border Conservation & Management IN EUROPE

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case studies

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why (not) cross-border

PLAN

to take action

DISCUSS

ask & answer

UPLOAD

share a resource

GET HELP

many resources

**FEATURED CASE STUDY**



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Thayatal & Podyji
National Parks

FEATURED CASE STUDY



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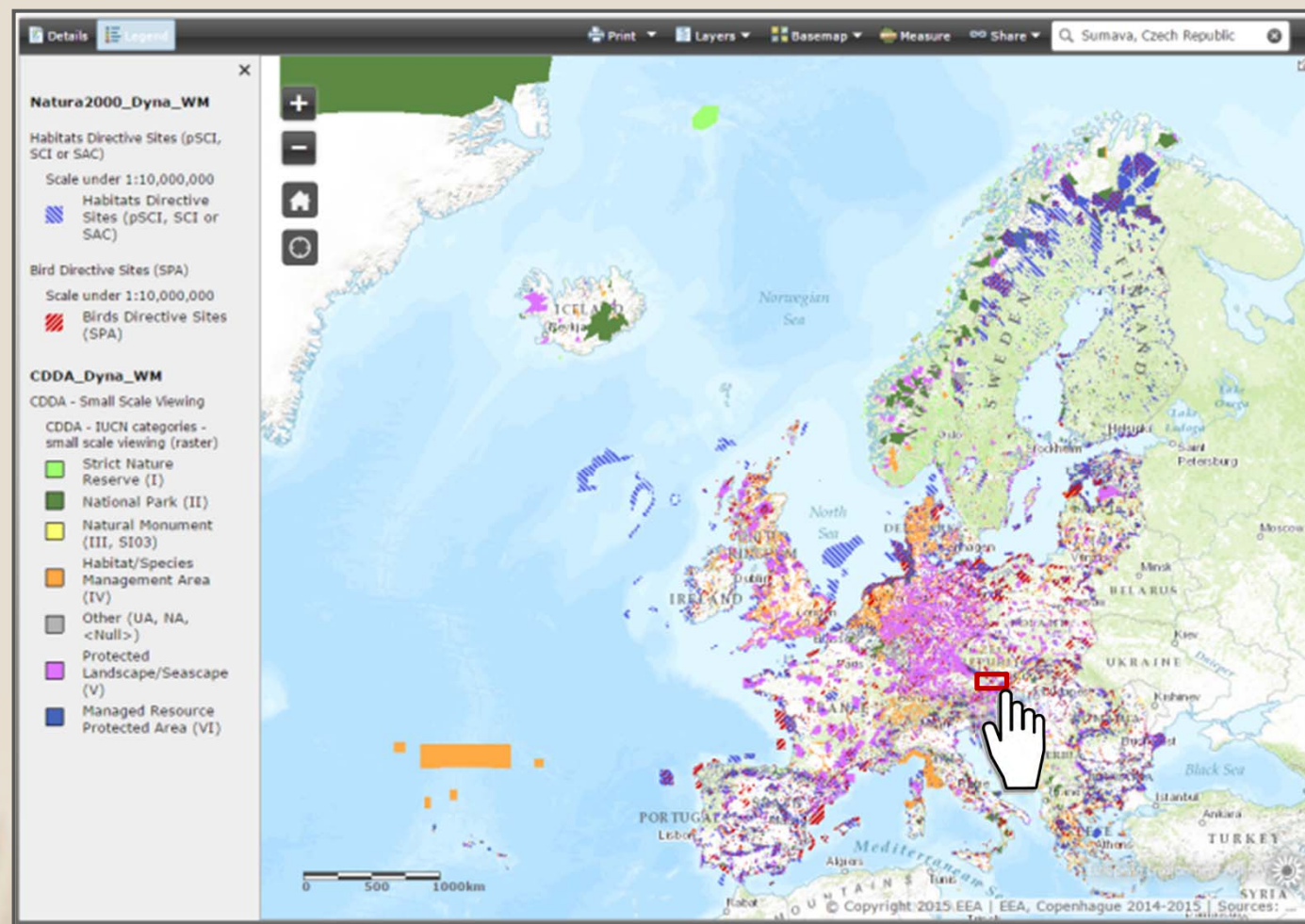


Image from European Environmental Agency



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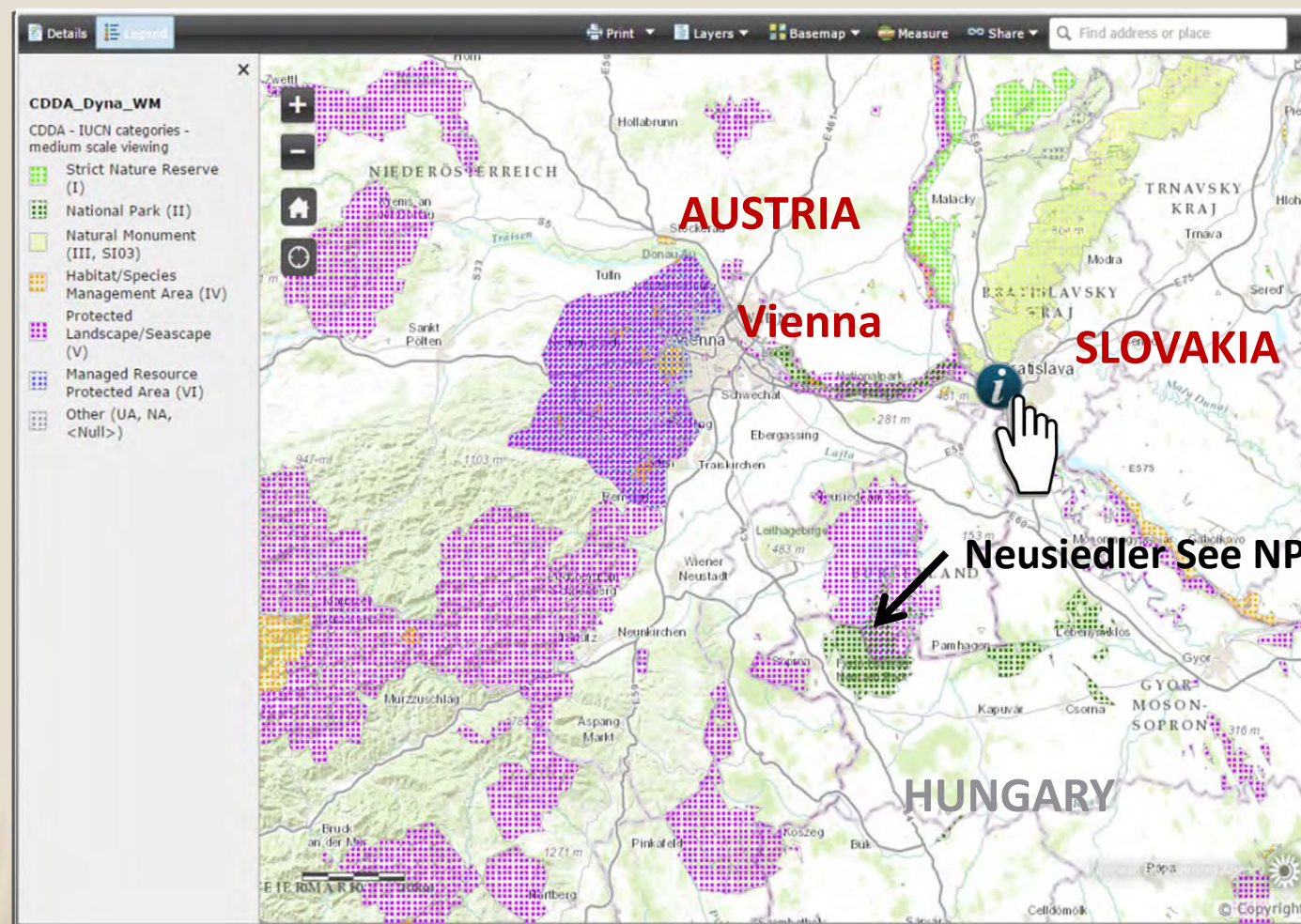
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Images from European Environmental Agency

1. Improving Habitat Connectivity

Example: Alps-Carpathian Corridor project

- Duration: 2009 - 2022
- Austria & Slovakia
- Restore migration corridor for wildlife
- Preserve & create green bridges over highways
- Sustainable land use planning
- 90-page action plan
- Protected areas, regional authorities, NGOs, highway companies, universities





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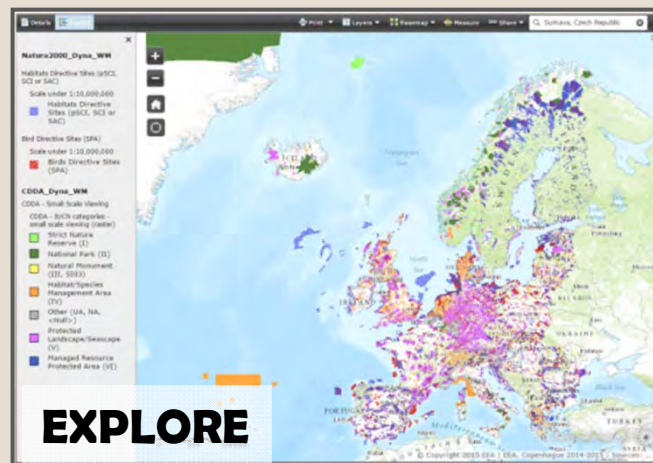
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share a resource

GET HELP

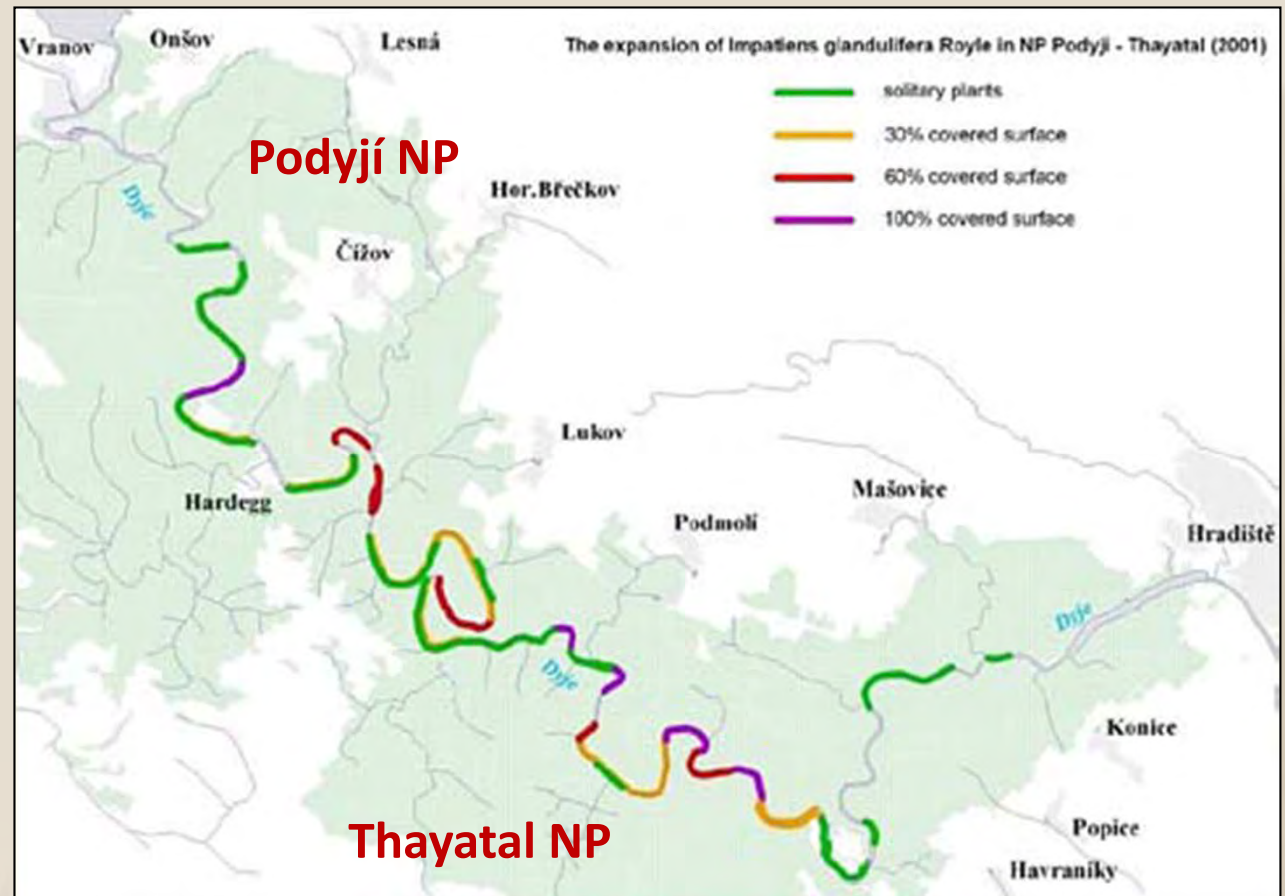
many resources



2. Co-managing invasive species

Example: Thayatal & Podyjí National Parks

- Duration:
1995 - 2005
- Austria & Czech Republic
- Eradication of Himalayan Balsam along River Thaya



Build from Existing Examples

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Next Steps

- ❖ Administer survey (June-July)
- ❖ Case study workshops (July-December)
- ❖ Scientific manuscripts + web portal (2016)

