

Securing the Conservation of biodiversity across Administrative Levels and spatial, temporal, and Ecological Scales

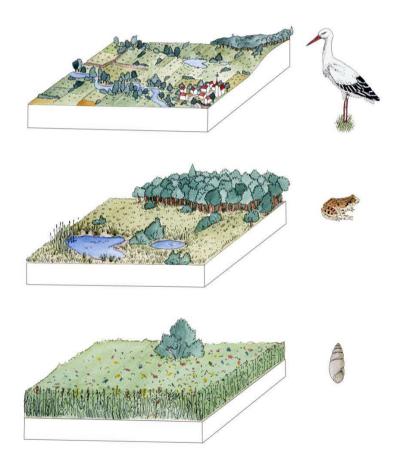






Introduction

- Different species perceive the environment differently
- Different ecological processes act differently at different scales
- Different policy decisions are made at different administrative levels (local, national, EU, global)
- Policy decisions & instruments do not always match





The Challenge



A key component of European environmental sustainability is our capacity to effectively sustain biodiversity across spatial and temporal scales

Anthropogenic and environmental pressures on biodiversity act differently at different scales



Effective conservation and policy responses must consider the scale at which effects occur.

It is therefore crucial that administrative levels and planning scales match the relevant biological scales





To better integrate the issue of scale into policy, decision making, and biodiversity management in Europe













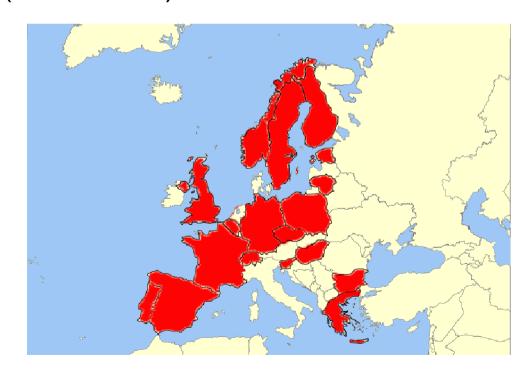
Project facts

☐ Large-scale integrating project, FP7



□ 28 Partners, 18 European countries & Australia, duration of 63 months (2009-2014)



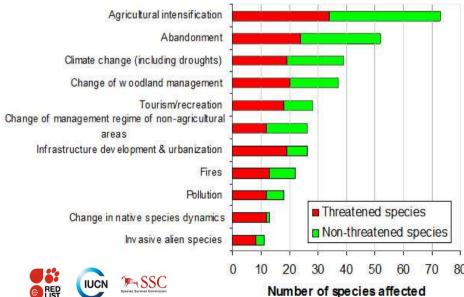




Drivers & scenarios

Assess the scale-sensitivity of drivers of change affecting European biodiversity under present and projected future conditions:

- Scale sensitivity typology of drivers
- <u>Future scenarios model future land cover across Europe</u>
- **Quantifying fragmentation** across policy relevant scales









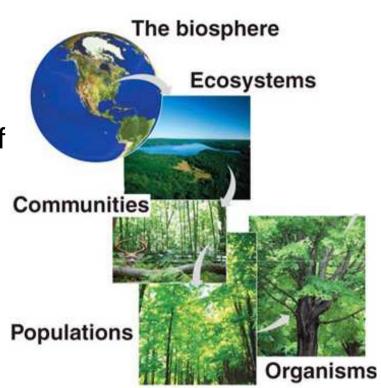


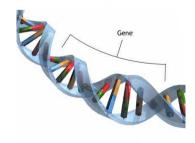
Species needs & response

Analyse the scale-dependent impacts of drivers (and pressures) on components of biodiversity:

- Trait data compilation
- Scaling of populations & thresholds of population viability
- Spatial scaling of species diversity
- Conservation of ecosystem functions at multiple scales
- Multiscale conservation strategies







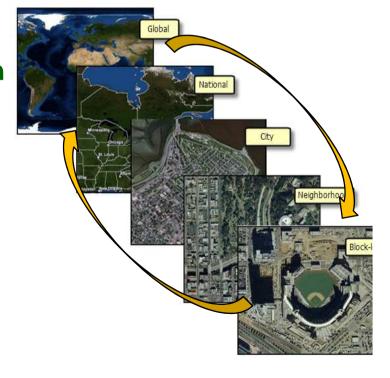


Method development

Develop and evaluate new methods for upscaling and down-scaling to facilitate the matching of environmental, ecological, and socio-economic information at relevant scales:

- Conservation prioritization and optimization
- PVAs
- Upscaling and downscaling methods for biodiversity assessment









Policy instruments

Assess the effectiveness and efficiency of existing policy instruments to respond to scale-related problems, identify innovative policy instruments to address scale-related conservation problems, and improve multi-level biodiversity governance:



- EU policy instruments
- National policy instruments
- Innovative instruments







Method testing

Test and evaluate the practical suitability and scale-matching of selected methods and policy instruments in case studies:

FI, FR, GR, PL & GB

Coherence of Networks of protected areas

Regional connectivity

Monitoring status and trend

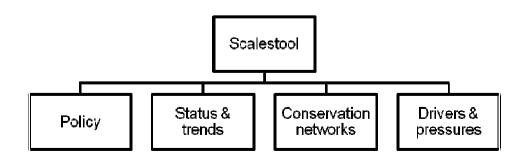
Integration of natural and social science approaches





Recommendations & integration of results

- Translate the results into policy and management recommendations and integrate them in a web-based support tool kit for effective biodiversity conservation across scales:
 - Synthesis of results from the project
 - Policy briefs
 - SCALETOOL







Dissemination, training, and science-policy dialogue

Disseminate the results to a wide range of relevant policy makers, biodiversity managers, scientists, and the general public and implement effective science-policy interfaces and stakeholder engagement processes:

- "Standard" dissemination
- Training (PhD, PostDoc)
- Science-policy dialog







Key deliverables

- Methodological and policy framework for biodiversity conservation across scales and administrative levels
- Implementation of the framework in SCALESTOOL
- Synthesis of the results in policy briefs
- Active and ongoing science-policy dialogue and dissemination









www.scales-project.net &CALES



Thank you...

