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

Biodiversity – the living world – is all about scale

Why do we go on losing biodiversity?
The answer depends on the scale at which you view the world.
At one scale it may be changes in climate, while at another one it may be habitat loss and fragmentation or disturbance.
Management of the living world will be effective only if we understand how problems and solutions change with scale.
The SCALES project will seek ways to build the issue of scale into policy and decision making and biodiversity management.

Conceptual framework

Objectives

1) Assess and model the socio-economic driving forces (e.g. EU policies, large scale economic and demographic trends, etc) and the resulting environmental pressures (e.g. habitat loss and fragmentation, changing climate) affecting European biodiversity under present and projected future conditions across scales.

2) Synthesize and improve the methodology for analysing the scale-dependent impacts of these pressures on components of biodiversity ranging from genes to species’ populations to biotic communities and ecosystems;

3) Develop and evaluate new methods for upscaling and downscaling to facilitate the provision of environmental, ecological, and socio-economic information at relevant and matching scales.

4) Assess the effectiveness and efficiency of policy instruments to respond to biodiversity loss, identify innovative policy instruments to address scale-related conservation problems, and improve multilevel biodiversity governance;

5) Test and evaluate the practical suitability and matching of methods and policy instruments under applied constraints to deliver effective European biodiversity conservation across scales, using networks of protected areas, regional connectivity, and monitoring of status and trend as a common testing and assessment ground;

6) Translate the results into policy and management recommendations and integrate them in a web based support tool (SCALETOOL) to assist governmental and non-governmental organisations in ensuring sustainable conservation action across scales.

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