

NaturaConnect

Co-designing a coherent and resilient network
of protected areas for the EU

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representing NaturaConnect



source: WWF, Matei Pleșa



NaturaConnect receives funding under the European Union's Horizon Europe research and innovation programme under grant agreement number 101060429. The contents of this material are the sole responsibility of the NaturaConnect consortium and do not necessarily reflect the opinion of the European Union.

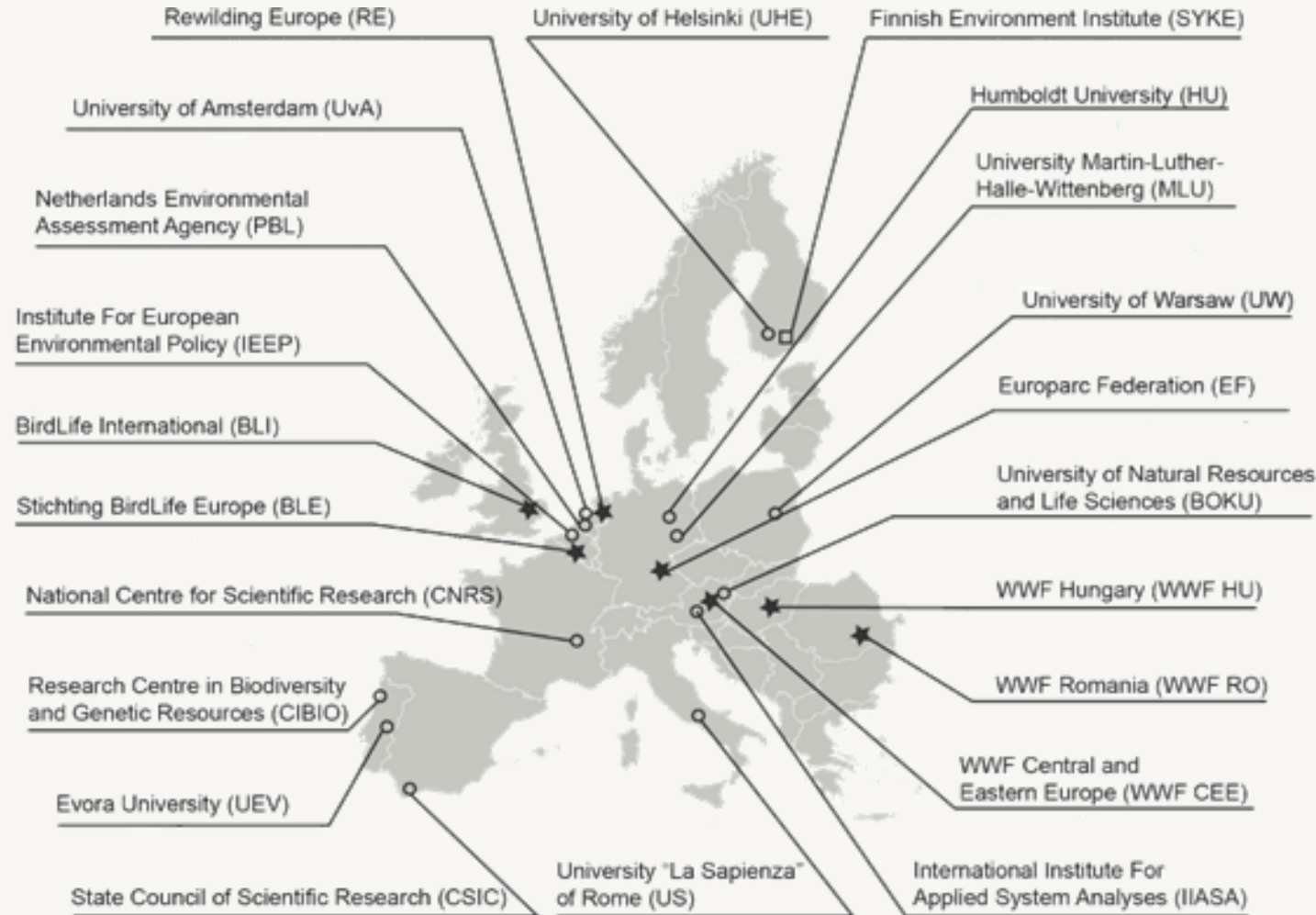


Funded by
the European Union

Who we are

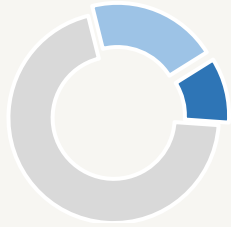
Key ambition of NaturaConnect:
Co-develop knowledge, tools and capacity building to support Member States in designing and implementing an ecologically representative, resilient and well-connected Trans-European Nature Network

15 Research organisations
7 National agencies & NGOs

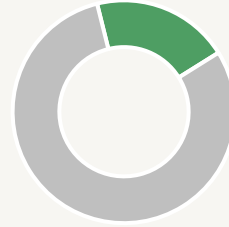


2022 - 2026

European Biodiversity Strategy 2030



Legally protect at least 30% of the land (incl. freshwater), and 30% of the sea in the EU. At least **1/3** of this should be **strictly protected**



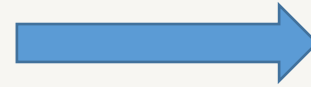
Actively or passively **restore 20%** of land area (terrestrial and freshwater ecosystems) towards **good condition**



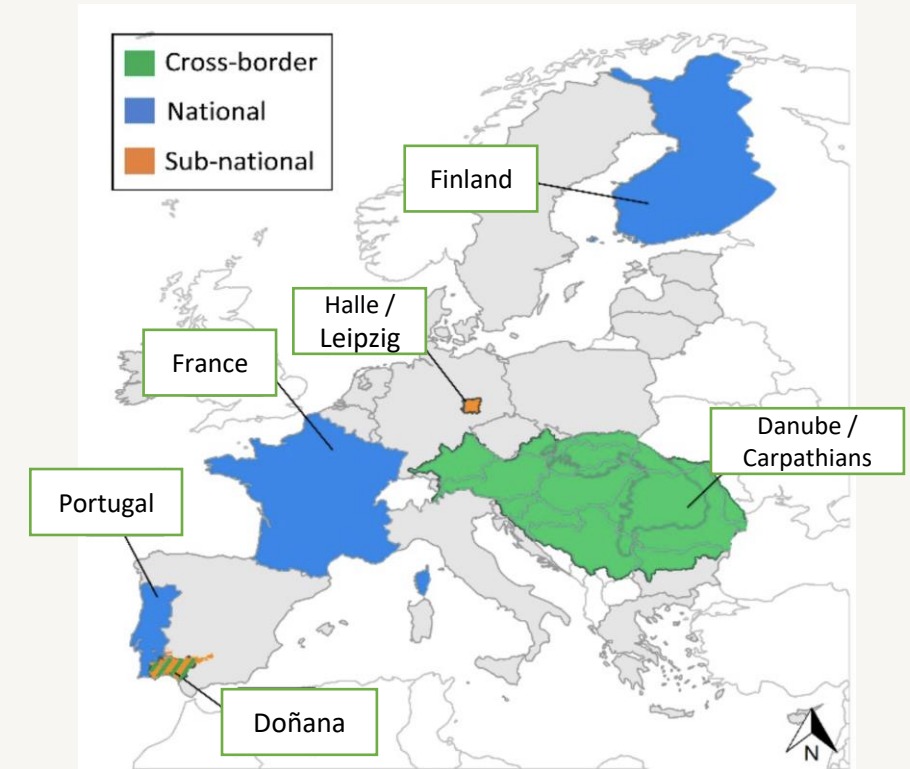
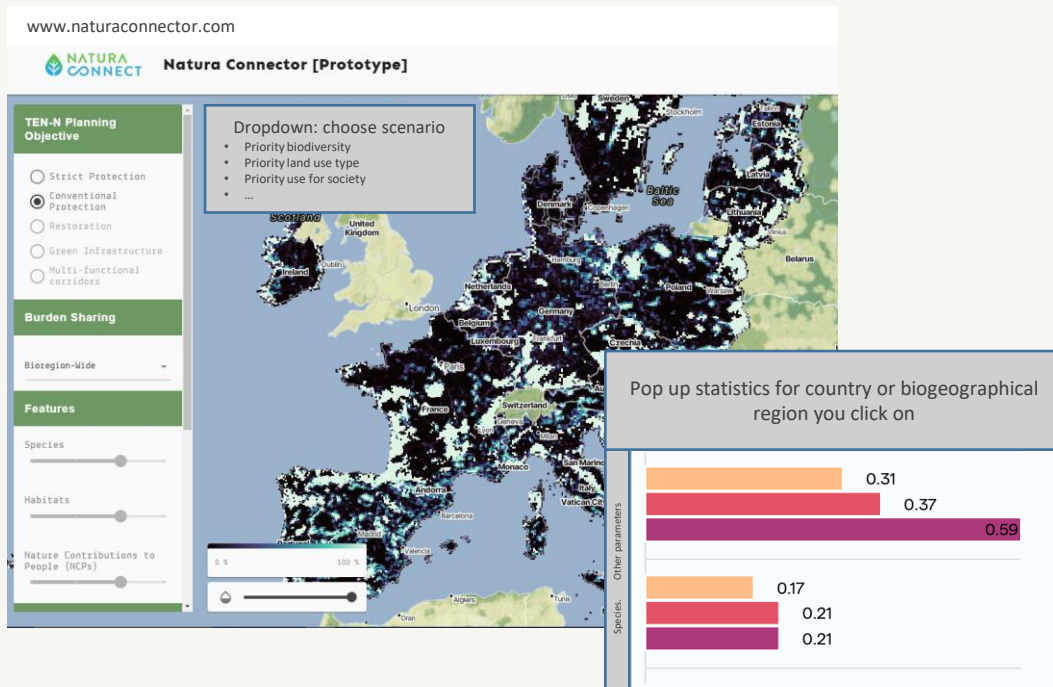
Facilitate ecological corridors and support sustainable land management, while **increasing resilience** to climate and land-use change

NaturaConnect outputs

Design workflow and produce scenarios for a **coherent, resilient and ecologically representative** protected area network (one focus improved connectivity)



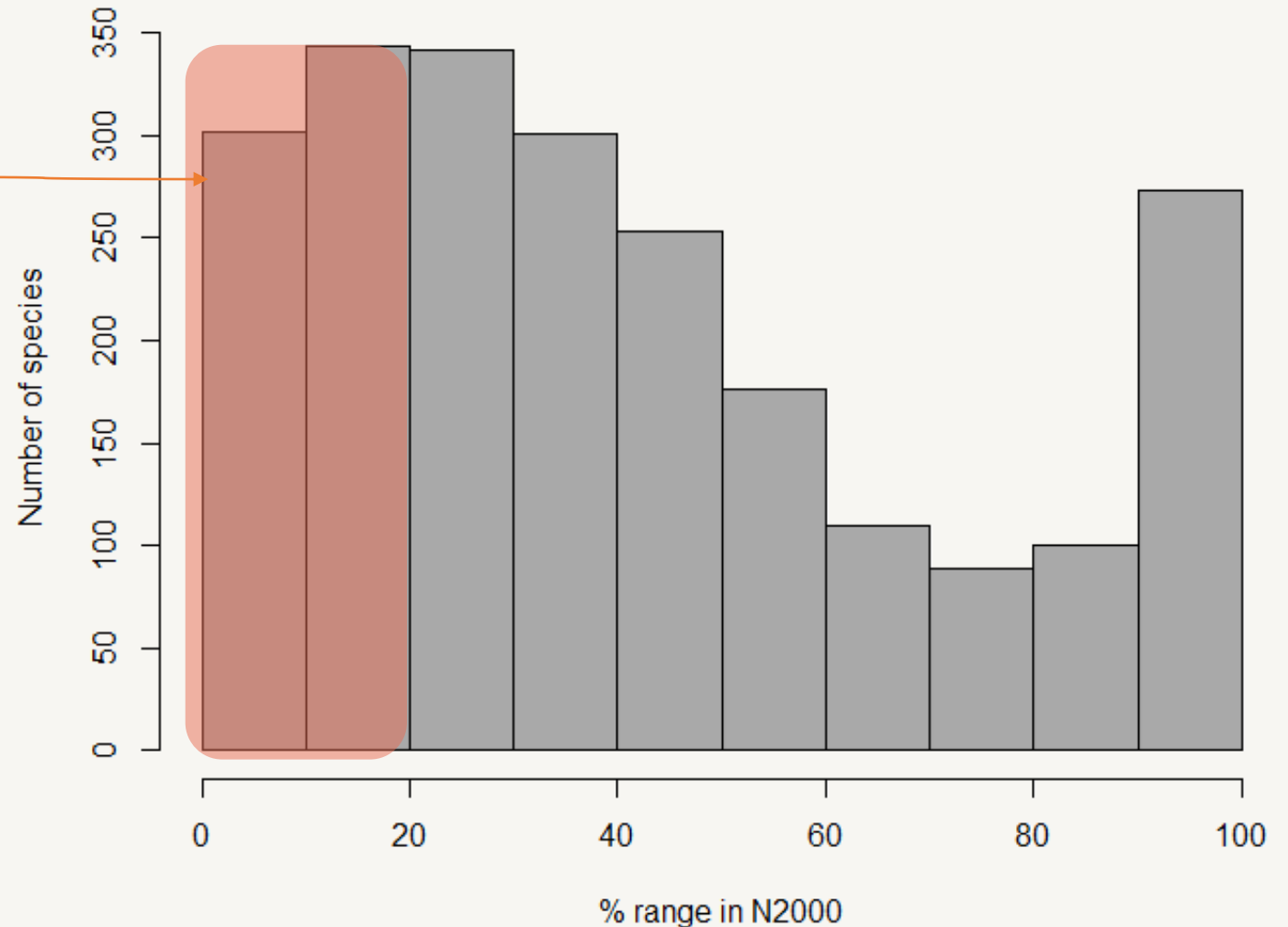
Provide data, tools and examples to support Member States in their planning



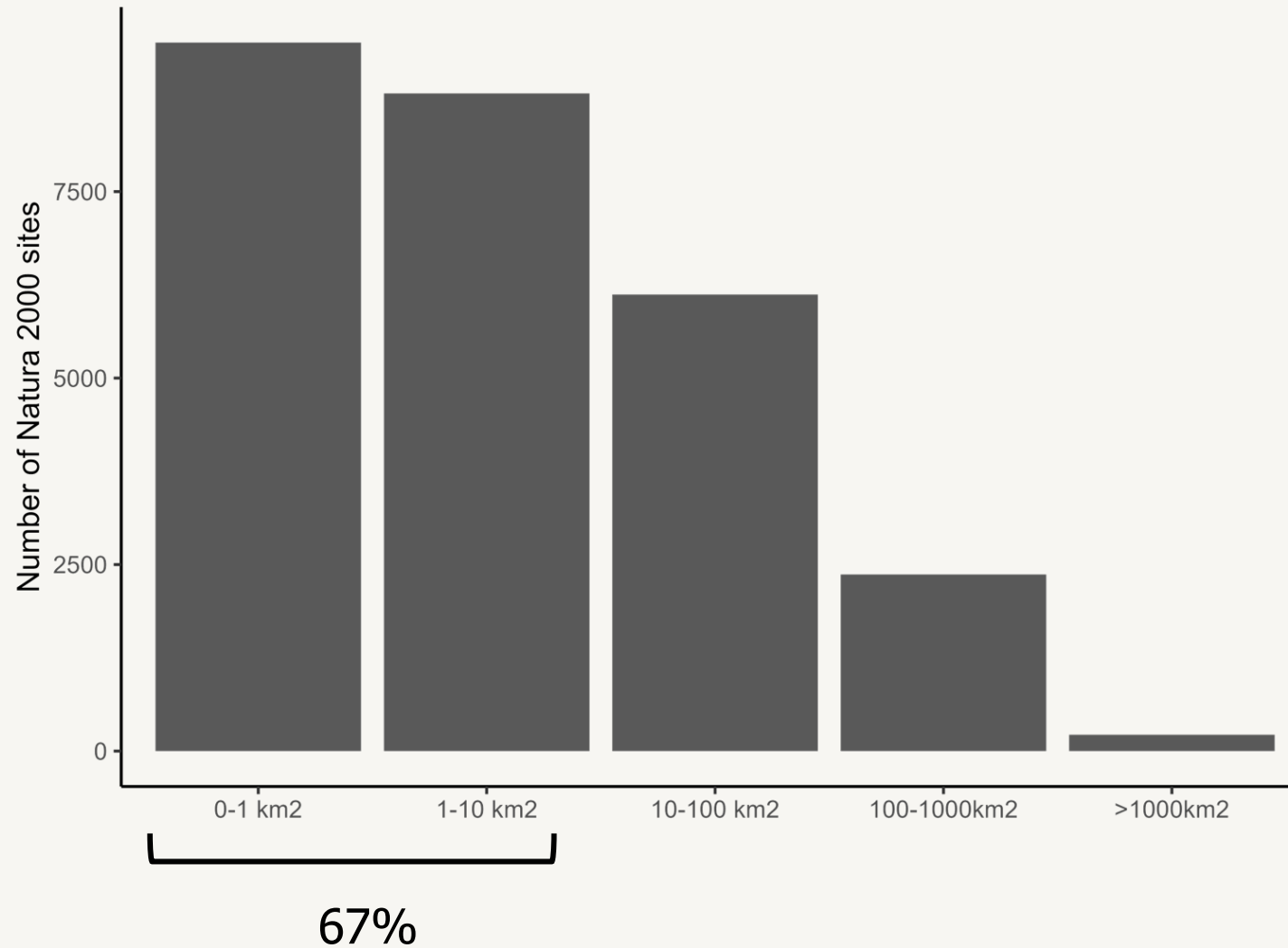
What is a « Truly Coherent Trans-European Nature Network » ?

646 globally threatened species have <20% of their EU range protected by the N2K network

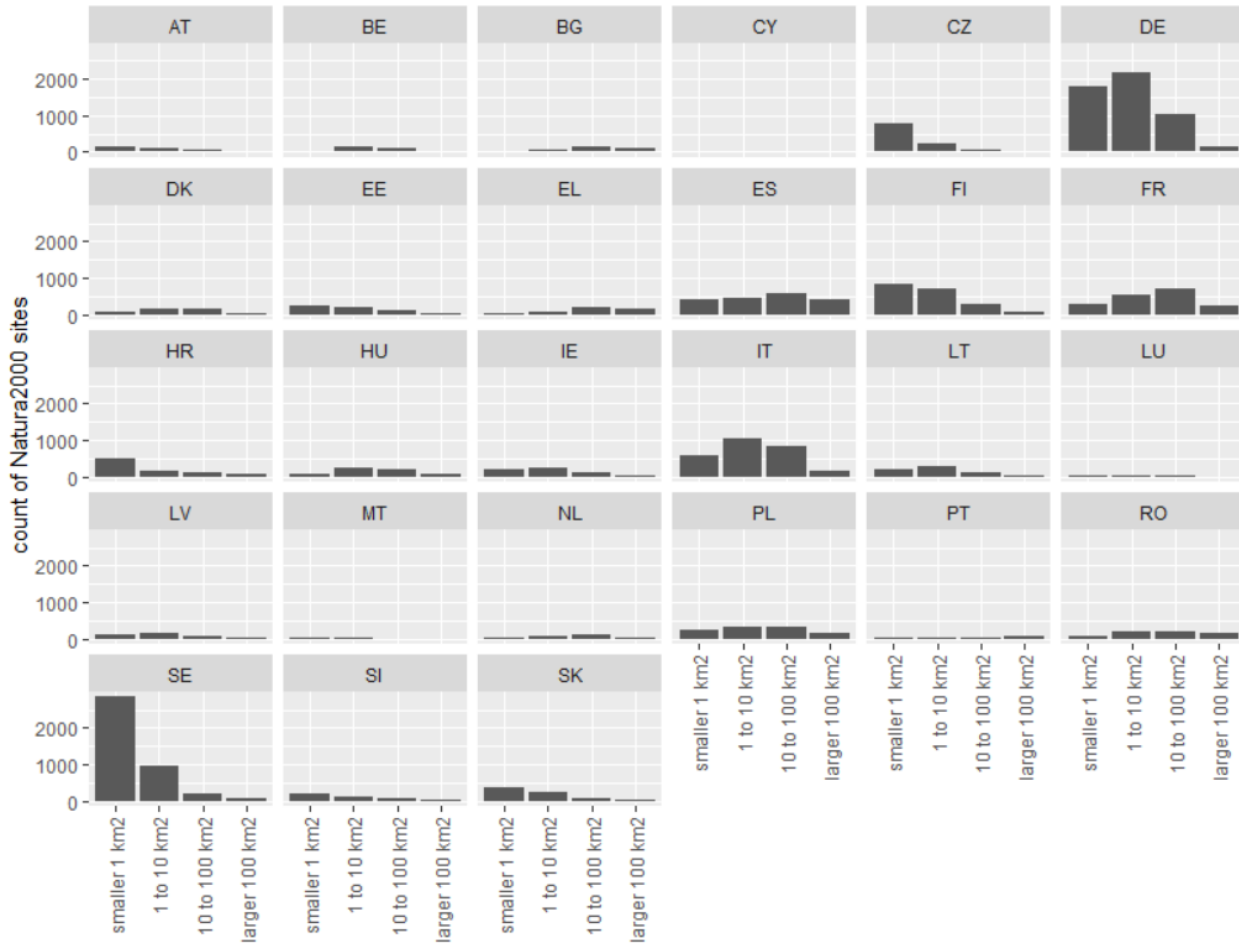
Coverage of threatened species by N2000 network in the EU



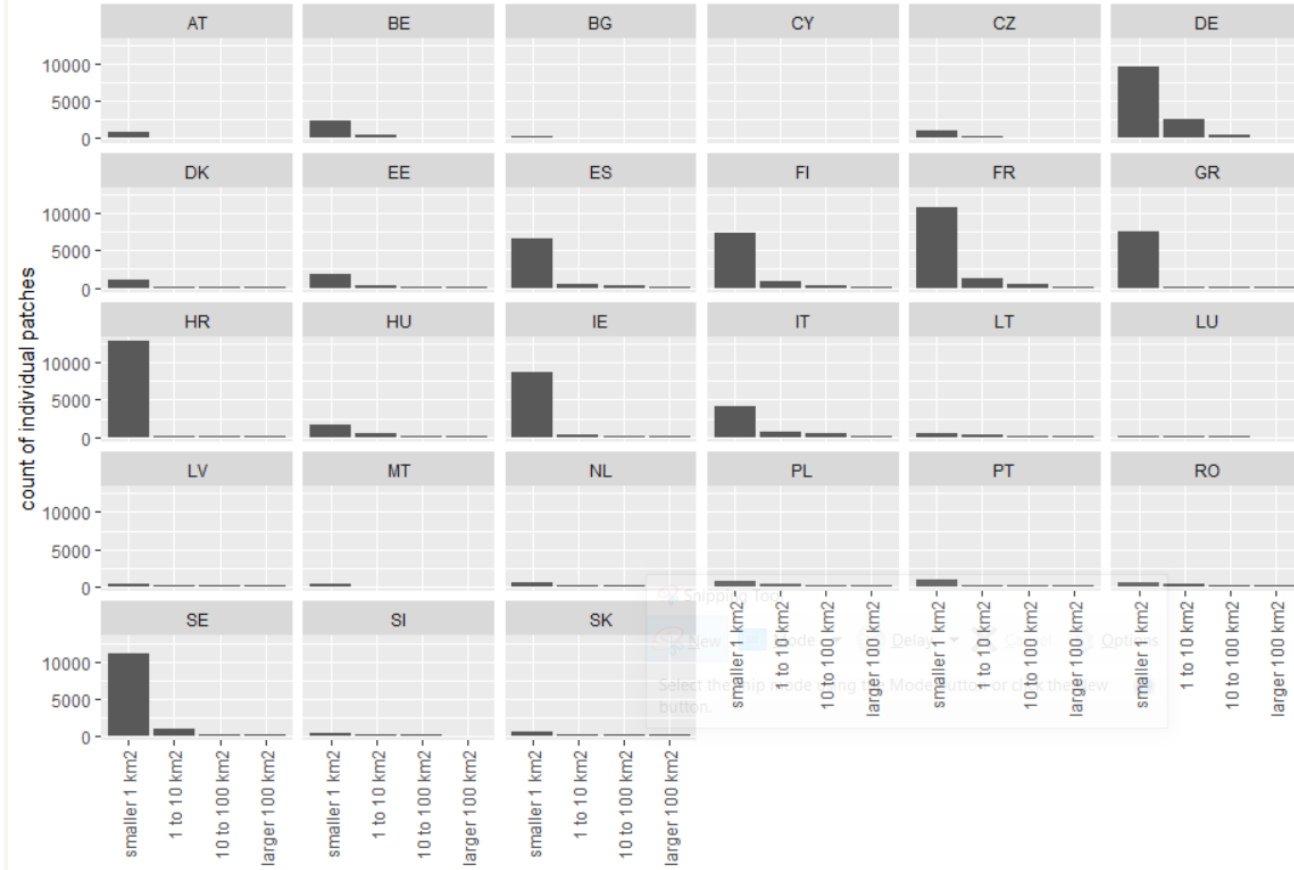
Adequacy – size and fragmentation



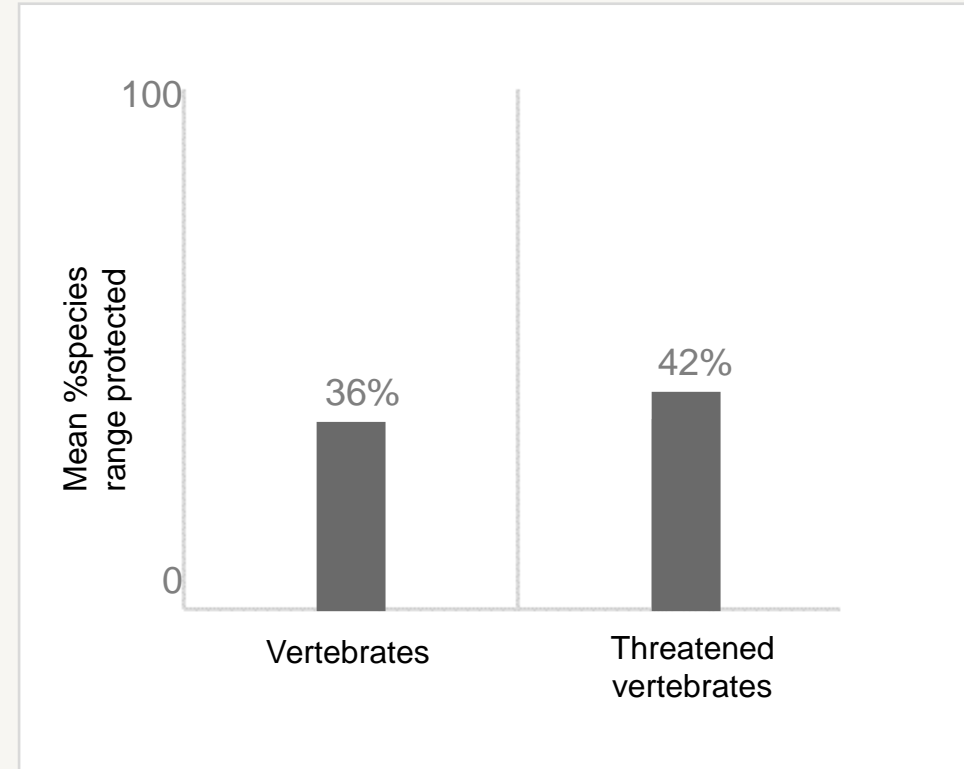
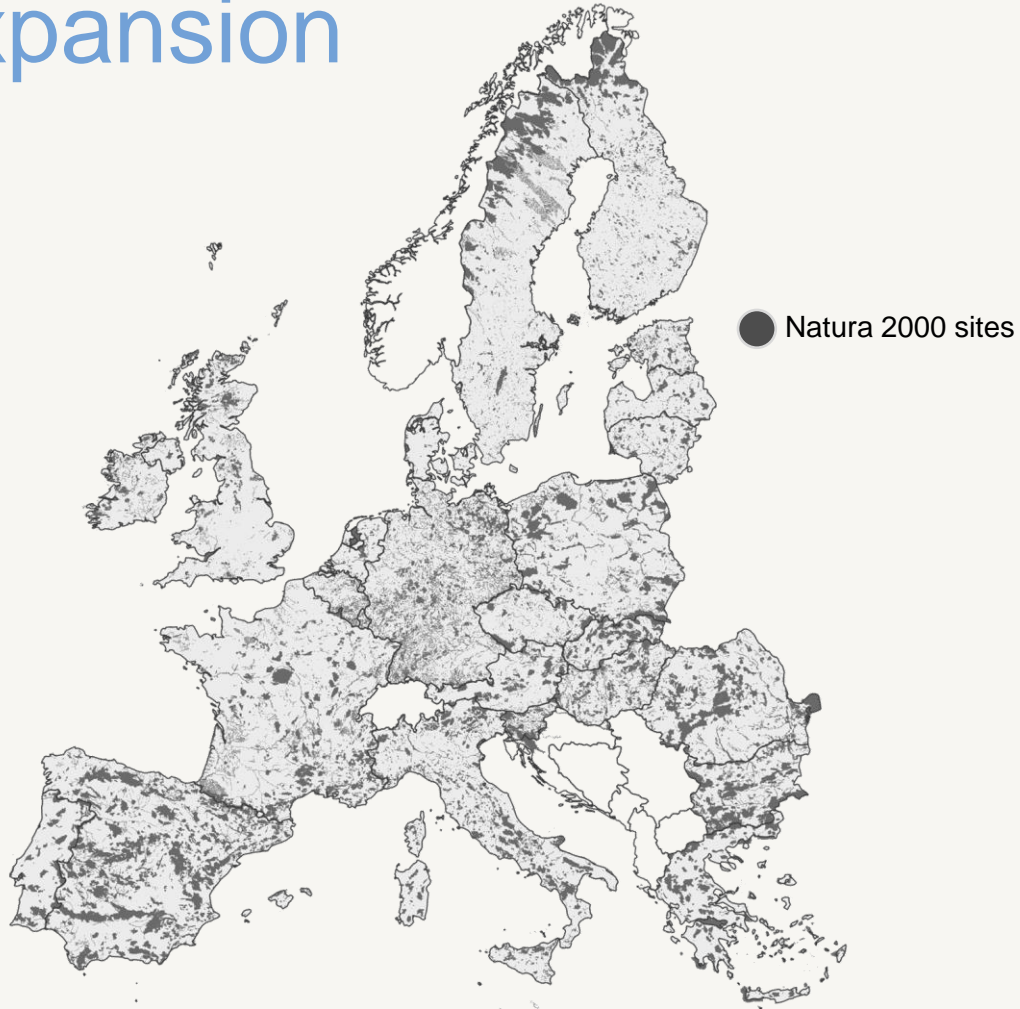
Size classes of Natura 2000 sites in EU Member States



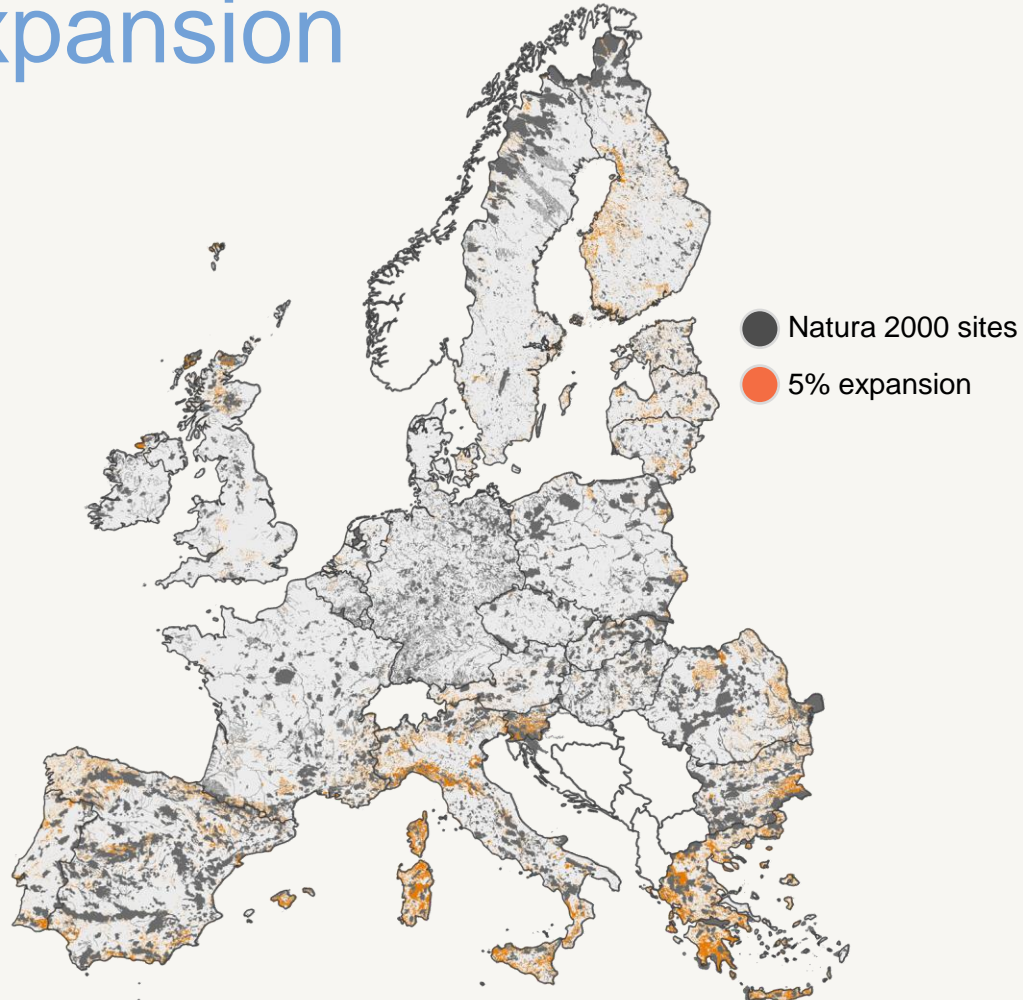
Size classes of patches in Natura 2000 sites in EU Member States



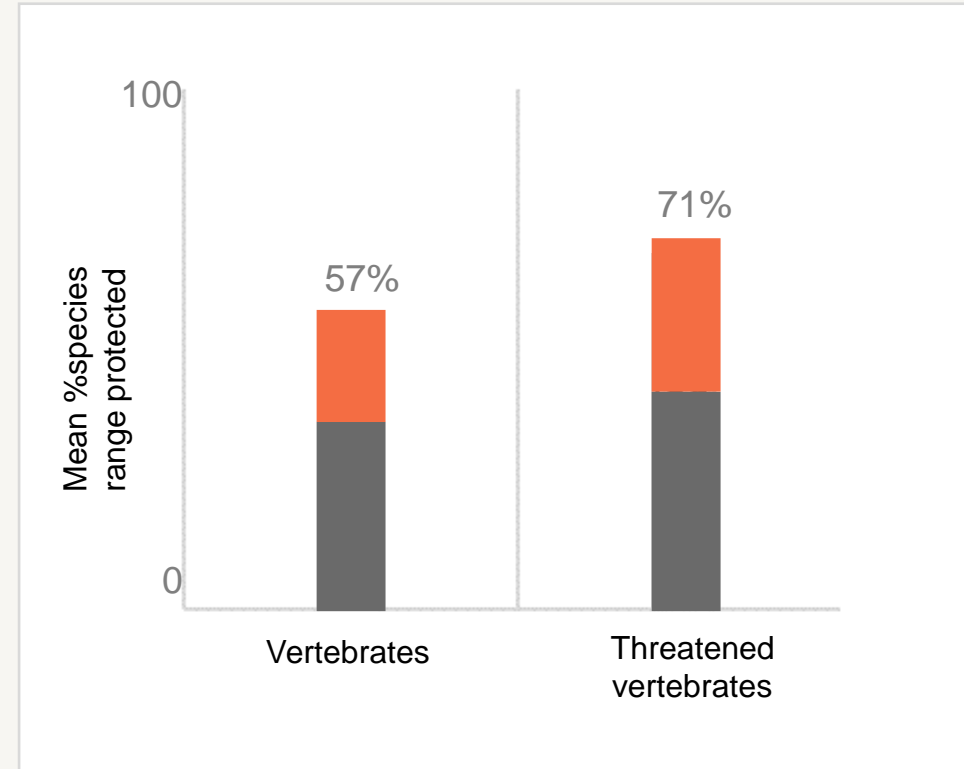
Large conservation gains are possible with limited area expansion



Large conservation gains are possible with limited area expansion



5% expansion of Natura 2000 network when focusing on terrestrial vertebrates




What are we planning for to produce relevant results?

Species and Habitats in Articles 12 and 17


 mammals

 birds

 reptiles

 amphibians

 plants

 arthropods



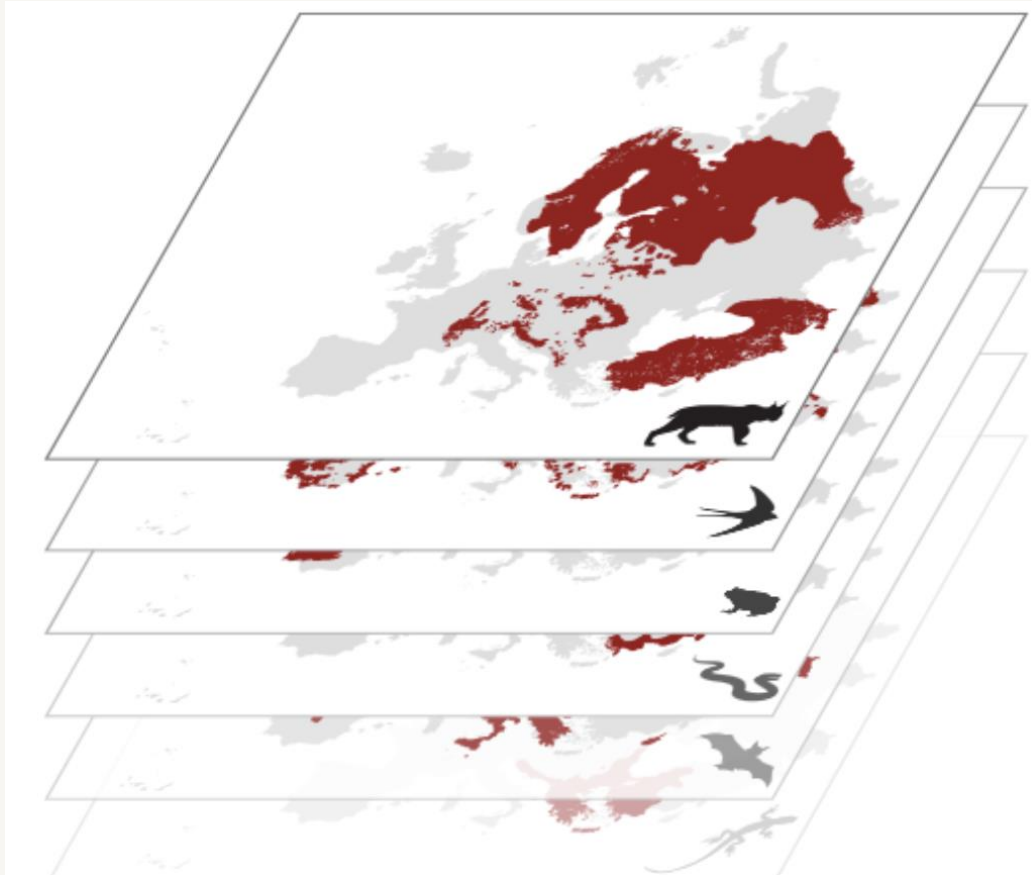
Threatened species and ecosystems



Other important ecosystems

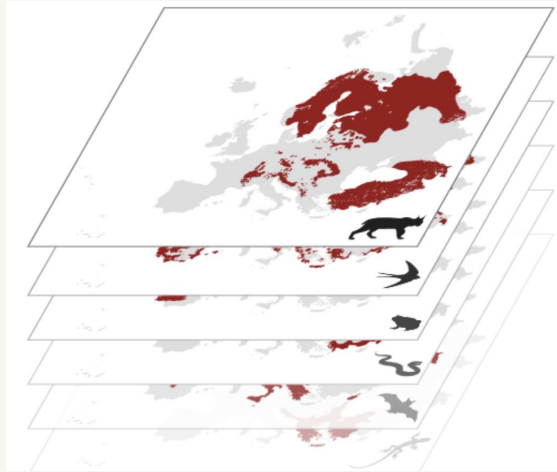


Primary and old-growth forests

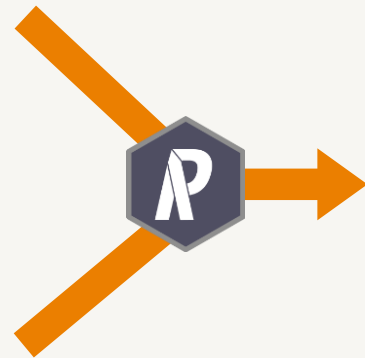


Methods for preliminary analysis

Species & Habitats of conservation concern



- + **Targets**
how much is enough?
- + **Weights**
how important is it to protect each species?



Scenarios for protected area expansion



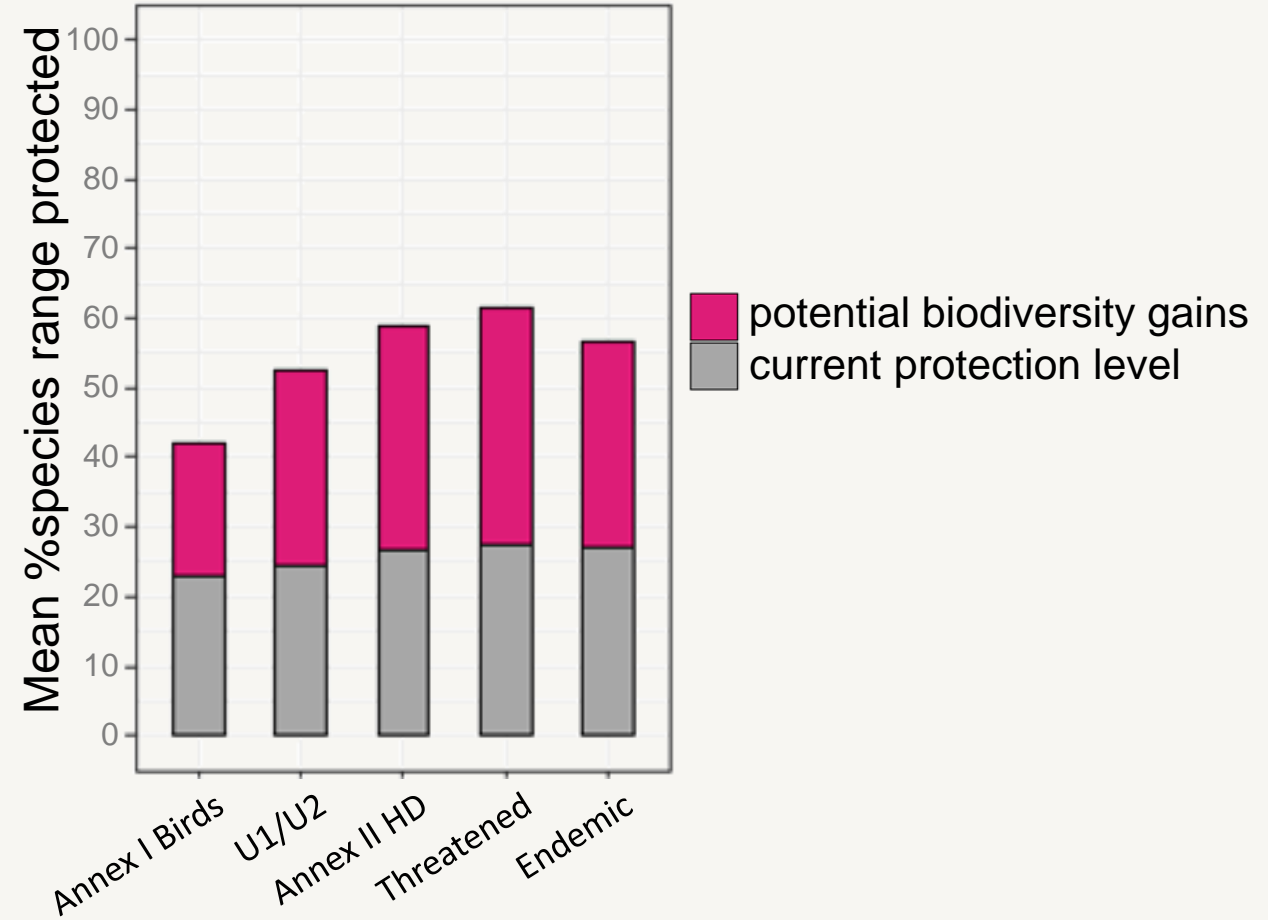
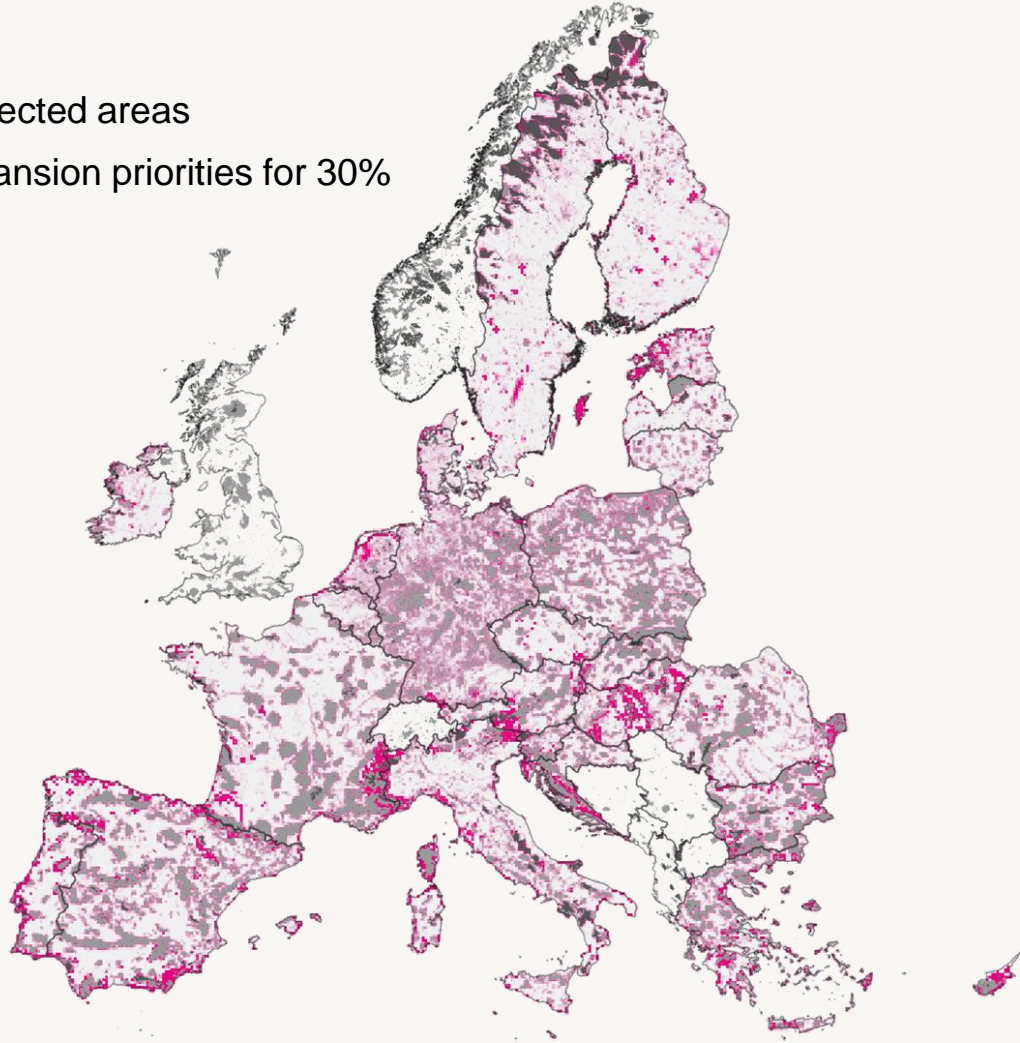
- EU-wide priorities
- Member State priorities
- EU-wide with equal area shares between countries



EU-wide priorities for expanding PAs

EU-wide priorities for biodiversity are unevenly distributed across countries

■ Protected areas
■ Expansion priorities for 30%

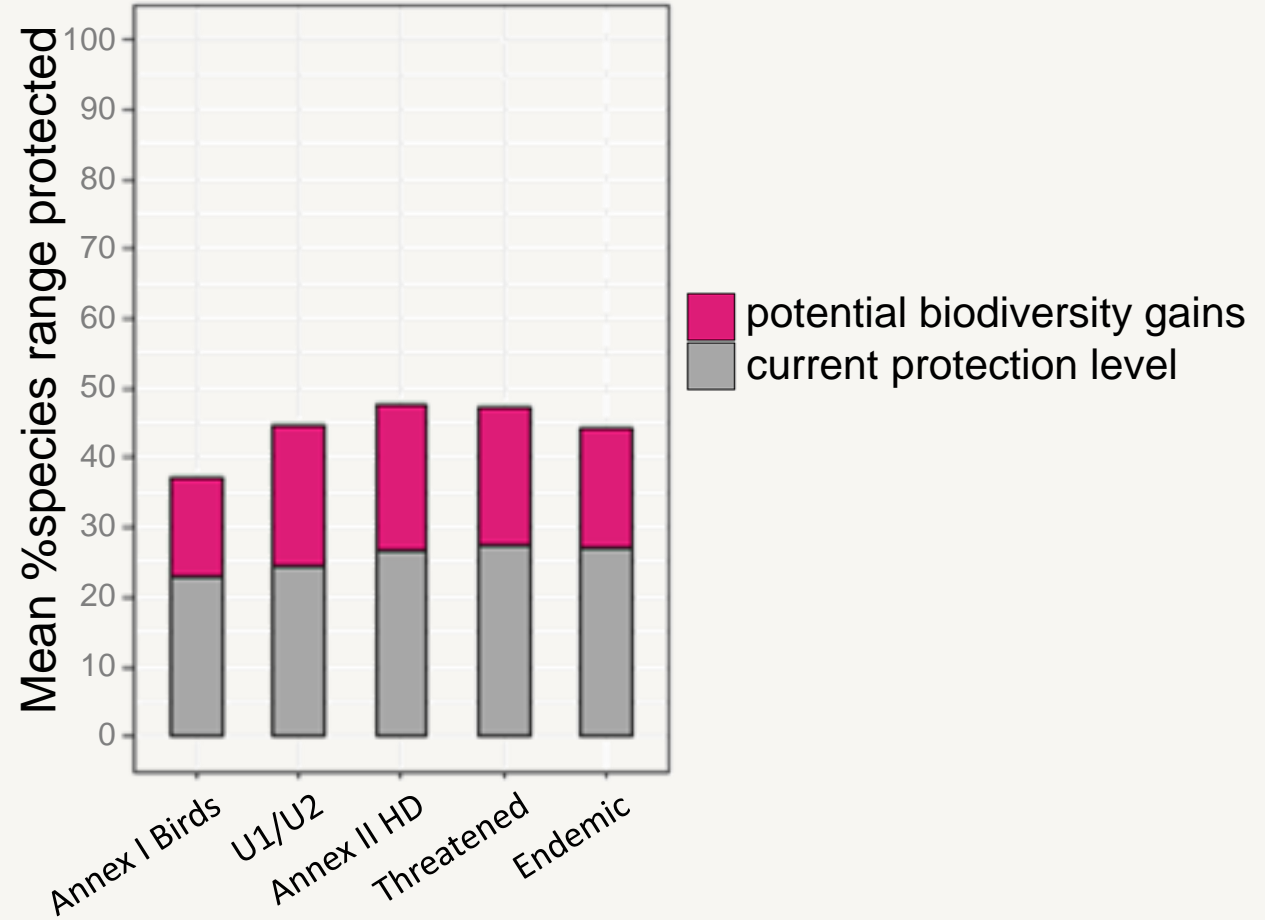
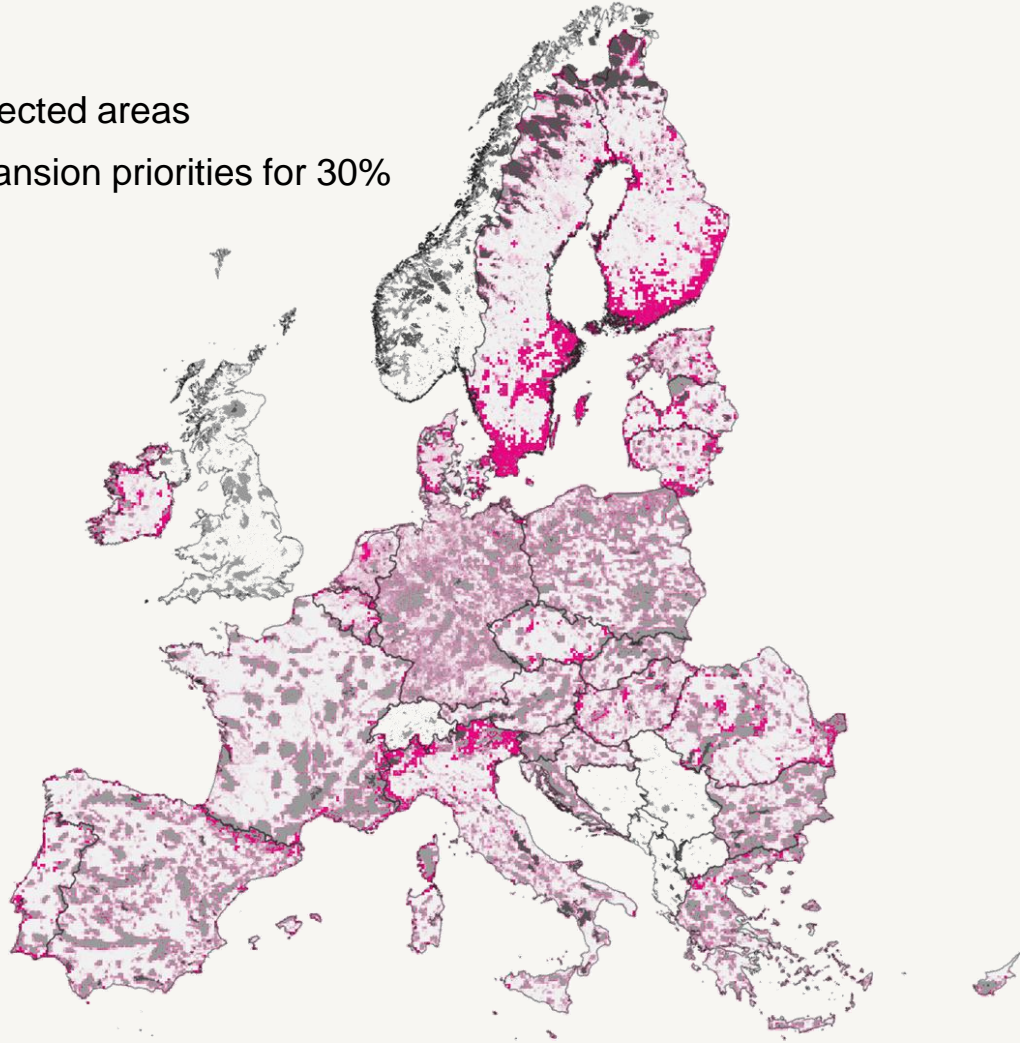




National priorities for expanding PAs

Same amount of area, but lower biodiversity gains

■ Protected areas
■ Expansion priorities for 30%

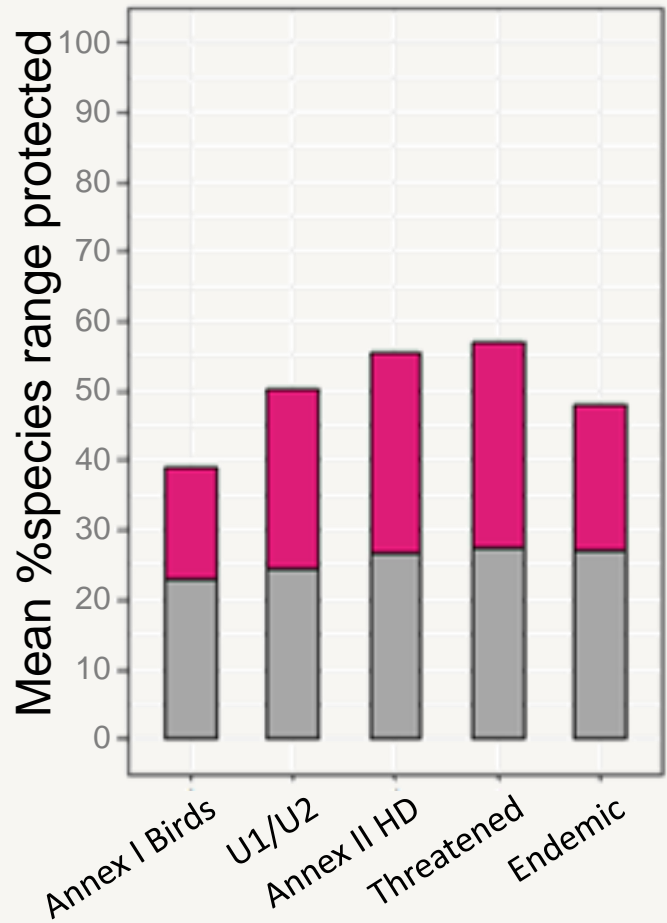
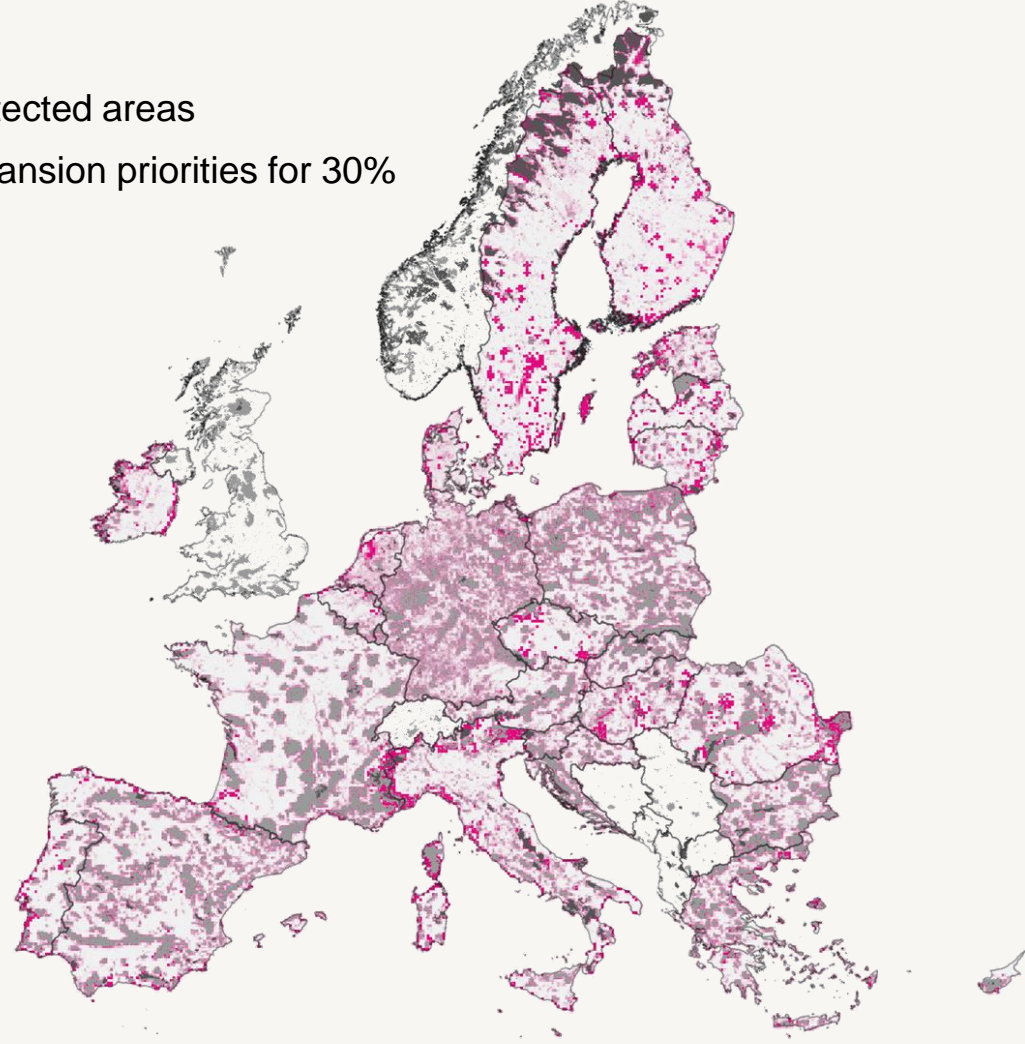




EU-wide priorities with equal area shares

Maximizing biodiversity gains with equal sharing of conservation areas

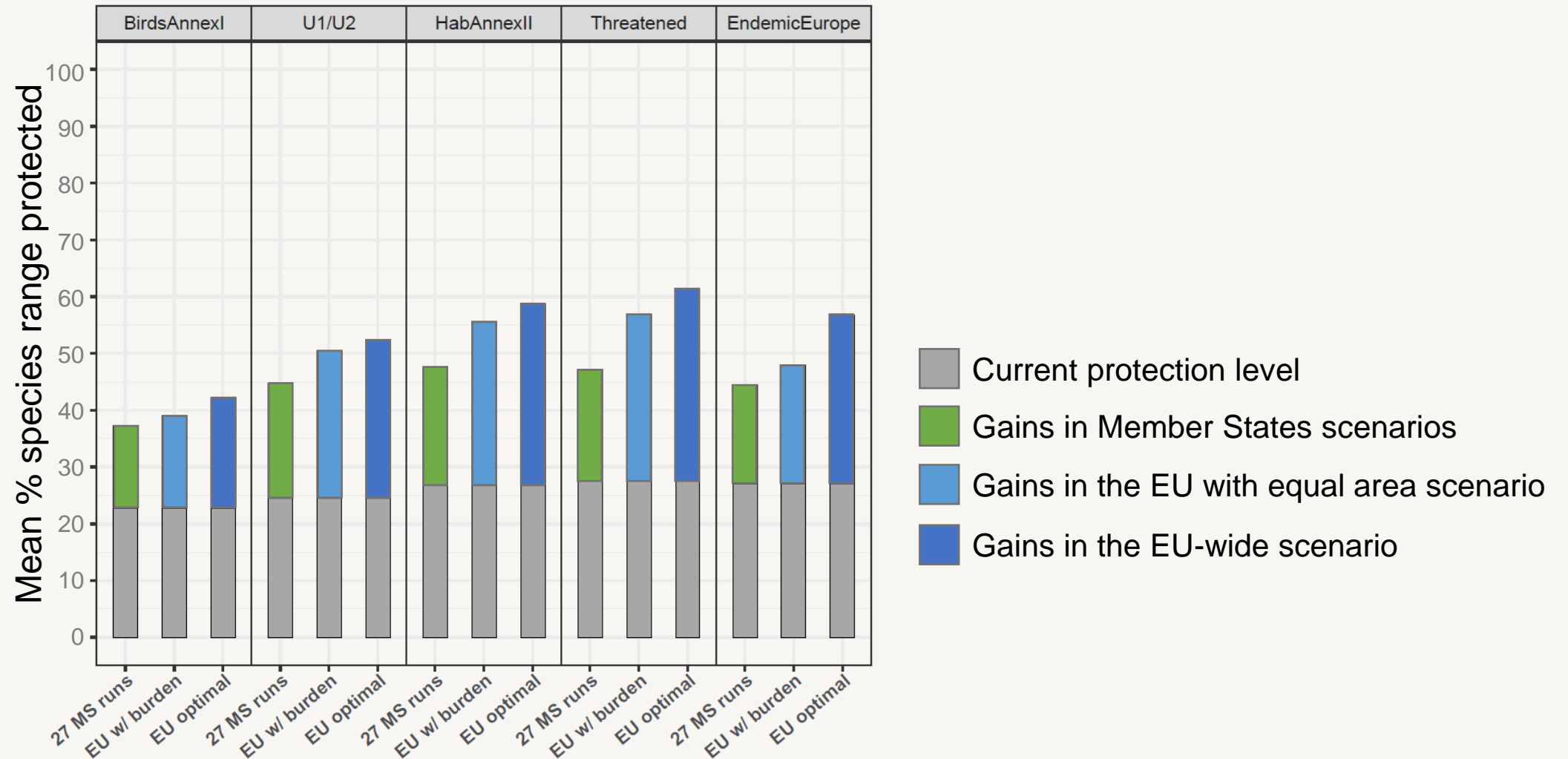
Protected areas
Expansion priorities for 30%



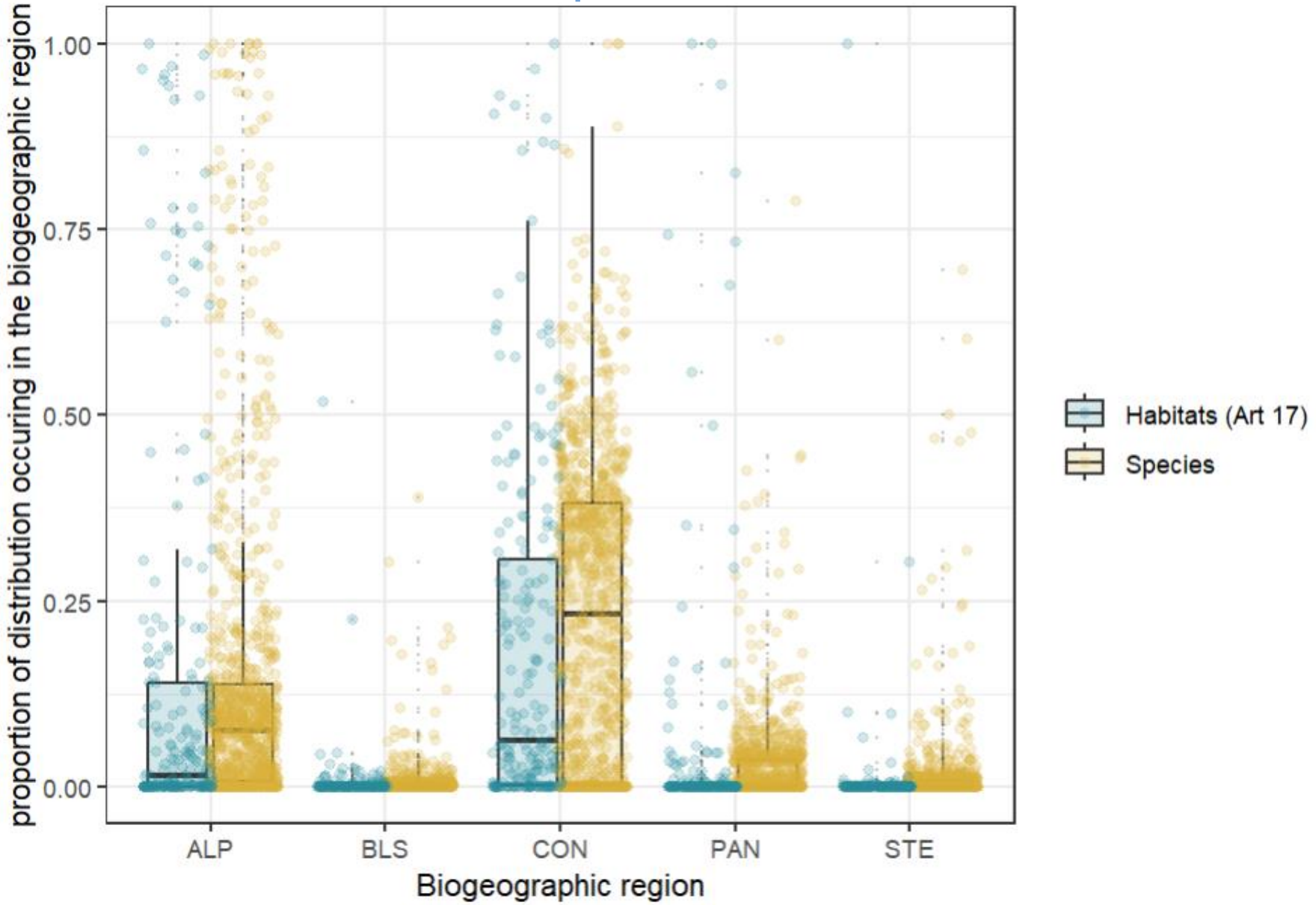
potential biodiversity gains
current protection level

Planning at EU scale increases conservation gains

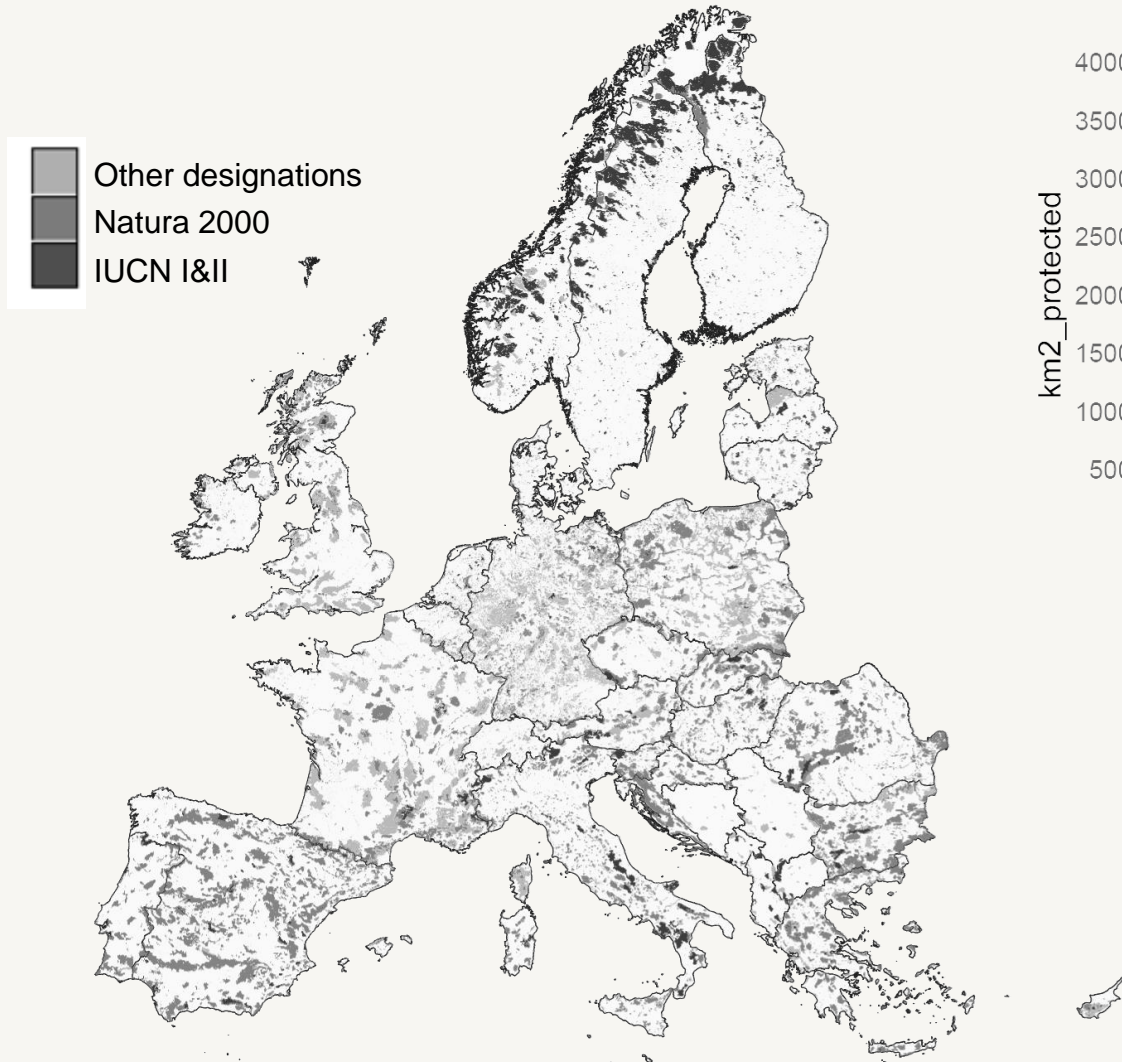
Collaboration across Member States is key to achieve best conservation outcomes



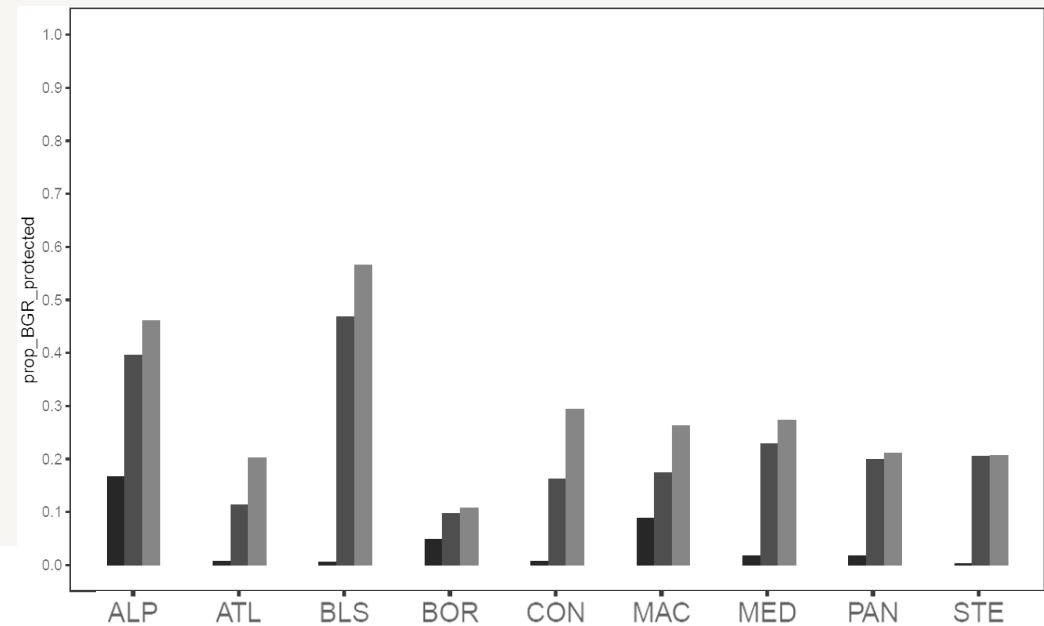
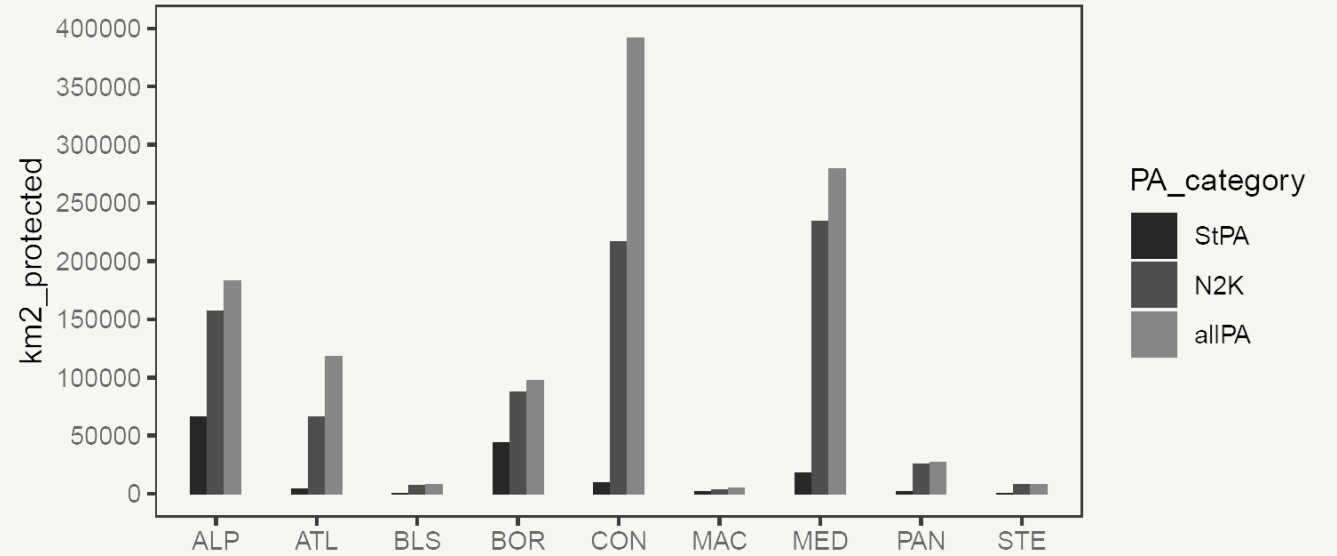
Different biogeographic regions have differentiated responsibility in protecting different species and habitats in Europe



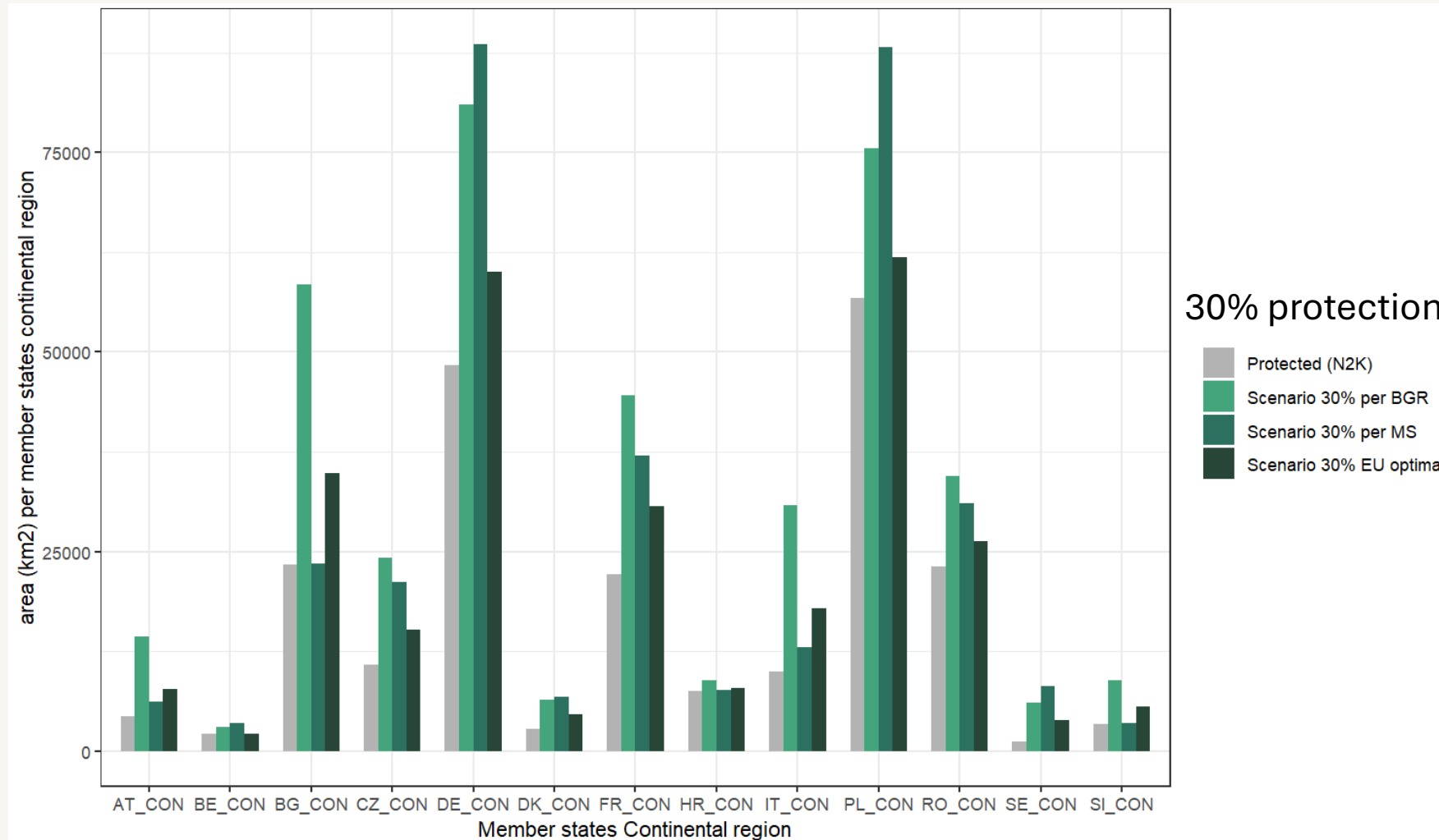
How are existing protected areas distributed across European biogeographic regions?



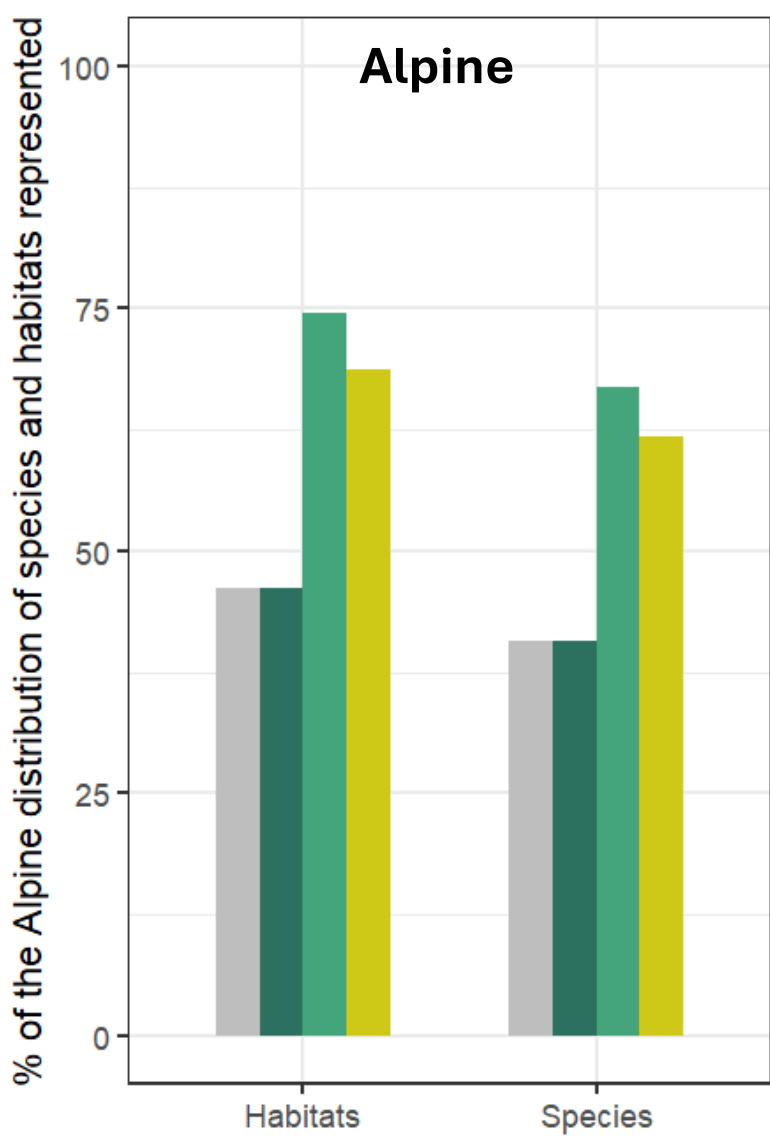
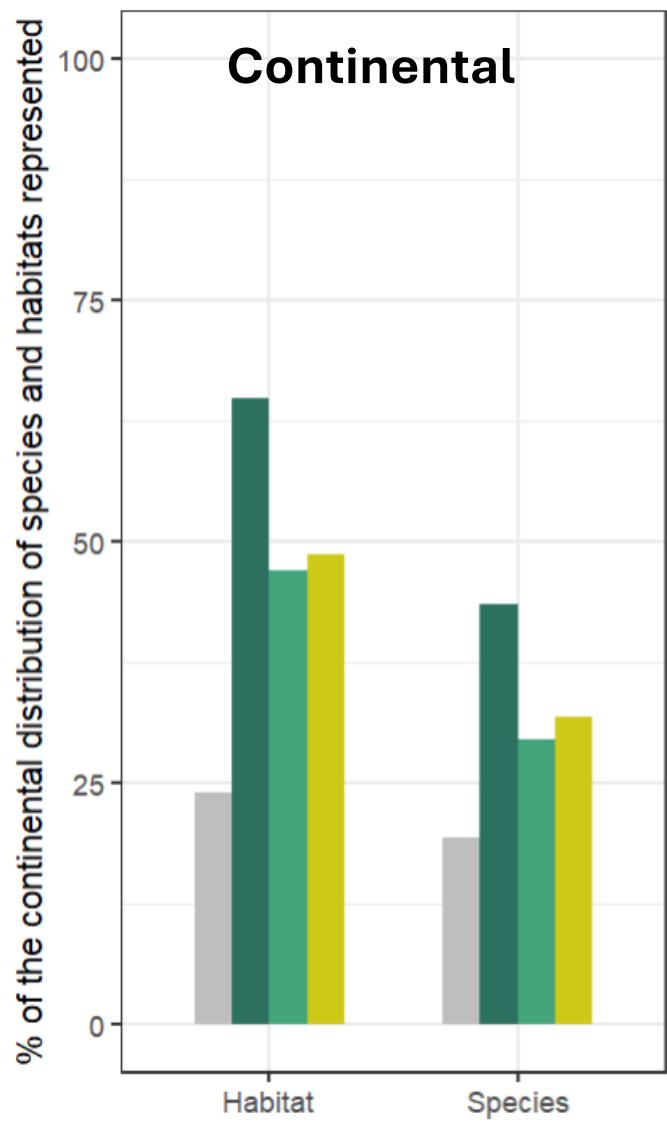
26% of EU land area is protected, including 18% Natura2000 and 3% strict protection



Burden sharing in the Continental Bioregion



PA representativeness for Alpine and Continental Bioregions



- Protected
- 30% with BGR burden sharing
- 30% with MS burden sharing
- 30% Europe (no burden sharing)

How can our results be the most useful?



Discussion for the Knowledge Marketplace

Targeted biodiversity features



- What habitat types, species and other aspects of biodiversity are priorities in your countries?
- What spatial design criteria (e.g. size, proximity to existing PAs) are important?

Costs and constraints



- What are the main constraints to additional designations you would like to see considered in prioritization analyses?

Decision support



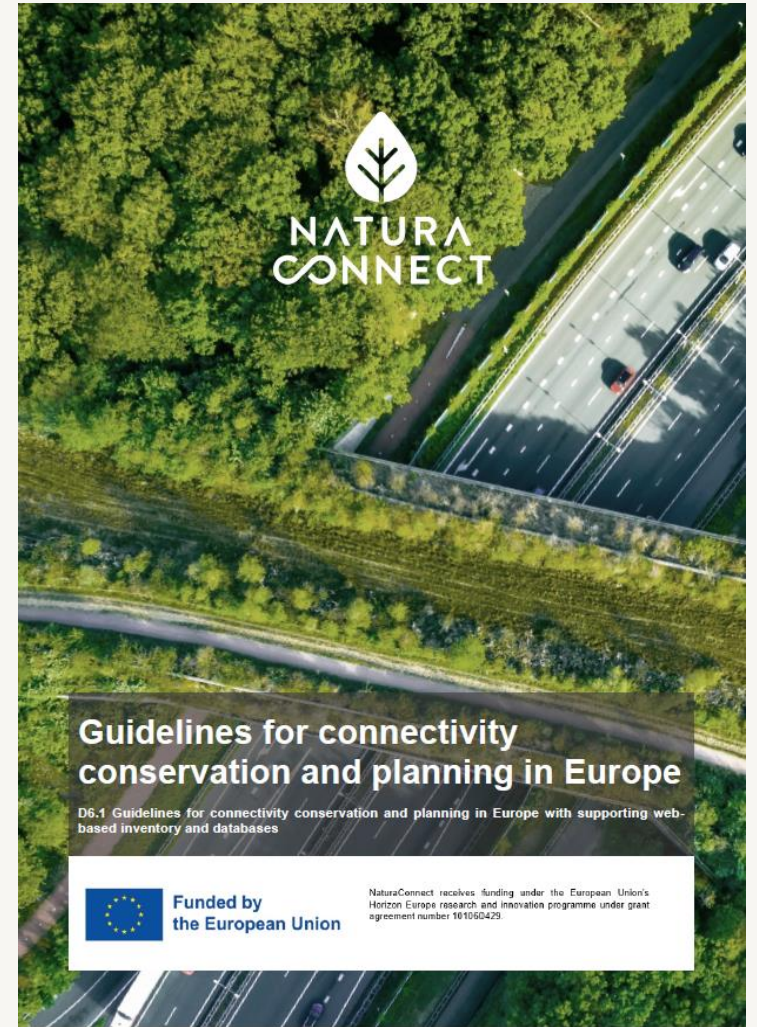
- What data products and tools are most useful for your planning activities?

How can our results be the most useful?

Discussion for the Knowledge Marketplace

Scale and Species

- What is the spatial extent and resolution most useful for decision-making?
- What type of multi-species or multi-use priorities do you have for ecological corridors?
- What data products and tools are most useful for teaching and engagement tools?



Incorporating costs and benefits to people

Costs

Nature's contributions to people



Opportunity

Cost associated with forgone (economic) opportunities from exploitation when setting aside land for conservation



Acquisition

Cost for acquiring property rights of the land



Management

Cost associated with management of conservation areas



Damage

Costs associated with damage to economic activities arising from conservation programs (e.g., livestock kill by wildlife)



Transaction

Costs associated with negotiating an economic exchange



Carbon sequestration



Pollination



Erosion control

Typology of the (economic) costs of conservation
(work by project partners in PBL (NL): Douglas Spencer, Aafke Schipper)

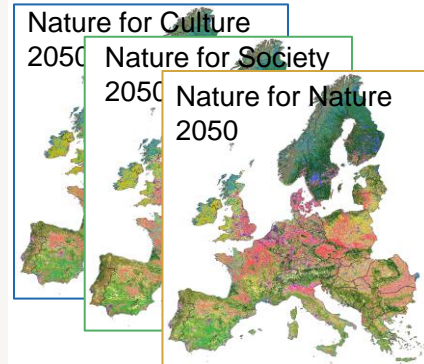
Regulatory & cultural services of nature

Coming soon: Restoration priorities

Definition

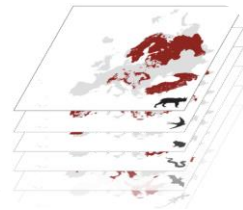
20% top priority areas that are currently unsuitable habitat and are likely to be restored/de-intensified according to future land use change scenario and the restored land use is beneficial for biodiversity (under current + future climate)

Land use change



+

Habitat suitability for species and habitats



Which restored areas are the top 20% most beneficial for biodiversity?

How to get in touch

Stay informed

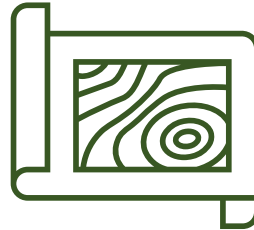


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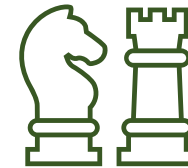
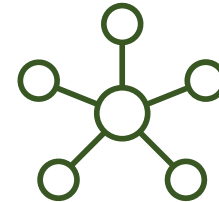
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discuss concepts or a specific analysis



Spatial data

Connectivity



Systematic
Conservation
Planning

Contact us

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Come talk to us!

We hope to collaborate with you over the next few years

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