

Restoration of natural habitat connectivity

Interreg Central Europe project Centralparks

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Ecological connectivity



Convention on
Biological Diversity

- Globally recognised
 - e.g. First draft of the post-2020 Global Biodiversity Framework (CBD, July 2021):
2050 Goals and 2030 Milestones

Goal A

The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species...

Milestone A.1

Net gain in area, connectivity and integrity of natural systems of at least 5 per cent.

Ecological connectivity – post 2020 GBF

2030 action targets

1. Reducing threats to biodiversity

- Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas
- Ensure that at least 20 % of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems
- Ensuring that at least 30 % globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes
- ...



**Convention on
Biological Diversity**

Ecological connectivity – IUCN guidelines and resolutions

Guidelines for conserving connectivity through ecological networks and corridors

(Hilty et al. 2020)

- The need for connectivity
- The scientific basis for connectivity
- Towards a common language of connectivity conservation
- Ecological networks for conservation
- Planning and implementing ecological corridors
- Application and benefits of ecol. corridors in different environments
- The emergence of connectivity conservation law and policy



Guidelines for conserving connectivity through ecological networks and corridors

Jodi Hilty, Graeme L. Worboys, Annika Keeley, Stephen Woodley, Barbara Lausche, Harvey Locke, Mark Carr, Ian Pulsford, James Plitcock, J. Wilson White, David M. Theobald, Jessica Levine, Mely Reulhing, James E.M. Watson, Rob Ament and Gary M. Tabor

Craig Groves, Series Editor



Protected Areas – Cornerstones of Ecological Connectivity in the Carpathians and Beyond

International Conference, Visegrád, Hungary, 28-30 September 2021 - Project co-funded by European Union Funds (ERDF, IPA)

Ecological connectivity

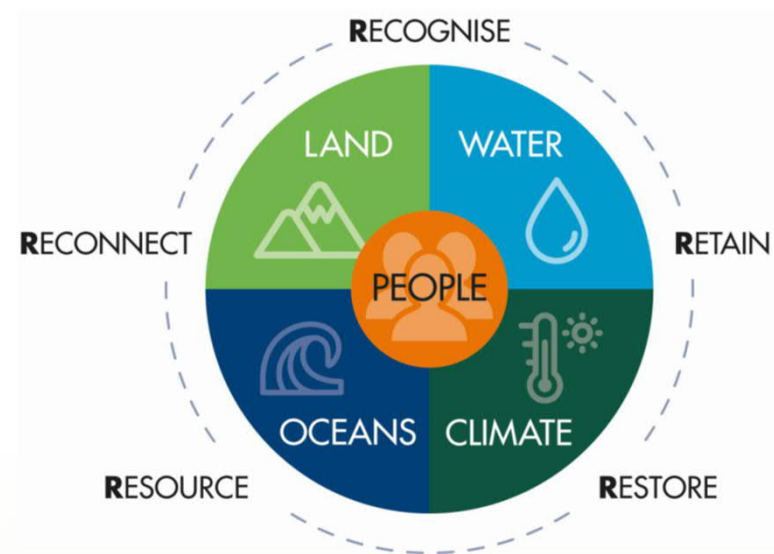
- IUCN Programme 2021-2024

Prioritised Programme Area LAND What needs to be done?

There is an urgent need to protect landscapes and biodiversity and to upscale the sustainable use and restoration of ecosystems and the conservation and recovery of species. Areas necessary for the persistence of biodiversity must be conserved with protected areas and other effective area-based conservation measures...

What will IUCN do?

1. Ecosystems are retained and restored - IUCN will work to support the retention of primary forests and other terrestrial ecosystems, and restoration to increase their intactness, integrity and connectivity as well as their benefits to human well-being...
2. Thriving production landscapes are sustainable, and nature's value and benefits are safeguarded - ... Work to reduce habitat fragmentation and improve ecological connectivity...



Ecological connectivity

- IUCN Programme 2021-2024

Pathways to Transformative Change: The 5Rs

RECOGNISE: ... Ecosystems and habitats must be retained and restored ... Communities must be involved ...

RETAIN: ... Protected areas that safeguard the most important freshwater, marine and terrestrial ecosystems...

RESTORE: The integrity, quality and functionality, and sustainable use of degraded ecosystems

RESOURCE: Conservation, sustainable use and restoration of the world's ecosystems and the services they provide...

RECONNECT: ... Fragmented ecosystems and habitats across landscapes ... To facilitate the flow of genetic diversity and maximise resilience to climate change. ... Migratory species ... across international borders. Protected and conserved areas linked across landscapes and seascapes... International treaties and conventions through synergies



Ecological connectivity



- IUCN World Conservation Congress 2020 (3-10 September 2021)

The Marseille Manifesto

- Includes: Committing to an ambitious, interconnected and effective site-based conservation network

Motions - resolutions

- Ecological integrity in the post-2020 global biodiversity framework
- Wildlife-friendly linear infrastructure
- Ecological connectivity conservation in the post-2020 GBF: from local to international levels
- Strengthening national spatial planning to ensure global persistence of biodiversity
- Ensuring the compatibility of human activities with conservation objectives in protected areas
- Rewilding, etc.

EU Biodiversity Strategy for 2030

Protecting and restoring nature in the EU

- A coherent network of protected areas
 1. Legally protect a minimum of 30% of the EU's land area and integrate ecological corridors, as part of a true Trans-European Nature Network
 2. Strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests
 3. Effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately
- An EU Nature Restoration Plan: restoring ecosystems across land and sea

Project Building management capacities of Carpathian protected areas for the integration and harmonization of biodiversity protection and local socio-economic development

- Programme Interreg CENTRAL EUROPE
- 2019-2022
- 7 countries, 8 partners / 8 Associated Partners
 1. Italy: European Academy of Bolzano/Bozen – Eurac Research
 2. Austria: European Wilderness Society
 3. Czech Republic: Vzdělávací a informační středisko Bílé Karpaty, o.p.s.
 4. Hungary: NP Duna-Ipoly National Park Directorate
 5. Poland: Ekopsychology Society
 6. Romania: NFA – Romsilva – Piatra Craiului National Park Administration
 7. Slovakia: OZ Pronatur
 8. Slovakia: State Nature Conservancy



Programme specific objective:

3.1 To improve integrated environmental management capacities for the protection and sustainable use of natural heritage and resources

Project specific objectives

- Improving integrated environmental management capacities of protected area administrations and other public sector entities dealing with the protection and sustainable use of natural resources
- Reconciling and linking the conservation of biological and landscape diversity to sustainable local socio-economic development
- Promoting the Carpathian Network of Protected Areas as the framework and tool for transnational collaboration between the protected areas of the Carpathian countries

Main work packages

- Integration of biodiversity conservation and sustainable development in the Carpathian region
- Building capacities of Carpathian PAs managers
- Carpathian Ecosystem Services Toolkit
- Communication



Protected Areas – Cornerstones of Ecological Connectivity in the Carpathians and Beyond
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WPT1: Integration of biodiversity conservation and sustainable development in the Carpathian region

Outputs include:

- Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside PAs
- Strategy for local sustainable tourism development based on natural heritage of the Carpathians
- Guidelines on communication between protected areas and local communities in the Carpathians

Deliverable Carpathian strategy for enhancing biodiversity and landscape conservation outside and inside protected areas

Strategic Objectives

1. Preservation, protection, recovery and sustainable use of plant, animal and fungi species
2. Preservation, protection, restoration and sustainable use of natural and semi-natural habitats
3. Preservation, protection, restoration, revitalization and sustainable use of landscapes
4. Ensuring continuity and connectivity of natural and semi-natural habitats, landscapes, strengthening the ecological network in the Carpathian region

SO4 Ensuring continuity and connectivity of natural and semi-natural habitats, landscapes, strengthening the ecological network in the Carpathian region

Operational Objectives

- Assessment of the local and regional state of ecological connectivity
- Planning the preservation, restoration, and enhancement of the local and regional ecological connectivity and ecological network
- Implementation of measures and activities for the preservation, restoration, and enhancement of the local and regional ecological connectivity and ecological network

SO4 Proposed measures for ensuring continuity and connectivity of natural and semi-natural habitats, landscapes and strengthening the ecological network in the Carpathian region

- Consolidation of data for the assessment of the local and regional state of ecological connectivity; local and regional ecological gap assessment; development and maintenance of a database on the ecological connectivity
- Identification and assessment of threats to the preservation of the ecol. connectivity
- Identification of the priority ecological connectivity intervention areas
- Planning and implementation of the preservation, restoration and enhancement of the local and regional ecol. connectivity by the modification of the economic use of the area
- Planning and implementation of measures and activities for the restoration or enhancement of the local and regional ecological connectivity

SO4 Proposed measures for ensuring continuity and connectivity of natural and semi-natural habitats, landscapes and strengthening the ecological network in the Carpathian region (continuation)

- Assessment of the need for the extension or designation of PAs for the preservation, restoration, or enhancement of the local and regional ecological connectivity and implementation
- Planning transboundary cooperation activities for the preservation, restoration, or enhancement of the local and regional ecol. connectivity
- Supporting the restoration and enhancement of the local and regional ecological connectivity and ecol. network by informative, educational and awareness raising activities
- Consultation, harmonization and coordination of measures and activities for the preservation, protection, restoration and enhancement of ecol. connectivity and ecol. network

Strategy for enhancing biodiversity and landscape conservation outside and inside protected areas

Includes „checklist“ for planning and implementation and monitoring of effectiveness (indicators)

Target audience

- administrations of PAs, nature conservation and landscape protection agencies and other nature and landscape conservation bodies and authorities
- local communities, incl. municipal and regional authorities

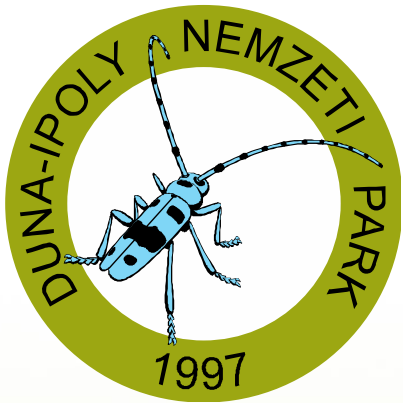
Cooperation and synergy with other related regional projects

- Interreg DTP ConnectGREEN (Methodology for identification of ecological corridors, Guidelines, Recommendations...)
- Interreg DTP SaveGREEN (implementation)
- Interreg DTP DaRe to Connect (barriers, ecol. corridors, monitoring – measures...)
- Interreg Central Europe BEECHPOWER (stakeholders involvement, risk management, forest management...)

Thank you!



eurac research



Let's
Get
Wild!

