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ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe

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Part I: General and Introductory Remarks

Part II: Strategical Actions for Managing and Developing the European Green Belt

Part III: Toolbox for Actions and Cooperation

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ReCo Transnational Restoration and Connectivity Strategy
for the **European Green Belt**
in Central Europe

Part I

General and Introductory Remarks

1. The European Green Belt

Europe in the 1980ies was a deeply divided continent with the Warsaw Pact in the east and NATO in the west. In between was the Iron Curtain, a largely impenetrable borderline that dominated vast adjacent areas on both sides. The Iron Curtain became a remote area where people moved away — or were moved away by force — and where development of infrastructure was slow or ceasing. Extensive access restrictions were effective especially on the eastern side. The only positive turn was that natural habitats were not as heavily destroyed in this region as elsewhere in Europe. In some areas, natural environments could even return to a former better conservation status, marked by less human activity.

When the Iron Curtain broke down in 1989, initiatives on both the eastern and western side stood up to preserve these natural treasures, joining forces across the border and initiating the *Green Belt*. Many sites were put under protection in the years to come and are today, often as national parks, providing attractions and income for these remote regions. It still took more than a decade until the local and regional initiatives joined on a European level, backed by politicians like Mikhail Gorbachev.

Generalized map of the European Green Belt.

The *European Green Belt* is today both an active initiative of local citizens and a line of valuable natural, cultural and historical heritage, spanning through 24 European countries and reaching from northern Scandinavia to the Black Sea coast, not far from the continent's end at the Bosporus. It crosses through a vast variety of European landscapes and serves as backbone of the Pan-European ecological network that is today described as *Green Infrastructure* by the European Union. The European Green Belt Initiative is one of the few international networks that joins authorities and other GOs with an energetic group of NGOs. All of them are jointly working on harmonizing human activities with the natural environment. They are steadily transforming the appalling Iron Curtain into an agreeable landscape that is both safeguarding the natural values and offering socioeconomic development opportunities for the benefit of the local communities.

Due to its immense length, the European Green Belt is subdivided into four sections. These are working jointly on the European level. The coordination of the vast network of partners and the design and implementation of activities are however largely performed on this regional level.

The INTERREG Central Europe programme area comprises **the whole Central European section of the European Green Belt as well as the southern part of the Baltic Green Belt. This is the area targeted by this Transnational Restoration and Connectivity Strategy.**

2. Objectives and Structure of this Strategy

2.1. Objectives and Goals

The *ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe* aims to outline the necessary measures for successful management and development of the European Green Belt over the next decade. It encompasses the complete scope of the European Green Belt's motives and ideas, i.e. not only focusing on nature conservation, but also concentrating on historical, cultural and socio-economical assets. It builds on prior work delivered in the frame of various projects and initiatives, with the ReCo project financed by Interreg Central Europe being a core component.

The European Green Belt Initiative has previously agreed on a concise statement outlining its mission which illustrates the objectives driving all activities:

> *The European Green Belt, our shared natural heritage along the line of the former Iron Curtain, is to be conserved and restored to function as an ecological network connecting high-value natural and cultural landscapes, whilst respecting the economic, social and cultural needs of local communities. The mission is to ensure that the European Green Belt is efficiently protected and that its sustainable development is promoted by facilitating an ongoing coordinated transboundary cooperation at all levels and across all sectors of society.*

This mission statement can be regarded the frame for the objectives of this Transnational Strategy for the European Green Belt in Central Europe. It is also well suited for the general goal definition of the ReCo Transnational Strategy for the European Green Belt, which is thus worded as:

> ***The valuable natural heritage left behind by the Iron Curtain is to be preserved, wisely managed and preferably expanded for the future, honoring and promoting its history and cultural heritage and supporting sustainable change that will enable the local population and economy to sustain a living.***

2.2. ReCo as Basis of this Strategy

This strategy builds on results and experiences from the ReCo Interreg project that has implemented various pilot actions in nature conservation and development at European Green Belt locations ranging from Poland to Slovenia. Major strategical findings from these have been published in two *Practitioners' Guides*, one of these focusing on the pilot activities, the other one on the species pilot actions. Detailed

Local/Regional Restoration Plans were created for six pilot areas, some of them cross-border and consequentially also with international cooperation as central and critical objective. A multitude of local, regional and national stakeholders considered important for successful implementation of conservation actions and long-term success were actively involved in the preparation of these plans, and extensive *Transnational and regional GIS surveys along the European Green Belt in Central Europe* highlighting habitat qualities and historical developments delivered a good base mapping for all following discussion and planning. All these activities reached far beyond the official project partnership, creating an extensive network of collaborators covering various professions and functions. All pilot areas received on-the-spot visits of international expert peer review teams, discussing the ReCo project activities with both the local project partners as well as with external stakeholders and practitioners. These peer reviews opened the door for substantial optimizations, effective far beyond the end of the project, main findings being documented in *Joint peer-review reports*.

All abovementioned ReCo project publications (and several more) are available for download on the project website:

https://www.interreg-central.eu/projects/reco/?tab=media

The knowledge and experience gathered during these and complementary activities and the intensive communication with an interdisciplinary set of stakeholders from numerous countries form the basis for the *ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe*. The ReCo project has been an excellent ground to learn about protection and development needs for the Central European part of the European Green Belt while also widely exploring, discussing and developing potential solutions to address such needs. These are exactly the assets needed to define strategical steps and requirements

To deliver a comprehensive picture, the *ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe* also integrates aspects that were not in the center of ReCo activities. It utilizes extensive experience from the wider European Green Belt network made up of GOs, NGOs and engaged individuals, with which the ReCo project has constantly kept close ties.

2.3. Geographical and Temporal Scope

The *ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe* encompasses the European Green Belt in the Interreg Central Europe programme area, that is in Poland, Germany, Czechia, Austria, Slovakia, Hungary, Slovenia, Italy and Croatia. It covers both the southern coast of the Baltic Sea, being part of the Baltic section of the European Green Belt, as well as the whole Central European section. Marine underwater habitats occur in this area just like high elevations of almost 3.000 meters. Climates range from alpine and sub-boreal over temperate to Mediterranean and the use and appearance of the landscapes vary widely. The width of the European Green Belt in the covered area varies with typical diameters ranging between 25 km and more than 50 km. For many development aspects it is essential to also look into adjacent areas, which were — like the defined European Green Belt areas — sometimes likewise affected by the Iron Curtain.

The *ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe* presents central strategical considerations for the development of the European Green Belt in the coming decade, i.e. for a timeframe ending in 2035. It is thus focused on short- and medium-term needs and actions, which is — considering the uncertainty of many political developments — often the maximum period for reasonably precise strategic statements.

2.4. Role of this Strategy

This strategy is at the time of its issuing solely a product of its authors and the ReCo project. It does not necessarily reflect the views and opinions of the whole European Green Belt network, the European Green Belt Association or the concerned regional subsections of the European Green Belt, Central Europe and Baltic. It also does not have to coincide with official or inofficial positions of the European Union, the main funder of the ReCo project.

The *ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe* does however aim at making realistic and beneficial proposals with a strong focus on the transposition of European Union legislation and policy on an international scale, making use of the diverse and well-connected European Green Belt network. It can be adopted and, if need be, adapted and enhanced, by all actors in the European Green Belt, be it on regional or pan-European scale. And it can serve as solid ground for future European Green Belt development, possibly being a basis for future finer-grained strategies addressing specific fields, regions or partner networks.

Most importantly, it prompts and invites for targeted direct action, pinpointing activities that will prove most beneficial for future management and development of the European Green Belt. It provides strategical guidance to local and regional actors and can serve as a manual providing diagnoses and remedies for common problems.

2.5. Structure of the Transnational Strategy

The *ReCo Transnational Restoration and Connectivity Strategy for the European Green Belt in Central Europe* falls into three distinct parts:

Part I: General and Introductory Remarks

This rather short section relates the considerations and methods as well as other basic issues that are relevant for the strategy. These chapters help to contextualize the recommended strategical actions and outline how the strategy evolved.

Part II: Strategical Actions for Managing and Developing the European Green Belt

This is the core of the strategy, relating the necessary actions for successful future development of the Central European part of the European Green Belt. It is divided into eight chapters addressing individual thematic fields of action:

- 1. Managing Habitats
- 2. Enhancing connectivity
- 3. Species conservation and management
- 4. Local history and heritage
- 5. Visitor management
- 6. Public information
- 7. Political lobbying and involvement
- 8. Research and citizen science

Besides some general considerations relevant for the respective topic(s) and a broad description of the main existing challenges and problems, each of these chapters contains a set of strategical instruments that are needed for the successful future management and development of the European Green Belt.

Part III: Toolbox for Actions and Cooperation

Strategies can be perceived a bit theoretical and too abstract to be directly translated into concrete action. To combat this, this part offers a toolbox that presents excellent real world actions, addressing and complementing all eight chapters of Part II. These carefully selected best practices and innovative examples that have already been realized in the territorial scope of the strategy, i.e. in the whole Central European Belt spanning from Croatia to the Baltic Sea and the coastal areas of Poland and Germany in the Baltic Green Belt.

The presented activities have proven to be successful, they are tangible and not theoretical. They can usually be inspected in-situ with reasonable effort and even discussed with their creators. Added to each

of these tools is an advice, where else in the territorial scope of this strategy a replication should be most rewarding. Most often this will not be a one-to-one replication, but rather a refined localized approach taking up central prerequisites and methods from the presented tool and thereby being much easier to realize than starting from scratch.

The showcased activities are diverse, encompassing all aspects of the set goals. They can all be regarded as best practices or best-in-class, having shown superior performance and excellent effectivity and efficiency. The presented *tools* are excellent examples or blueprints to duplicate, to refine or to advance for an own use, sparing a good deal of the usual creation process of successful activities.

ReCo Transnational Restoration and Connectivity Strategy
for the **European Green Belt**
in Central Europe

Part II

Strategical Actions for Managing and Developing the European Green Belt

3. Managing Habitats

3.1. Introduction

The European Green Belt encompasses some of Europe's most valuable habitats. Along its Central European and southern Baltic stretch – from Poland to Croatia – these include, for example, peat bogs, riparian corridors, floodplains, coastal lagoons, grey dunes, mountain forests and extensive semi-natural grasslands. This diversity is mirrored by the exceptional biological richness of the region, making habitat management a foundational component for ensuring long-term ecosystem functionality, resilience to climate change and the achievement of both national and EU-wide biodiversity targets.

With the European Union's Biodiversity Strategy for 2030 and the newly adopted Nature Restoration Law (formally: *Nature Restoration Regulation*, 2024/1991), EU Member States are committed to reversing biodiversity loss and restoring at least 20% of land and sea areas by 2030. Habitat management across the European Green Belt represents a key spatial opportunity and liability for meeting these goals.

3.2. Strategic Relevance

Over 80% of habitats protected under the Habitats Directive in the EU are currently in unfavorable condition. Across Central Europe, pressures such as industrialized agriculture, infrastructure development and also land abandonment and climate change have fragmented or degraded many ecosystems and are severely threatening the survival of various habitats throughout Central Europe. Effective habitat management is therefore vital to improve ecological quality, maintain species diversity and secure ecosystem resilience and services along the European Green Belt. As a long but narrow corridor, is particularly sensitive to edge effects and to maintain its connectivity functions it is essential that it retains its largely gapless state.

Habitat management in the European Green Belt is central to fulfill the obligations of the EU member states in the Natura 2000 site network and to reach the necessary improvements of habitat quality and diversity that are subject of the Nature Restoration Law. Habitat management is also strategically aligned with national goals, such as several German federal states' designation as National Natural Monument *(Nationales Naturmonument) or* the inclusion of European Green Belt segments in the identified core ecological networks of various states.

Additionally, natural habitats and diverse cultural landscapes are also a core component of local heritage, telling histories of local communities and adding to local quality of life. Landscapes regarded as pretty and pleasant to live in are rich in colorful wild flowers, abound with singing birds and are refuges of endangered habitats such as winding, burbling streams or undulating shores. As such, they add to local revenue as tourism destinations and the EU points out in its communication on the Nature Restoration Law that each Euro invested in nature restoration yields 4 to 38 Euros in benefits.

3.3. Objectives

The overarching objective is to improve the ecological status of rare and priority habitats and to preserve or enhance the status of all other typical habitats within the European Green Belt through restoration, appropriate management and adaptive governance. Specific objectives include:

- Halting degradation of mires, old-growth forests, unbuilt shorelines, semi-natural grasslands and all other typical habitats suffering from ecological diversity loss and decline
- Restoring degraded or lost habitats, especially wetlands and alluvial systems, as per the EU Nature Restoration Law.
- Improving habitat quality metrics, such as species richness, structural diversity and natural processes (e.g. hydrology).
- Mainstreaming Green Belt habitat priorities into local and regional policies, national restoration plans and EU funding frameworks such as the CAP and the cohesion policy.

3.4. Key Actions

3.4.1. Promote Organic Agriculture and Traditional Land Use Practices

DESCRIPTION:

Organic agriculture and traditional land use create and preserve habitats for many plant and animal species and areas so managed are increasingly becoming their only refuges. Sustaining and promoting such agriculture is therefore the central key to successful nature conservation especially in cultural landscapes.

DETAILED ACTIONS:

- Provide adequate financing for organic agriculture and low-impact traditional land uses that remunerate the services that these farming practices deliver for society and nature.
- Farming schemes without detrimental environmental effects should become the central prerequisite for receiving funding through the financing instruments of the Common Agricultural Policy (CAP).
- Offer consultation and incentives for businesses willing to turn organic.
- Install and support direct marketing of local traditional and organic goods.

ADDED VALUE:

This action is essential to reach environmental goals in both pillar I (Eco schemes) and pillar II (Agri-Environmental and Climate Measures) of the CAP, it is the core of the EU Farm to Fork Strategy, which demands 25% organic agriculture by 2030, and is also central for the fulfilment of the demands of the EU Biodiversity Strategy, among others. The action yields high biodiversity and is very important for the pollinator recovery targets under the Nature Restoration Law.

GEOGRAPHICAL RELEVANCE:

This is of great relevance in the whole European Green Belt, in some areas to preserve the still very diverse landscape endangered by changes in agricultural markets, in others to recover some nature islands within industrial agriculture.

3.4.2. Restore and Manage Semi-Natural Grasslands

DESCRIPTION:

Semi-natural grasslands are characterized by grazing or mowing in extensive farming schemes on pristine or only slightly altered soils. Semi-natural grasslands are among the most species-rich habitats in Europe, yet they are declining due to abandonment and intensification. Continued support from EU agri-environmental payments is crucial for this grasslands' long-term viability.

DETAILED ACTIONS:

- Secure habitat-specific mowing or grazing regimes.
- Reintroduction of extensive livestock breeds.
- Ensure economic feasibility of nature- and conservation-based agriculture with financial remuneration
- Remove woody encroachment.
- Restore the seed bank for long-term resilience and biodiversity.

ADDED VALUE:

This action supports high biodiversity, increases resilience to climate change (through soil carbon storage and water retention) and aligns with pollinator recovery targets under the Nature Restoration Law and generally the EU Biodiversity Strategy.

GEOGRAPHICAL RELEVANCE:

Relevant in the whole European Green Belt, with hotspots in coastal meadows on the Baltic seashore, the montane grasslands in mountainous areas, the diverse grasslands in the foothills of Alps and Dinaric Alps and the temporarily flooded fluviatile meadows along rivers and streams.

GOOD PRACTICE EXAMPLE:

The ReCo project has realized successful implementation of meadow protection on daffodil mountain meadows in the Karavanke Mountains and on Karst drylands near the Adria coast (further info in Practitioner Guide Habitats).

Managing semi-natural grasslands needs good conservation concepts, farmers' commitment, and also adequate and often special machinery and equipment (Karavanke Mountains).
(Jörg Schmiedel)

3.4.3. Regenerate the Natural Habitat Diversity of Woodlands

DESCRIPTION:

Many woodlands in the European Green Belt have been heavily transformed by forestry, today often containing only few of their naturally growing species. Conifer plantings have replaced deciduous tree vegetation over vast areas, mass-proliferations of insects often impairing the trees' growth at these non-natural locations. Replacement afforestations usually include less conifers, but are often still not based on the site's natural tree spectrum.

More than one fifth of all forest species are completely dependent on deadwood for their survival and many others highly profit from its availability, but deadwood is a rare resource in most of today's forests as trees are harvested long before they develop significant deadwood habitats.

It is thus necessary to implement a more nature-based forestry in the European Green Belt that has biological richness as a focus besides wood production, is more resilient towards climate change and eliminates insect infestation problems, Continuous-cover forestry, retention of deadwood to increase habitat quality for saprophytic and saproxylic organisms and forest specialists and – where necessary – enrichment planting with native species are its basis.

DETAILED ACTIONS:

- Clear-cutting and monoculture practices are to be replaced by biodiversity-oriented management.
- Timber and deadwood removal must never exceed the new growth.
- No-use areas are to be established in all woodlands.
- Natural rejuvenation must be the standard method for reafforestation, with planting or seeding strictly limited to areas without suitable indigenous mother trees and all alien species are to be avoided.
- Maintenance of drainage systems in forest areas should be terminated.
- The restoration of riparian forests and floodplains includes dike relocation, natural succession and the removal of artificial barriers to allow natural flooding and sediment dynamics.
- The eutrophication of forests, especially in lowland glacial sediment regions, has to be combatted.

ADDED VALUE:

Most of the actions are essential for meeting the ecosystem restoration targets in the EU Nature Restoration Law and they substantially improve carbon sequestration and drought resilience. The habitat quality and usually also the quality for human recreation is improved. Actions in riparian areas specifically support the EU river continuity goals of the Nature Restoration Law (25.000 km of free-flowing rivers by 2030) and the Water Framework Directive's good environmental status requirements, and they additionally provide ecosystem-based flood protection.

GEOGRAPHICAL RELEVANCE:

Relevant in the whole European Green Belt, with hotspots in mountain and riparian forests.

3.4.4. Restore Hydrological Regimes in Wetland Areas

DESCRIPTION:

The most extensive wetlands in the European Green Belt are on the one side bogs and mires with peat accumulation and on the other side the floodplains along streams and rivers, typically with sedimentation of upstream material, and often also with peat formation. A specialty are the coastal bogs along the Baltic coast with brackish water flooding. All of these have been heavily impacted by man, with their hydrological regimes typically severely changed and drainage being ubiquitous in formerly wet areas. Sites with an (almost) unchanged hydrological regime are very rare.

Peatlands are the most important and most capable ecosystems for long-term carbon storage, but they have been drained for agriculture and forestry, with ongoing draining arousing constant emissions of huge amounts of carbon dioxide. Drainage of living or degenerated bogs is the most important source of climate relevant gases over vast areas of the European Green Belt. This action is thus not only important for habitat conservation and management, but also central for climate protection. Undrained unaltered mires and especially lowland raised bogs are today among the rarest and most endangered habitats in the European Green Belt of Central Europe. Much of their fauna and flora is highly specialized and does not occur in other habitats.

The EU Carbon Farming Initiative (funding through LIFE and the European Regional Development Fund, among others) and future funding for actions according to the Carbon Removals and Carbon Farming

Certification (CRCF) Regulation as well as the CAP support can provide financial assistance for peatland restoration, provided national implementation frameworks include these measures. Funding for flood risk management and for implementation of water directives on EU and national levels can co-fund these actions; synergies with climate adaptation plans should be utilized.

DETAILED ACTIONS:

- Re-establish natural water regimes, e.g. by blocking drainage ditches.
- Eliminate eutrophication caused by inflow of fertilized waters or further drainage-induced soil decomposition.
- Completely cease any peat extraction.
- Reintroduce typical species into renaturalized but highly isolated bog areas.
- Reinstate natural flooding and sedimentation by removing obsolete barriers and restoring natural water dynamics.

ADDED VALUE:

This action supports a multitude of EU policy goals in the climate, water and biodiversity sectors and can be considered essential to meet both the EU's and also many national states' climate-relevant emission targets, due to the immense share the drainage-induced emissions constitute in the overall climate gas emissions. The action also improves biodiversity, water retention, recreation value and reduces fire and drought risks as well as the flooding potential of populated areas.

GEOGRAPHICAL RELEVANCE:

Target areas are scattered over the whole European Green Belt of the covered area with the most acute need for action in Germany and secondly Poland, Czechia, Austria and Italy.

GOOD PRACTICE EXAMPLE:

The *LIFE for Mires* project has succeeded to revitalize extensive boglands (further info in Toolbox).

3.4.5. Conserve Coastal Habitats, such as Dunes, Beaches and Tidal Flats

DESCRIPTION:

Beaches are among the most heavily impacted habitats by human recreation, being widely trampled, cleaned of the natural wrack line and often built up with seasonal or permanent constructions to support tourism and recreation. Trampling is not only an issue on sand, but also on shingle beach habitats, as they are typical for the northeastern Adria coast. Dunes lying in the back of the beaches are frequently trampled, abused as toilets, often built up and are heavily impacted by invasions of alien species such as Japanese Rose *(Rosa rugosa) or* Black Pine *(Pinus nigra)*. Management of human disturbance along the southern Baltic and Adriatic coasts are essential to protect rare pioneer communities of both the beaches and sand dunes. The shorelines are also heavily impacted by all types of marine litter, especially plastic waste, with microplastics now being an ascendant component in the beach sand and from there migrating through the food chain, including into animals used for human consumption.

Mudflats in the Baltic and the Adria are central for bird migration, especially for waders, and are among the most productive marine habitats. The tidal range of the Baltic Sea is very low, with flooding or dryfalling often being ruled by prevailing winds, a regional specialty evoking extreme and unique habitat conditions. Human disturbance originating both from land or sea (vessels, sports activities) is frequent in many mudflats and needs to be minimized.

The shallow water habitats of the Baltic Sea have been severely altered by eutrophication, sediment extraction and invasions of alien species, with especially the eutrophication effects drastically reducing the extent of biologically rich areas and whole groups of organisms, such as charophytes, having widely vanished. The resulting mass-proliferations of cyanobacteria are relevant for human health. Eutrophication has to be combated on a European scale, it cannot be tackled in the European Green Belt alone.

Generally, shallow water areas as in the Green Belt of both Baltic and Adria are among the most biodiverse parts of the seas, especially areas with rocky grounds.

DETAILED ACTIONS:

- Apply visitor management and guidance on all beaches, involving visitor information and, where necessary, also infrastructure to safeguard the beach and also potentially neighboring dune habitats.
- Representative portions of the beaches should be held completely free of visitor traffic and trampling, keeping in mind that these are not only plant and insect habitats, but also breeding grounds of endangered birds such as the Little Tern *(Sterna albifrons)* or Sandpipers *(Charadrius spp.)* which are prone to disturbance even from a distance.
- Do not allow newly established plants of neophytes in dunes to spread, but rather consistently remove them while this is still possible with little effort.
- Severely reduce the Baltic Sea's eutrophication as a prerequisite for regenerating the underwater habitats, which means to reform and restrict practices of the main pollutant, industrial agriculture.
- Drastically reduce plastic waste release in the environment.
- Establish underwater no-take zones for biodiversity protection and regeneration of fish stocks.

ADDED VALUE:

This action supports migratory birds, halophytes and habitat resilience against sea-level rise. It also contributes to marine biodiversity targets and ecosystem-based coastal protection.

GEOGRAPHICAL RELEVANCE:

Baltic Green Belt coast of Poland and Germany as well as the Adria coast in the wider Trieste region in Italy and Slovenia

GOOD PRACTICE EXAMPLE:

Underwater macroalgal forests and seagrass meadows have been re-created in the Adria (further info in Toolbox).

3.4.6. Habitat Mapping and Classification

DESCRIPTION:

Habitat mapping provides critical information for understanding, managing, and conserving habitats. Mapping allows to understand where particular habitats are located, which state they are in and which management actions might be necessary. Data can be compared over time to detect changes in the conservation state of the habitats, in land use, possible degradation processes or climate-related shifts.

DETAILED ACTIONS:

- Implement habitat mapping systems using field inventories and remote sensing.
- Adjust management plans based on ongoing biodiversity assessments.
- Establish standardized protocols and a unified classification framework to enable data sharing across the European Green Belt (and beyond) and for ensuring comparability of data over time.
- Specifically address data necessary for the implementation of international directives (e.g. EU Habitats Directive, Convention on Biological Diversity).

ADDED VALUE:

This action provides essential datasets for habitat conservation, supporting EU biodiversity monitoring and management goals and also allowing science-based documentation and reporting. Reliable habitat data is also required for environmental impact assessments and various kinds of strategic planning.

GEOGRAPHICAL RELEVANCE:

Target areas for habitat mapping are scattered over the whole European Green Belt.

3.4.7. Protected Area Designation and Management

DESCRIPTION:

The European Green Belt alone does not provide any protection to its habitats – it may impose moral obligations, but not more. To establish a binding protection it is necessary to designate legally protected areas according to national or international laws, e.g. national parks, nature conservation sites according to national legislation, Natura 2000 sites, UNESCO Biosphere Reserves. Unfortunately, a major part of the European Green Belt is even today still without any legal protection and hence prone to possible destruction. A wipeout of valuable habitats and irreparable connectivity gaps would be the result.

A protected area designation is not just about conserving nature – it's about preserving a shared European heritage and ensuring the European Green Belt benefits both wildlife and people for generations to come. Successfully designating and managing Protected Area requires a combination of legal, operational and social actions and after the designation, management measures will usually be necessary to maintain or achieve a good ecological status of the site.

DETAILED ACTIONS:

- Initiate national and transnational protected area designations along the European Green Belt to fill the remaining gaps.
- Advocate for types of protection that recognize the European Green Belt as a coherent ecological network, ensuring it is protected in its entirety under national and international law.
- Provide public information in cases where protection could be controversial.
- Align with EU legislation and policies such as the Habitats Directive, the Birds Directive and the European Biodiversity Strategy.
- Make protected area networks transboundary and specifically add missing links where protection has already been provided on the other side of the border.
- Formally include the European Green Belt in spatial plans and similar policies as priority area for nature conservation.

ADDED VALUE:

A protected area status brings a more secure habitat protection – a destruction or annulation of protected habitat areas then requires a prior formal process and potentially a public or political discussion. A legal recognition also makes it easier to access funding (e.g. from EU LIFE Programme or national funding schemes). Transboundary cooperation in protected area governance, as e.g. in the Bayerischer Wald-Šumava or Podyjí-Thayatal partnerships, fosters joint strategies and resource sharing and builds lasting contacts across national borders.

GEOGRAPHICAL RELEVANCE:

Inadequate management of protected areas with a lacking fulfillment of protection goals and obligations is frequent across the whole European Green Belt. Important areas for protected area designations in so far unprotected or insufficiently protected parts of the European Green Belt are for example the land side of the Polish Baltic Sea coast or the southern Alps.

4. Enhancing Connectivity

4.1. Introduction

Connectivity is one of the fundamental pillars of ecological integrity and resilience. The European Green Belt by its very nature functions as transcontinental *Green Infrastructure* and as such, safeguarding and enhancing landscape connectivity is both a strategic imperative and a practical necessity. Fragmentation by infrastructure, intensive agriculture and urbanization has led to increasingly isolated habitats, threatening species movement, gene flow and ecosystem adaptation to climate change.

The EU Biodiversity Strategy for 2030 underlines the importance of restoring and connecting fragmented habitats and establishing a trans-European nature network. Within this framework, the Central European and southern Baltic segments of the European Green Belt represent a high-potential backbone for green infrastructure. Reinforcing the European Green Belt's connective function will not only benefit biodiversity conservation but also strengthen ecosystem services such as pollination, climate resilience and flood prevention.

Migrating birds like this curlew resting in Škocjanski Zatok are totally dependent on connectivity for survival — they have to travel from their breeding areas in the North to the wintering areas further south every year and need stepping stones like this one to feed and rest (Škocjanski Lagoon).
(Jörg Schmiedel)

4.2. Strategic Relevance

Connectivity enhancement within the European Green Belt addresses multiple EU-level policy targets:

- The Birds Directive explicitly addresses the conservation of migration routes and the network of suitable staging sites lying therein.

- The EU Biodiversity Strategy for 2030 commits to expanding the ecological coherence of Natura 2000.
- The EU Green Infrastructure Strategy sets out how EU-wide action can become an important step towards protecting natural capital, to help stop the loss of biodiversity and to enable ecosystems to deliver their services to people
- The Nature Restoration Law mandates restoring connectivity in degraded ecosystems, particularly forests, rivers, peatlands and grasslands.
- Components of the Trans-European Transport Network (TEN-T) must integrate biodiversity safeguards, including ecological crossings and barrier mitigation, to assure that important connectivity and migration corridors are not disrupted.
- Furthermore, connectivity is the central conservation asset of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) signed by both the European Union and additionally by all of its member states, all of these now being parties of the convention.

4.3. Objectives

The primary objective is to reinforce the ecological connectivity function of the European Green Belt corridor as core part of the European Union's Green Infrastructure through structural, functional and institutional measures. Specific objectives include:

- Identify and close connectivity gaps between core habitats, also across along borders.
- Restore landscape permeability for species migration, seasonal movement and dispersal.
- Integrate ecological connectivity into infrastructure planning (transport, energy, land use).
- Support species-specific corridor needs, particularly for wide-ranging or threatened species.
- Embed connectivity into national restoration plans and European Green Belt management frameworks.

4.4. Key Actions

4.4.1. Locate, Map and Prioritize Connectivity Gaps

DESCRIPTION:

This action involves analyzing corridors at regional scale. By overlaying barriers and pressures such as roads, intensive land use or built up areas, critical passability bottlenecks for relevant species can be located. The spots and areas requiring action should be reviewed and prioritized.

DETAILED ACTIONS:

- Regions with special need for an in-depth gap analysis should be identified, based on occurrences of species requiring wide roaming ranges, species of special conservation concern and obvious needs for establishing connectivity between isolated protected areas.
- Using GIS systems, satellite imagery and topographic map data, large areas should be analyzed concerning the functional quality of their connectivity services and obstacles hindering passability.
- Minimum habitat areas for animals needed to sustain viable populations should be especially considered.
- Due to its north-south orientation, the European Green Belt can serve as an excellent corridor for northward migration of species due to climate change, this should be addressed.
- Ecological expertise and local field mapping are required to complement and potentially emend the GIS results.
- Priority areas for action should be identified according to the need for conservation and ecological remediation as well as on the basis of a least cost analysis.

ADDED VALUE:

The analysis provides a spatially explicit basis for targeted investments and implementation of regulatory protection of movement corridors. It can provide unified and comparable data across borders. Since the

GIS work is possible with open source software and also an abundance of spatial datasets are openly available, the action is usually very cost efficient.

GEOGRAPHICAL RELEVANCE:

This is relevant in the whole section of the European Green Belt covered here.

GOOD PRACTICE EXAMPLE:

ReCo's GIS analysis of the landscape has shown connecting elements and gaps as well as their evolvement over time (further info in *Transnational and regional GIS survey* and *Transnational Atlas for six ReCo Pilot Regions*).

4.4.2. Create Connecting Ecological Corridors

DESCRIPTION:

Ecological corridors are necessary to be created or restored in the areas for action pointed out by the gap analysis and also anywhere else where European Green Belt habitats are to be connected or upgraded. Simple connecting elements can be hedgerows, meadow strips along field paths, natural streams or small forest patches. Connecting elements do not have to be linear though: ponds for example can serve as stepping stones for wetland species that can only cross limited distances over dryland. The creation of basic functional connecting elements is, when well planned, often neither costly nor complicated. It can thus be accomplished even by small municipalities or groups of activists. Besides having an ecological value, connecting elements prettify the landscape, fostering recreation and a more pleasant living environment.

The connectivity actions generally show a high alignment with the EU Green Infrastructure Strategy and CAP-funded landscape features, with the CAP also suited for financing, provided that actions are integrated into national agri-environment schemes.

DETAILED ACTIONS:

- On-the-spot actions to boost connectivity are manifold, varying with the habitats to be connected and the species addressed, but generally, the more diverse the connecting elements are, the more functional they will usually be. Concrete examples of effective actions to create ecological corridors are:
- Connect forest patches with hedges made up of native tree and bush species.
- Transform the sides and embankments of secondary roads and trainlines or the power line right of way clearings to near-natural meadows under appropriate mowing regimes.
- Provide solid deadwood scattered over all forest and hedge areas because a great number of insect dwellers of such habitats are unable to bridge longer distances, meaning they cannot spread if no deadwood is available in the near vicinity.
- Abandoned field paths can be used for creating connecting elements in areas with difficult land availability (such as in intensively used agricultural areas where the will of private owners to sell is often limited) as the respective land plots are often under public ownership.

ADDED VALUE:

The connecting elements enable dispersal of plants and animals, reconnect formerly isolated populations and increase the resilience of species to climate-driven range shifts.

GEOGRAPHICAL RELEVANCE:

This is relevant in the whole section of the European Green Belt.

GOOD PRACTICE EXAMPLE:

Connecting corridors have been located by GIS analysis of freely available satellite data in a cross-border project in Germany and the Czech Republic (further info in Toolbox).

4.4.3. Enhance Continuity of Rivers and Riparian Corridors

DESCRIPTION:

The continuity of stream and river systems is often abruptly blocked by dams and other installations, making it impossible to migrate up- or downstream for various animals. This disrupts for example the spawning migration of fishes, causing inevitable extinction of the affected populations. Canalized sections of streams and rivers are unsuitable as habitats for many riparian species and thus also have an isolating effect. Reconnecting the partial sections of rivers and streams into one long flowing water body that can be freely traveled by riparian organisms is central for the ecological functioning of these habitats.

Additional challenges are imposed by the increasingly severe droughts in summertime due to climate change that impair continuity by leaving stream sections without or with too little water. It is also foreseeable that commercial shipping on some rivers, like on the Green Belt section of the Elbe, will terminate, as there will not be enough water in the summer months to allow an economically viable operation. This effect of climate change offers chances to bring these rivers back to a natural state after losing their function as shipping channels.

DETAILED ACTIONS:

- Remove dams as well as pipe canalizations and culverts.
- Create fish passes to relieve the situation at impassable dams.
- Design all bridges and crossovers in a way that does not impair continuity of the underlying stream or river, i.e. include room for banks to not disrupt movements of e.g. otters *(Lutra lutra)* and provide a large enough distance and diameter above the water level to retain the continuous downstream air current necessary for upstream migration of e.g. mayflies (Ephemeroptera) and dragonflies (Anisoptera).
- Relocate dikes to enable species movement and water retention.
- Develop concepts and solutions for streams and rivers suffering from climate change-induced low water problems, reaching from a regeneration of their waterheads to post-shipping scenarios for rivers which would afterwards provide other services than today's dominant traffic function.

ADDED VALUE:

The action helps to meet the EU target of 25.000 km of restored rivers. It diversifies fish stocks, including those of economic importance, and advances genetic exchange, improving resilience of the ecosystems.

GEOGRAPHICAL RELEVANCE:

Key river systems in the European Green Belt are Vistula, Oder/Peene, Elbe, Danube, Morava, Mura and Drava. Apart from these, there are numerous smaller rivers requiring action.

4.4.4. Prevent the Creation of new Infrastructure Barriers

DESCRIPTION:

The transportation network along the European Green Belt is still growing, with especially new roads severely disrupting connectivity and thus dividing the landscape into smaller compartments with reduced biodiversity. The EU is partly financing this infrastructure, focusing on the TEN-T network of connections of European concern. More than 20 TEN-T corridors are crossing through the European Green Belt section covered by this strategy, many of them with planned expansions of the existing transport infrastructure.

The connectivity of the European Green Belt has already been severely interrupted by roads at various locations, despite Environmental Impact Assessments or accompanying landscape conservation plans often being mandatory for these constructions. Safeguarding connectivity will have to gain in prominence when enlarging the transportation network in order to at least slow down this trend. While negative impacts of new constructions are impossible to avoid, disruptions of European Green Belt connectivity have to be reduced to the absolute minimum possible.

While the transportation network, namely roads, trainlines, canalized rivers, ports and locally even airports, is the dominant factor in dividing European Green Belt landscapes, it has to be emphasized that impacts of urban sprawl, recreation infrastructure, installations for military or border control purposes and others also play an important role in impairing connectivity. Future development of these in the European Green Belt should follow comparable principles as outlined for the transportation network.

DETAILED ACTIONS:

- Connectivity issues have to be thoroughly analyzed in the impact assessments of any new infrastructure to be installed in the European Green Belt; minimization of negative impacts should be paramount.
- Constructions of green bridges or underpasses and culverts that are designed to be usable for animals should be regarded mandatory on transport infrastructure.
- All water crossings must allow riparian species' migration; also the banks should not be interrupted.
- Night lighting should be omitted as it can heavily impair movements of e.g. night flying insects, where it is still necessary lamp design, light spectrum and lighting times should be optimized for least possible impact.
- In the Fennoscandian and the Balkan sections of the European Green Belt, newly installed border fences are now seriously blocking and disrupting animal movements – it is important that such constructions shall not be installed in Central Europe, especially not along borders between EU member states.

ADDED VALUE:

EU requirements under TEN-T guidelines mandate inclusion of ecological mitigation. Retaining ecological connectivity is also central

4.4.5. Install Crossings on Existing Infrastructure Barriers

DESCRIPTION:

Existing infrastructure barriers have often separated adjacent habitats from each other for decades, with animal movement across e.g. highly frequented motorways being largely impossible for many species. However, an at least basic reconnection is usually possible, either by adding structures that aids in crossing or by reducing the dividing impact of the existing infrastructure. Both are highly desirable and should be used to recreate connectivity wherever possible.

DETAILED ACTIONS:

- Green bridges or underpasses and culverts that are designed to be usable for animals should be added to reconnect habitats wherever possible.
- Make roads crossable for mammals by imposing speed limits and for migrating amphibians by spawning-time partial closures.
- Existing night lighting should be optimized for low ecological impact by using an appropriate lamp design, light spectrum and lighting times with the potential to operate using presence detectors.

ADDED VALUE:

Fragmentation by transport infrastructure is mitigated, which supports biodiversity and ecosystem resilience. The action prevents roadkill of protected species and also reduces death toll and injuries of car drivers resulting from large mammal collisions

GEOGRAPHICAL RELEVANCE:

This action is critical along TEN-T corridors intersecting the European Green Belt, but also for other dividing infrastructure all along the European Green Belt section covered in this strategy.

4.4.6. Cross-border Cooperation on Management and Governance

DESCRIPTION:

The European Green Belt depends on communication and cooperation across borders; it stands as a symbol for overcoming Europe's division in Iron Curtain times and replacing this era by vital international collaboration for the sake of nature and society. With national borders in the very center of it and its narrow width, working together across borders is essential for successful European Green Belt management. This includes to at least partly agree on harmonized rules and procedures for joint management.

DETAILED ACTIONS:

- Foster international meeting opportunities for the local population.
- Establish joint management bodies and secure regular cross-border consultations.
- Harmonize planning instruments, methodologies and other formalized processes.

ADDED VALUE:

This action ensures long-term functionality of corridors that span multiple jurisdictions. It also enhances the quality of regional development plans and policies as it fosters the consideration or even inclusion of aspects from neighboring areas.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

4.4.7. Facilitate Climate-Induced Range Shifts

DESCRIPTION:

The ongoing man-made global warming is already now leading to range shifts of plants and animals and to extinctions in formerly populated areas. This process will not only proceed, but probably speed up. For the affected species (which is more or less the total indigenous flora and fauna) this means having to either go extinct or to move their ranges northwards or to higher altitudes – an endeavor that is often discerning and sometimes near-impossible in Europe's highly fragmented landscapes. The European Green Belt as a still largely intact north-south corridor through much of the European continent has a special importance in fostering the needed stepping stones and habitat connectivity that will allow species to successfully move their ranges in response to climate warming.

DETAILED ACTIONS:

- Use climate and species distribution models to identify projected movement corridors for target species.
- Locate bottlenecks and gaps along potential migration routes in the European Green Belt and restore degraded corridors through appropriate measures to recreate the necessary connectivity.
- Expand the protected area network in alignment with projected species shifts.

ADDED VALUE:

Making the connectivity function of the European Green Belt fit for supporting the climate-induced range shifts will prevent biodiversity losses and contribute to saving species from extinction. It complements national climate adaptation strategies.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

5. Species Conservation and Management

5.1. Introduction

The European Green Belt is home to a wealth of plant and animal species, many of which are rare or threatened under European and national conservation frameworks. A few species are even endemic to the European Green Belt, occurring not even in neighboring areas. Its linear structure, low land-use intensity in many parts and representation of a multitude of habitat types make the European Green Belt a key area for species survival, recolonization and genetic exchange.

However, ongoing pressures such as agricultural intensification, urban encroachment, hydrological modification and infrastructure development are fragmenting habitats and isolating populations, making plants and animals vanish from formerly habitated locations and — in extreme cases — leading to their extinction. There is also a general lack of coordinated species management at the transboundary level. Targeted action is therefore needed to secure and restore viable populations of key species.

5.2. Strategic Relevance

Species conservation is integral to fulfilling the EU's Birds and Habitats Directives and contributes directly to the EU Biodiversity Strategy for 2030, which codifies a reversal of the decline of pollinators by 2030, stipulates a measurable improvement for at least 30% of species and habitats currently assessed as in poor condition and demands that no deterioration in the conservation status of all protected species occurs.

The Green Belt provides one of the few continuous structures where large-scale species conservation can be coordinated across ecosystems and countries. It is also strategically aligned with national biodiversity action plans and species recovery programs.

5.3. Objectives

- Identify, monitor and conserve populations of priority species along the European Green Belt.
- Implement coordinated transboundary management for wide-ranging and migratory species.
- Address species-specific threats through targeted actions.
- Support functional metapopulations and genetic exchange through habitat linkages and large enough habitat areas.
- Integrate species conservation goals into land-use planning, forestry, agriculture and infrastructure development.

5.4. Key Actions

5.4.1. Identify Priority Species and Conservation Hotspots

DESCRIPTION:

Central for species conservation is the basic knowledge about which species need special focus and conservation effort and in which areas and habitats these are distributed. This has to be analyzed as the basis for targeted species conservation in the European Green Belt.

A list of priority species should highlight the species for which the European Green Belt has a special conservation significance or function. The list is not limited to species that reproduce in the European Green Belt, but it also considers those that use it as essential part of their migration corridors or – in the case of species with very large home ranges – as important part of their roaming area. Parts of the European Green Belt with a special importance for priority species should be pinpointed as conservation hotspots.

DETAILED ACTIONS:

- Assessments of conservation concern, rarity and the importance of the European Green Belt in relation to their total distribution are necessary for identifying the priority species. National Red Lists, Natura 2000 species data, national and international expert opinions as well as available distribution data can be used as a basis.
- Regional data gaps should be tried to fill by using results from adjacent regions, utilizing the transnational nature of the European Green Belt with many international experts being involved in the network.
- Identify those taxa that rely on the European Green Belt as a major or even exclusive part of their total distribution, as protection of these species is often not possible without targeted measues within the European Green Belt.
- Identify the species conservation hotspots by locating areas with a special importance for priority species.

ADDED VALUE:

This action provides an ecological and spatial basis for targeting species conservation resources and actions at transnational level. It is thus helpful to direct the limited conservation resources to activities that promise a maximum yield.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

5.4.2. Address Animals with extensive Home Ranges, esp. Large Mammals

DESCRIPTION:

Large mammals with extensive spatial requirements such as Brown bear *(Ursus arctos)*, Eurasian lynx *(Lynx lynx)*, European bison *(Bos bonasus)* or European wildcat *(Felis silvestris)* depend on functionally connected habitats to fulfill their ecological needs, including foraging, breeding and dispersal. Effective conservation of these species requires large, undisturbed core areas, good connectivity across wider landscapes and usually good ecological permeability of borders and infrastructure. These conditions are still present in substantial parts of the European Green Belt, but they are under pressure even there from infrastructure expansion, intensification of land-uses and sometimes also high death tolls due to deliberate killing or accidents.

Central for the conservation of mammals with extensive roaming ranges is to secure their habitats in their required size and to preserve the connecting corridors, while also mitigating other threats like man-induced killings.

DETAILED ACTIONS:

- Develop and maintain functional connecting corridors between all core habitat patches to enable undisrupted movements in the landscape as a prerequisite for natural habitat use and foraging, functional gene flow and a large enough roaming range to sustain stable populations.
- Identify bottlenecks or barriers in connectivity within and on the rim of the usual roaming range through telemetry and roadkill data.
- Use GPS collaring, camera trapping, genetic sampling or visual identification of individual animals to assess natural movements, population dynamics and mortality causes and adapt management strategies accordingly.
- Harmonize habitat protection, monitoring, legal frameworks and conservation targets across borders and establish lasting trans-national cooperation in protection activities to safeguard the permeability of the border for the animals.

- Implement preventive measures to relieve human-wildlife conflicts (e.g. electric fencing, livestock guardian animals, fact based public information) and support compensation systems to reduce retaliatory killings and foster tolerance among local communities.
- Secure large habitats as protected areas according to national and EU legislation (e.g. Natura 2000, national parks) based on the species' home range requirements, emphasizing habitat size and ecological connectivity as central values to be protected in the legal designation.

Wild European Bisons can only exist when connecting elements secure their minimum habitat size requirements and allow them to cross through man-dominated landscapes without being endangered by e.g. car traffic (Ińsko Lakeland). (Jörg Schmiedel)

ADDED VALUE:

Most species with large habitat requirements are highly relevant protection subjects of the Habitats Directive and collected monitoring data is essential for Natura 2000 reporting obligations. All these large mammals are charismatic animals that are special both concerning public attention and their above-standard habitat requirements. They can therefore serve as umbrella and flagship species, their protection fostering the conservation of numerous other less conspicuous species.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

GOOD PRACTICE EXAMPLE:

The ReCo project's bison monitoring has extensively studied the European bison's roaming ranges, helping to understand better which landscape elements connect and which hinder their movements, possibly beyond critical minimum habitat size (further info in Practitioners' Guide Species).

5.4.3. Control of Invasive Alien Species

DESCRIPTION:

Invasive alien species are a driver of biodiversity loss, particularly in some habitats of riparian zones, forests, grasslands, coastal dunes as well as in various underwater habitats of freshwater, brackish or marine types. Species such as Giant hogweed *(Heracleum mantegazzianum)*, Japanese rose *(Rosa rugosa)*, Canadian goldenrod *(Solidago canadensis)*, Zebra mussel *(Dreissena polymorpha)*, Spinycheek crayfish *(Faxonius limosus)*, Raccoon *(Procyon lotor)* and many others threaten native flora and fauna through outcompetition, predation, habitat alteration and as disease vectors. Eradication is usually impossible once the species are fully established and effective control often requires great efforts with frequently limited success in return. Early detection, rapid response and coordinated management are generally necessary for promising control measures. In parts of the European Green Belt targeted actions for invasive species control are necessary and promise successes for native species conservation.

DETAILED ACTIONS:

- Establish systems for early detection, explicitly also integrating citizen science contributions, and prematurely prepare trained rapid response actions to eradicate new invasions before they become fully established.
- Use spatial data and ecological risk models to locate high-priority areas for intervention, particularly in protected sites and biodiversity-rich zones.
- Apply species-specific control methods, generally choosing the ecologically least invasive options that minimize non-target impacts and adhere to best practices.
- Facilitate international cooperation to allow early notification about potential invasive new arrivals, to share control strategies and coordinate joint cross-border control measures.
- Involve local communities, land managers, and engaged NGO members in prevention and control through education, citizen science and participatory monitoring.

ADDED VALUE:

Controlling invasive species along the European Green Belt safeguards native biodiversity and reduces long-term ecological and economic damage. It promotes actions necessary according the the EU Regulation on Prevention and Management of the Introduction and Spread of Invasive Alien Species and it also contributes to obligations under the EU Biodiversity Strategy for 2030 and the Convention on Biological Diversity.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

5.4.4. Restore Populations through Reintroduction and Reinforcement

DESCRIPTION:

In Europe’s highly fragmented landscape it is often near-impossible for extirpated plant and animal species to recolonize suitable habitats as they are unable to reach them. Targeted reintroductions can be an instrument to bypass this constraint, making it possible to make European Green Belt areas habitable again for species that were once brought to extinction by hunting, habitat destruction, overexploitation or other causes. Reintroductions are possible both with plants or animals and they may also be useful to support small relict populations by enhancing genetic diversity. Care must be taken to only introduce indigenous genotypes.

DETAILED ACTIONS:

- Animals and plants to be reintroduced should be carefully selected, keeping in mind that the necessary effort especially with vertebrate animals is often huge and may have to be supplied for decades.

Reintroducing flagship species can be especially advantageous since they may pave the ground for a wide acceptance of conservation efforts which would usually also benefit many other species.

- Especially consider and evaluate species for introductions that may be heavily affected by global warming and may not be able to colonize new suitable habitats by own means.
- In the forefront of a reintroduction, various preparatory steps are fundamental, namely assessing habitat suitability, possibly conducting a genetic analysis to ensure sufficient genetic diversity and fitness, developing a reintroduction plan and fostering understanding and awareness among the local human population.
- Where possible propagate plants and animals in cultivation or captivity to yield stocks large and diverse enough for successful reintroductions. Care must be taken with plants to avoid outbreeding with garden plants and thus end up with genetically modified organisms and generally to preclude genetic erosion through inintended selective breeding.
- Ongoing monitoring and evaluation of reintroduced stocks as well as adaptive management measures are usually mandatory.

ADDED VALUE:

Reintroductions can restore ecological functions and diversify the genetic variability especially of very rare species. They can therefore play in important role in protecting species of annex II of the Habitats Directive.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

GOOD PRACTICE EXAMPLE:

The reintroduction of European wildcat in Thayatal national park has initiated re-establishment of the species, complemented by scientific monitoring (further info in Practitioner Guide Species).

5.4.5. Establish Transboundary Species Protection and Monitoring

DESCRIPTION:

Many species of conservation concern are extremely vagile, meaning they frequently cross international borders, especially when these are so closeby as in the European Green Belt. The successful protection of these species therefore relies on international cooperation.

DETAILED ACTIONS:

- Standardize monitoring protocols and fieldwork methods, which also means to supply these standards in all local languages.
- Organize joint cross-border activities to deepen understanding and cooperation.
- Share species data across borders and set up joint monitoring systems to track species movements internationally.

ADDED VALUE:

International cooperation improves conservation success and efficiency. It supports the implementation of the EU Nature Restoration Law and the reporting required by the Habitats Directive

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

5.4.6. Develop Species-specific Action Plans

DESCRIPTION:

To target conservation needs for very rare, sharply declining or specialized species, specific action plans can be a medium to collect all relevant information and convey the necessary actions, readily available for the sometimes pretty demanding conservation efforts. Action plans for priority species can be international, national or regional, but for European Green Belt purposes integrating cross-border considerations and international expertise is pretty essential.

DETAILED ACTIONS:

- Select species that would particularly benefit from action plans, especially those that might be in danger of extinction without targeted conservation efforts.
- Use the European Green Belt network to team up for collecting all relevant data, including national datasets or publications in local languages that might otherwise be inacessible.
- Action plans should be published in all relevant national languages, potentially simply using AI tools for translations if resources are limited.

ADDED VALUE:

Species action plans provide a wealth of biological and ecological information on the species covered and deliver a framework for targeted interventions, funding acquisition and monitoring. The EU Restoration Law mandates the restoration of habitats and species in poor conservation status, action plans are central components for delivering this.

GEOGRAPHICAL RELEVANCE:

This is relevant for the whole European Green Belt but especially for Natura 2000 sites dedicated to the preservation of specific species.

6. Local History and Heritage

6.1. Introduction

The European Green Belt is not only a natural corridor but also a cultural and historical landscape. It stretches along the former Iron Curtain, where geopolitical division once shaped both nature and human settlement. This historic dimension has led to the emergence of a unique socio-ecological tapestry, where political isolation inadvertently allowed nature to flourish. This human history — from military installations and border patrol zones to displacements and community isolation — is deeply signified in the landscape.

Recognizing and integrating the local history and cultural heritage of the European Green Belt landscapes and communities enhances public identity, fosters ownership of conservation efforts and strengthens the narrative for its protection. Moreover, heritage conservation and ecological restoration are increasingly seen as mutually reinforcing objectives within European policy frameworks.

6.2. Strategic Relevance

Cultural heritage is recognized under the EU Green Infrastructure Strategy and the EU Biodiversity Strategy for 2030 as essential for identity and cohesion. Preserving and interpreting historical elements along the European Green Belt contributes to sustainable regional development, cultural tourism, education and local identity. It also complements landscape-scale restoration by supporting multifunctional land uses that respect local values.

6.3. Objectives

- Document and preserve historical features and awareness along the Green Belt.
- Rehabilitate culturally significant landscapes and traditional land uses.
- Integrate heritage conservation into spatial planning and European Green Belt governance.
- Promote cross-border collaboration in interpreting and valorizing shared history.
- Engage local communities in storytelling, memory preservation and site management.

6.4. Key Actions

6.4.1. Map and Inventorize Historical and Cultural Sites

DESCRIPTION:

Develop a comprehensive inventory of historical features like bunkers, watchtowers, border fences, dismantled military infrastructure and cultural landscapes including traditional agricultural practices and historical buildings connected with them. This can be eased by using participatory mapping, archival research and should utilize GIS tools as a basis.

DETAILED ACTIONS:

- Collect the historical and cultural data using open and standardized archieving platforms and standards to make wide participation possible and contribution easy.
- Integrate information from already existing datasets that have been produced as a result of historical or regional research, often as citizen science-sourced works by erudite locals.
- Make the information usable for regional marketing and tourism purposes, also including information on nature conservation requirements that might otherwise not be known to visitors.
- Integrate over national borders and – where possible – with EU-wide cultural heritage registers.

ADDED VALUE:

This action provides the basis for integrated management and a great variety of heritage-based actions, also enabling economic utilization of the collected information for tourism and other uses.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

6.4.2. Preserve and Restore Traditional Cultural Landscapes

DESCRIPTION:

With a widespread industrialization of agriculture, disintegrating with local communities and resources and modifying the landscape towards a monotonous production ground without local identity, traditional cultural landscapes have been identified as a valuable historical asset that is not only essential for a high recreation value, but also showcase the regional heritage and uniqueness. Supporting the restoration of traditional land-use systems is thus central for the European Green Belt, joining both cultural and conservation needs. Traditional cultural landscapes are home to sustainable agricultural practices that minimize destructive side-effects and pollution, they safeguard the regions' traditional biodiversity and value and preserve both heritage and identity.

DETAILED ACTIONS:

- Collect and preserve local knowledge on traditional land-use practices both in theory and in practice and offer possibilities to personally acquire this knowledge.

- Offer opportunities and events to participate, like joint mowing of meadows using traditional gear or festivals based on local heritage and offering the local produce.
- Make sustainable agriculture economically feasible for farmers by making targeted subsidies available for these usually small and local enterprises and honoring not the cropped area but the services supplied to society and environment. This requires to streamline agri-environment measures and financing in the CAP.
- To prevent the extensive fatalities among insects and other animals through the use of modern pesticides, organic agriculture should be the foremost option.
- Have municipalities engage in safeguarding their landscape by e.g. basing development and associated plans on the traditional landscape or only leasing local land under the condition that heritage and nature-aware farming is applied.

ADDED VALUE:

Preserving traditional landscapes maintains high nature value habitats and delivers a landscape that is generally perceived as exceptionally pretty and pleasant. The action fosters a deeper understanding and appreciation of the own local heritage and strongly supports virtually all biodiversity-related EU directives and strategies and also takes up central principles of the CAP.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

GOOD PRACTICE EXAMPLE:

Stregna commune has taken a wide set of measures to safeguard and manage its cultural landscapes (further info in Toolbox).

6.4.3. Establish Transboundary Heritage Routes and Trails

DESCRIPTION:

The European Green Belt is already today an attractive route for heritage-aware tourism. The Iron Curtain Trail (EuroVelo 13) is probably the best known and most international of the existing heritage routes, but it is centered on long-distance biking and has its main thematic focus on cold war history and not so much on nature nor on local culture and tradition. Integrated approaches covering historical, cultural and natural sights are rather scarce, but only these can really present the essence of the European Green Belt. It is thus necessary to develop walking and cycling trails that connect historical and natural landmarks across borders, with multilingual interpretation and integration into regional tourism networks.

DETAILED ACTIONS:

- Suitable trails optimally rely solely on existing infrastructure and should be identified and planned in various lengths.
- Care should be taken not to draw people into ecologically sensitive areas such as breeding or staging sites for birds or to locations which will not provide possibilities for legal and nature-compatible parking. Final design of the routes therefore needs local expertise and usually also fieldwork.
- Trails should be uploaded to online hiking platforms and be provided as GPS tracks with intermediate waypoints delivering the historical, cultural and natural information as well as links to more elaborated descriptions that can also include pictures, maps, videos and even spoken word. The links could also be provided on the spot by QR codes, which are cheap to apply, seldom prone to vandalism and due to their small size do not interfere with the beauty of the landscape.
- Presenting the routes on social media platforms will reach many persons so far not acquainted with the European Green Belt.

ADDED VALUE:

Attractive routes can generate significant additional income from tourism. Furthermore, the routes foster cross-border exchange (both on the creators' and the visitors' side) and serve an educational purpose.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

6.4.4. Preserve and Interpret Cold War Infrastructure

DESCRIPTION:

Understanding the European Green Belt means to understand the cold war era with its policies and dogmas that made the Iron Curtain the impenetrable and partly depopulated line that it was. Surviving cold war infrastructure such as watchtowers, border fences or patrol paths can provide an authentic picture of these past times and they should therefore be preserved and explained to foster broad understanding of the European Green Belt's cause and its worldwide uniqueness. Selected remnants of border infrastructure should therefore be an integral part of European Green Belt narratives, with elaborate interpretations being provided.

DETAILED ACTIONS:

- Representative and safe to visit historical structures should be selected, taking into account their historical significance. While still existing infrastructure is obviously best suited, it can likewise be useful to present lost structures, like demolished villages.
- Interpretation should be provided by traditional means (information boards) or via internet with QR codes being placed on-site. Such links could include video and audio clips and might therefore offer a more immersive experience.
- Cooperation with authorities for cultural heritage preservation, municipalities, local experts, former army members and of course the owners is essential and usually yields a wealth of information.

ADDED VALUE:

The action reinforces the European Green Belt's role as a living memorial and educative landscape.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

GOOD PRACTICE EXAMPLE:

Alta Val Torre in the Julian Prealps has seen an excellent conversion of old military infrastructure into nature conservation assets (further info in Toolbox).

6.4.5. Support Local Storytelling and Oral Histories

DESCRIPTION:

People that have actively ruled, designed and experienced the cold war era are now at an age that leaves not so much time to collect their first-handed knowledge and experiences from this time. This still existing chance should be used by engaging residents, particularly older generations, in documenting personal narratives, memories and oral histories related to the border and land use.

DETAILED ACTIONS:

- People with historical expertise known to the European Green Belt network should be interviewed to preserve their knowledge and background for future work and education.
- The acquired data should be made openly available online for schools, science and digital archives.

ADDED VALUE:

This action preserves intangible cultural heritage and fosters community inclusion.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

6.4.6. Integrate European Green Belt Heritage in Spatial Planning

DESCRIPTION:

As a prerequisite for preservation it has to be ensured that historical features and cultural landscapes of the European Green Belt are recognized in municipal and regional planning documents, in conservation plans and comparable papers.

DETAILED ACTIONS:

- Planning authorities and bodies of all levels have to be approached and informed.
- As the systematics of spatial planning vary widely, the classification of the European Green Belt and its assets may have to be dealt with differently for each plan; good factual expertise and capable proposals will have to be provided.

ADDED VALUE:

Being included in spatial plans indirectly prevents degradation and enables responsible landscape development.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

6.4.7. Nominate Sites as Cultural Landscapes or National Monuments

DESCRIPTION:

The European Green Belt as a historically significant area is not a classic nature conservation site, as its conservation assets are multifaceted and go far beyond the preservation of natural values. Comparable situations have also been recognized for other – albeit far smaller and less diverse – sites that have been put under a special protection regime. This is classified as National Natural Monument in Germany and can serve as a model for other areas.

DETAILED ACTIONS:

- Make authorities aware of the special protection status honoring both historical importance and natural values and promote its application for the European Green Belt.

ADDED VALUE:

This action provides legal protection for so far unprotected areas of the European Green Belt and enhances visibility.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

6.4.8. Make the European Green Belt UNESCO World Heritage

DESCRIPTION:

The European Green Belt is unique as a huge memorial landscape with nothing similar existing anywhere worldwide. The historical importance paired with today's engagement to preserve the assets left behind by the cold war make it a both suitable and special candidate for inclusion into the UNESCO world heritage site network. A nomination should be developed and submitted.

DETAILED ACTIONS:

- Prepare a nomination of the European Green Belt as UNESCO world heritage site together with the responsible national authorities, partnering with as many nations as possible in this application. A nomination requires an elaborate justification and has to abide to restrictive criteria.
- Organize political support since the possible number of submissions is limited and a prior selection process might favor more traditional sites over the unique, but also a bit atypical European Green Belt.

ADDED VALUE:

A classification as UNESCO world heritage would emphasize the historical value of the European Green Belt and help in its long-term preservation, e.g. by unlocking funding possibilities.

7. Visitor Management

7.1. Introduction

The European Green Belt offers not only rich biodiversity and historical heritage but also outstanding potential for sustainable nature-based tourism. As interest in ecotourism, cultural landscapes and hiking exquisite trails is growing, managing the increasing number of visitors in a way that aligns with conservation goals has become both an opportunity and a challenge.

Visitor management in the European Green Belt should focus on enhancing nature-compatible tourism infrastructure, improving visitor awareness and creating economic benefits for local communities while safeguarding sensitive habitats and species. Thoughtfully planned and managed tourism contributes to the long-term viability of the European Green Belt and strengthens local support for its protection.

7.2. Strategic Relevance

Visitor management aligns with the EU Biodiversity Strategy for 2030, which emphasizes sustainable tourism as a tool for local development and conservation. The European Charter for Sustainable Tourism in Protected Areas and various Natura 2000 guidelines further stress the importance of aligning tourism development with environmental integrity. Within the European Green Belt context, visitor management helps balance access with protection, while also fostering transboundary cooperation.

7.3. Objectives

- Promote sustainable and ecologically sensitive forms of tourism.
- Improve visitor infrastructure in alignment with ecological needs.
- Reduce negative impacts of tourism on biodiversity and habitats.
- Increase public awareness and appreciation of the Green Belt.
- Generate local economic benefits through nature-based tourism.

7.4. Key Actions

7.4.1. Develop Visitor Zoning Plans for Core Areas

DESCRIPTION:

The most-visited areas of the European Green Belt like some national parks require an advanced visitor management involving both areas that are open to well managed mass tourism and also sensitive no-access zones where disturbance by visitors is prevented. Creating such zoning usually involves intensive discussions with authorities and local societies, but once established successfully precludes constant discussions about novel land uses in areas that should be core protection zones.

DETAILED ACTIONS:

- Zoning concepts have to be well planned and justified, so the first step in their establishment has to be a thorough analysis of the conservation needs as well as existing and probable future conflicts through land uses.
- Intensive and pro-active involvement of authorities, stakeholders and local inhabitants are usually essential for success and acceptance. These should be begun once sufficient data to discuss and justify the plans has been collected.
- The resulting zones can be applied to any protected area of larger extent.

ADDED VALUE:

The zoning can help to reduce pressure on core conservation areas and can also play an integral role in management plans for Natura 2000 areas.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

7.4.2. Enhance Visitor Infrastructure and Information

DESCRIPTION:

While there is plenty of visitor infrastructure in many areas of the European Green Belt, the European Green Belt is sometimes often neither mentioned nor signified by a logo. Consequentially, visitors stay uninformed about the special heritage and nature of the area they are staying in. Likewise, some Visitor centers and local museums along the European Green Belt might profit from information being provided by the European Green Belt network which could afterwards be integrated in the expositions. Some of the natural core areas of the European Green Belt would benefit from informational signage that advises about the rules of conduct that are necessary to enjoy nature without harming it.

DETAILED ACTIONS:

- Municipalities, tourism associations, visitor centers and other relevant bodies should be encouraged to express on their visitor infrastructure that their region is part of Europe's longest habitat network, the European Green Belt. This can happen e.g. by using the logo and adding at least a few explanatory sentences to central information infrastructure.
- Central elements of the code of conduct to safeguard nature should be made available in all sensitive areas that are visited by larger numbers of people.
- Additional signage can increasingly be provided by small notices with accompanying QR codes, which is less costly than huge information boards and makes it easier to provide the information in different languages.
- Transboundary cooperation is very helpful for translation proofreading, and for locations near the border some information about the "other side" should be provided.

ADDED VALUE:

Adequate visitor information about the European Green Belt generally raises awareness and additionally improves visitor satisfaction and knowledge while reducing undesirable behavior.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

7.4.3. Offer Opportunities for Citizen Engagement

DESCRIPTION:

Sometimes conservation achievements can go hand in hand with visitor entertainment and satisfaction: Actively contributing to nature's wellbeing by hand-mowing meadows, planting trees or counting animal numbers can be both educative and fun. This should be utilized, targeting both locals and visitors.

DETAILED ACTIONS:

- Hand mowing meadows, weeding out invasive plants or removing bushes is slow and tedious work, but inviting for it as the core of an event can make it possible to cover large areas and along the way get people informed about nature conservation and the European Green Belt. Target groups to be addressed could be schools (for easy tasks) or adults and families.
- Persons active on social media and living in the European Green Belt might be interested to tell others about the fascinating nature. They might need some basic information for the start since they are usually no experts, but they might act as successful multipliers if they reach large numbers of people.
- Some persons show interest to contribute as local guides or assist with basic ranger activities in the field.
- A great variety of engagements is possible in citizen science projects.

ADDED VALUE:

At best, this action can mobilize long-term allies and workforce for activities that would otherwise not be possible. In other cases the yield is at least one-time help and some spreading of information.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

8. Public information

8.1. Introduction

Public information plays a major role in creating and strengthening awareness and support for conservation and regional identity. Targeted communication strategies can build understanding and inspire stewardship for the European Green Belt across all societal levels.

8.2. Strategic Relevance

Communicating the values of the European Green Belt supports the EU Biodiversity Strategy for 2030, the Nature Restoration Law and aligns with the Aarhus Convention, which emphasizes access to environmental information and public participation. By increasing visibility, transparency and appreciation for biodiversity, public information efforts create a foundation for successful implementation of conservation and restoration policies. Furthermore, the symbolic nature of the former Iron Curtain and its transformation into the European Green Belt allows for compelling storytelling that bridges history and ecology.

8.3. Objectives

- Raise awareness of the ecological, cultural and historical significance of the European Green Belt.
- Promote public participation and ownership of conservation initiatives.
- Increase visibility of the Green Belt in education, media and tourism.
- Develop transnational messaging aligned with local narratives.
- Encourage behavioral change through informed public discourse.

8.4. Key Actions

8.4.1. Develop a Transnational Communication Manual

DESCRIPTION:

Many messages about the European Green Belt are uniform, not depending on nationality and location. Also, homonymous and consistent communication makes it more comprehensible. Some basic standards for good European Green Belt communication should thus be developed and recommended for use. It could be complemented by a joint communication framework across all European Green Belt countries to present consistent, persuasive messages about the ecological, cultural and historical significance of the Green Belt.

DETAILED ACTIONS:

- File a short and simple communication manual with key recommendations and basic information for public relations work, also relating when and how to use the European Green Belt logo and whom to contact for further information.
- Coordinate timing, thematic focuses and target audiences for some news or information items over the transnational network to achieve a joint release.

ADDED VALUE:

The actions yields better recognition of the European Green Belt as a joint Pan-European ecological network and makes engaging in European Green Belt communication easier.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

8.4.2. Create Multilingual Educational Materials and Information

DESCRIPTION:

The European Green Belt is characterized by a multitude of spoken languages with not a single language being readily understood by everyone. This makes it necessary to provide information in the people's mother tongues to foster education and possible future engagement. Producing language versions has become a lot easier in recent years due to the boom of digital communication and the aid in translations that internet and computers can provide. Local language material should therefore be provided more regularly.

DETAILED ACTIONS:

- European Green Belt publication should as a rule be available (at least digitally) in all languages that are spoken around the area that they address.
- The international network should cooperate to provide translation support by proofreading, with the major part of the work being done by electronic translators or artificial intelligence.
- Educational materials and other more elaborate publications should be offered for re-use in neighboring countries in a national language version.

ADDED VALUE:

The action will lead to a more diverse set of understandable communication material being available for inhabitants and guests of the European Green Belt, enabling better overall information.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

8.4.3. Strengthen Visibility through Digital Platforms and Media.

DESCRIPTION:

Media communication is increasingly shifting away from printed matter towards Internet sources. It is therefore advisable to expand and interlink online platforms, social media channels and digital tools to reach diverse audiences beyond traditional media and physical European Green Belt locations.

DETAILED ACTIONS:

- Develop online and interactive content that is constantly enhanced and kept up to date.
- Use QR code internet links instead of more expensive information boards for visitor information.
- Make use of already existing suitable internet resources, especially if these are openly sourced and managed, like many citizen science portals.

ADDED VALUE:

This enhances outreach capacity, builds an engaged digital community and supports EU digitalization goals in environmental communication.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

GOOD PRACTICE EXAMPLE:

Visitors of Karavanke region can learn about wild daffodils and their habitat in an augmented reality experience, which can also help in regulating visitor pressure and to instruct visitors (further info in Toolbox).

9. Political Lobbying and Involvement

9.1. Introduction

Political support is essential for ensuring the long-term presrvation of the European Green Belt as a contiguous corridor with unique values. Strategic lobbying and institutional engagement across all governance levels – local, national and European – are needed to integrate the Green Belt into policy frameworks, funding mechanisms and land use planning.

9.2. Strategic Relevance

The European Green Belt contributes directly to achieving EU targets on protected areas, green infrastructure and restoration as set out in the EU Biodiversity Strategy and Green Deal. However, implementation gaps persist at national and regional levels, risking fragmentation and insufficient funding. Also, conservation is frequently (and usually falsely) accused of preventing promising economic developments and there are obvious and constant conflicts with industrialized agriculture, lobbyists of which are perpetually demanding the abolishment of restrictions. To set a counterpart, political involvement, information and also lobbying are also necessary from the European Green Belt network's side.

Political involvement can make the European Green Belt and its needs a strategic landscape in spatial planning and funding programs, including the Common Agricultural Policy (CAP), Cohesion Policy and EU Green Deal instruments. Coordinated advocacy is necessary to elevate the European Green Belt's profile in political agendas and secure long-term commitment.

9.3. Objectives

- Inform about the special assets and unique qualities of the European Green Belt, including its conservation needs.
- Promote the inclusion of the European Green Belt into land use, spatial and funding frameworks.
- Advocate for legal protection of the European Green Belt.
- Strengthen links between civil society, namely the European Green Belt network, and political decision-makers.

9.4. Key Actions

9.4.1. Establish a European Green Belt Parliamentary Support Group on EU Level

DESCRIPTION:

The development of the European Green Belt is highly dependent on international financing, especially from EU sources. This has been possible due to its consideration in EU funding instruments and due to long-lasting support by EU parliamentarians. To set this parliamentary support on a more reliable and firm basis, it is desirable to perpetuate cooperation with them, ideally by creating an informal support group that can work positively for the ideas of the European Green Belt and its network.

DETAILED ACTIONS:

- Parliamentarians from all democratic groups in the European Parliament should be informed and approached, particularly those that have already previously engaged.
- Regular online coordination events should be held.
- Parliamentarians should be invited to European Green Belt conferences and to local European Green Belt events in their electoral district.

ADDED VALUE:

The activity promotes a regular intersectoral dialogue and should ensure a greater policy coherence which makes activities in the European Green Belt better projectable.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

9.4.2. Recognition in National and EU Spatial Planning Instruments

DESCRIPTION:

Advocate for the incorporation of the European Green Belt corridor and, when needed, buffer zones in spatial plans to prevent fragmentation and to guide sustainable development.

DETAILED ACTIONS:

- Engage in the spatial planning processes and provide helpful ideas or options on how to integrate the European Green Belt or its conservation assets.
- Inform involved politicians.
- On EU, the European Green Belt's unique transnational approach should be highlighted.

ADDED VALUE:

Inclusion in spatial plans will lead to a more reliable protection and constant baselines for planning.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

9.4.3. Integration into EU Funding Programs and Operational Strategies

DESCRIPTION:

The European Green Belt is special in Europe due its combined focus on society, history, nature and internationalism. It can help to overcome national prejudices and join people that were previously divided. As Europe's longest ecological network it is also of foremost importance for natural connectivity. This justifies a better inclusion into EU funding programs. The inclusion of European Green Belt objectives in the programming and implementation of EU funding instruments such as LIFE, Interreg, CAP Strategic Plans and the Cohesion Policy should therefore be supported.

DETAILED ACTIONS:

- Inform and lobby about the important transnational functions of the European Green Belt fostering cross-border communication and cooperation and a multifaceted conservation approach and highlight the benefits arising from financing for this initiative.
- Seek support from EU parliamentarians.
- Propose concrete solutions.
- Especially for CAP funding discussions with national authorities are central.

ADDED VALUE:

Future public financing is central for the European Green Belt and this action supports it.

GEOGRAPHICAL RELEVANCE:

Financing options should be targeted on the whole European Green Belt.

10. Research and Citizen Science

10.1. Introduction

Science-based planning and monitoring are indispensable for effective biodiversity conservation along the European Green Belt. Integrating research, data sharing and citizen science supports adaptive management and public involvement. The Green Belt serves as a living laboratory where ecological, social and historical dynamics intersect. Strengthening this role through targeted actions can enhance both scientific understanding and community engagement.

10.2. Strategic Relevance

The EU Biodiversity Strategy for 2030 emphasizes the need for improved monitoring and data access. Horizon Europe, LIFE and Interreg programs encourage stronger links between science and policy. The European Green Belt offers a platform to pilot research frameworks, transdisciplinary studies and participatory science initiatives that align with European and national priorities, supporting adaptive management and restoration.

Research efforts in the European Green Belt currently remain underfunded, are fragmented and regional, leaving large knowledge gaps hindering sensible development. Also, existing research is sometimes disconnected from policy implementation, meaning that valuable information is left aside when creating plans and policies including European Green Belt areas. Structured cooperation among academic institutions, NGOs and government agencies can bridge gaps and generate vital insights on habitat quality, connectivity, species movements and socio-ecological resilience.

Citizen science can fill knowledge gaps without requiring a great amount of funding. It has emerged as a powerful tool for both data collection and public engagement. Mobilizing local knowledge and grassroots participation not only expands monitoring capacity but also fosters stewardship and social support for Green Belt conservation.

10.3. Objectives

- Establish an integrated and coordinated research agenda and monitoring framework
- Secure long-term ecological monitoring.
- Involve citizens in data collection for biodiversity monitoring and habitat assessment.
- Increase accessibility of ecological data by a harmonized acquisition and structuring as well as making it available through open platforms.
- Link research findings to decision-making and public discourse, i.e. include them into spatial planning, restoration design and policy creation.
- Build long-term partnerships among research institutions, NGOs and managing authorities.

10.4. Key Actions

10.4.1. Utilize network benefits for European Green Belt research

DESCRIPTION:

The European Green Belt is not only a cardinal piece of Green Infrastructure, but also a long-standing international initiative involving diverse experts and researchers of various fields. These represent research institutions, authorities and also NGOs, and there is already some established cooperation between many of those professionals. However, to accompany the existing European Green Belt Initiative with a dedicated European Green Belt research network would require an intensification of this cooperation and also setting up a basic agenda of networking principles. The benefit of such networking is obvious: scientific work could be better targeted to jointly tackle pressing issues and the use and sharing of data could be streamlined.

DETAILED ACTIONS:

- The already existing European Green Belt Scientific Committee should function as an active body, providing scientific consultations and supporting scientific networking and joint research.
- Leverage the European Green Belt network's untapped scientific expertise by fostering internal collaborations.
- Align research and publications with the European Green Belt topics to enhance visibility and recognition.
- Establish pathways for research efforts to integrate with existing research activities in the European Green Belt.
- A dedicated fund offering mini grants to stimulate new scientific projects focused on the European Green Belt would be desirable.

ADDED VALUE:

The action aligns research efforts across disciplines and countries, maximizing resource efficiency and data comparability. It can help scientific institutions, NGOs and government bodies to define priority research questions, methodologies and monitoring needs across the European Green Belt.

GEOGRAPHICAL RELEVANCE:

This should not only cover the entire Central European and Southern Baltic Green Belt but instead reach beyond to encompass the whole European Green Belt from the Barents Sea to the Black Sea.

10.4.2. Establish long-term landscape and biodiversity monitoring

DESCRIPTION:

Scientific monitoring is an essential basis for adaptive management, tracking habitat health, species trends and action outcomes. Monitoring schemes should thus be established to keep track of relevant developments. To be comparable over time and over wider geographical areas, standardized research and documentation methods should be used (or, if not yet existant in the required form, be developed).

DETAILED ACTIONS:

- Establish monitoring systems using field inventories and remote sensing.
- Agree on standardized protocols and a unified framework to enable data sharing across the European Green Belt (and beyond).
- Utilize citizen science assistance where possible.
- Adjust management plans based on biodiversity assessments (mandatory for Natura 2000 sites).

ADDED VALUE:

This action provides the scientific basis for conservation, supporting EU biodiversity monitoring requirements of e.g. the Habitats and the Birds Directive. It provides critical data for adaptive management, policy evaluation and restoration success assessment and it fosters community stewardship through participation, enhancing support for the European Green Belt mission.

GEOGRAPHICAL RELEVANCE:

This action involves the whole European Green Belt. Priority should be given to biodiversity hotspots and areas with restoration interventions.

10.4.3. Facilitate open access to scientific data

DESCRIPTION:

Openly accessible data unfurls a far better usefulness to science than closed data; it can be used by a multitude of scientists of various professions without need for complicated or expensive acquisition procedures. Data collected on and for the European Green Belt should thus be made publicly available, with restrictions only applying where conservation needs justify this.

A portal hosted by the European Green Belt Association or a consortium of research institutions could concentrate the data in one place, eliminating tedious search processes for individual datasets. Citizen science sourced data should be included.

DETAILED ACTIONS:

- Make sure to publish all data and research in a way that is openly available.
- Use open and standardized documentation and structuring formats.

- Set up one or more centralized data portals for biodiversity, land use, restoration and cultural heritage datasets in the European Green Belt, ensuring accessibility and interoperability.

ADDED VALUE:

This action improves transparency, fosters innovation and supports evidence-based decision-making.

GEOGRAPHICAL RELEVANCE:

This is relevant for the whole European Green Belt.

10.4.4. Initiate Citizen Science Activities

DESCRIPTION:

Citizen science can provide considerable additional workforce for laborous tasks which would be impossible to realize without such support. By providing direct opportunities for involvement and ensuring that participants get access to the appropriate tools and resources, communities can be animated to actively contribute to the European Green Belt, helping it thrive and its natural, historical and social resources being better understood. Encouraging collaboration and fostering a sense of community is essential for sustained engagement. Engage local communities, schools and visitors in biodiversity monitoring and environmental data acquisition by offering interesting and useful citizen science initiatives.

While citizen science-sourced data can have obvious weaknesses (namely faulty application of standardized methods or misidentifications of species due to lacking expertise, inclusion of cultivated or captive specimens in dataset, subsequent collection or disturbance at openly published localities), it is for most use cases an excellent resource which would not be possible to acquire otherwise. Good instruction can minimize mistakes and give further motivation. Open data availability is essential not

DETAILED ACTIONS:

- Encourage people to collect data on local flora and fauna and to record them in open portals like iNaturalist. Pl@ntNet, ObsIdentify, Naturgucker or on specially tailored apps for specific projects.
- Train and motivate volunteers to test water quality in streams, rivers or lakes, thereby collecting data on easily to analyze indicators like pH, temperature or various indicator species.
- Engage volunteers in mapping out key habitats and recording their species, either in joint one-time events or in longer projects.
- Educate and motivate citizens to survey changes in land use and vegetation over time, contributing valuable baseline data.
- Involve citizens in habitat restoration projects like tree planting, invasive species removal or seed collection of easily recognizable species.

ADDED VALUE:

This action makes badly needed data available by increasing both quantity and quality, it raises environmental awareness and fosters stewardship.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the whole European Green Belt as well as its neighboring areas.

GOOD PRACTICE EXAMPLE:

The *Geo Day of Biodiversity* has yielded high quality data on European Green Belt plant and animal species (further info in Toolbox).

10.4.5. Link Scientific Results to Policymaking and Communication

DESCRIPTION:

Scientific results tend to inaccessible to policymakers and the majority of the wider public – not because they are not at all available (in the internet age and with growing significance of open publishing platforms this is a constantly attenuated problem), but rather because language barriers, the complexity of the text or simply the inextricable amount of scientific publications hinder their transition into everyday life and political decisions. To make their findings more than a theoretical effusion that is – at best – only read by a few other researchers and otherwise of rather limited usefulness, scientists have to communicate the scientific results in a way that is understandable and readily available for the target audience which could benefit from the findings.

Only by establishing mechanisms to translate research findings into policy recommendations and public information can researchers ensure science-policy integration and make their findings yield a concrete gain for people and nature.

DETAILED ACTIONS:

- Communicate relevant scientific results in local languages, as English is not readily understood by many people and tedious to read for even more.
- Directly address practitioners that could benefit from the findings, be it in politics, administration or initiatives in civil society.
- Offer assistance in interpreting and utilizing the results.

ADDED VALUE:

Enhances evidence-based conservation, informs adaptive management and strengthens public trust.

GEOGRAPHICAL RELEVANCE:

This action is relevant for the complete European Green Belt section covered by this strategy.

GOOD PRACTICE EXAMPLE:

The ReCo project's peer reviews in all pilot areas posed excellent opportunities for in-depth discussions with representatives from authorities and communicating results to political stakeholders (further info in Toolbox and ReCo peer review reports).

Peer review field visits like this one in Fichtelgebirge together with invited representatives from regional authorities allowed an extensive transfer and discussion of project findings.
(Jörg Schmiedel)

ReCo Transnational Restoration and Connectivity Strategy
for the **European Green Belt**
in Central Europe

Part III

Toolbox
for Actions and Cooperation

11. Toolbox for the European Green Belt

Overview of the showcased tools and best practices

A. Managing Habitats

B. Enhancing connectivity

C. Species conservation and management

D. Local history and heritage

E. Visitor management

F. Public information

G. Political lobbying and involvement

H. Research and citizen science

A. Managing Habitats

- Grassland management through grazing by Exmoor ponies in the Podyjí National Park
- Green belt camp - exploring and restoring dry grasslands at the Austrian Green Belt
- Life for Mires - wetland restoration in hilly areas
- LIFE Restore for MDD: River and floodplain revitalization along borders
- Reforestation of underwater macroalgal forests and seagrass meadows
- Revitalization of a degraded coastal lagoon creates habitats and a visitor attraction

GRASSLAND MANAGEMENT THROUGH GRAZING BY EXMOOR PONIES IN THE PODYJÍ NATIONAL PARK

Havraníky and Mašovice, Czech Republic

Addressed issue

Dry grasslands in Central Europe are experiencing a significant decline due to the abandonment of traditional agricultural practices, such as extensive grazing, haymaking or burning. These biodiverse ecosystems rely on low-intensity management to prevent encroachment by shrubs and trees, which leads to habitat degradation and loss of unique plant and animal species. With rural depopulation and the shift towards industrialized farming, many grasslands are left unmanaged, accelerating natural succession and reducing the open habitats essential for specialized species like bees, butterflies, and ground-nesting birds. Restoration efforts, including reintroducing grazing animals, are critical to halt biodiversity loss.

Location

The southeastern edge of Podyjí National Park (Czech Republic) consists of a system of dry grasslands, heaths, and remnants of steppe, which were historically managed through traditional practices. However, these practices were gradually abandoned after World War II, leading to the overgrowth of these areas with tall grasses, shrubs, and trees.

Additionally, due to the proximity of the former Iron Curtain, several military training grounds were operated in National Park proximity. One such site is located near the village of Mašovice. Military activities, such as shooting and heavy machinery movement, previously helped maintain open and regularly disturbed grasslands. However, this shooting range was abandoned about 30 years ago, and these areas are now heavily degraded.

Activities

- Two herds of Exmoor ponies, totalling 11 individuals, were introduced in May 2018 to two sites with deteriorating dry grassland remnants. One pasture, covering 35 hectares, is located in the south eastern part of National Park near the village of Havraníky. The second, spanning 30 hectares, was established on the site of former military training ground near Mašovice.
- Since the establishment of the pastures, grazing activities have been continuously monitored. The horses help reduce tall grasses in favour of flowering plants and create patches of open soil through their hooves and dust baths, which serve as vital habitats for many endangered species.
- Due to successful course of the project, we plan an extension of grazing activities into new pasture and experiment with grazing in open forest.

A herd of Exmoor ponies grazing on a former military training ground near Mašovice (Tomáš Dvořák).

Added value for the Green Belt

- We have demonstrated that grazing by large herbivores is an effective measure for managing dry grasslands. Exmoor ponies, as a semi-wild breed, are a cost-effective and low-maintenance solution capable of grazing large areas.

- Horses are naturally appealing animals, attracting public interest and serving as an effective means of educating people about the issue of grassland abandonment and management.
- Through our activity, we help to enhance populations of endangered xerothermic species along the part of the Green Belt.

Where to replicate?

Grassland degradation, whether due to abandonment or the intensive use of agricultural techniques, is a widespread problem in the Central European landscape. Developing effective and cost-efficient grazing regimes is crucial for restoring valuable open habitats and can be replicated in various locations along the Green Belt.

Who to ask?

Správa Národního parku Podyjí
Mr. Robert Stejskal
Na Vyhlídce 5
669 02 Znojmo
tel. +420 515 282 240
info@nppodyji.cz

References

Resources for further info: www.nppodyji.cz/ https://www.ceska-krajina.cz/klicove-druhy/divoky-kun-equus-ferus/

GREEN BELT CAMP – EXPLORING AND RESTORING DRY GRASSLANDS AT THE AUSTRIAN GREEN BELT

Lower Austria – Hollabrunn and Mistelbach

Addressed issue

After the last Ice Age, Europe's landscapes were shaped by mega-herbivores such as aurochs, which kept large areas forest free. Neolithic settlers replaced them with livestock, maintaining species-rich dry grasslands through extensive grazing. These dry grasslands, found in warm, dry regions such as eastern Austria under Pannonian climate conditions, support drought-tolerant specialist plants such as *Pulsatilla vulgaris* and *Iris pumila*, which thrive on nutrient-poor soils. With the decline of traditional grazing in the 1960s, shrubs and trees have encroached, threatening these unique ecosystems. Cultivation has ceased because the terrain is too steep for heavy machinery. The hills are a very important habitat for many rare plant and animal species. Active management (mowing, brush cutting) is now essential to preserve these fragile habitats and their extraordinary biodiversity.

Location

The restored and managed dry grasslands along the Austrian Green Belt are located in Lower Austria in the districts of Hollabrunn and Mistelbach.

Activities

- **Intercultural Exchange**: Young Volunteers from diverse backgrounds and different countries all over the world lived and worked together for 16 days. Team-building activities were organized, and tasks such as cooking, cleaning, and timekeeping were shared to promote cooperation.
- **Cultural Exploration**: Cultural and historical sites were visited, with guided tours provided by locals. Highlights included a visit to Mikulov in the Czech Republic and a workshop on the Cold War, presented by historian Julia Köstenberger.
- **Community Involvement**: Local experts, municipalities, and residents were actively involved, contributing their knowledge and fostering a collaborative environment.
- **Grassland Management**: Dry and semidry grasslands were preserved and restored through mowing, raking, and the removal of shrubs. These activities were conducted under professional guidance to ensure effective results. The work took place across 12 different areas in 8 different municipalities, with volunteers receiving information on the ecological significance of these habitats and proper tool usage.

Added value for the Green Belt

- **Habitat Conservation:** The camp plays an important role in the conservation and restoration of dry and semi-dry grasslands, which are essential for maintaining the biodiversity of the Green Belt. Through activities such as mowing, raking and cutting shrubs, it prevents the spread of woody plants and neophyts and protects in these way habitats for endangered species.
- **Community engagement and awareness**: By involving young volunteers from all over the world and local resident the camp fosters cooperation and builds support for the Green Belt. It raises awareness of the ecological and historical importance of this corridor and motivates participants to advocate for its conservation.
- **Intercultural exchange:** The camp provides an opportunity for people from different backgrounds to live and work together, promoting mutual understanding and cooperation. It also highlights the historical

significance of the Green Belt, such as its connection to the Cold War, creating a deeper appreciation for its role as a natural and cultural landmark.

Where to replicate?

Wherever dry and semi-dry grasslands are threatened by changes in land use and land use practices.

Who to ask?

Austrian League for Nature Conservation Lower Austria
(Naturschutzbund Niederösterreich)
Mrs. Sarah Gross
sarah.gross@naturschutzbund.at

References

Projekt info:
https://naturschutzbund.at/green-belt-camp.html

Volunteers rake the dry meadows above a burial mound in Rabensburg (Sarah Gross).

Excursion to the nature reserve "Feehaube-Kogelsteine" during the Green Belt Camp - Lower Austria (Margit Gross).

LIFE FOR MIRES - WETLAND RESTORATION IN HILLY AREAS

Šumava Mountains/Bavarian Forest, Czech-German Green Belt

Addressed issue

Restoration of wetland is a suitable way to mitigate the consequences of climatic change and to preserve biodiversity. Many wetlands, primarily the peat bogs in Šumava (Bohemian Forest) and Bavarian Forest, are hotspots of biological diversity, where rare and endangered plant and animal species live in their natural environment. Wetlands play an irreplaceable role in landscape hydrology and the water cycle, having favourable effects on the local climate. Restoring the natural water regime in hilly and especially montane areas is in many ways different from similar measures in flat areas. In particular, the slope of the terrain plays a crucial role, which increases the speed and erosive power of runoff water and creates different conditions for its infiltration into the soil profile and runoff from the area. Furthermore, mountains also tend to have a much higher water supply from atmospheric precipitation, which also significantly affects runoff conditions. The project "LIFE for MIRES - Trans-boundary restoration of mires for biodiversity and landscape hydrology in Šumava and Bavarian Forest" (2018-2024) was funded by the LIFE Programme of the European Union with co-financing of the Czech Ministry of Environment and Bavarian Nature Conservation Fund.

Location

Šumava Mountains and Bavarian Forest at the Green Belt Czech Republic-Germany (Bavaria).

Activities

- An area of 2.180 ha wetlands was restored, 212 km ditches blocked, 28 springs and 35 km of streams restored. Most of the implementation measures took place in national park Šumava (Czech Republic). The project was accompanied by extensive public relations work and environmental education measures as well as activities for volunteers. On the German site the focus was on demonstration measures for support of Natura 2000 in the vicinity of human residences. Here, implementation measures took place on approx. 25 ha near and in close cooperation with small municipalities. Support of trans-boundary important ecological corridors for wetland species like *Carabus menetriesi pacholei, Lycaena helle* or *Sicista betulina* was also a key topic.
- Implementing the **Micro-Catchment Concept**: Solving problems in the highest parts of the watershed with a number of springs and a complex mosaic of interconnected wetlands and watercourses required a comprehensive approach. Another impetus was the revealed extent of the drainage in the Šumava landscape and resulting degradation of wetlands. Therefore, the **principle of holistic restoration of the water regime** was established and hydrological restoration began to be implemented within partial micro-catchments, which represented an entire hydrological unit. The mentioned micro-catchments usually included springs, bogs, various non-peat wetlands and streams, and all these water elements were dealt with together as part of hydrological restoration.
- The aim of restoration is to return hydrological conditions to a state close to natural conditions or to pre-drainage conditions. However, there are different types of wetlands and mires, with different genesis and hydrological conditions. They also differ in water table and the dynamics of its fluctuations. The method of re-wetting should reflect these differences. The method of blocking ditches was based on the concept of a **target water table**. This means that the wetlands are not chaotically flooded by closing the ditches, but the aim is to return the water table to a level close to the natural or pre-drainage state. This level is referred to as the target water table.

Added value for the Green Belt

- The region of Šumava and Bavarian Forest is a hotspot of biodiversity along the European Green Belt. The implemented restoration measures supported the generally highly endangered mire habitats and wetlands and their flora and fauna. Especially trans-boundary biotope networks were supported.
- Strengthening of Natura 2000-network: The Natura 2000-sites "Sumava" (Czech Republic) and "Moore bei Finsterau und Philippsreut" as well as "Bischofsreuter Waldhufen" (Germany) were ecologically enhanced and also enlarged by land purchase for nature conservation.
- Trans-boundary cooperation was supported between Czech and Bavarian organisations as well as between GO and NGO, new cooperations between local stakeholders (like Bavarian and Czech farmers) could be established.
- Due to many events and guided tours for locals and visitors the topic of mire protection and also of the European Green Belt as promoted in the region.

Where to replicate?

The implemented restoration concept for wetlands and mires (micro-catchment concept and target water table concept) can be replicated in other hilly areas where wetland restoration is required. E.g. in **low mountain ranges of the inner-German Green Belt**.

Who to ask?

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References

General project information in Czech, German and English: https://life.npsumava.cz/en/

Bufková et al. (2024), "Hydrological restoration in mountainous and hilly areas - Summary of the experiences with restoration of wetlands, springs and streams in the Šumava region", book (English), download: https://nx17201.your-storageshare.de/s/dis7ngSi6P5cP6f

Interactive map of restoration sites: https://life.npsumava.cz/en/project-sites/

Strengthening of trans-boundary cooperation: Czech and German volunteers restoring a drainage ditch directly on the border (Melanie Kreutz).

LIFE RESTORE FOR MDD: RIVER AND FLOODPLAIN REVITALIZATION ALONG BORDERS

Mura-Drava-Danube Biosphere Reserve, Austria, Slovenia, Croatia, Hungary and Serbia

Addressed issue

As part of river regulation measures, rivers have been straightened, dammed up and embanked. The natural processes of a river valley, such as the formation of oxbow lakes or gravel bars and the flooding of meadows and riparian forests have been disrupted by these developments. As a result, various species of plants and animals which have adapted to the ecological niches in natural river valleys, e.g. the False Tamarisk or Little Ringed Plover, are now in decline. Furthermore, the regulation of rivers along with the surface sealing brought on by the buildup of infrastructure had the paradoxical effect of worsening the effects of extreme flood events. With straightened courses and less open space to seep into the ground, flood waters are now that much more destructive when they do manage to break through.

Location

The Danube, together with its tributaries of Mura and Drava, forms a large river basin in south-eastern Europe. These three rivers form part of the borders between Austria, Slovenia, Hungary, Croatia and Serbia, and were thus part of the Iron Curtain facing Austria and Yugoslavia. The Mura-Drava-Danube river system forms the core for the largest, most intact floodplain habitats in the entire Danube basin, despite recent river regulation measures and the construction of numerous hydroelectric plants. The location on the iron curtain has reduced disturbance and human impacts, which helped the MDD region become a refuge for various rare species that have been driven from more actively regulated, intensively exploited river and floodplain habitats.

Activities

- Restoration and preservation of floodplain forest structures and functions.
- Improvement of key habitat structures in floodplain forests.
- Restoration of natural hydro-morphodynamic processes for sediment mobilisation and pioneer habitat creation.
- Improvement of lateral connectivity and water level dynamics between river and floodplains.
- Combating the spread of invasive plant species, which tend to dominate river banks when left untreated, degrading the habitat for both plants and animals.
- Improving the coordination between adjacent states through joint workshops, training and public outreach activities.

Added value for the Green Belt

With the LIFE RESTORE for MDD project, the Mura-Drava-Danube river complex retains the unique natural rivers and floodplain habitats (HT 91F0 – hard-wood forests – and HT91E0* - soft-wood forests) which were preserved due to the presence of the Iron Curtain in the second half of the 20th century. This project boosts the ecological and conservation value of the region further, by both providing a habitat for threatened species and presenting a terrestrial and aquatic corridor for the migration of species between central and southeastern Europe. The cooperation between five different countries to preserve this unique region is furthermore symbolic for international cooperation along the European Green Belt.

A wild, unregulated section of the Drava river (Arno Mohl, WWF AT).

Where to replicate?

In many sections of the European Green Belt, rivers serve as borders. This project can serve as a blueprint to start international cooperations which embrace **border rivers which have been or are being degraded**. Both the ecological potential of these rivers and the historical context can be preserved, enhanced and communicated following the example of the LIFE Restore for MDD project.

Who to ask?

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References

www.amazon-of-europe.com/projects/life-restore-for-mdd/
www.unesco.org/en/mab/mura-drava-danube

REFORESTATION OF UNDERWATER MACROALGAL FORESTS AND SEAGRASS MEADOWS

Gulf of Trieste, Italy

Addressed issue

Seagrass meadows and macroalgal forests are very diverse and important underwater habitats. They have however vanished in some sea areas due to anthropogenic pressure. Replanting initial populations of the typical plant species can enable these habitats to spread again, provided the reasons for decline have ceased.

Location

The Gulf of Trieste is the shallow bay of the Adriatic Sea between Punta Tagliamento (Italy) and Savudrija (Croatia). Activities are conducted in the Italian side of the gulf, in particular in the Miramare Marine Protected Area and along the coasts of the towns of Grado (in the western part of the gulf) and Muggia (to the East, on the border with Slovenia), where the coast is characterised by shallow and sandy seabeds.

Activities

Focusing on a target species such as the macroalga *Cystoseira* and marine plant *Cymodocea*, restoration actions mainly include the transplanting of these species to favour natural recolonization. *Cystoseira* and *Cymodocea*, whose decline due to anthropogenic pressure made it a vulnerable species, is able to spread through macroalgal forest habitats of high aesthetic and naturalistic value and plays a key role especially in supporting food webs and sequestrating large amounts of CO_2.

Divers monitoring the implanted population of macroalga *Cystoseira* (Saul Ciriaco).

- *Cystoseira* fertile parts or *Cymodocea* cuttings are collected in healthy population.
- As for *Cystoseira*, mesocosms are set up for controlled reproduction and generation of seedlings to be implanted in chosen reforestation sites. As for *Cymodocea,* cuttings are replanted into hosting sites and protected by cages to prevent predation by herbivores.
- Reforestation is carried out where historical presence of the two species is recorded and measures to mitigate/contrast impacts that led to its loss are implemented.
- Maintenance and regular monitoring of the implanted population are developed to assess forestation success over time.

Added value for the Green Belt

The food chain is the basis of the balance of a whole ecosystem and acting to preserve this capital by strengthening the basic elements is essential to ensure balance even on a larger scale. In the mid-long term, the newly established *Cystoseira* forests and *Cymodocea* seagrass meadow will form an ecological network with a cascade of positive effects and increasing ecosystem services. Among these, oxygen production, erosion control and storage of CO_2 operated by algae and plants are of primary importance, being an often-underestimated effective measure to counteract the effects of climate change at any level and for any geographical area.

Where to replicate?

The activity can be replicated in other **marine sites in the European Green Belt** where formerly effective reasons for decline of the species have vanished and where a natural recolonization would take very long. Depending on the location, possibly also other target algal or plant species could be addressed.

***Cymodocea* cuttings to be replanted into hosting sites** (Saul Ciriaco).

Who to ask?

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References

Project info: www.ampmiramare.it/en/research-and-monitoring/

REVITALIZATION OF A DEGRADED COASTAL LAGOON CREATES HABITATS AND A VISITOR ATTRACTION

Koper, Slovenia

Addressed issue

In the 1970s and 1980s, human activities – primarily draining and filling the lagoon, along with dumping construction debris, organic waste, and other municipal refuse – posed a severe threat to the area of Škocjanski zatok, bringing it close to destruction. However, in the 1990s, a movement led by ornithologists and backed by 7.000 local petitioners led to the establishment of a protected area. As a result, Škocjanski zatok was temporarily designated a natural landmark in November 1993, culminating in March 1998 when the Slovenian Parliament passed the Act on the Škocjanski zatok Nature Reserve. In 2006 and 2007, the area was completely restored through the LIFE-Nature project *Restoring and Conserving Habitats and Birds in the Škocjanski zatok Nature Reserve* (LIFE00NAT/SLO/7226).

Location

The Škocjanski zatok Nature Reserve is the largest brackish wetland in south-west Slovenia, covering 122,7 hectares and consisting of two main parts: a brackish lagoon and a freshwater marsh. Located near the town of Koper, the reserve is part of Koper Bay and the broader Gulf of Trieste. Its proximity to the sea, combined with a Mediterranean climate and Sub-Mediterranean vegetation, supports a diverse range of plant and animal species. The reserve is a Natura 2000 area and important as a nesting, wintering, and migratory stopover for many bird species.

Removal of sediment and deepening of channels in the brackish lagoon in 2007 (NRSZ Archive).

Activities

- The planning and implementation of habitat restoration in Škocjanski zatok were carried out as a cooperative action involving the manager (DOPPS-BirdLife Slovenia, an NGO), representatives of the Ministry of the Environment and Spatial Planning, the area's owners, the local municipality, and responsible professional agencies. The implemented measures do not interfere with natural processes and provide tangible, practical and cost-effective solutions.
- Before starting the restoration process, removing all forms of waste and preventing illegal sewage inflow into the reserve area was essential.
- The reestablishment of good fresh and sea water inflow to the brackish lagoon by cleaning of the water inflow channels and installing a sluice system (gates) at both inflows was central for reviving the natural lagoon ecology.
- The removal of approx. 200.000 m^3 of sediment from the lagoon and the restoration of habitats at the lagoon's edge, along with the creation of mudflats within the lagoon, recreated habitats and eliminated all key threats in the brackish part of the reserve.
- A freshwater marsh (area approx. 25 ha) was created as replacement habitat for the lost marshes destroyed twenty years earlier. At the same time, a circular educational trail (2,2 km long) was built around the entire freshwater marsh, along with embankments and ditches. These measures were key in preventing disturbances to wildlife caused by the presence of visitors, while also providing them with access and a high-quality nature experience.
- The restoration was supported by numerous awareness and educational events, and in collaboration with other wetland managers. Research and a long-term monitoring of the colonization of plants and avifauna in newly created habitats, the dynamics of water masses, marsh growth, water quality and hydrological parameters (water levels) provided information on the effectiveness of the actions taken.

Added value for the Green Belt

- As part of the network of Mediterranean wetlands, Škocjanski zatok now serves as a very important site for migratory birds, helping to maintain the region's ecological balance and mitigating the threats posed by habitat loss and degradation.
- Events for visitors about the importance of biodiversity and protected areas raise awareness and encourage people to participate in nature conservation, which aligns with the goals of the European Green Belt.

Educational activities (Bojana Lipej).

Where to replicate?

The measures implemented in Škocjanski zatok can serve as a good practice example for **coastal wetlands and also other wetlands and marshes** in the European Green Belt facing similar challenges.

Who to ask

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References

Resources for further info: https://skocjanski-zatok.org/en/projects/completed-projects/reserve-restoration/

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B. Enhancing Connectivity

- GPS-collaring European Bisons as basis for species and landscape management
- Locating corridors to enhance ecological connectivity along the Green Belt

GPS-COLLARING EUROPEAN BISONS AS BASIS FOR SPECIES AND LANDSCAPE MANAGEMENT

Ińsko Lakeland, Poland

Addressed issue

The European bison population in Northwestern Poland faces challenges related to migration barriers, leading to herd isolation, restricted gene flow, and low genetic diversity. This makes the species more vulnerable to diseases and environmental changes. Additionally, human-bison conflicts, poaching, and infrastructure development threaten conservation efforts. Effective monitoring and management strategies are necessary to ensure the long-term viability of the population while mitigating conflicts with local communities.

Location

The Ińsko Lakeland, encompassing the core area, spans a total of 880 km² in Northwestern Poland, while the extended Pilot Region extends over an area of 40.200 km². The region is characterized by its primary land use in agriculture and forestry, boasting a rich system of watercourses, water bodies, and wetlands. With a developing road and railway network, the area is relatively sparsely urbanized, emphasizing a focus on wildlife and nature-oriented tourism. Notable protected areas within the Ińsko Lakeland include the Ińsko Landscape Park, designated as Natura 2000 site with the code PLB320008 Ińsko Refugium, and PLH320067 Ińsko Lakeland.

Activities

Restoration Approaches include the enhancement of the management of European bison herds reintroduced in NW Poland. This involves identifying migration barriers and formulating recommendations for transport infrastructure investments. Additionally, efforts are directed towards optimizing the population's spatial structure by maintaining low densities (<3 individuals/1.000 ha) through the increase in the number of herds. The implementation of constant population monitoring is crucial, ensuring a swift response to potential human-bison conflicts.

The following activities have been implemented:

GPS-collar deployment – equipping an additional 10 animals with state-of-the-art GPS collars enhances monitoring and analysis of their movements and behaviours, providing valuable data for conservation efforts.

Migration barriers identification – a comprehensive assessment identifies and understands migration barriers that may impede the natural movement of wildlife. This entails studying geographical features, human-made structures, and other factors contributing to obstacles in the animals' migratory routes.

Poaching identification and tracking – implementing advanced tracking technologies actively identifies and

A GPS-collared female bison with a calf (West Pomeranian Nature Society)

monitors instances of poaching. The integration of real-time tracking systems allows for prompt responses to potential threats, contributing to the protection of endangered species and the preservation of biodiversity.

Formulation of recommendations for transport infrastructure investments – as part of the pilot investment, a thorough analysis of the existing transport infrastructure in the region is conducted. Based on the findings, detailed recommendations for strategic investments in transportation networks are formulated, aiming to balance human development needs with wildlife conservation and promote sustainable coexistence.

Added value for the Green Belt

By restoring migration corridors and improving habitat connectivity, this project directly contributes to the ecological integrity of the European Green Belt. Enhanced gene flow among bison populations strengthens biodiversity and increases resilience to environmental pressures. Additionally, the initiative promotes sustainable land use by integrating conservation objectives with infrastructure development and community needs. The involvement of local stakeholders fosters positive relationships between wildlife and human activities, reinforcing the Green Belt's role as a model for transboundary conservation.

Typical landscape of the Ińsko Lakeland (Green Federation "GAIA")

Where to replicate?

The GPS-collaring approach can be replicated in other regions where European bison populations are reintroduced or managed, particularly in areas with significant human-wildlife interactions. Suitable locations include other parts of Poland, Germany, the Baltic states, and Central and Eastern Europe, where migration corridors are fragmented due to infrastructure expansion. This method could also be adapted for other large herbivore species facing similar conservation challenges, such as red deer or wild horses, in landscapes requiring habitat restoration and improved conservation.

Who to ask

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References

Skorupski J., Hacker J., Volf O., Mariňáková M., Korošec M., Lipej B., Dvořák T., Haider J., Fuchs S. 2024. Implementation of joint pilot restoration actions in ReCo – pilot regions with pilot investments (Output 2.1 & 2.2). ReCo project Consortium

LOCATING CORRIDORS TO ENHANCE ECOLOGICAL CONNECTIVITY ALONG THE GREEN BELT

Green Belt Germany-Czech Republic, Bavarian Forest-Šumava Mountains

Addressed issue

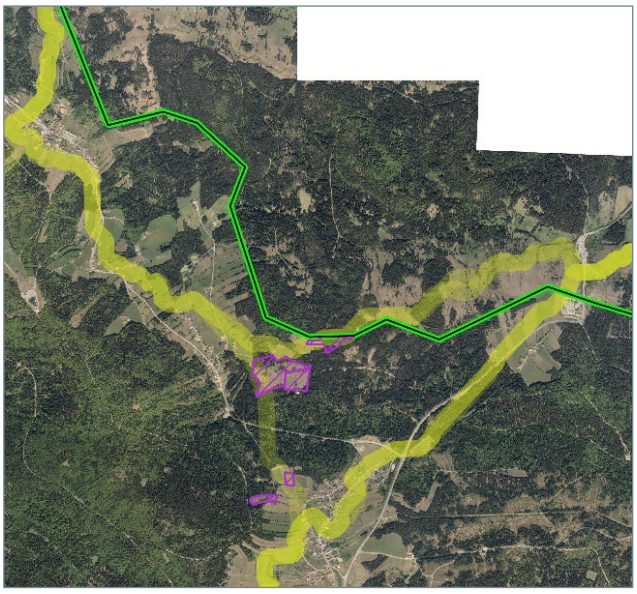
Resources for nature conservation must be focussed on areas with high priority. Regarding ecological connectivity this means to focus on certain parts of landscape that are – presumably – the most important corridors for most species in the respective region. These differ between different ecological groups and habitats. Species of wetlands and mires mainly migrate in valley systems, while species of grasslands in an arboreous landscape like the Bavarian Forest need meadows, pastures or shrubby woodlands for migration. Valleys can be detected quite easily in maps or in the field. Open or semi-open corridors on the other hand cannot be assessed that easily in field and even less on large scale. Furthermore, an important aspect not only locally but also in the transnational context, the fragmentation of those corridors by barriers (settlements, transport infrastructure or fencing, roads and PV-plants, etc.) must also be considered. To identify existing and potential ecological corridors as well as major barriers along the Green Belt Germany-Czech Republic in the region of Bavarian Forest/Šumava a method was used based on the evaluation of remote sensing data within the project *DaRe to Connect (D2C) - Supporting Danube Region's ecological Connectivity by linking Natura 2000 areas along the Green Belt* (Interreg Danube Transnational Programme).

Location

The Inner Bavarian Forest is one of five so called *linking-up areas* in the project *Crosslinking Green Belt* funded by the German Federal Agency for Nature Conservation. The area is located along the Green Belt Germany (Bavaria)-Czech Republic. The project aim is to enhance habitat connectivity in a large area of about 500 km² in the rural district of Freyung-Grafenau (Bavaria) and to build up or optimize the transboundary connectivity towards the valuable high-altitude/mountain grasslands of Šumava mountains/Šumava national park on Czech side by tangible implementation measures.

Activities

- **Analysis of Sentinel-2-data** for the D2C-pilot region "Bavarian Forest-Mühlviertel-Šumava (DE-AT-CZ)" (100 x 100 km) provided an up-to-date high-resolution raster image with a pixel size of 10x10m. By using training data such as ground truthing by the project partners and other biotope mappings, each pixel of the PR was classified and assigned to one of the Broader Habitat Types (BHT) using a machine learning algorithm of the satellite data time series of 2017 & 2018.
- **Detail assessment of existing and potential corridors within the project *Cross-linking Green Belt*:** Core areas for species of mesic grasslands were identified exemplarily and the position of the shortest, most probable connecting corridors between those core areas was calculated using GIS-based tools.



Amplified activities in the project site Wagenwasser due to high significance for connectivity (BUND).

- **Validation of the position of existing project areas**: The mapping of current management sites appointed by knowledge of local experts together with

the calculated D2C-corridors showed a high congruence of data and reality. Most project sites were situated directly in the corridors or close to them. Accordingly, activities at e.g. project site “Wagenwasser” (municipality Philippsreut), were significantly enlarged as satellite data revealed the key role of this area for connectivity towards open landscape parts on Czech side. Considering small-scaled barriers, e.g. fences, that slip through the comparatively rough resolution of 10 x 10m pixel, mapping must be conducted on site, either during the ground truthing phase and/or the implementation of recommended measures to enhance connectivity on a local level.

- **Determination of prospective “activity areas”:** By comparing the calculated corridors with other data available and displayed in geographical information systems, like biotopes, protected areas and others search spaces for future habitat connectivity measures could be designated. Additional management sites were searched and selected regarding the need for further measures in certain areas.

Added value for the Green Belt

For the first time it was possible to map potential connectivity corridors in this region, assessed unbiasedly using satellite data. Further activities in nature conservation can now be focused in these corridors. Gaps can be identified more easily and measures can be scheduled and carried out in order to close gaps by reactivation of fallows or opening non-native or extraordinary dense forests.

Where to replicate?

This approach can be used **all over the European Green Belt** and even beyond. It is especially suitable **for areas where no or little ground-collected landscape data is available**. As there is a huge variety of remote sensing data, corridors for several types of habitat requirements could be examined.

Who to ask?

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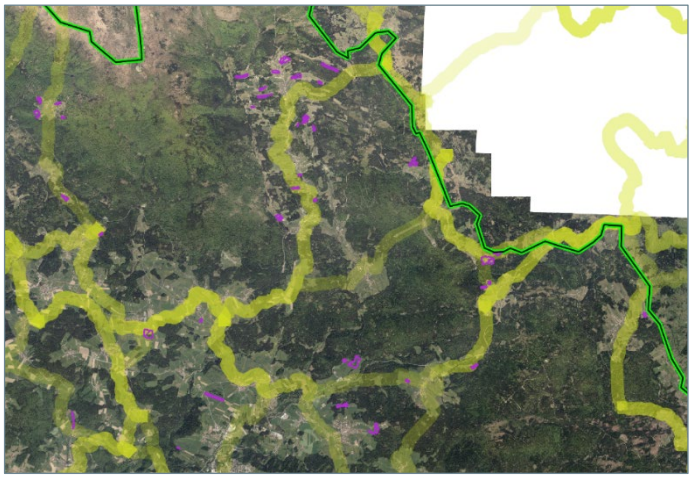

Connecting corridors along and across the Green Belt Europe in Lower Bavaria at the Czech border determined using satellite data. Management sites (purple) of the biotope connectivity project "Crosslinking Green Belt" were located respectively (Tobias Windmaißer, BUND).

References

GIS-tool developed in the “DaRe to Connect”-Interreg project by University of Vienna (Department of Botany and Biodiversity Research, Division of Conservation Biology, Vegetation and Landscape Ecology): https://dtp.interreg-danube.eu/approved-projects/d2c/section/gis-tool

Online manual for the D2C-GIS-tool: https://dtp.interreg-danube.eu/uploads/media/approved_project_output/0001/48/2a319c36049890bb99b7e72b8fe7633ccd7c4388.pdf

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C. Species Conservation and Management

- 24/7 task force for mammal management prevents conflicts
- A "red light district" to protect night flying insects and fight light pollution
- Adapting military remains to restore biodiversity: bunkers and shooting ranges as habitats
- Protecting the Bohemian gentian *Gentianella bohemica* along the Green Belt

24/7 TASK FORCE FOR MAMMAL MANAGEMENT PREVENTS CONFLICTS

West Pomeranian and Pomeranian Voivodeships, Poland

Addressed issue

Managing large mammals such as the European bison in human-dominated landscapes presents significant challenges, including human-wildlife conflicts, poaching, and infrastructure-related risks. Conflicts arise due to crop damage, road accidents, and safety concerns, leading to a decline in social acceptance of conservation efforts. Additionally, poaching remains a major threat, hampering population growth despite successful reintroduction efforts. To ensure effective species management and rapid intervention in crisis situations, a continuous monitoring and response system is essential.

Location

The project area covers the Zachodniopomorskie (West Pomeranian) and Pomorskie (Pomeranian) Voivodeships in northern Poland. This region spans approximately 40.200 km², encompassing a diverse landscape of forests, lakes, rivers, wetlands, and agricultural land. The area includes parts of the Baltic Sea coastline, making it ecologically significant for biodiversity conservation. The region is characterized by relatively sparse urbanization, with important cities such as Szczecin, Koszalin, and Gdańsk located nearby. Additionally, the presence of road and railway networks poses both opportunities and challenges for ecological connectivity and species migration.

Activities

The 24/7 emergency service for European bison management focuses on real-time monitoring, rapid intervention, and conflict prevention.

Key activities include:

- Immediate response to human-bison conflicts – a dedicated hotline allows residents to report incidents involving bison in villages, farmlands, or near roads. The team responds quickly to assess and manage the situation.
- Mitigation of crop damage – the task force works with farmers to deploy deterrents, such as alarm systems, and supplementary feeding strategies to minimize bison encroachment.
- Road safety interventions – the team responds to bison-related traffic incidents by removing animals from roads, coordinating with traffic authorities, and installing warning signs in high-risk areas.
- Monitoring and relocation – GPS tracking is used to monitor bison movements, enabling pre-emptive action in areas with frequent human-bison interactions. When necessary, individuals are relocated to prevent conflicts.
- Poaching prevention and enforcement – the team collaborates with law enforcement and conservation organizations to monitor poaching threats, investigate incidents, and strengthen anti-poaching measures.
- Community education and engagement – awareness campaigns inform local communities, farmers, and authorities about bison behaviour, safety protocols, and conservation benefits, fostering a more positive perception of the species.

Added value for the Green Belt

The establishment of a 24/7 task force significantly enhances the European Green Belt's role as a model for large-scale wildlife conservation. By ensuring constant monitoring and immediate response, the initiative strengthens ecological connectivity and promotes coexistence between humans and large mammals. Additionally, it enhances the effectiveness of conservation investments by reducing mortality risks from poaching and accidents. This approach supports sustainable land-use planning and reinforces the Green Belt's function as a transboundary ecological corridor, contributing to biodiversity conservation across European landscapes.

Where to replicate?

The 24/7 mammal management task force model can be replicated in other **regions facing similar challenges with large herbivores and carnivores**, particularly **in conservation areas with increasing human-wildlife interactions**. Suitable locations include areas in the European Green Belt with reintroduced or expanding bison populations and regions managing species such as wolves, bears, or moose. The model could also be adapted for **conservation programs** in national parks and protected landscapes, where real-time monitoring and rapid intervention are essential for balancing conservation with human activities.

Who to ask

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References

Skorupski J., Hacker J., Volf O., Mariňáková M., Korošec M., Lipej B., Dvořák T., Haider J., Fuchs S. 2024. Implementation of joint pilot restoration actions in ReCo – pilot regions with pilot investments (Output 2.1 & 2.2). ReCo project Consortium

West Pomeranian European bisons
(Green Federation "GAIA").

A "RED LIGHT DISTRICT" TO PROTECT NIGHT FLYING INSECTS AND FIGHT LIGHT POLLUTION

Ahrenshoop, Germany

Addressed issue

Light pollution is a growing problem for natural environments worldwide, causing extensive killings of insects and other animals. Night time illumination is growing by about 10% every year and also the European Green Belt is heavily affected, both by new installations and existing ones being equipped with brighter light sources. A new road lighting in Ahrenshoop substantially reduces side effects of night lighting, both by applying specially designed lamps that rigorously direct the illumination to the road, leaving the surroundings dark, and by using a red light spectrum which is largely invisible to insects.

Location

The road ***Fulge*** in Ahrenshoop village lies adjacent to an extensive natural reedbed on the side of Darß-Zingst lagoon chain. *Vorpommersche Boddenlandschaft* national park protects most of these waters. The shallow brackish water habitats and their shores boast a special biological diversity, with some typical species having a very limited distribution worldwide. While insect losses from these valuable habitats due to light attraction have never been researched, it is obvious that they must be extensive. To yield a maximum effect, a road alongside the waterline has been chosen for the pilot installation of the special lighting, to be followed up by further roads inside and outside of Ahrenshoop village.

Fulge road in Ahrenshoop with the installed red colored lighting. Illumination concentrates on the road leaving the surroundings in the dark. The reedbed is adjacent to the right. Northern lights induce an unusually bright night sky on this picture (Jörg Schmiedel).

Activities

- 15 existing road lights were replaced with a newly developed street light model, reusing the existing lamp masts along the road. The installed lights are equipped with shutters that eliminate light emissions to the side and use special red light LEDs largely without spectral components visible to most insects. During the early evening hours, an option to use light with a wider color spectrum is available and light intensity is strongly reduced during night hours.
- Due to the possibly problematic connotation persons may have with red light, information of the public was a central part of the activity both prior to the installation and afterwards, explaining the reasons and the advantages.
- A post-realization survey among Ahrenshoop inhabitants was conducted, revealing a decidedly positive attitude towards the change.
- Cooperation with a lamp manufacturer was established resulting in the joint optimization of available lamps. The created lamp model is now available on the market. Collaboration for further improvement is ongoing.

Added value for the Green Belt

- Greatly reduced losses of night flying insects, counteracting the ongoing sharp decline of many species.
- The problems man-made illumination is causing for nature are unknown to a major part of the population. The conspicuous red-colored street lights (along with the provided information) are strongly making people aware of the matter and even providing a good solution.
- Better quality of life for local inhabitants, as red light does not interfere with sleep and man's biological clock as much as other light colors.

The newly developed lamp model (TAL Shield), which is now available on the market (Selux AG).

Where to replicate?

Light pollution is a growing problem throughout the European Green Belt, with the most prominent conflicts arising **in and around protected areas**. These locations should be the core areas for action, keeping in mind however that waiving lighting altogether is always the best solution for nature. The **Wien/Bratislava and Trieste agglomerations** are among the most light-polluted areas in the European Green Belt, offering plenty of opportunities to act.

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References

Project info: www.bodden-nationalpark.de/der-verein/vereinsarbeit/vernetzte-vielfalt/neue-leuchten

ADAPTING MILITARY REMAINS TO RESTORE BIODIVERSITY: BUNKERS AND SHOOTING RANGES AS HABITATS

Lusevera, Italy

Addressed issue

Many landscapes in the European Green Belt have experienced significant changes in land use and economy, primarily due to the decline of traditional agropastoral practices and population decline. These have had severe consequences for both biodiversity and cultural heritage. Specifically, European bat populations are declining, with the loss of roosting habitats being a major contributing factor. Military bunkers are possible replacement habitats, just like other military remains can be for other species. Improvement of those abandoned structures for species conservation is a chance to create long-persisting habitats for such species.

Location

The project was held in Alta Val Torre, in the heart of the Italian Green Belt and of the Julian Prealps Natural Park, and more specifically, in the living memorial landscape of Lusevera, a small municipality of 597 inhabitants lying on the slopes of the Musi Mountains, home to a Slovenian language ("*ponašin*") speaking community. The Julian Prealps are a biodiversity hotspot and preserve unique cultures, languages and traditions scattered among small mountain communities. In the past, these mountains have also been theatre of war: arms depots, bunkers and military outposts, nowadays hidden by European Green Belt lush vegetation, were an ominous line dividing Cold War-era rivals.

Activities

- **Upgrading forgotten bunkers**: six cold-war bunkers were selected using thermos-loggers and following determined spatial parameters suitable for bats. They were repurposed to become shelters and roosting sites for endangered bats. After creating openings, installing bat-friendly structures to provide grip and providing the surrounding areas with bat-boxes, 5 different bat species were documented by automatic recorder units. Monitoring activities were carried out during 2 years to detect local biodiversity.
- **Revitalizing abandoned meadows**: The Val di Musi meadows were used as a shooting range during the Cold War and later abandoned. As a result, encroaching shrubs and trees began to suffocate the open meadow and its protected botanical communities, part of the Natura 2000 network. To restore the area, 1,5 hectares of meadow have been re-opened, and traditional agropastoral practices such as hand mowing and grazing have been reintroduced to maintain the meadows in the long term.

Added value for the Green Belt

- The combination of the conversion/reuse of former military buildings (bunkers, military firing range etc.) and the ecological optimization of the surrounding area through adapted nature conservation measures promoted endangered species that need habitats rich in structure.
- Biodiversity restoration within a Natura 2000 site within the European Green Belt, with positive impacts on protected species and habitats.
- Dissemination of European Green Belt values via Social Media updates, radio interviews and articles on magazines, the participation as speakers in conferences and seminars, the organization of webinars and in-person conferences and a documentary on the project.
- Improved capacity building of this small mountain community by providing new guided tours for local groups, the involvement of local private company in habitat restoration practices

A collage of images of the various actions, species and habitats in Lusevera municipality, Italy (Rete Italiana European Green Belt).

Where to replicate?

The topics addressed in these projects are transferable to any context along the European Green Belt. Activities could certainly be replicated in **mountainous regions of Slovenia, Austria and Germany**.

Who to ask?

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References

Association website: https://www.rete-egb.it/

PROTECTING THE BOHEMIAN GENTIAN *GENTIANELLA BOHEMICA* ALONG THE GREEN BELT

Bohemian Massif – Border triangle Germany-Czech Republic-Austria

Adressed issue

The Bohemian Gentian (*Gentianella bohemica*) is a highly endangered species throughout its complete range. It is listed in the annex II and IV of the European FFH directive. It inhabits nutrient poor meadows, fellows or pastures. Actors in nature conservation are engaged in revitalisation of former occurrences and protection of the last sites where it still survived. Despite this, only very few populations show a positive trend in population dynamics and knowledge about the requirements and applicable measures is scarce. Due to its biennial life cycle and low competitiveness as well as fragmented populations successful management seems very difficult. Demands regarding soil chemistry and symbiotic fungi partners are nearly unknown.

Location

This Gentian species is nearly restricted to the Bohemian Massif with most of its distribution area located in Czech Republic and Austria, in the border triangle Germany-Czech Republic-Austria. In Germany (Bavaria) it currently occurs only in a very few populations close to the former Iron Curtain. The Bavarian project measures focus on the last occurrences in the municipalities Mauth and Neureichenau within the rural district of Freyung-Grafenau (Lower Bavaria).

Activities

- **Promotion of international exchange**: Several online meetings and field trips were conducted to share news about developments, current findings and protection measures in Gentian habitats. Concrete actions at the protection sites could be shared among the participants.
- **Adoption of successful Czech management tools:** Pilot application of findings and methods from other actors in Gentian conservation. Especially the successful approaches from the Czech Side in Šumava National Park were adopted as management tools in the Bavarian conservation efforts on *Gentianella bohemica*. The main approaches are the removal of litter and dense moss layers in early spring to enhance germination of seeds and the establishment of the young Gentian seedlings. There is also need for extensive but consequent mowing or grazing of larger sites as well as the promotion of ex-situ cultivation to provide seeds for the spreading in promising areas without endangering existing populations.
- Monitoring and special measures in the remnant populations. New and established measures were organized for the respective occurrences. The population dynamics and spatial distribution at management sites are monitored each year.

These activities were initiated within the project “Cross-linking Green Belt” (Federal Biodiversity Program and Bavarian Nature Conservation Fund) since 2021 and were expanded by executing a LNPR-project (according to the Bavarian landscape conservation and nature park guidelines, LNPR), supported and funded by the government of Lower Bavaria and the Bavarian State Ministry for Environment and Consumer Protection (StMUV).

Added value for the Green Belt

Protection efforts on a nearly endemic species for a geographical entity region along the Green Belt representing an endangered plant community typical for traditional cultural landscapes. The implementation of methods tested successfully in other places helped not only to protect this species in Bavaria. This

approach also enhances the vegetation types and species communities at its occurrences and strengthens the Green Belt as distribution corridor and as core region for biotope connectivity.

Where to replicate?

Application in all remnant populations and at formerly inhabited **sites of *Gentianella bohemica*** within the complete historic range of the species. The approaches are also replicable **in conservation areas for other species with similar habitat requirements or causes of threats, just like *Arnica montana*, *Carlina acaulis* and other less competitive plant species** in nutrient poor grasslands.

Who to ask?

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References

Information on *Gentianella bohemica* (German): www.lfu.bayern.de/natur/artenhilfsprogramme/merkblaetter_botanik/doc/06lfumerkblatt_gentianella_bohemica.pdf

Křenová et al. (2019): Can we learn from the ecology of the Bohemian gentian and save another closely related species of Gentianella? https://pmc.ncbi.nlm.nih.gov/articles/PMC6922359/

Flowering *Gentianella bohemica* at its best occurrence site in Bavaria (Tobias Windmaißer, BUND).

Common visit and examination of management sites in Bavaria with participants from Czech Republic, Austria and Germany (Tobias Windmaißer, BUND).

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D. Local History and Heritage

- A former brewery becomes a place to meet and to explore the Green Belt
- Municipal protection and preservation of valuable mountain meadows

D1. A FORMER BREWERY BECOMES A PLACE TO MEET AND TO EXPLORE THE GREEN BELT

Schönsee, Germany

Addressed issue

The European Green Belt motives and its cross-border approach can greatly aid in connecting population and local heritage across what formerly was the Iron Curtain. Utilizing this chance is however not trivial, as this requires a holistic concept and good and lasting local support, integrating the European Green Belt with local activities, spreading knowledge about its natural wonders and resources and commemorating its historical importance. Centrum Bavaria Bohemia has been created to take these chances and realize a functioning integrative institution with the European Green Belt as central prerequisite.

Location

Centrum Bavaria Bohemia is located in the center of the small town of Schönsee in the Upper Palatine Forest (Oberpfälzer Wald) region. Centrum Bavaria Bohemia is the coordination center of Bavarian-Czech cultural exchange and cooperation. Located in the building of a former brewery it offers changing exhibitions, cultural events, workshops and conferences. Its area of interest is the whole Bavarian-Czech border region.

Activities

The art installation "The Nest" by Jakub Nepraš in the exhibition hall of Centrum Bavaria Bohemia, surrounded by the temporary exhibition "Forest & hunting" (2024/25) (Veronika Hofinger).

- **Information**: Visitors find an outdoor exhibition explaining and interpreting the Bavarian-Czech Green Belt, including two audiostations on the German and on the Czech side of the border (at Centrum Bavaria Bohemia and in the former village Pleš / Plöss). The tourist information in Centrum Bavaria Bohemia offers specialized material on the European Green Belt, largely for free.
- **Public relations, public events** being an integral part of our work, we are regularly publishing contributions in regional and national media in Germany and Czech Republic. Since 2021, we are participating in the "Green Belt days" with an event for the broad public. It takes place in a different location each year. The event hosts stands and events representing the Bavarian-Czech Green Belt, involving a large number of initiatives.
- **Exhibitions** interpreting the Green Belt Bavaria-Czech Republic: The real life in the European Green Belt was the starting point for the topics of a series of exhibitions of the Centrum Bavaria Bohemia: 'Forest & Hunting' shows hunting as a means of regulating a man-made ecosystem and as part of the common cultural heritage that connects Bavaria and the Czech Republic. Further exhibitions deal with landscape change under differing political and societal influences, with human settlements and migration, with places and cultures of remembrance. All topics are presented by using the means of art and culture. The **climbable art installation 'The Nest'** by the internationally renowned artist Jakub Nepraš permanently represents the Green Belt in the rooms of the former brewery. The exhibitions and the programme are bilingual German-Czech

throughout. But it is not only the language barrier that is to be overcome. It is also about overcoming barriers and prejudices in society.

- **Workshops** and conferences connecting stakeholders take place several times per year. They connect mainly regional German and Czech stakeholders on specific topics (tourism, education, remembrance culture, landArt, etc.). Frequently, we are involving universities. We are also happy to invite experts from other parts of the Green Belt.
- **Education** has become a core part of our activities: In cooperation with partners from Czech Republic and with support of the Bavarian state ministry of education and culture we are offering excursions for German and Czech pupils in the Green Belt, preparatory seminars in schools and a set of workshop-formats for different age categories. The topics are focussing on geography, history and social and political sciences.
- **Publications** present the outcomes of interpretation work, interviews with experts, workshops and exhibitions.

Added value for the Green Belt

Interpretation of the cultural and historic side of the Green Belt raises awareness for the specific traits and values of the European Green Belt. What has been considered a periphery with low living standard becomes an attractive place to live and recreate. Understanding the value and attractivity of the Green Belt increases the willingness to protect it. Cultural and historic traits allow to connect areas divided by the former iron curtain and connected by the European Green Belt. Culture and history adds a sense of uniqueness and meaning to a landscape marked by conflict and totalitarian systems and the possibility of a brighter future under the conditions of democratic systems and European **unification.**

A perfect place to grasp history: With pupils in the former village of Grafenried, in the beginning of a long explorative hiking tour in the Green Belt
(Jan Šícha).

Where to replicate?

A replication is possible **anywhere along the European Green Belt where a good institutional rooting and a long-term commitment** can be provided.

Who to ask?

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References

www.zeleny-pas.eu / www.gruenes-band.eu

D2. MUNICIPAL PROTECTION AND PRESERVATION OF VALUABLE MOUNTAIN MEADOWS

Stregna, Italy

Addressed issue

Grasslands represent some of the most species-rich habitats in the EU, with extensively managed grasslands in particular contributing to local and regional diversity levels. However, both too intensive agricultural management techniques and the abandonment of tracts of lands are reducing faunistic and floristic diversity through increased competition from fast-growing grasses and shrub and tree encroachment, respectively. For mountain meadows in particular, global effects such as atmospheric nitrogen deposition and climatic changes can exacerbate these trends. The maintenance of these extensive mountain meadows requires careful management, which is increasingly difficult to organize due to rural flight, land abandonment, and the fading of local land management traditions.

Location

Stregna is a municipality located on the Italian-Slovenian section of the European Green Belt in the Italian Region of Friuli-Venezia Giulia. The 21 hamlets of the municipality are distributed across the Julian pre-alps, ranging from 200 to 600 m a.s.l. Climatically, it lies in the temperate oceanic zone, with increasing continental influences at higher altitudes. While the natural vegetation consists of beech and true chestnut forests, both the forests and meadows of the region have a long history of human cultivation and influence. Due to the proximity to Slovenia, a unique culture has developed which incorporates the languages, cultures and traditions of both Italy and Slovenia.

A structurally varied, extensively managed mountain landscape near Stregna (Francesca Siardi).

Activities

- The municipality of Stregna has carried out bureaucratic and organizational measures to strengthen the protection of local mountain meadow habitats, with corresponding management measures prescribed to maintain the habitats.
- Stregna is leading and taking part in several regional and national projects to strengthen local traditional agriculture, promote the region and the biodiversity therein, e.g. ASFO Erbezzo, an association of local landowners seeking to promote sustainable management practices.
- The municipality is the lead partner in cross-border projects such as Ikarus and PotiDoVasi, which are aimed at enhancing the ties between Italian and Slovenian communities of the region. They promote the shared cross-border culture and traditions of this ancient agricultural region.
- Finally, Stregna is a partner in Interreg projects such as “ALPCHESTNUT” and “Terra di Castagne”, which are cross-border cooperative programs to keep agropastoral traditions and management techniques alive.

Added value for the Green Belt

The project work carried out by and in the municipality of Stregna has helped secure and improve the management of species-rich extensive grasslands and pastoral forests. The functionality of these habitats as refugia for rare species and stepping stones for animals and plants spreading along the Green Belt has thus been secured. Furthermore, projects, publicity work and festivals have tied the neighbouring communities in Italy of Slovenia closer together have helped revive reviving ancient pastoral practices and strengthening the sense of community in a commune which has struggled with rural flight.

Where to replicate?

The combination of cultural and natural conservation activities can be useful for many **smaller communities in the European Green Belt, especially where land abandonment is an issue**. Putting shared sustainable land management in the hands of the community both increases the revival of traditional landscape management methods, reduces the rate of land abandonment in mountainous areas and ensures the long-term maintenance of these species-rich habitats.

Who to ask?

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References

www.asfoerbezzo.eu/

www.comune.stregna.ud.it/

www.ikarusfest.eu/

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E. Visitor Management

- *"Beach Islands"* - micro-reserves on beaches in core tourism areas safeguard nature and arouse interest
- Snorkeling tours in marine protected area

"BEACH ISLANDS" – MICRO-RESERVES ON BEACHES IN CORE TOURISM AREAS SAFEGUARD NATURE AND AROUSE INTEREST

City of Rostock and Fischland-Darß-Zingst peninsula, Germany

Addressed issue

Sandy beaches are probably the habitat type most visited by humans in the European Green Belt, at least in relation to their area. As a result, the majority of coastal beaches is subject to heavy trampling, leaving little or none of the natural vegetation and seriously diminishing breeding grounds for several seaside bird species. By marking off parts of the beach with poles and signposting the reason, trespassing in these small areas (the *Beach Islands*) could be reduced to almost zero.

Location

The beaches of Rostock and Fischland-Darß-Zingst peninsular are all situated on the southeastern coast of the Baltic in one of the centers of coastal tourism in the European Green Belt. The main tourism season ranges from June to September, which is also the period when bathing and sunbathing are prominent activities. Outside of this period beachwalking concentrating around the wrackline is the main activity of beach visitors.

Activities

- The Beach Islands, as they are called locally, start at the foot of the sea dunes and range up to halfway down to the sea. They cover the upper part of the beach, the lower portion remaining open for people to pass. The areas are marked with wooden poles and an unobtrusive fence, equipped with signs informing about expected behavior and beach habitats. Due to coastal protection requirements, the poles have to be removed before winter and newly installed each spring.
- All activities are conducted in close cooperation with the municipalities, usually their tourism departments. All involved municipalities strongly support the Beach Islands, actively proposing beach sections for them to be installed, sometimes in the very center of tourism (next to the sea bridge).
- Guided tours to the Beach Island and neighboring habitats are offered during the summer season. Basic information is also provided to the tourism departments as the micro-reserves have evolved to be an attraction to visitors, sometimes being actively asked for and about.
- A scientific monitoring is conducted alongside, focusing on insects, but also concerning other animals and plants.

Added value for the Green Belt

- The monitoring shows that, even though the marked off areas are tiny, they support almost the complete natural vegetation of the upper beaches, a large portion of the beach insects and the more extensive ones may even serve as breeding grounds for a few coastal bird species that would otherwise not occur (such as plovers).
- Beaches are usually not perceived as a habitat by people, especially not as a rare and endangered one. The Beach Islands contribute to changing this, giving visitors a surprising first impression of how a (semi-) natural beach would look like.
- The European Green Belt follows the eastern and southern Baltic seashore, but is almost invisible and impossible to experience on beaches with heavy tourism since almost none of the natural values are left at these locations. The Beach Islands point people to the Green Belt, providing information about its natural values and background as well as the special historic heritage of these beaches that were heavily access-restricted during iron curtain times.

Beach Island on the coast of Zingst, Fischland-Darß-Zingst peninsula (Susanna Knotz).

Where to replicate?

Most beaches in the European Green Belt are prone to trampling, some more, some a bit less. Especially beaches with heavy recreation and tourism use can retain some of their nature and gain visitor attractions by establishing *Beach Islands*. Main target regions would be e.g. the **Gdańsk/tri-city agglomeration** in Poland, most of the **German southern Baltic coast** and the few **beaches of the Trieste surroundings** in Italy and Slovenia. Comparable actions are also possible on inland waters such as **lakesides or riverbanks**.

A guided tour at one of the Beach Islands at Rostock (Jörg Schmiedel).

Who to ask?

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References

Project info: www.bund-mecklenburg-vorpommern.de/strandinseln

SNORKELING TOURS IN MARINE PROTECTED AREA

Miramare, Trieste, Italy

Addressed issue

The sea is a widely unknown and inaccessible environment, separated from life on land. Most people know little about it and do not consider underwater habitats in their decisions and everyday life. The possibility to collect own experiences like in land habitats is very limited. Increasing knowledge of the sea with immersive experiences allows us to raise people's awareness on its importance and need for protection.

Location

Miramare Marine Protected Area is set in the heart of the Miramare Biosphere Reserve, covering a total area of more than 3.000 hectares. The Marine Protected Area is a place rich in biodiversity and with a high population density, due to the presence of many different habitats in a small area and over thirty years without fishing or human disturbance, offering an experience of absolute wonder and beauty.

Activities

Every year from June to September snorkeling excursions are a way of observing the underwater environment, suitable for everyone, adults and children. The only requirement to participate is to be able to swim and use the snorkeling equipment. Neoprene underwear and fins are given on free loan when needed.

- Initially a guided tour of the museum of the MPA is led by a WWF guide, focusing on the importance of the reserve and the most peculiar and recognizable species of the gulf.
- Secondly, people are taken in small groups to snorkel inside the MPA and observe especially the reef and its countless forms of life. The itineraries proposed within the marine area line up along the coast, at the foot of Miramare Castle, along a shallow underwater path among the rocks and a few metres from the shore.

Added value for the Green Belt

The gulf of Trieste is one of the few points where the Green Belt comes into direct contact with the Mediterranean Sea, an increasingly fragile ecosystem subject to anthropogenic pressures and global warming. The snorkeling experience, guided by marine biologists and naturalists, has a strong emotional impact on participants and a high educational value, in terms of knowledge and awareness. A society aware of the importance and fragility of an ecosystem will be led to protect that ecosystem, which is an invaluable result, given the interdependence of the sea and the land in regulating the balances, the climate and the biodiversity of the entire region. Furthermore, aware and sensitive citizens will be more easily led to respect, care for and defend also any other ecosystem or habitat, even further away from the place where they live, developing a careful and responsible vision of the entire planet.

Where to replicate?

This activity has the potential to be replicated anywhere in **coastal parts of the Central European and Baltic Green Belt**, such as on the **Slovenian coast** and places like **Rügen Island or the Western Pomeranian Lagoons** on the Baltic coast. Especially suited areas could be marine protected areas, reserves or special protection zones, where there may be both a greater biodiversity and high-quality educational activities.

Who to ask?

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References

Project info: https://www.ampmiramare.it/en/seawatching-en/

Snorkeling guided excursion at the foot of Miramare Castle (Davide Lombroso).

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F. Public Information

- Using augmented reality to see and learn about Daffodils and their habitats
- Young people explore digitally and in real life traces of nature and history along the European Green Belt

USING AUGMENTED REALITY TO SEE AND LEARN ABOUT DAFFODILS AND THEIR HABITATS

Jesenice, Slovenia

Addressed issue

The flowering alpine meadows in the western Karavanke Mountains, home to the protected mountain daffodil *(Narcissus poeticus)*, are a valuable natural asset in need of careful conservation. The daffodil blooms from April to May and takes years to develop. It is sensitive to environmental changes and intensified agricultural practices. Being a major visitor attraction during its flowering season, increased visitor traffic during its blooming period pressures its habitat. To raise awareness and support conservation, an innovative virtual experience featuring eight locations of flowering meadows is accessible via QR codes and VR goggles. This provides key information on meadow care, biodiversity, and local attractions, offering a year-round experience of daffodils in bloom while promoting education and protection of this natural heritage.

Location

The geographical area depicted by the virtual experience covers the Karavanke Mountains within the borders of the municipality of Jesenice, with the first sites occurring in the lower part of the Karavanke foothills at an altitude of around 700 m. The daffodils also grow in large numbers in extensively cultivated meadows in the wider area of the villages of Javorniški Rovt, Mala Golica, Plavški Rovt and Španov vrh. For each of these locations, two 360-degree photos of the daffodils in bloom were taken, for which a VR-AR solution was developed to provide an integrated virtual experience.

Activities

- An integrated VR-AR solution with 360-degree images of the natural environment and daffodil blooms was developed. It provides an impression of the exciting display also outside of the flowering seasons. At each location, the app shows icons to discover background content: local people taking care of the meadows, nature values of rich biodiversity and interesting sights to see. Virtual experience is accessible via web app and QR codes on the spot to view content on visitors' devices.
- 3 VR glasses (Oculus) available in the Tourist information office of Jesenice for more immersive experience with commentary by a local narrator that guides the visitor through different locations.

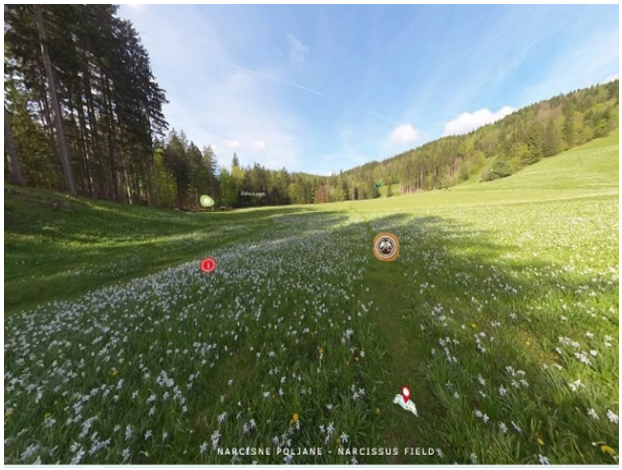
Added value for the Green Belt

- Year-round accessibility: Using the attractivity of daffodil locations, the app makes people explore and appreciate the European Green Belt's values regardless of season. Even at times when the daffodils are not even visible above ground, the special importance of their locations is made obvious.
- Promoting conservation efforts and education: The app provides background information on the mountain habitats and their conservation needs right on the spot, but also for prior or subsequent studies at home. It also highlights the European Green Belt's significance in preserving ecological hotspots, cultural heritage, and biodiversity.
- The VR app promotes sustainable tourism and environmental awareness, attracting well-informed return visitors who encourage others through social influence, potentially generating additional income in remote areas.

Web application available on mobile phones by scanning QR codes on the locations (Jošt Gantar).

Where to replicate?

Any area in the European Green Belt with **striking displays of flowers, seasonal aggregations of animals or only periodically perceivable habitat features** could benefit from comparable electronic solutions. For example, bird migration sites might benefit from the opportunities to picture their importance and visually explain temporary access restrictions. Or the extent and importance of seasonal flooding, snow cover or historical incidents for special habitats could be visualized.



Pristava: The first location of daffodil virtual experience

Who to ask?

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References

Project info:
https://visit.jesenice.si/sl/znamenitosti/naravne-znamenitosti/

YOUNG PEOPLE EXPLORE DIGITALLY AND IN REAL LIFE TRACES OF NATURE AND HISTORY ALONG THE EUROPEAN GREEN BELT

Green Belt German: Werra Valley and Rhön Mountains

Addressed issue

Especially young people often don't know much about the history of the Iron Curtain and the biodiversity of the European Green Belt. The remote border areas often are not known, although they are attractive for people interested in nature and culture. BUND Thuringia with its regional partners want to make the big vision of the European Green Belt tangible for inhabitants and people from all over the world: Virtual 360°-tours showing historical and nature points of interest of two regions along the inner-German Green Belt were elaborated accompanied by excursions and youth leader trainings in the field. The project, funded by the Federal Foundation for the Study of the Communist Dictatorship in Germany, the Heinrich-Böll-Foundation Thuringia and the Foundation for Nature Conservation Thuringia exemplarily united historic and nature conservation issues and competences in one project.

Location

5 km surrounding of two former GDR watch towers in the inner-German Green Belt in the nature park region Eichsfeld-Hainich-Werratal (Werra Valley) and the biosphere reserve Rhön.

Activities

- Different points of interest (e.g. border relicts, places with a special border history or of outstanding nature conservation value) were collected and described by photos, maps, videos and podcasts to be presented in virtual 360°tours. Additionally, real life activities with young people were implemented in the same regions. So different low mountain ranges with highly diverse geologic circumstances, different forest and open land habitats and lots of older and younger border history are presented to the public in the resulting 360°tour.
- The two interactive virtual 360° tours are available in English and German: Starting from an aerial overview of a former border tower, you can go to the ground and explore relicts of the former border and habitats of the Green Belt. Embedded in high resolution photo panoramas film clips on rare species, interviews with experts and contemporary witnesses and text tables are integrated.
- Young people could explore nature and history along the Green Belt in several excursions. In a youth leader training the participants hiked four days along the Green Belt in the Werra Mountains (Werra Valley), e.g. visited a border museum, met contemporary witnesses at the campfire and experts for rare species, explored relicts of the former border and Green Belt habitats and exchanged on environmental education methods. In a work camp they mowed mountain meadows.

Added value for the Green Belt

The big vision of the European Green Belt gets tangible and reaches young and technically affine target groups from all over the world. The 360°tours promote the Green Belt and its specific regions. They give background information and can be explored interactively. In the specific nature parks and biosphere reserves they are integrated into exhibitions and flyers. As it works modularly, relevant topics of the specific region can be integrated. The tours links different regions, as it is quite easy to switch from one region to the next one. The virtual tours make the Green Belt also explorable for physical disabled people.

Where to replicate?

It is possible to adapt the system to other **European Green Belt** regions with their specific regional history and nature, their activities, problems and chances.

Who to ask?

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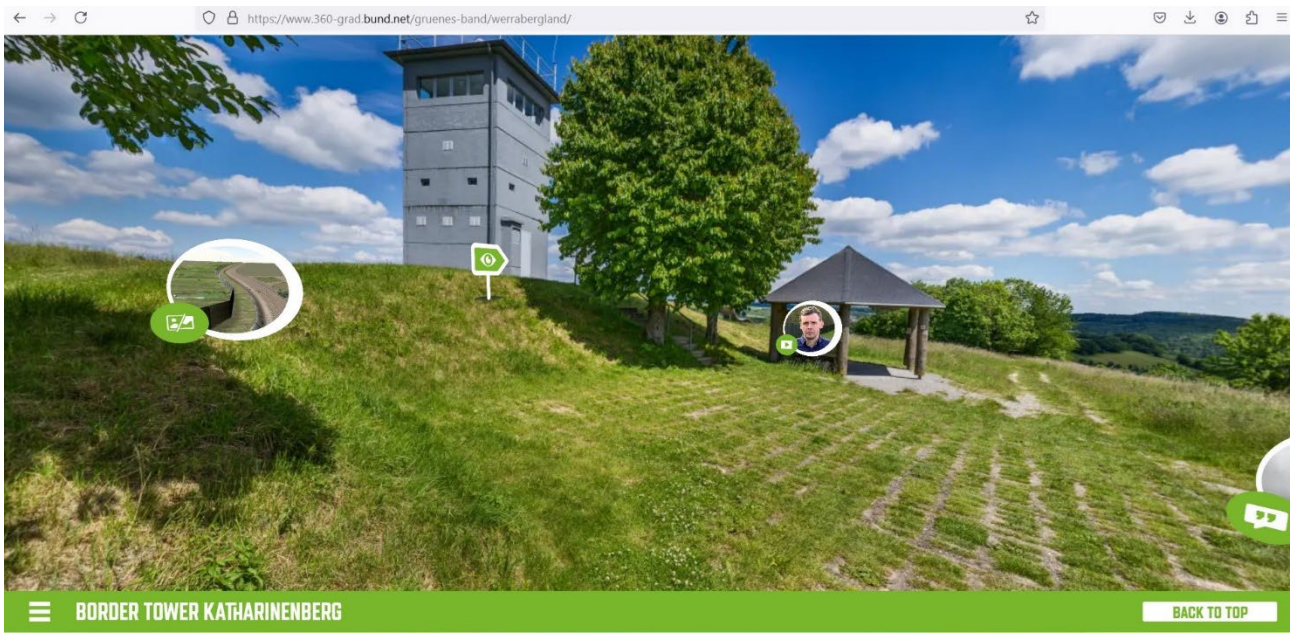
References

www.360-grad.bund.net/gruenes-band/rhoen

www.360-grad.bund.net/gruenes-band/werrabergland

Three additional tours available in German: www.gruenes-band-monumental.de



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G. Political Lobbying and Involvement

- A campaign for a national nature monument Green Belt Thuringia
- Expert peer reviews of site management and stake-holder involvement enhance conservation success
- Štítary, centre of local biodiversity: Integrating village development and the Green Belt

A CAMPAIGN FOR A NATIONAL NATURE MONUMENT GREEN BELT THURINGIA

State of Thuringia, Germany

Addressed issue

Already at the start of the Green Belt project in Germany in 1989 it was clear that, to preserve this extraordinary treasury of biodiversity and lively monument of German and European history, the Green Belt would need a protection status. But in the commotion of the reunification, nature conservation didn't have a big lobby and many people just wanted to forget history. But after decades of struggle the Green Belt seemed to fit perfectly into a new nature conservation category in Germany. The protected area category of "National Nature Monument" (NNM) was included in the German Federal Nature Conservation Act (BNatSchG) in 2010. NNM are legally designated areas that are of outstanding importance for cultural-historical reasons and because of their rarity, uniqueness or beauty (see § 24 (4) BNatSchG). Thuringia was the first German Federal State that started to declare their part of the German Green Belt as NNM. As the declaration of nature protection areas often arouses opposition, BUND Thuringia started a preparatory campaign to showcase the values of the Green Belt for the people and the benefits of the added protection.

Location

The campaign included the complete 763 km of the Thuringian Green Belt, where the adventurer and former GDR refugee Mario Goldstein hiked along and met people.

Activities

- Prior to the NNM declaration, adventurer and former GDR refugee Mario Goldstein hiked all along the Thuringian Green Belt. On his tour he met lots of contemporary witnesses, land users, and nature conservationists, explored nature and historical landmarks. The tour was partly accompanied by a film team, yielded wide press coverage and later also a popular book.
- A multivision show featuring the hiker's experiences was created and shown in every county along the Thuringian Green Belt in village centers, guest houses and city halls to 100 to 300 persons. An English language version was produced for international use and presented e.g. in Brussels.

A picnic with people from administrations, locals and hikers during the Green Belt tour (Eulefilm).

- The events were supplemented by a website, flyers, post cards and several smaller events.

Added value for the Green Belt

- The Thuringian Green Belt was successfully declared as NNM in 2018. Other German Federal States, like Saxony-Anhalt (2019) and Brandenburg (2022) followed. With Hesse the first western Federal State declared its border region as NNM in 2023. With a total protected length of 1.136 km, the NNM Green Belt is currently the longest protected part along the European Green Belt. The Federal States Saxony and Mecklenburg-Western Pomerania are in preparation to nominate also their parts of the Green Belt as NNM.

- "Maintenance, development and information plan": After the nomination process a plan for the protection, management, development and experience of the Green Belt was developed. It has been accompanied by partners out of nature conservation, history, county administration, agriculture and forestry. Staff positions and a budget for the development of the Green Belt have also been established in the Federal States.
- The declaration of the NNM is a basis for the current activities for the declaration of the Green Belt as UNESCO World Heritage Site.

Where to replicate?

The campaign could be adapted to other parts of the **European Green Belt** where it is necessary to promote the historical and nature values and to gain acceptance and understanding for the protection.

Who to ask?

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References

Homepage on the National Nature Monument Green Belt Thuringia: www.gruenes-band-monumental.de

Stiftung Naturschutz Thüringen (Thuringia Nature Conservation Foundation): www.stiftung-naturschutz-thueringen.de/handeln/gruenes-band-thueringen

Left: Relict of the former Iron Curtain - GDR watch tower at the Green Belt Wendehausen (Mario Goldstein); right: Adventurer and GDR refugee Mario Goldstein on his trip along the Green Belt Thuringia (Eulefilm).

EXPERT PEER REVIEWS OF SITE MANAGEMENT AND STAKEHOLDER INVOLVEMENT ENHANCE CONSERVATION SUCCESS

Green Belt locations in Poland, Germany, Czech Republic, Austria, Slovenia and Italy

Addressed issue

Actors in the European Green Belt possess a wealth of local knowledge and extensive expertise on nature as well as cultural and historical backgrounds. However, management requirements are diverse, often very demanding, and the locally responsible teams for implementing the actions often small. Additional external advice to tackle specific or non-standard questions can sometimes be helpful, as well as an uninvolved expert's view on the chosen solutions from a possibly different perspective. Peer review visits by small expert peer review teams to management actions provided just that.

Location

Various locations in the Baltic and Central European Green Belt were subject to peer review visits, namely Ińsko lakeland in Poland, the Fichtelgebirge/Smrčiny Mountains on the German-Czech border, Podyjí/Thayatal national parks on the Czech-Austrian border, the Karavanke high mountain area in Slovenia, the Trieste karst in Italy and coastal Slovenia.

Activities

- A detailed methodology of the peer review teams' tasks and duties was created. It includes a final assessment form to be filled both by the peer reviewers and the hosts. Some of the reviewed activities were already completed, but most were still undergoing implementation.
- Peer review teams of 4-8 international experts were selected to visit each site. Prior online discussions on the selection of activities to be reviewed and the stakeholders to be involved resulted in a detailed agenda of the visit, which was jointly produced by the host and the peer review team.
- The core part of all peer review visits were intensive consultations with local stakeholders having diverse relationships to the activities to be reviewed. People affected by their outcomes and persons involved in their realization were common, but also individuals responsible for local policies or administration were interviewed.
- Open conversations with all hosts and stakeholders, explicitly not only featuring perceived successes and benefits, but also possible shortcomings, failures and worries, are a central requisite for effective peer reviewing. A friendly and sincere atmosphere, strictly omitting any notion of control, accusation or exposure, was therefore maintained throughout all peer review visits and also afterwards.

Added value for the Green Belt

- The wide set of expert opinions and analytical approaches provided by the peer reviewers substantially improved the results of the reviewed activities.
- The hosts' roundup of ongoing and completed works, necessary for preparation and execution of the peer review, upgraded the understanding of their own activities besides their functioning and impacts, gaining valuable experience for future tasks.
- Peer reviews conducted during the realization process of a measure can yield excellent hints for optimization of the work lying still ahead, thereby instantly improving impact and efficiency.
- The peer review visits highly improve international cooperation in the European Green Belt. Profiting from its diversity, they utilize international experiences and expertise locally for better performance and solutions. Some of the contacts created during the peer reviews serve the network long after the peer review has ended, being the basis for constant exchange.

- The conclusions of the peer reviews are particularly useful in planning future activities both by the hosts and the peer reviewers, as they will allow to avoid repeating mistakes and to strengthen the positive impacts of future actions.

Where to replicate?

Expert peer review visits can be replicated **anywhere in the European Green Belt** where larger activities or projects are ongoing.

Who to ask?

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All peer review visits featured here were part of the ReCo Interreg project and are one of its most important deliverables.

References

ReCo project consortium (2025): Joint peer-review reports on peer-review excursions by Joint Pilot Teams to ReCo Pilot Regions / Reports from the Peer-Review visits.

Field meeting of the peer review team with a local stakeholder in Fichtelgebirge/Smrčiny Mountains (Jörg Schmiedel).

ŠTÍTARY, CENTRE OF LOCAL BIODIVERSITY: INTEGRATING VILLAGE DEVELOPMENT AND THE GREEN BELT

Krásná - Štítary, Czech Republic

Addressed issue

The border areas of the Czech Republic face many challenges, including the dwindling population of already small villages and the concentration of tourists in the most famous areas, such as national parks, while other areas are overlooked by visitors. Local residents are often not very interested in their own community and do not get involved in common activities. From a biodiversity perspective, a major challenge is the overgrowth of valuable areas due to lack of care, including the spread of invasive species, and unsuitable management like intensive grazing or planting of non-native species, and the associated decline of endangered species.

Location

Krásná is a small village in the most western part of the Czech Republic. On its territory, there is also the former village of Štítary, which disappeared after the expulsion of the German population in 1945 and was never rebuilt due to the existence of the Iron Curtain. The houses were demolished, old gardens and orchards became overgrown, and non-native species of poplar are spreading across the wet meadows that until recently hosted a declining population of the endangered butterfly marsh fritillary (*Euphydryas aurinia*). Straight streams flowing through degraded meadows no longer provide optimal habitat for the remaining populations of pearl mussel (*Margaritifera margaritifera*), and due to the disturbed water regime of the landscape and climate change, they often lack water.

Activities

- The village gained the land in Štítary from the state. After the discussions with university experts, they planned suitable management of the area.
- Non-native trees and expanding shrubs were removed. A part of the area is grazed with Exmoor ponies. It is a very hardy breed that can stay outdoors all year round and needs virtually no veterinary care.
- Small pools were created using heavy machinery to improve water conditions.
- An old orchard was restored by planting local herbs and fruit tree varieties. Local people were involved in the planting.
- The municipality carried out a number of excursions for local people, schools, university students and conservationists. ¡ Within an EGB Days project, an educational trail was created and connected with the existing popular "Czech Trail" (Stezka Českem, a trail along the whole Czech border).

Exmoor ponies in Štítary (archive of the municipality of Krásná)

Added value for the Green Belt

The project was initiated by a nature conservationist in cooperation with the municipality. All measures were discussed with experts. Local people were involved in the planning and implementation. This is an exemplary approach of a community-based restoration project.

Elimination of non-native poplar trees has reduced the negative impact not only on the project area but also in its surrounding

including the protected national nature monument Lužní potok – Bystřina.

Restoration of degraded wet meadow habitats supported the biodiversity of the border zone including the endangered species.

The horse pasture increased the attractivity of the area for local people and visitors.

Marsh fritillary *(Euphydryas aurinia)* (Ametyst)

Where to replicate?

Comparable activities could be initiated **anywhere in the Green Belt where traditional cultural landscapes exist**. There is a lot of valuable sites which need regular management. It is not always possible to pay for mowing or grazing with livestock. Grazing with Exmoor ponies requires initial investment but then it is quite cheap. However, the management has to be planned by experts taking into account the ecological needs of the target species and habitats.

Community-based approach is desirable in many cases, especially in smaller villages.

Who to ask?

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Freshwater pearl mussel *(Margaritifera margaritifera)* (Ametyst)

References

Information about the village: www.obeckrasna.cz/

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H. Research and Citizen Science

- DNA-metabarcoding for connectivity analysis, monitoring and the development of management strategies
- *"GEO day of biodiversity"*: Discovering and protecting the Green Belt's biological richness
- Underwater citizen science helps in monitoring and species protection
- Using historical map data for today's connectivity planning

DNA-METABARCODING FOR CONNECTIVITY ANALYSIS, MONITORING AND THE DEVELOPMENT OF MANAGEMENT STRATEGIES

Green Belt Germany

Addressed issue

Insect species are declining rapidly in Central Europe, causing potential future issues for agriculture, such as reduced pollination. This decline in diversity and biomass is driven by intensive land use, traffic, pesticides, light pollution, and climate change. As climate conditions shift, species are migrating north to more suitable habitats. The German Green Belt, at the heart of the EGB, may serve as a crucial "highway" for these migrations and a refuge for endangered species due to its protected status (e.g. as National Nature Monument on 82 % of its length). Understanding how species use this biotope network is vital for ensuring their long-term protection. This knowledge aids ecological conservation, informs habitat protection strategies, and provides decision-makers with essential biodiversity data. Improving insights into insect diversity and defining protection measures can increase political and public support for conservation efforts.

Location

The core of the inner-German Green Belt is a 1.378 km long and around 50-200 m wide strip of landscape, which was mainly protected from human interventions, due to the strict regulations at and also near the border fortifications. This part is characterized by many open habitats, which are often endangered in the rest of Germany. The study conducted in 2025 analyses sites ranging from the very south of the inner German Green Belt to the Baltic sea. It covers a large spectrum of over 24 habitat groups in all 5 geographical regions of the inner-German green belt, thus maximizing the potential species diversity found in the entire dataset. The data will be collected centrally at a DNA-Metabarcoding company for later analysis.

Activities

- Malaise Trapping: To capture key species along the German Green Belt, 100 Malaise Traps (Townes Model) are deployed to catch flying insects in various habitats. Using light attraction, these traps collect insects and store them in ethanol, preserving biomaterial for DNA sampling in the lab.
- Data analysis: Modern, state-of-the-art technology analyses the large dataset of sequencing reads, identifying DNA barcodes (BINs) for species identification.
- Sequenced DNA is processed bioinformatically to match DNA barcodes in databases (e.g. NCBI BLAST, RDP Classifier, BOLD). BINs with significant matches are considered species present in the sample.

Insect samples after sieving for DNA metabarcoding (© www.metabarcoding.com).

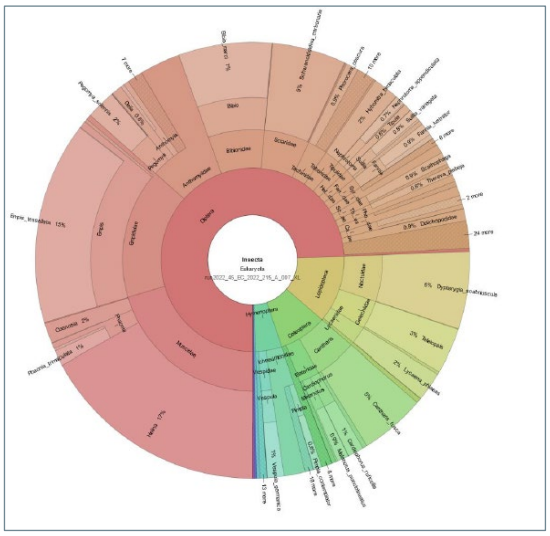
- DNA can be preserved from various extraction stages for later comparisons, new sample protocols, or pesticide analysis.
- The data supports analyses of species diversity, community structures, relative species abundance, and genetic diversity across habitat types, protection zones, seasons, landscapes, land-use intensities, and geographic gradients (e.g. north-south/arid-wet).
- Data collection and database creation: Insect samples are complemented with data on animal species collected over the past 10 years by various authorities and institutions. This will deepen understanding of the German Green Belt's value as the largest biotope network in the country. Data will be sourced at

communal, federal, and national levels and stored for a comprehensive analysis in potential follow-up projects. An expandable database will also be developed for future data collection.

Added value for the Green Belt

The dataset is helpful for:

- Providing a detailed and standardized overview of insect species diversity and abundance along the Green Belt, which will be invaluable for conservation planning and management.
- Identifying critical habitats or migration corridors that require enhanced protection to support biodiversity.
- Strengthening political arguments for maintaining and expanding protected areas within the Green Belt by offering scientifically validated evidence of its ecological importance.
- Supporting the development of educational and public awareness campaigns that highlight the role of the Green Belt as a biodiversity hotspot and a model for conservation in other regions.
- Creating a foundation for future studies that monitor long-term changes in insect diversity and ecological health in response to climate change, land-use shifts, and conservation efforts.



Diversity analysis of differently sieved sample fractions after DNA-metabarcoding
(© www.metabarcoding.com).

Where to replicate?

The experimental design is adaptable to **anywhere in the European Green Belt** and can scale down to 1-10 Malaise traps for cost-effective data collection in smaller areas.

Lower data analysis costs, especially regarding taxonomic expertise, make this insect monitoring approach affordable even for **small-scale projects**. This enhances data collection on species diversity, improving understanding of habitat conditions and refining data for local and national decision-makers.

Who to ask?

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References

www.metabarcoding.com

German-wide Malaise trap metabarcoding estimates over 21.000 insect species: Buchner *et al*. 2024, Upscaling biodiversity monitoring: Metabarcoding estimates 31,846 insect species from Malaise traps across Germany, Molecular Ecology Resources 25, doi 10.1111/1755-0998.14023.

"GEO DAY OF BIODIVERSITY": DISCOVERING AND PROTECTING THE GREEN BELT'S BIOLOGICAL RICHNESS

Green Belt Germany

Addressed issue

The Green Belt is considered the largest ecological network in Germany, but it continues to face pressures from human activities and environmental threats, underscoring the importance of ongoing protection and preservation. One of the key challenges in conservation is the lack of comprehensive data on species diversity, particularly in areas like the Green Belt. Despite its vast ecological importance, research on the full range of species in this the European Green Belt has been limited. With the GEO Day of Biodiversity this gap could be addressed by encouraging individuals to discover and document as many different species of plants and animals as possible within a 24-hour period. The event highlighted the rich biodiversity of the almost 1.400 km long Green Belt Germany, raising awareness of its ecological value and emphasizing the need for further research and conservation efforts.

Location

In 2003 the central event of the "GEO Day of Biodiversity" took place in the trans-boundary national parks Harz (Lower Saxony) and Hochharz (Saxony-Anhalt), which are large "pearls" along the otherwise relatively narrow ecological corridor Green Belt. In addition to this core area, satellite projects were organized in several regions along the Green Belt. These included in northern Germany Dassower See and Schaalsee (Mecklenburg-Western Pomerania / Schleswig-Holstein), Landgraben-Dumme-Niederung and Großes Bruch (both Saxony-Anhalt/Lower Saxony), as well Unteres Eichsfeld (Thuringia/Lower Saxony), Schlechtsarter Schweiz/Haßberge/Grabfeld (Thuringia/Bavaria) and Mittelvogtländisches Kuppenland (Saxony/Bavaria). These diverse areas highlight the wide range of ecosystems within the Green Belt and the importance of their preservation.

Activities

- The first International Day for Biological Diversity was held on 22 May 1993. This date was chosen to honour the adoption of the Convention on Biological Diversity (CBD) text on 22 May 1992. GEO is a popular German educational monthly magazine comparable to National Geographic magazine. The GEO Day of Biodiversity if hosted by GEO with changing partners. In 2003 it was conducted with BUND (Friends of the Earth Germany) along the inner-German Green Belt.
- During the GEO Day of Biodiversity along the inner-German Green Belt in 2003 500 experts (full-time and volunteer species experts) mapped more than 5.200 animal and plant species in just 24 hours. Even species that were thought to be extinct were rediscovered. Throughout the event, there were various educational presentations, exhibitions and talks on the Green Belt's biodiversity and conservation, helping to increase public awareness about the importance of preserving this unique region. Many small events and activities were organized in the satellite regions. Some regional schools were also actively involved. Visitors had the chance to learn about the area's diverse species and conservation challenges.
- An extensive report on the GEO Day of Biodiversity was featured in the June 2003 issue of *GEO*.
- In 2025 a Day of Biodiversity is featuring the European Green Belt at Lübeck.

Added value for the Green Belt

- The findings of the GEO Day of Biodiversity 2003, including rediscoveries like the swallow-wort, reinforced the exceptional conservation value of the Green Belt Germany. These results exceeded expectations, demonstrating the area's vast biodiversity potential.

- The event also played a critical role in raising public awareness about the Green Belt, which contributed to the German government's decision to transfer significant portions of land in the Green Belt to the states for long-term protection. This is a key achievement in Germany's conservation efforts for the Green Belt.
- The involvement of local experts, volunteers, and the public during the event helped create a deeper understanding of the importance of protecting the Green Belt, fostering a sense of shared responsibility for its preservation

Impressions from GEO-Day of Biodiversity along the inner-German Green Belt 2003, middle: rediscovered swallow-wort *Vincetoxicum hirundinaria* (GEO).

Where to replicate?

The success of the GEO Day of Biodiversity 2003 could be replicated anywhere in the **European Green Belt**. The locations would benefit from both local engagement and national-level conservation initiatives aimed at protecting critical habitats and connecting fragmented ecosystems.

Who to ask?

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Day of Biodiversity 2025:

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References

GEO Day of Biodiversity 2003, report from the central event in national park Harz: https://www.geo.de/natur/tag-der-artenvielfalt/10575-rtkl-5-geo-tag-der-artenvielfalt-im-harz-gruenen-band

Project "Hotspot|Climate|Diversity in the hotspot 28": https://www.bund-mecklenburg-vorpommern.de/hotspot-28/

UNDERWATER CITIZEN SCIENCE HELPS IN MONITORING AND SPECIES PROTECTION

Trieste coastal area, Italy

Addressed issue

Ecological monitoring to detect and describe changes in ecosystems or habitats requires extensive datasets that usually have to be acquired by frequent and widespread sampling. The effort for this is not always affordable, meaning that some research, despite badly needed, is left undone. This is especially true for data collection underwater. But in an age of booming snorkeling and diving activities it is possible to ask for assistance. Underwater citizen science can source data for long-term monitoring.

Location

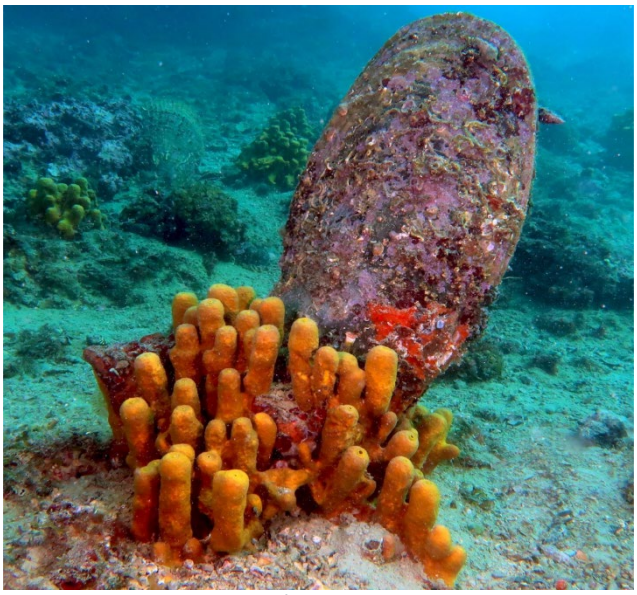
The coastal area of Trieste is an 11 km long strip that extends from the town of Santa Croce to that of Barcola, for a total of approximately 1.500 hectares. Sea-related activities are carried out from the harbours, marinas and seaside resorts scattered along the coast. Some activities, due to their relevance for scientific purposes, are authorised within the Miramare Marine Protected Area, sited at the core of the coastal strip.

Activities

Citizen science initiatives are conducted to inform about marine animal and plant species, and data are collected through easy-to-use survey cards about the monitoring of species and phenomena considered as indicators of climate change (i.e. coral bleaching, sponge mortality, the presence of alien species and especially thermophilic species).

Activities always include a preparatory training for the citizen science campaign participants and can target specific species or focus on transversal phenomena affecting more than one species, namely:

- Census and health assessment of the specimens of noble pen shell Pinna nobilis still alive, after an epidemic decimated its populations in 2016 and pushed this species in critical danger of extinction. The citizen science activities involve divers to monitor the surviving individuals and conduct an environmental and health assessment of the most suitable habitats for the species.
- Observation and census of organisms of species particularly sensitive to the increase in water temperature for prolonged periods, including black sponges, yellow tube sponges, orange sponges and madrepores. Some key organisms are marked with special labels fixed on the seabed nearby. During the months of August and September they are kept under observation with weekly inspections carried out through guided snorkeling excursions. The aim is to monitor their state of health and the emergence and evolution of any symptoms of stress in the organisms, such as bleaching for madrepores or necrosis for sponges. The subsequent analysis of the census cards and photographs taken allows us to highlight the signs of suffering in the observed specimens during the season but also from one year to another.



Yellow tube sponge *Aplysina aerophoba* and noble pen shell *Pinna nobilis* (Saul Ciriaco).

Added value for the Green Belt

The acquisition of scientific data allows to properly determine the health status of the marine ecosystem and consequently intervene in the most appropriate way to protect this crucial balance. At the same time, more aware citizens will be more inclined to take care of both marine and terrestrial ecosystems and provide support to the scientific community at local level and beyond.

Where to replicate?

These activities can be replicated anywhere, in the sea as on land, but it's even more easy to replicate them in terrestrial environments than in marine ones, due to more favourable conditions. However, a high-level initial training of the participants is what ensures the success of these initiatives, because it leads on one side to a correct and effective data acquisition, on the other to an awareness rise for citizens.

Who to ask?

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References

Project info: www.ampmiramare.it/en/research-and-monitoring/

Labeling of a yellow tube sponge inside the Miramare Marine Protected Area (Lorenzo Peter Castelletto).

USING HISTORICAL MAP DATA FOR TODAY'S CONNECTIVITY PLANNING

Thayatal & Podyjí, Austria & Czech Republic

Addressed issue

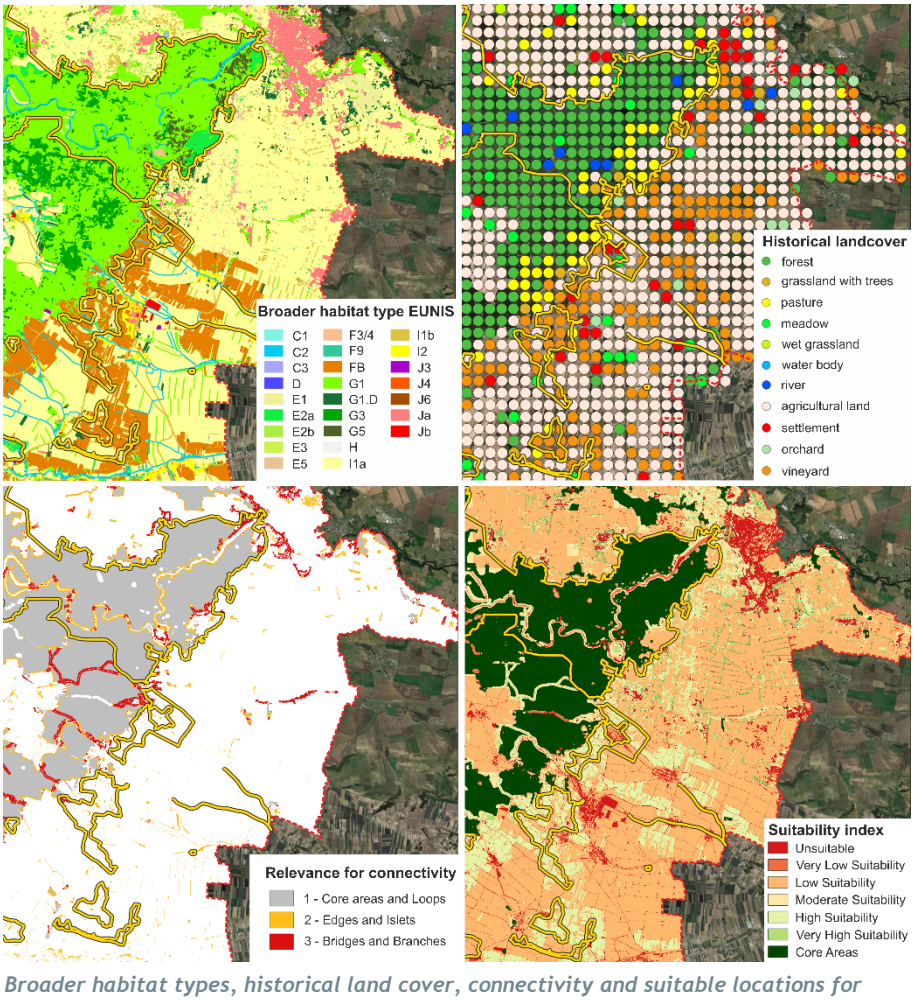
Today's valuable habitats are under increasing pressure of human activities, caused by either intensification of their use or their abandonment. These activities cause habitat fragmentation and degradation, leading ultimately to the loss of biodiversity. Therefore, restoring connectivity of these habitats should be one of the priorities for nature conservation. Using historical maps can help in planning restoration activities to increase ecological connectivity of habitats (application of the "learn from past" approach), which can then serve for better movement of organisms, such as the European wild cat (*Felis silvestris*) and other species occurring in the Thayatal and Podyjí National parks.

Location

National parks Thayatal and Podyjí are located at the north border of Austria, northwest of Retz, and south border of the Czech Republic, west of Znojmo. Their common features are represented by the narrow and steep valley of the river Thaya/Dyje, which is mainly surrounded by natural forests. While both national parks host predominantly natural habitats, they are closely encircled by agricultural landscape with few natural habitats, which is typical mainly for the eastern part of the region. Connecting the remnants of these habitats could play significant role in increasing overall ecological connectivity and therefore enabling easier movement of wildlife, including the European wild cat.

Activities

- First activity focused on creating a **suitability map for restoring and increasing connectivity of forest habitats**, which are preferred by the **European wild cat**. This map was a result of combining three different sources: A map with historical habitats was created in the form of a 250 m x 250 m grid by manual vectorization of topographic maps from 19th century. A broader habitat types (BHT) map was generated using regional habitat mapping, Corine Land Cover (CLC+ Backbone), and semi-automatic classification of Sentinel-2 satellite imagery. This map provided insights into the current landscape quality. Target forest and woody features were extracted as they serve as wildcat corridors, and all habitats were ranked based



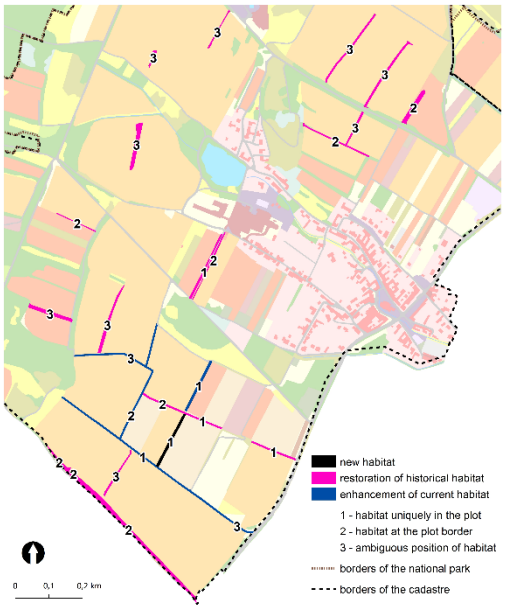
Broader habitat types, historical land cover, connectivity and suitable locations for restoration in the Thayatal and Podyjí National parks for European wild cat

on their suitability for restoration into the targeted habitats. Third map indicated the functional value of the habitats in the form of connecting landscape elements, which were divided into core habitats, connecting elements, potential areas for connections and habitats that are isolated and need to be (re)connected.

- As a result, the suitability map for restoring and increasing connectivity of forest habitats shows localities with different types of suitability from very high to very low, areas that are not suitable for restoration, and core areas (large localities suitable for breeding of the wild cat). This map can serve as one of the inputs for creating the Regional Restoration Plan for enhancing ecological connectivity of habitats suitable for the European wild cat in the Pilot Region.
- Second activity focused on local scale to try to **increase landscape resilience** by restoring natural habitats (both woody and grasslands) that were present during the first half of the 20th century. For this activity, aerial photos from 1950s were used. Comparison with present habitats revealed gaps where measures to increase landscape resilience and habitat connectivity were suggested: restoration of historical habitats, enhancement of current degraded habitats, and creating new habitats with respect to land ownership.

Added value for the Green Belt

- Increased ecological connectivity and decreased fragmentation of natural habitats enables better movement of organisms, offers additional habitats and leads not only to increased biodiversity but also overall landscape resilience against human activities and climate change.
- Combining different datasets offer a comprehensive product that poses a base for informed decision making for conservation actions and connectivity plans. The multi-layered origin of the products accounts for both ecological integrity and practical feasibility.
- Proposed solutions are based on scientific methods, which show target places where the restoration activities would significantly increase connectivity of habitats and overall landscape resilience.
- Historical maps provide connection to the history of the place.



Measures for increasing landscape resilience and habitat connectivity by creating new habitats, restoring vanished historical habitats or enhancing characteristics of current habitats.

Where to replicate?

Fragmentation of natural habitats is a widespread problem throughout the European Green Belt, especially in **unprotected and intensively used areas**. These areas often serve as a barrier for movement of organisms, making the populations in protected areas isolated and prone to higher risk of extinction. Historical maps can provide an inspiration for restoring habitats or parts in places where they used to be, leading not only to increased connectivity of habitats but also to linking the heritage of the past with the present. The maps are nowadays becoming available in most of the European countries making this inspiration more real.

Who to ask?

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Information about creating suitability maps: https://www.interreg-central.eu/wp-content/uploads/2024/10/Working-Paper-With-Proposals-For-Restoration-Actions-Along-EGB-CE.pdf

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The ReCo project consortium consists of:

- Bavarian Branch of Friends of the Earth Germany (Lead Partner, Germany)
- DOPPS – BirdLife Slovenia (Slovenia)
- Ametyst (Czech Republic)
- Federacja Zielonych "GAJA", NGO (Poland)
- Thayatal National Park (Austria)
- University of Vienna (Austria)
- Landscape Research Insitute (Czech Republic)
- BSC – Business support organisation ltd., Kranj (Slovenia)
- Podyjí National Park Administration (Czech Republic)
- Ministry of the Environment of the Czech Republic (Czech Republic)
- WWF Italy (Italy)

www.interreg-central.eu/projects/reco