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Green Infrastructure: A tool for reducing Europe's vulnerability to climate change

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Overview

- Context and definitions
- Data evidence
- Väinameri project, Estonia
- GI as an adaptation tool
- Success factors



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Context and definitions

“A **strategically planned network** of natural and semi-natural areas with other environmental features designed and managed to **deliver a wide range of ecosystem services**. It incorporates green spaces (or blue if aquatic ecosystems are concerned) and other physical features in terrestrial (including coastal) and marine areas. On land, GI is present in rural and urban settings” (COM(2013) 249 final; May 2013)

- ▶ Serves to **enhance ecosystem health and resilience, contribute to biodiversity conservation** and **benefit human populations** through the maintenance and enhancement of ecosystem services
- ▶ GI can be strengthened through **strategic and coordinated initiatives** that focus on maintaining, restoring, improving and connecting existing areas and features as well as creating new areas and features



Data evidence

- ▶ Creation of a database of European GI projects (127 entries covering all EU-27 countries)
- ▶ Analysis of six in-depth case studies
- ▶ Expert workshop on green infrastructure

Gallecs, Spain



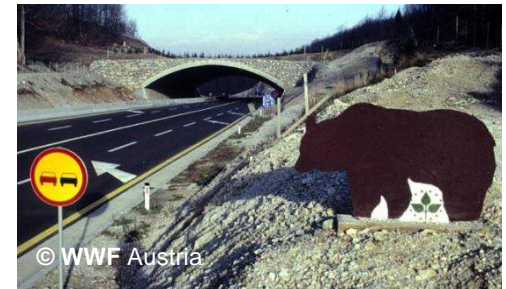
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National Forest Creation, UK



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Alpine Carpathian Corridor, Austria/Slovakia



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Transformation of the banks of the Rhone (Lyon), France



© In Situ

10Gemeten, the Netherlands



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Väinameri project, Estonia



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Väinameri project, Estonia

- ▶ **Pilot project for “One Europe, More Nature”** (WWF)
- ▶ **Threats:** flooding, storm surges, loss of coastal ecosystems
- ▶ **Objective:** increase local employment opportunities via restoration and conservation of semi-natural coastal grassland areas
- ▶ **Activities:** extensive grazing and mowing of unfertilized grasslands, clearing activities, sustainable resource extraction, ecotourism, ecological education, awareness-building



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Väinameri project: Results

- ▶ Improved resilience and functioning of coastal habitats, leading to:
 - ▶ Formation of regional and international networks
 - ▶ Improvements in health of targeted habitats and ecological systems
 - ▶ Improved fishing and hunting opportunities, bird watching, indirect economic effects to local businesses via ecotourism



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GI as an adaptation tool

- ▶ Boost disaster resilience (risk management)
 - ▶ functional floodplains, riparian woodland, protection forests in mountainous areas, barrier beaches and coastal wetlands can be created or maintained (together with grey infrastructure) for disaster reduction
 - ▶ Parks and green spaces (especially with high biodiversity) and fresh air corridors (often blue infrastructure) can act as cooling islands against summer heat waves
- ▶ Reduced vulnerability by supporting local livelihoods and economies
- ▶ Provide connected spaces and habitats for wildlife



Success factors

1. **Involvement of local people** in the planning and implementation of the project (decentralised approach to project development)
2. Biodiversity and conservation **objectives were understood** and appreciated by all participants
3. **Time & place suitability** - the project concept was coherent with local visions and ambitions
4. **Support system** - a network of farmers, artisans and tourism entrepreneurs was developed that ensures the sustainability of the project



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Thank you for your attention!

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