

**LIFE Platform Meeting 2024: Amphibian & Reptile
Conservation: *Challenges and Opportunities in Europe***

Improving ecological connectivity in a fragmented
landscape by providing vital stepping stones for
amphibians and reptiles



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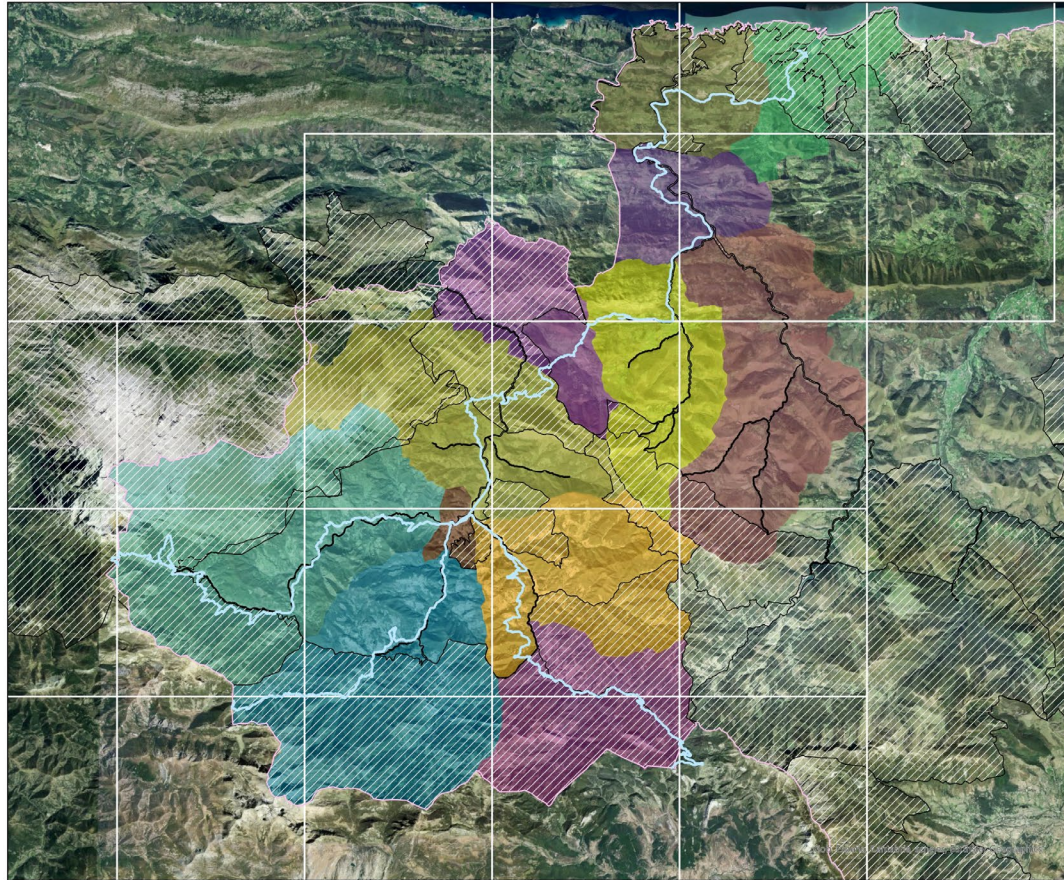


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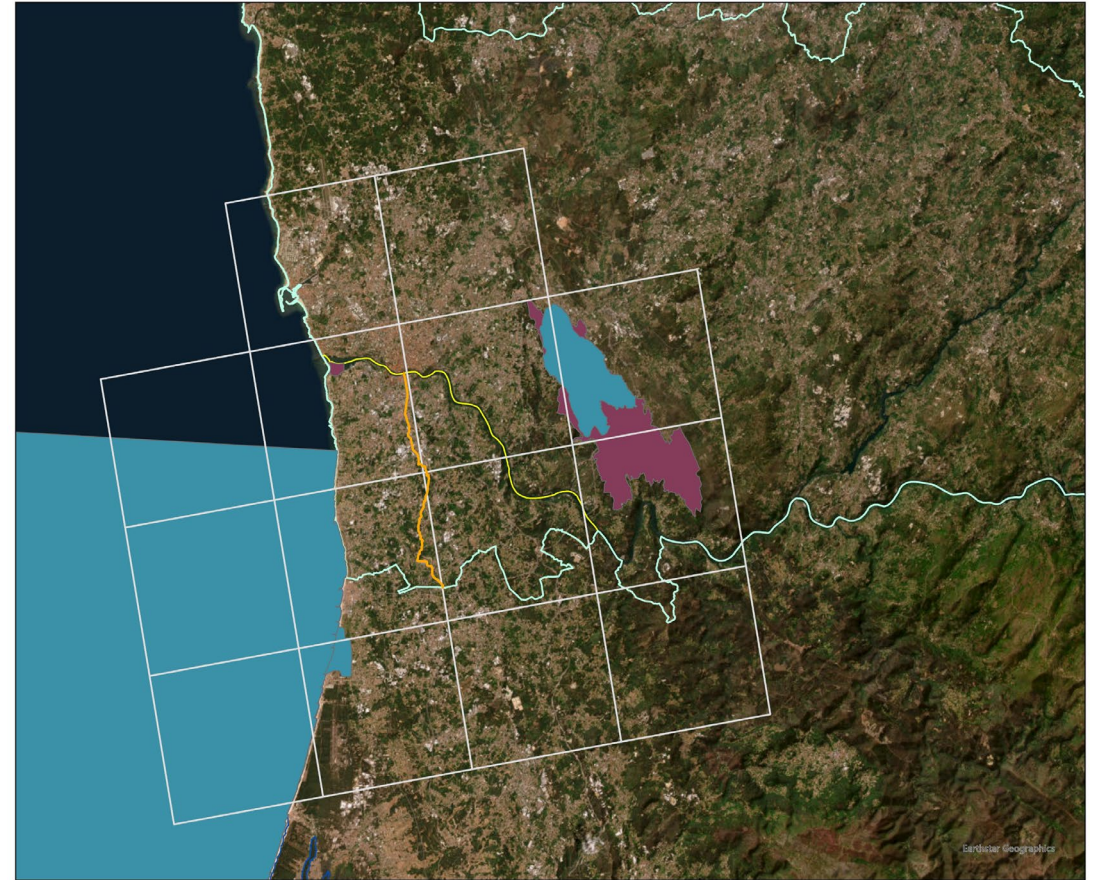


January 2022 – December 2026

Cantabria - Spain



Villa Nova de Gaia - Portugal





National Green Infrastructure and Ecological Connectivity and Restoration Strategy and European Biodiversity Strategy 2030.

Lepidópteros



Eriogaster catax



Euphydryas aurinia



Phengaris nausithous

Coleópteros saproxílicos y xilófagos



Rosalia alpina



Osmoderma eremita



Limuniscus violaceus

Reptiles



Lacerta schreiberi



Iberolacerta monticola

Aves



Perdix perdix

Anfibios



Discoglossus galganoi



Chioglossa lusitaniae

Mamíferos

Quirópteros



Miniopterus schreibersii



Myotis bechsteinii

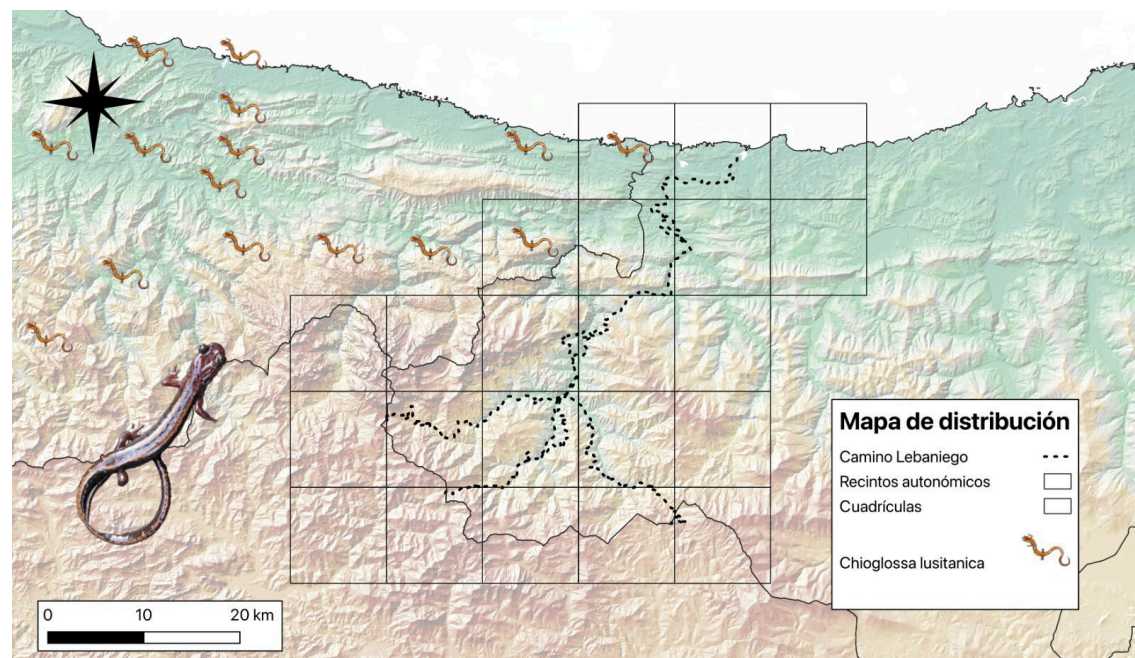


Ursus arctos



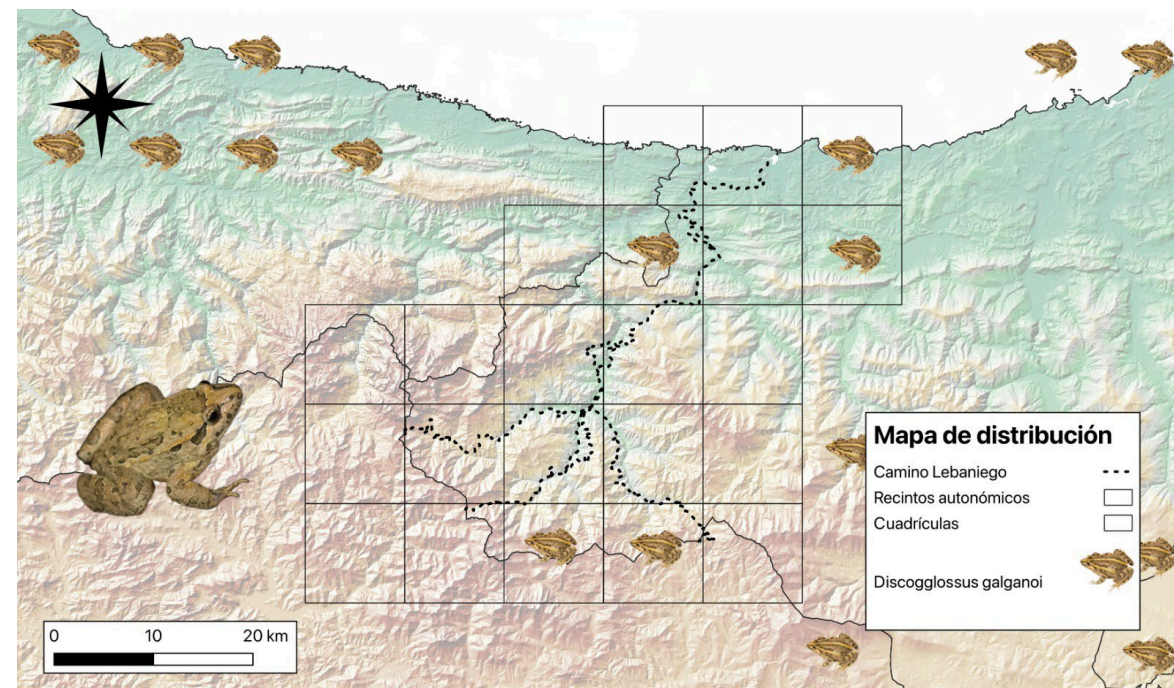
Herpetofauna targeted by the project

Gold-striped salamander / *Chioglossa lusitanica*



Conservation status	
Annex II & IV	Habitats Directive (92/43/CEE)
Vulnerable	IUCN
Vulnerable	Livro Vermelho dos Vertebrados Portugal
Vulnerable	Spanish Catalogue of Threatened Species.

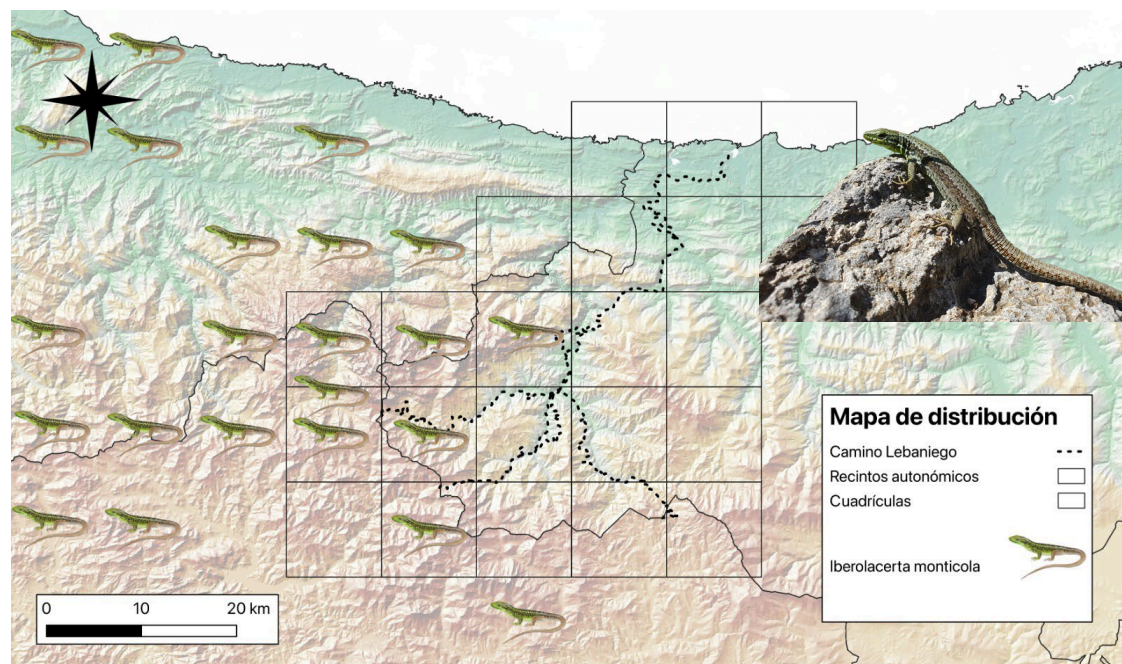
Iberian Painted Frog/ *Discoglossus galganoi*



Conservation status	
Annex II & IV	Habitats Directive (92/43/CEE)
Vulnerable	IUCN
List of Wild Species under Special Protection Regime	Spanish National Catalogue of Threatened Species

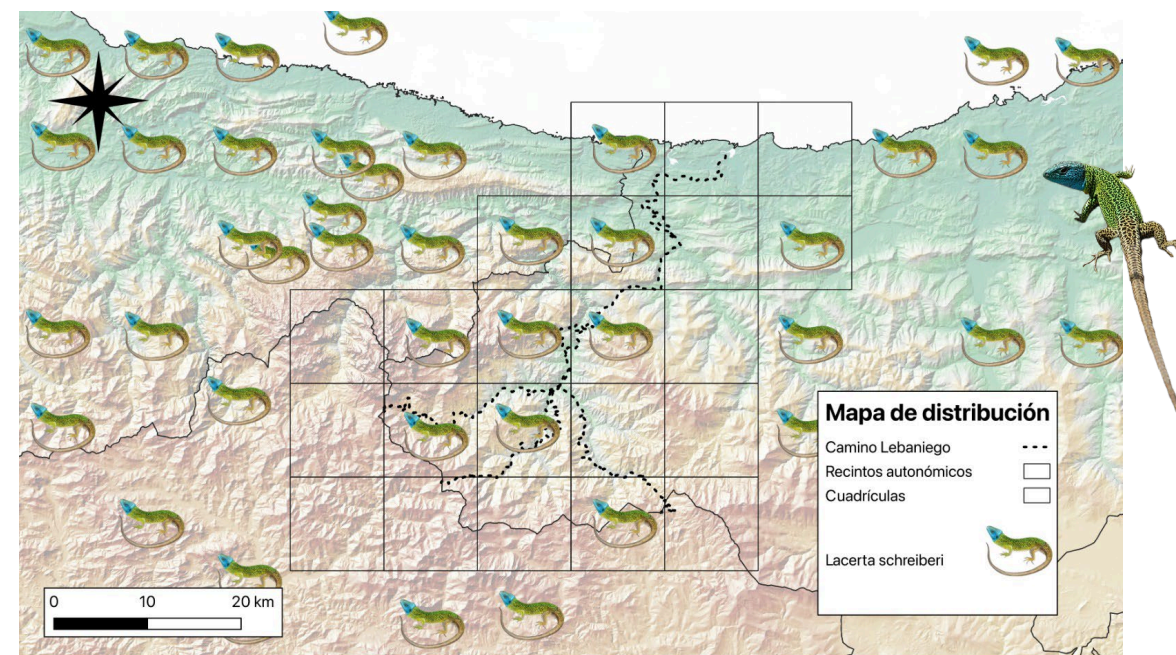
Herpetofauna targeted by the project

Iberian rock lizard – *Iberolacerta monticola*

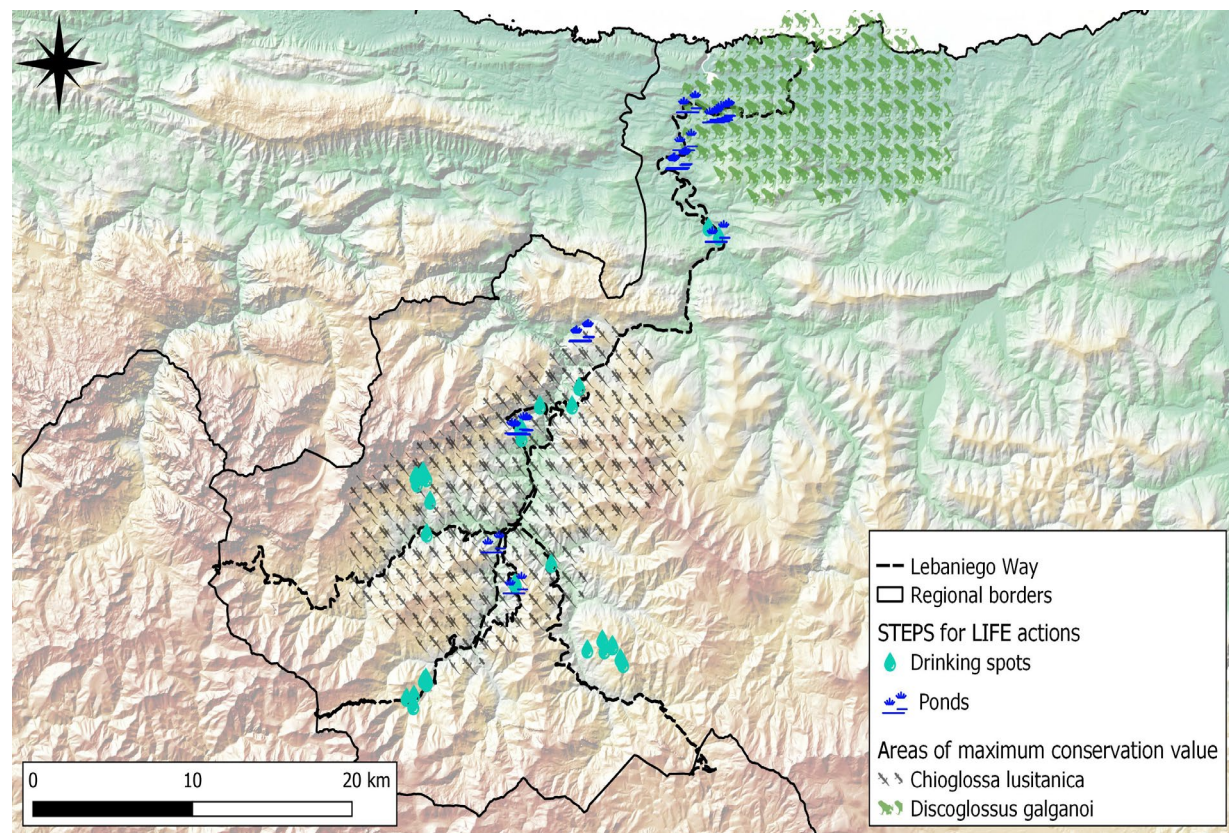


Conservation status	
Annex II & IV	Habitats Directive (92/43/CEE)
Annex II	Bern Convention
Vulnerable	IUCN
Species of Special Concern	Spanish Catalogue of Threatened Species.

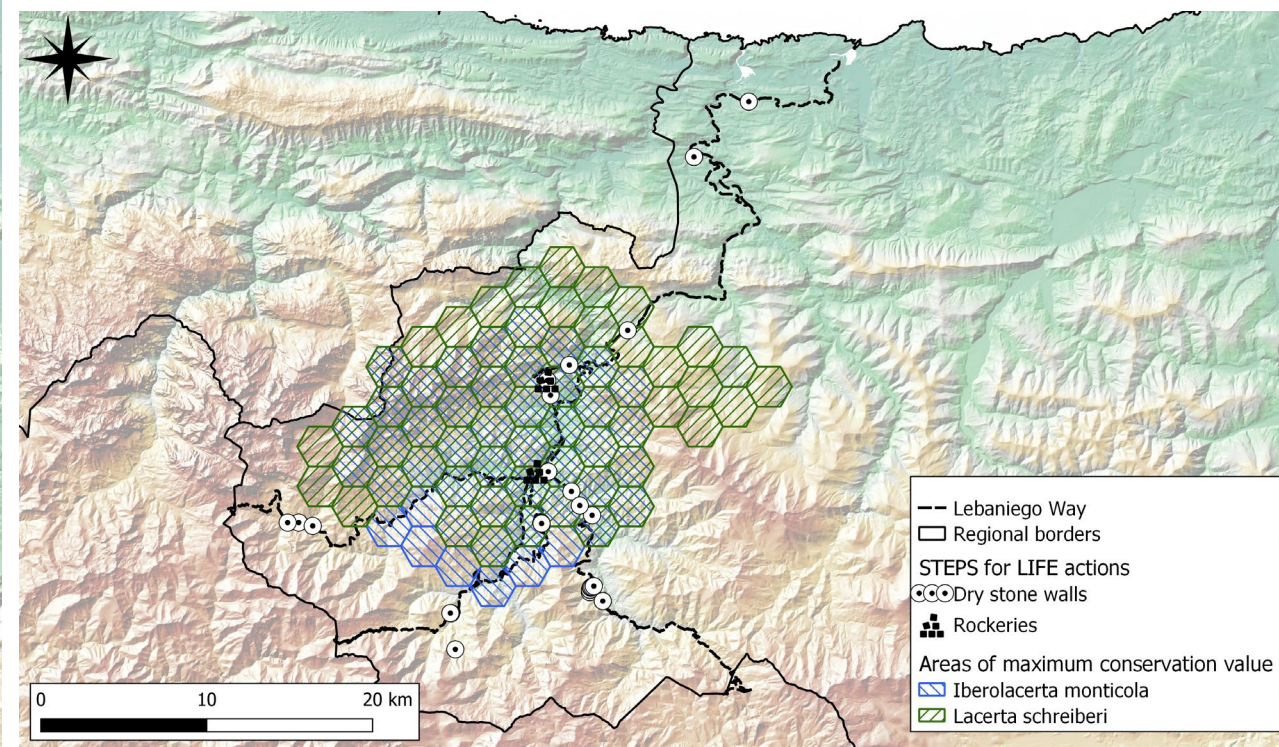
Iberian emerald lizard / *Lacerta schreiberi*



Conservation status	
Annex II & IV	Habitats Directive (92/43/CEE)
Near Threatened	IUCN
Near Threatened	National Catalogue of Threatened Species
Vulnerable	Livro Vermelho dos Vertebrado



Target amphibian species



Target reptile species



Conservation Actions



Optimising ecological connectivity improving the target species habitats

➤ **Invertebrates** (*Phengaris nausithous*, *Euphydryas aurina*, *E. alcyon*)



➤ **Mammals** (*Ursus arctos*, *Miniopterus schreibersii*, *Myotis bechsteinii*)

- Minimizing the disturbances, discomfort, habitat damage, and
- Improving their habitat (bat boxes, old trees, ponds,...)





Optimising ecological connectivity improving the target species habitats

Other Actions

- IAS eradication





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in countryside habitats

➤ **Restoration of Dry Stone Walls (808,3 m; 29 units)**



PORCIEDA

Before



After





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in countryside habitats

- Restoration of Dry Stone Walls (808,3 m; 29 units)



Before



PENDES

After





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in countryside habitats

➤ Restoration of Dry Stone Walls (808,3 m; 29 units)



VEGA DE LIÉBANA

Before



After





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in countryside habitats

➤ Rockeries: 5



CABAÑES



POTES





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in aquatic habitats

➤ Adaptation and creation of water points: **76** (43 drink spots; 33 ponds)



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amica



ampros



FiRee



70
SEO BirdLife



VILA NOVA DE
GAIA



Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in aquatic habitats

- Adaptation and creation of water points: 76 (43 drink spots; 33 ponds)



FUNDACIÓN
CAMBO LEBANEIGO
CANTABRIA





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in aquatic habitats

➤ Adaptation and creation of water points: 76 (43 drink spots; 33 ponds)





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in aquatic habitats

➤ Adaptation and creation of water points





Conservation Actions



Optimising ecological connectivity through the creation and adaptation of stepping stones in aquatic habitats

- Adaptation and creation of water points



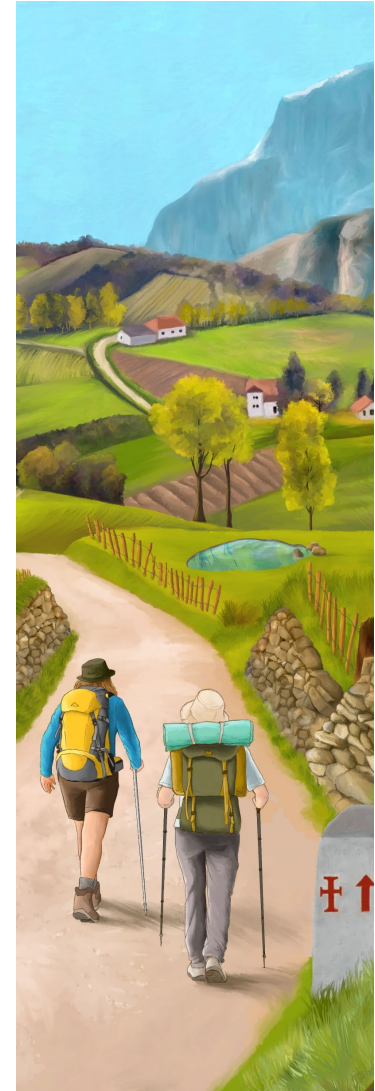


Ecosystem Services



Development of ecosystem services by improving Biodiversity

- **Ecosystem connectivity / Habitat preservation** Improving natural habitats benefit landscape connectivity
 - All the concrete conservation actions
- **Traditional knowledge and cultural identity** Sustainable managements of natural resources over generations
 - Old trees and grassland management, walls, hedges, drink spots, beekeeping and livestock
- **Food production** Providing food to humans and improving conditions for livestock
 - Water points, walls, hedges, polination and grassland management,
- **Plague control & avoiding disturbances to humans** Pest insects, flies, mosquitos, wasps, spiders, ...
 - Water points, walls, forestry management,
- **Minimising soil damages** Minimising soil erosion, puddles in tracks, ...
 - Ponds, walls, forestry management
- **Recreation** Incrising the quality and quantity of recreation options
 - All the concrete conservation actions, and creating interpretative areas and boards
- **Environmental education** Enhancing the education of the society about the biodiversity and its benefits
 - All the concrete conservation actions, and with an environmental education programme





Long Distance Non-Motorized routes
such as Green Infrastructures
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Thank you for your attention

