

Rewilding in European Protected Areas

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Rewilding
Europe®

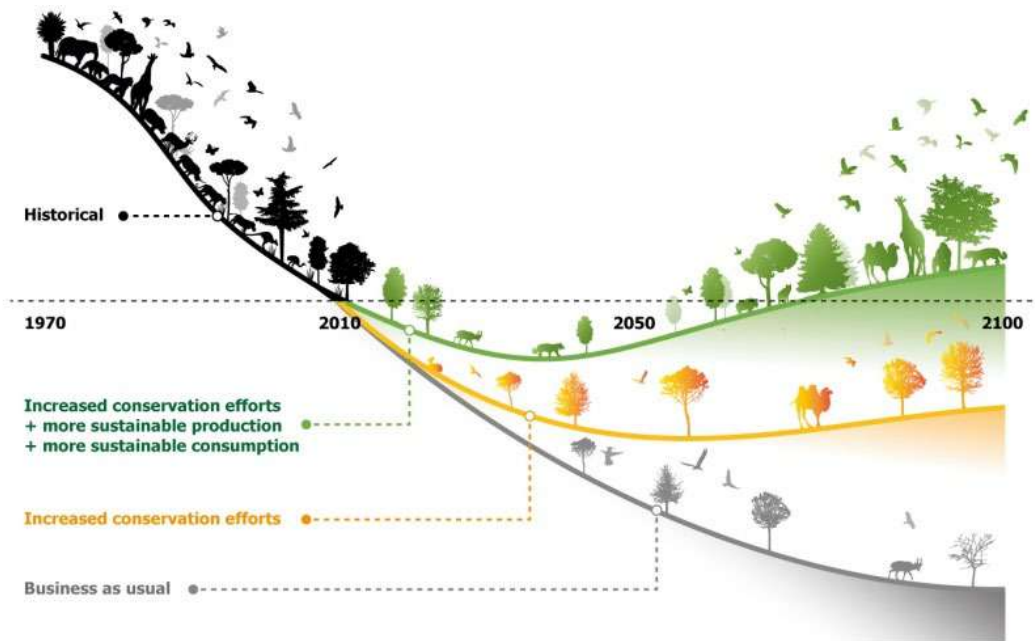


A misty, golden-hour landscape with a winding river and dense trees. The scene is bathed in a warm, orange-gold light, creating a soft, ethereal atmosphere. The river flows through the center, reflecting the light and the surrounding greenery. The trees are dense and varied in shape, some appearing as dark silhouettes against the lighter background. The overall mood is serene and contemplative.

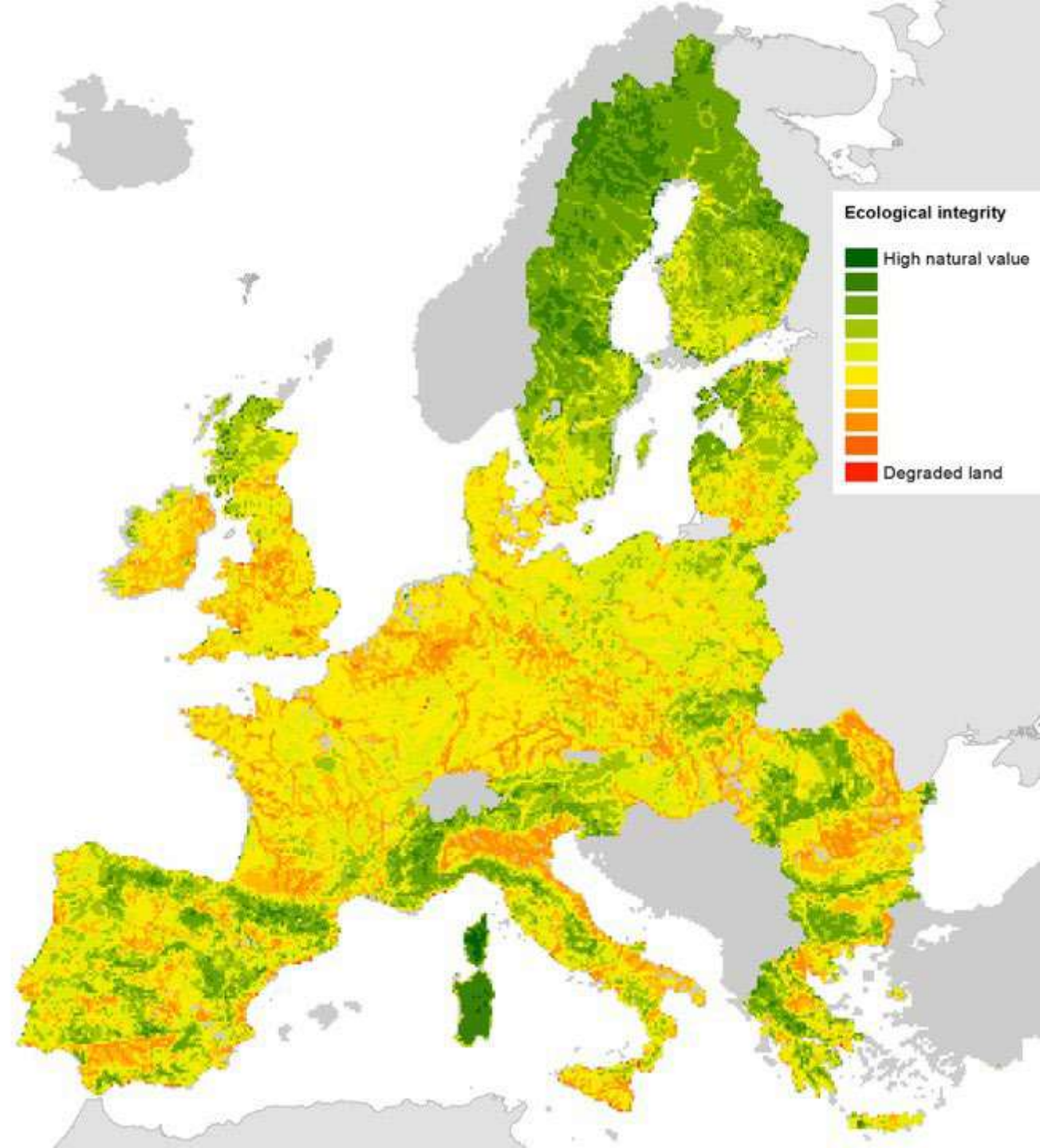
PART I


What is Rewilding?

DEGRADATION OF EUROPEAN LANDSCAPES



This artwork illustrates the main findings of the article, but does not intend to accurately represent its results (<https://doi.org/10.1038/s41586-020-2705-y>)





Rewilding is a progressive approach to conservation. It's about letting nature take care of itself, enabling natural processes to shape land and sea, repair damaged ecosystems and restore degraded landscapes. Through rewilding, wildlife's natural rhythms create wilder, more biodiverse habitats.

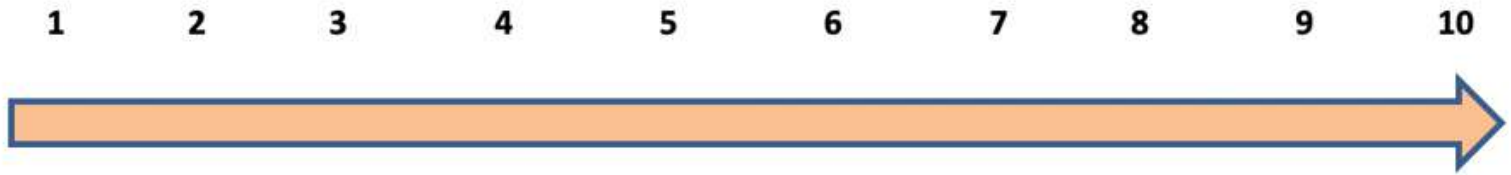
REWILDING: A NEW NARRATIVE FOR NATURE IN EUROPE

- A new and positive appreciation of wild nature
- Biodiversity derived from natural processes
- Future oriented, learning from the past
- Nature as an ally on solving today's challenges – e.g. nature-based climate solutions
- Connecting modern society with wild nature through nature-based economies
- Progressive, moving up a scale of wildness



A Rewilding Scale

“The goal of rewilding is not to restore a painting that then needs curating, it is about restoring a system that can come to look after itself”



From		Towards
Habitats		
All forests in the area managed for wood production (or no forest at all)	Wilder Forests	All the forest locations with native forest vegetation shaped by natural processes
All transitions between forests and grasslands are man-made or managed	Wilder Mosaics	All transitions between forests and grasslands are result of natural succession
Grassland-systems completely in agricultural use	Wilder Grasslands	Grasslands fully integrated in natural grazing systems
Marshlands, estuary, coastal waters and coastline completely artificial	Wilder Deltas	Completely natural marshlands, estuary, coastal waters and coastline
Rivers completely dammed, without natural erosion, sedimentation and floodplains	Wilder Rivers	Completely free flowing rivers with natural floodplains, erosion and sedimentation
Wildlife		
None of the indigenous key large herbivores present	Herbivory	Natural populations of all indigenous large herbivores
None of the indigenous key large carnivores present	Carnivory	Natural populations of all indigenous large carnivores
None of the indigenous key large scavengers present	Scavenging	Natural populations of all indigenous large scavengers
Corridors		
No possibility for large mammals to migrate without obstacles (roads, fences, hunting)	Terrestrial	Large mammals can freely roam along their annual migration routes
All rivers in the area fully inaccessible for all indigenous migratory fish species	Aquatic	All rivers in the area fully accessible for all indigenous migratory fish species



THE PRINCIPLES OF REWILDING

Rewilding practitioners from across Europe have co-formulated a set of principles that characterise and guide rewilding in a European context.



Providing hope and purpose



Offering natural solutions



Thinking creatively



Complementary conservation



Letting nature lead



Working at nature's scale

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Long-term focus



Acting in context



Building nature-based economies



Working together



Knowledge exchange

WORKING TOWARDS LONG-TERM IMPACT

ECOGRAPHY

A JOURNAL OF SPACE AND TIME IN ECOLOGY

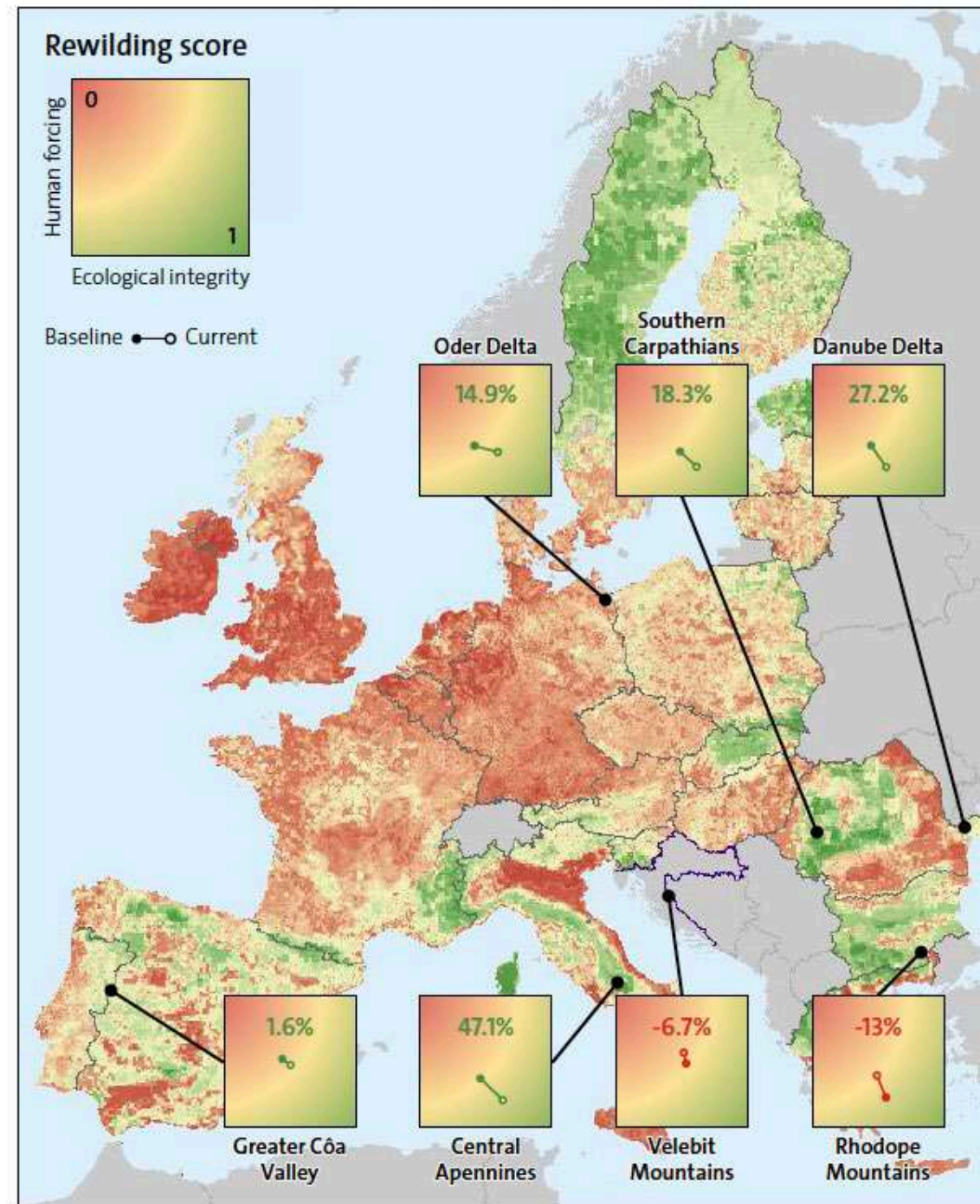
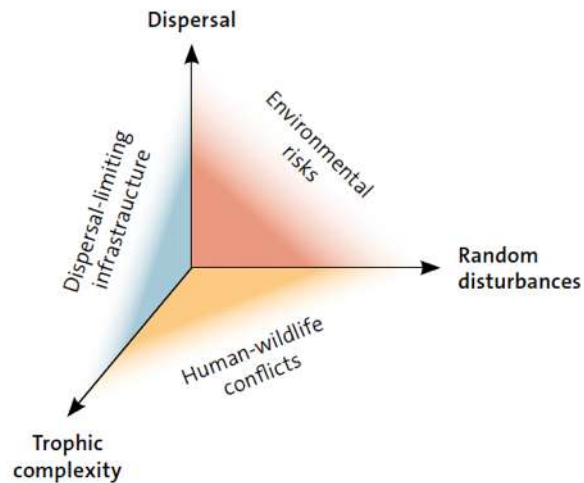
Research | Open Access | CC BY

Expert-based assessment of rewilding indicates progress at site-level, yet challenges for upscaling

Josiane Segar ✉, Henrique M. Pereira, Raquel Filgueiras, Alexandros A. Karamanlidis, Deli Saavedra, Néstor Fernández

First published: 01 September 2021 | <https://doi.org/10.1111/ecog.05836>

Three dimensions of ecological recovery



A misty, golden-hour landscape with a winding river and dense trees. The scene is bathed in a warm, orange-gold light, creating a soft, ethereal atmosphere. The river flows from the upper right towards the lower right, reflecting the light. The trees are silhouetted against the mist, and a small house is visible in the middle ground.

PART II

Rewilding Europe

A savanna landscape at sunset. The sky is a warm, golden orange. In the foreground, several animals are silhouetted against the bright light: a buffalo on the left, a dog-like animal, a gazelle, an elephant, a cow, and another buffalo on the right. A large, dark tree stands on the right side of the frame, and a smaller tree is on the left. The sun is low on the horizon, creating a hazy, atmospheric effect.

Our Vision

Making Europe a Wilder Place

OUR INTERCONNECTED ROLES



A demonstrating role

- Our landscapes – the physical places where we pioneer and show rewilding in a holistic way
- Place-based, tangible, meaningful and substantial results and impact
- Acting as labs, application of rewilding models and principles – learning by doing (impact monitoring)
- Building expertise and knowledge
- A range of specific targets by 2030

A catalysing (upscaling) role

- Networks of practitioners: using our convening power (ERN, others)
- Developing smart (commercial) financial mechanisms for scaling up
- Advocacy and enabling policies at global, EU and national level
- Working with strategic partners
- A network of ‘rewilding scientists’
- Marketing, communication and training
- A range of specific targets by 2030

Our demonstrating work: rewilding large landscapes

- Currently 10 (->15) ‘flagship’ landscapes
- At least 100,000 ha – part of larger landscapes
- Each focusing on specific themes; locally anchored & led
- Working towards 15 in 2030



PUTTING PRACTICE CENTRE STAGE – 4 MAIN INTERVENTIONS



Wilder Nature

Enabling natural processes through river restoration, reflooding, dam removal, natural grazing, wildlife comeback, restoring trophic chains



Nature for people

Support transition of local economy with new business models, providing finance, access to markets; wider benefits i.e. climate adaptation, human wellbeing, cultural aspects



Building Engagement:

Inspiring and reaching out to large audiences, providing new engagements and perspectives, empowering communities, providing new identity and pride



Scaling Up

Develop and apply upscaling mechanisms & tools (including financial models) to leverage widespread adoption across sectors and geographies, incl. science & policy

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LEVERAGING A NEW AND POSITIVE NARRATIVE

- Turning problems into opportunities
- Rewilding as the engine of change
- Scalable models become spinning wheels
- Scaling-up potential leading to a nature positive, more climate resilient, local economy



A NETWORK OF REWILDING PRACTITIONERS

- Started in 2013 at WILD10
- Now 94 members in 29 European countries ~ 5 million hectares involved
- Sharing experiences through webinars (> 40 so far)
- Physical exchanges, trainings and visits across the continent
- Target: 160 members by 2030



PARTNERSHIP WITH EUROPARC FEDERATION



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PART III

Rewilding in Protected Areas

Ecological integrity of protected areas in Europe

Based on a quick scan (2021)

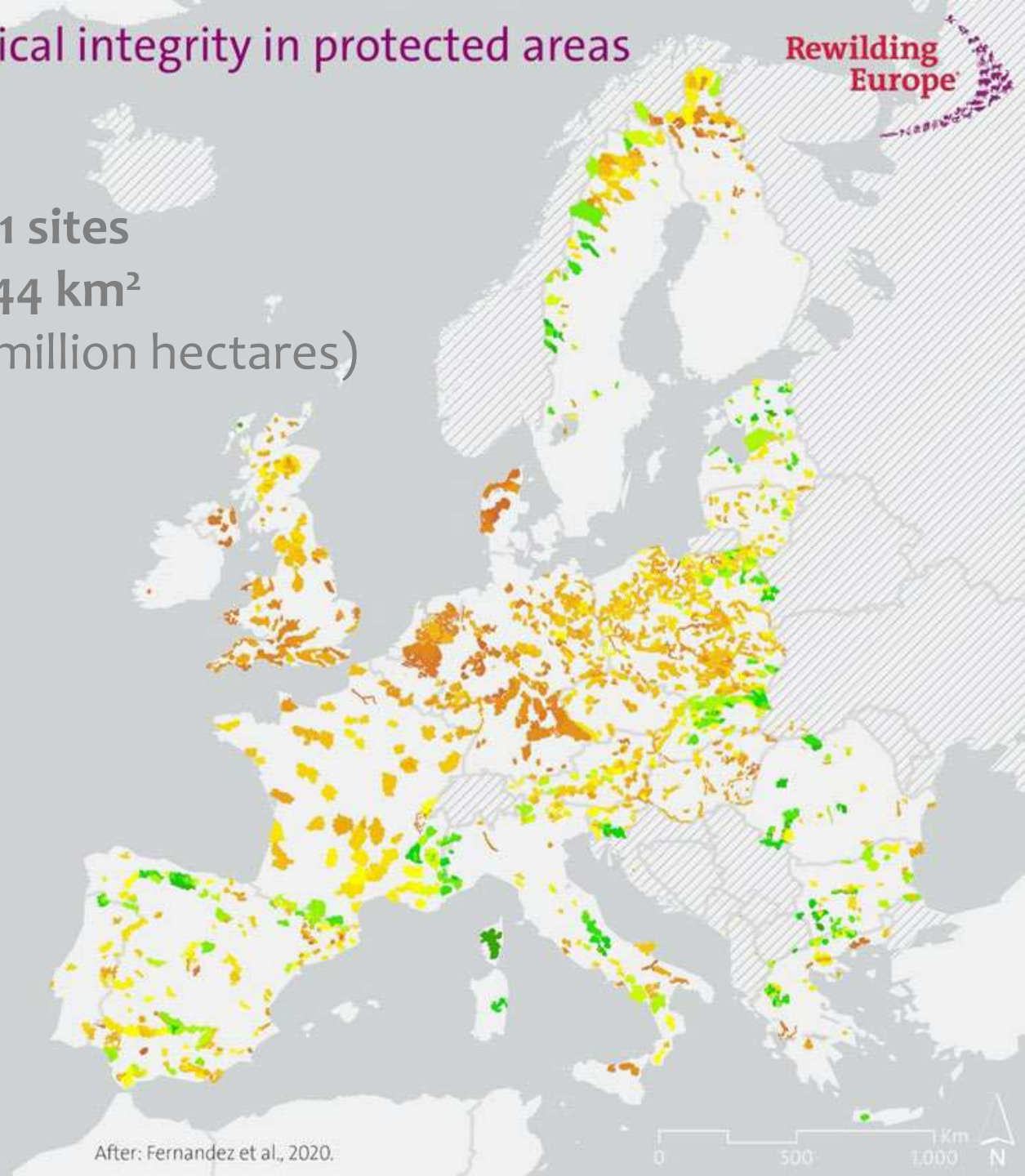
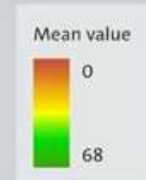
- Ia – Strict Nature Reserve
- Ib – Wilderness Area
- II – National Park
- III – Natural Monument
- IV – Habitat/Species Management Area
- V – Protected Landscape
- VI – Managed Resource Protected Area



Ecological integrity in protected areas

Rewilding Europe

29,081 sites
621,044 km²
(62,1 million hectares)



After: Fernandez et al., 2020.

A big opportunity, and need

- There is a big opportunity and a key role to play for protected areas to help recover nature at scale
- The current status of ‘ecological integrity’ demonstrates the high need for this
- Protected areas provide many opportunities, ranging from allowing natural processes, to support wildlife comeback, to developing corridors



TOP 10 MEASURES FOR BOOSTING WILDNESS IN EUROPEAN PARKS

- **Natural forest regeneration**
Far better for biodiversity and addressing climate change than planting trees – and much more cost-effective. Of course, there can be exceptions e.g., if seed sources are completely absent.
- **Reintroduction / restocking of keystone species**
Enhancing populations of important species that are missing or diminished (e.g. European bison, Eurasian lynx and vulture species) can restore food webs and boost ecosystem functionality and resilience.
- **Leaving dead wood in place, including bark beetle infestations**
This helps to close the circle of life by supporting populations of decomposers and myriad species that feed on them, such as fungi, insects, woodpeckers, owls, and bats.
- **Allow natural fire regimes**
A natural phenomenon, periodic wildfires can clear out dead organic material, increase soil fertility, and open up landscapes to create new, dynamic habitat. Natural grazing can help sustain such open patches and prevent such fires from becoming catastrophic.
- **Remove dams and allow natural water flow**
Dams and dykes can choke the life out of waterways and wetlands. Removing them can reflood polders and reconnect wetlands and lakes with rivers, thereby rejuvenating aquatic ecosystems.
- **Natural grazing with (semi-)wild herbivores**
Delivers a huge range of benefits, from biodiversity enhancement to enhanced carbon storage to lower risk of catastrophic wildfire (many protected areas have lost their large herbivores, or see their mammal biomass dominated by domesticated livestock).
- **Leave carcasses in nature**
There is no need to remove the bodies of wild or domesticated animals from nature. Boost scavenger populations by leaving them in place as a source of food, thereby restoring the circle of life.
- **Remove fences and other obstacles**
Wildlife needs to be able to move easily across landscapes and removing fences (of which Europe has millions of kilometres) is critical to this. Where obstacles are impossible to remove (e.g. roads and rail lines), safe movement can be enabled by employing measures such as wildlife bridges.
- **Increase connectivity with neighbouring core areas**
Many of Europe's protected areas are isolated and too small to support viable wildlife populations. Improving connectivity can increase the size and health of wildlife populations and allow them to adapt to climate change.
- **Apply rewilding principles**
These guide rewilding practitioners as they embark on their rewilding journey. Please view page 75 of this review or check out our website.

It is already hapenning!

- Kemer National Park
- Swiss National Park
- Bavarian Forest Biosphere Reserve
- Hohe Tauern National Park
- And many more!



Thank you!

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**Rewilding
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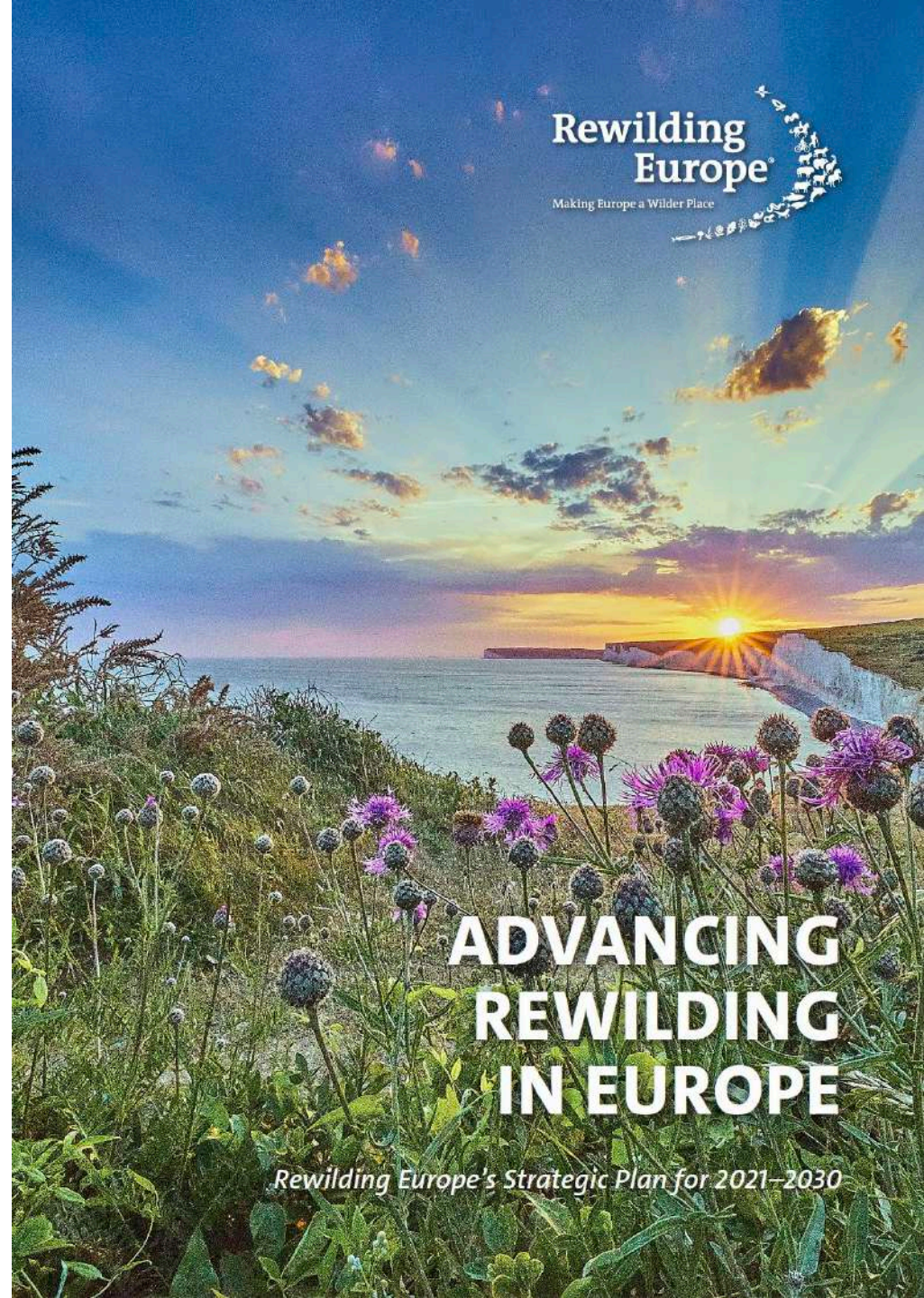
WHERE ARE WE NOW?

- Exciting rewilding movement in Europe
- 10 Rewilding Landscapes operational
- European team of > 160 people in > 17 countries, local organisations set up
- Rewilding principles and models developed and being applied
- European Rewilding Network with 94 members in 29 countries
- Many results, impacts starting to show



**ADVANCING
REWILDING
IN EUROPE**

Rewilding Europe's Strategic Plan for 2021–2030



GREATER COA VALLEY

- Portugal

- Restoring Mediterranean forests and wildlife corridor
- Reducing risk of fire: natural grazing
- Iberian wolf & Iberian lynx
- Local economy: Wild Côa Network, local products, culture and identity



DANUBE DELTA – Romania, Ukraine & Moldova

- Transboundary delta vision, supporting nature & local communities
- Large-scale wetland & steppe restoration
- Natural grazing: kulan, water buffalo, konik, deer species
- Nature-based economy



SOUTHERN CARPATHIANS - Romania

- Free-roaming population of European bison (>150 animals in 2025)
- Recovery of a forest landscape (incl. old growth forests)
- Development of local 'bison economy' (coexistence)



CENTRAL APENNINES – Italy

- Co-existence corridors create 260,000 ha connected landscape
- Expansion of Marsican brown bear population & coexistence (bear-smart communities)
- Local entrepreneurship and Bear Conservation Fund

