The EU Nature Restoration Law
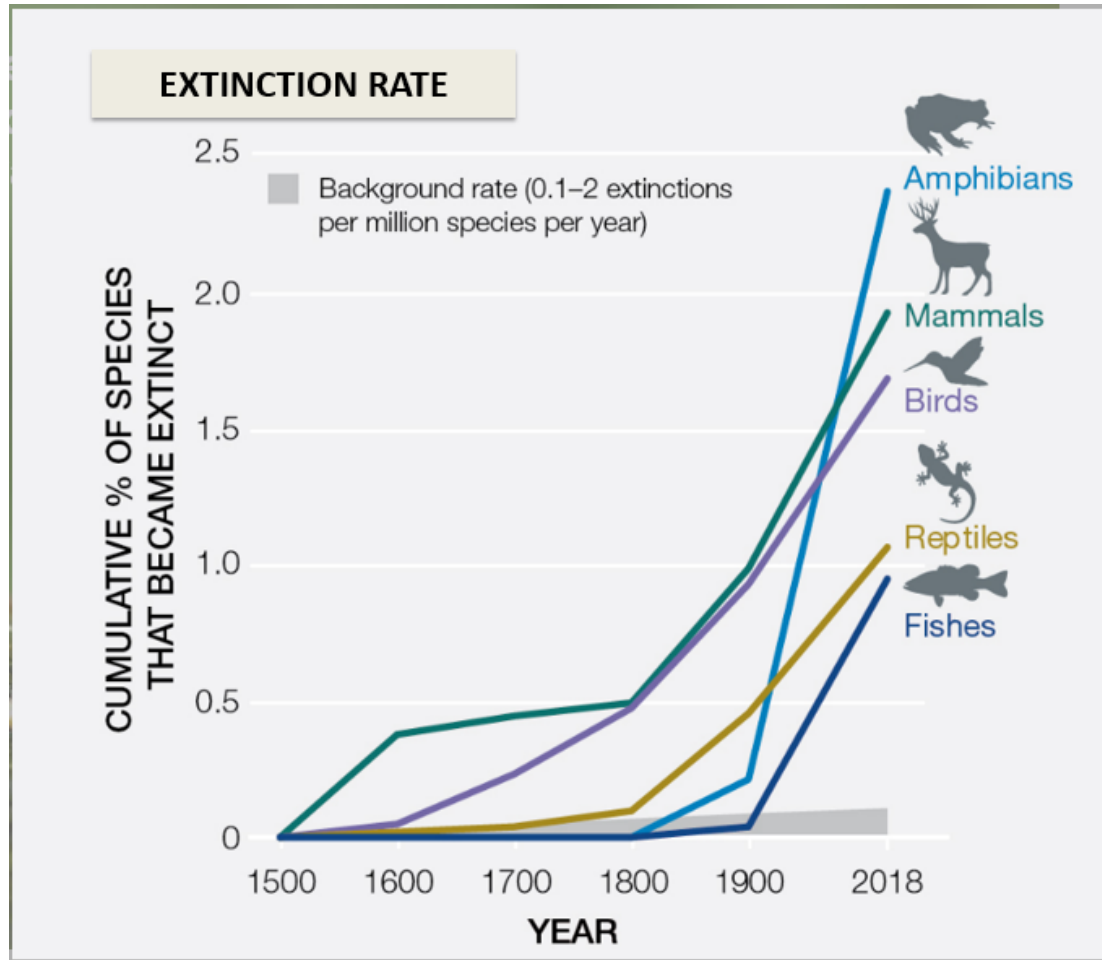
Restoring ecosystems for people, nature and the climate

European Union

The global and EU biodiversity crisis

EXTINCTION RATE

Background rate (0.1–2 extinctions per million species per year)

Amphibians
Mammals
Birds
Reptiles
Fishes

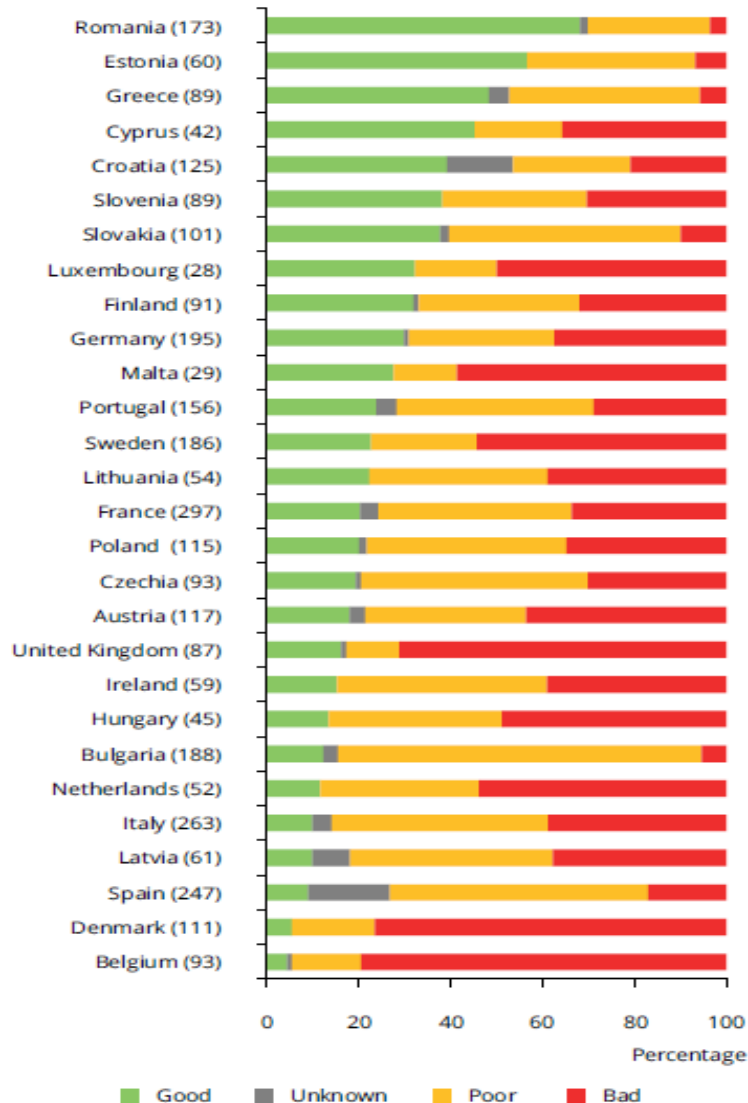CUMULATIVE % OF SPECIES THAT BECAME EXTINCT

YEAR

Biodiversity loss and the degradation of ecosystems, continue at an alarming rate, across the broad range of ecosystem types in the EU.
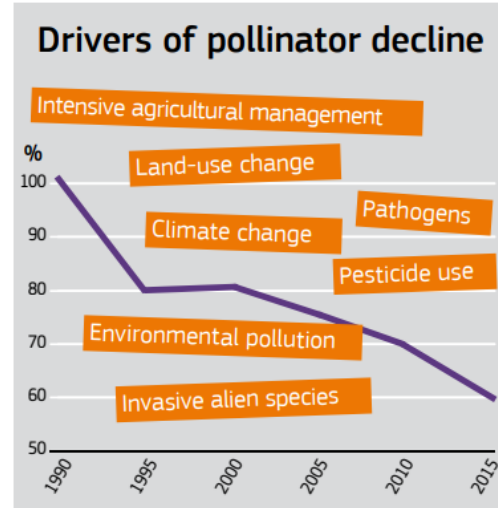
In the EU:
- >80% of habitats in poor condition, peatlands, grasslands and dune habitats worst

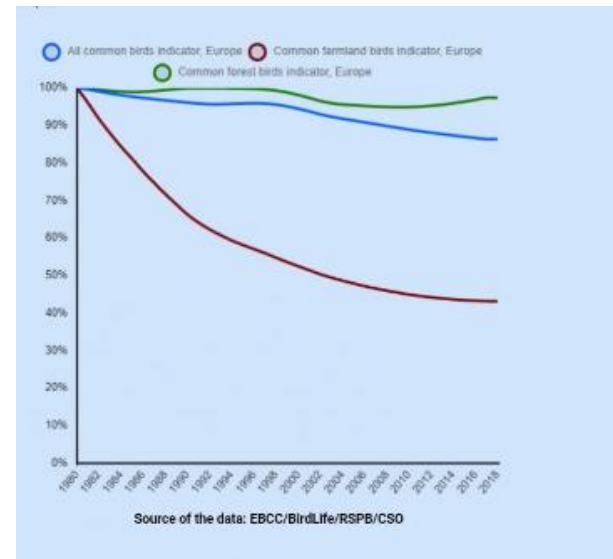- In Western, Central and Eastern Europe wetlands have shrunk by 50% since 1970

Source: IPBES Global assessment 2019

Other evidence of biodiversity loss…

Conservation status of habitats listed in Annex I of the Habitats Directive at Member State level (State of Nature report, EEA)

Drivers of pollinator decline

Intensive agricultural management
Land-use change
Pathogens
Climate change
Pesticide use
Environmental pollution
Invasive alien species

Common farmland birds

Good   Unknown   Poor   Bad

Time is running out

IPCC (2022):
- the world and Europe have a brief, rapidly closing window to secure a liveable future, as the rise in weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt

- restoring ecosystems will be fundamental in helping to combat climate change and also reduce risks to food security

2022 the World Economic Forum's annual Global Risks Report:
- biodiversity loss as the third most pressing global risk by severity, right after climate action failure and extreme weather.

The European Green Deal

- CLIMATE PACT AND CLIMATE Regulation
- PROMOTING CLEAN ENERGY
- INVESTING IN SMARTER, MORE SUSTAINABLE TRANSPORT
- PROTECTING AND RESTORING NATURE
- STRIVING FOR GREENER INDUSTRY
- FROM FARM TO FORK
- ELIMINATING POLLUTION
- LEADING THE GREEN CHANGE GLOBALLY
- MAKING HOMES ENERGY EFFICIENT
- FINANCING GREEN PROJECTS
- ENSURING A JUST TRANSITION FOR ALL

EU Biodiversity Strategy for 2030

Protect Nature

Enable Transformative Change

Restore Nature

EU For An Ambitious Global Agenda

EU Biodiversity Strategy – key points:

- Continuing ecosystem degradation and biodiversity loss across the EU →

    ➢ **Protection is not enough**

    ➢ Voluntary targets of the 2020 EU Biodiversity Strategy: **not met**

        → **a reinforced approach is needed**

- Conclusion: The Commission to come forward with a proposal for legally binding targets for nature restoration

Better regulation: rigorous process

- Open Public consultation (11 Jan – 5 April 2021): more than 111 000 replies

- 5 consultation workshops with stakeholders and MSs (2020-2021)

- Impact assessment study

- Regulatory Scrutiny Board opinions: 16 July and 28 Oct 2021

- Adoption & Impact Assessment published (22 June 2022): https://environment.ec.europa.eu/publications/nature-restoration-law_en

Considerations behind the legal proposal

- Use the legal form of a **regulation**

- **Complement & build on existing policy framework**

- Build on the **synergies between climate change & nature**

- Need for **large scale restoration** effort

- Proposed targets that are **area-based or indicator based**

Nature Restoration Regulation: structure

Overarching objective

Restoration targets

Implementation framework

National Restoration Plans

Monitoring and Reporting

Overarching objective (Art 1)

✓ Contribute to

- A **continuous, long term and sustained recovery** of **biodiverse and resilient nature** across the EU land a sea areas through the **restoration of ecosystems**

- Achieve EU **climate change** mitigation and adaptation objectives

- Meeting the EU's international commitments (SDGs, CBD, UNFCCC, CCD, UN Decade on Restoration,….)

✓ By 2030 → restoration measures will cover **20%** of EU's land and sea

✓ By 2050 → measures in place for **ALL ecosystems in need** of restoration

Geographical coverage (Art 2)

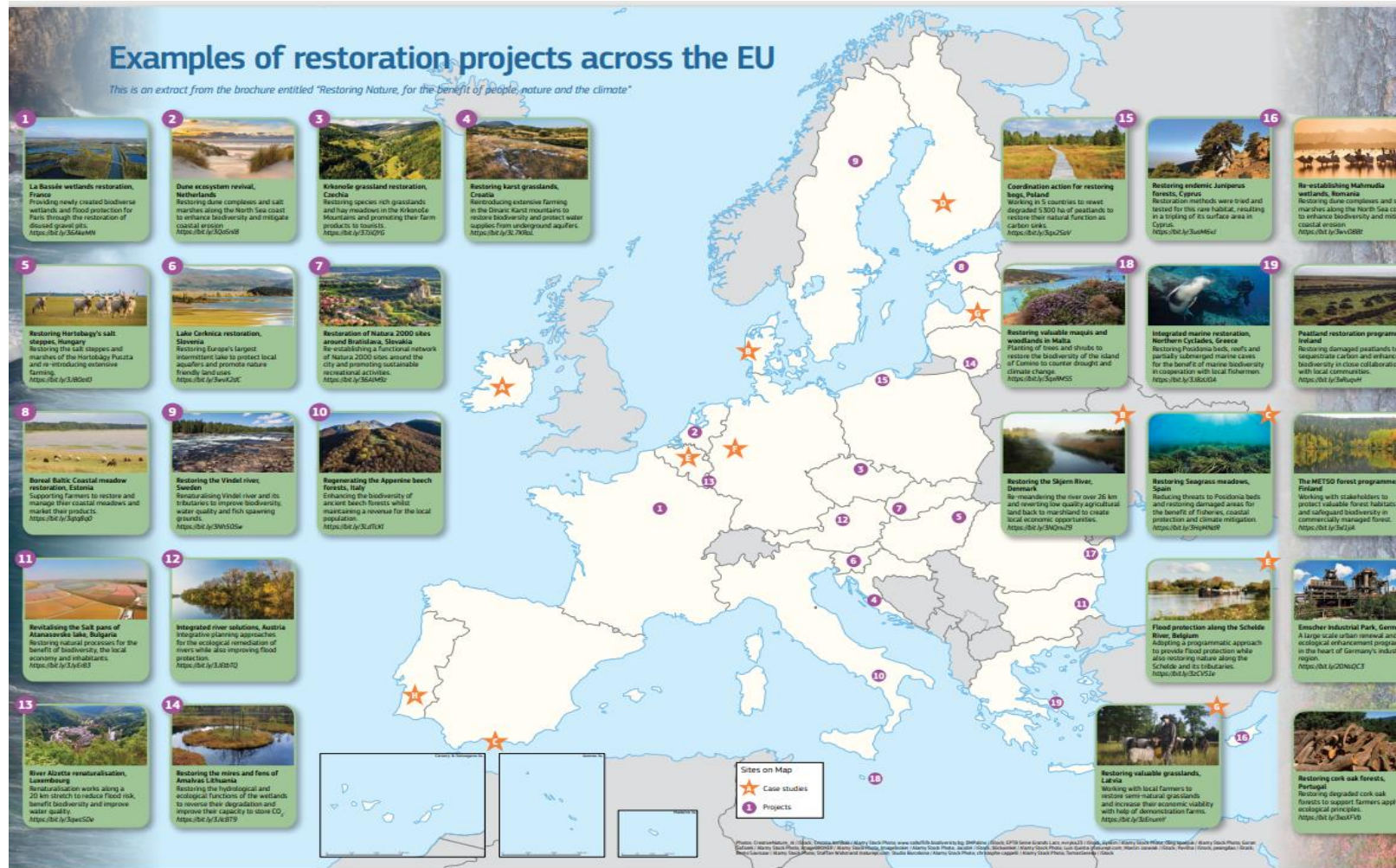**Definitions (Art 3)**

So, what is nature restoration?

'restoration' means the process of actively or passively assisting the recovery of
- an ecosystem towards or to good condition,
- a habitat type to the highest level of condition attainable and to its favourable reference area
- a habitat of a species to a sufficient quality and quantity or of species populations to satisfactory levels

as a means of conserving or enhancing biodiversity and ecosystem resilience;

Restoring nature

For the benefit of people, nature and the climate

Restoration is already happening ….

Examples of restoration projects across the EU

However restoration is needed on **larger scale** to ensure the sustained long-term recovery of biodiversity, for the benefit of nature, the climate and people

Specific restoration targets

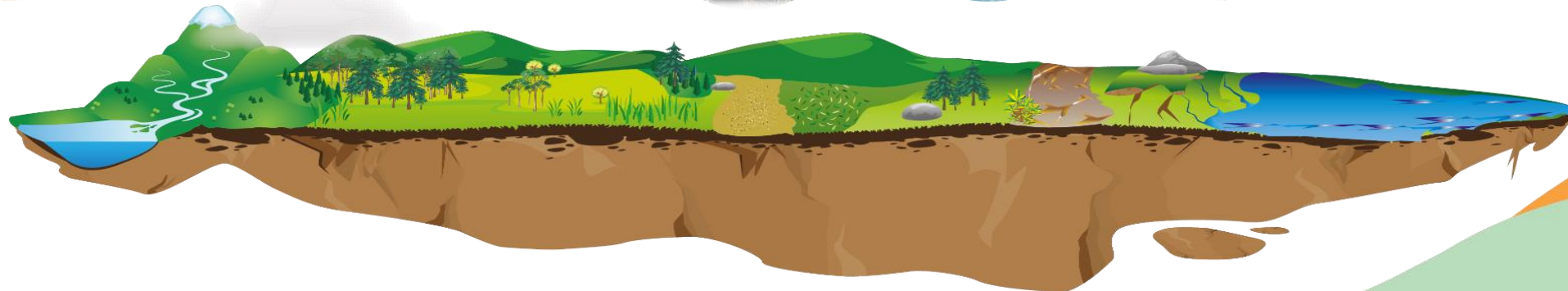| Protected Habitat Types (Annex I HD) | Habitats of protected species (BHD) | Marine Habitats (beyond HD) | Urban ecosystems | River connectivity | Pollinators | Agro-ecosystems | Forest ecosystems |

Targets based on existing legislation (Art.4 & 5)

For terrestrial & marine **protected habitat types and species**:

Based on data available from nature directives reporting & other sources for marine, targets are set up that require to **put in place restoration measures** ...

- ✓ ...for habitat types: to **improve** degraded areas on on at least 30% by 2030, 60% by 2040, 90% by 2050 & to **re-establish** areas that were lost (but 100% by 2050);

- ✓ ...for species: to **improve, re-establish, re-connect** the **habitats of species –** in addition to what is done for habitat types .

- Areas under restoration have to show an **improvement in condition**

- No deterioration clause (inside and outside the Natura 2000 network) with certain exceptions.

Groups of habitat types (Annex I & II)

1. Wetlands (inland & coastal)

2. Forests

3. Grasslands and other pastoral habitats

4. River, lakes, alluvial and riparian habitats

5. Heath & scrub

6. Rocky and (Coastal) & dunes

1. Seagrass beds

2. Macroalgal forests

3. Shellfish beds

4. Maerl beds

5. Sponge, coral and coralligenous beds

6. Vents and seeps

7. Soft sediments (above 1000 meters of depth)

Forest ecosystems targets (Art.10)

Put in place **restoration** measures necessary to enhance forest biodiversity **in addition to Art 4**

Achieve an **increasing trend in indicators** (until satisfactory levels are achieved):

- ➤ Standing deadwood;
- ➤ Lying deadwood;
- ➤ Share of forest with uneven age structure;
- ➤ Forest connectivity;
- ➤ Common forest birds index;
- ➤ Stock of organic carbon.

Selection of indicators

Selection criteria:

1. The indicator gives direct information about the state of biodiversity or the ecological quality of the ecosystem.
→ Based on this, pressure indicators were excluded as often being indirect indicators of biodiversity.

2. The data are readily available or will shortly be available in the EU, and the data are reliable and updated periodically.

Grounded on extensive work carried out over several years as part of the MAES (Mapping and Assessment of Ecosystems and their Services) as led by the Commission and involving MS experts and stakeholders, and the UNSEEA (UN System of Environmental and Economic Accounting). Both have been developing methodologies and indicators to assess the condition of all ecosystems and for describing trends in forest ecosystem condition..

IA Table III-9: Considered forest ecosystem indicators

SEEA Typology	Indicator	Direct indicator of ecological/biodiversity quality	Temporal series available	Data Stream	Final assessment
Class A1 **Physical state**	**Normalized difference water index (NDW)**	No, indirect measure of ecological/biodiversity quality	yes	Mapping	No
Class A1 **Chemical state**	**Air pollutants**	No, indirect measure of ecological/biodiversity quality	yes	EU reporting (NEC Directive)	No
	Exceedance of critical loads for acidification	No, indirect measure of ecological/biodiversity quality	Yes	Mapping	No
	Exceedance of critical loads for eutrophication	No, indirect measure of ecological/biodiversity quality	Yes	Mapping	No
	Organic carbon content in forest soils	Yes, strongly associated with key services like water holding capacity, resilience improvement, and is related to management practices	Yes, reported in Forest Europe	Mapping Source : LUCAS Soil,, ICP Forests	Yes
Class B1 - **Compositional state**	**Common Forest Bird indicator**	Yes, strongly associated with associated biodiversity and is related to management practices	Yes	Mapping Source : PECBMS	Yes
	Tree species composition	Yes and No, measure of ecological/biodiversity quality but not completely relevant	Yes	Mapping Source : National Forest Inventories (NFI), Forest Europe, FAO-FRA	No
Class B2 - **Structural state**	**Forest biomass**	No, indirect measure of ecological/biodiversity quality	Yes/no	Mapping Source : NFI, Forest Europe	No
	Growing stock	No, indirect measure of ecological/biodiversity quality	Yes	Mapping Source : NFI, Forest Europe	No
	Tree cover density	Yes, key aspect in ecological condition, biodiversity, ecosystem structure, biogeochemical processes, animal habitat, biomass and carbon sequestration, and anthropogenic demand for building materials	Yes	Mapping Source : Copernicus	Yes
	Deadwood	Yes, strongly associated with associated biodiversity and is related to management practices	Yes	Mapping Source: NFI, Forest Europe	Yes
	Age structure	Yes, strongly associated with associated biodiversity and is related to management practices	Yes	Mapping Source: NFI, Forest Europe	Yes
Class C1 – **Landscape & seascape**	**Forest connectivity**	Yes, strongly associated with key aspect in biodiversity, ecosystem services and the ever-increasing pressure from anthropogenic land use	Yes	Mapping based on CLC (JRC, Forest Europe)	Yes

NRL Annex VI: List of biodiversity indicators for forest ecosystems referred to in article 10(2)

Indicator	Description, unit, and methodology for determining and monitoring the indicator
Standing deadwood	**Description:** This indicator shows the amount of non-living standing woody biomass in forest and other wooded land. **Unit:** m^3/ha. **Methodology**: as developed and used by FOREST EUROPE, State of Europe's Forests 2020, FOREST EUROPE 2020, and in the description of national forest inventories in Tomppo E. et al., National Forest Inventories, Pathways for Common Reporting, Springer, 2010, and taking into account the methodology as set out in Annex V of Regulation 2018/1999 in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
Lying deadwood	**Description**: This indicator shows the amount of non-living woody biomass lying on the ground in forest and other wooded land. **Unit**: m^3/ha. **Methodology**: as developed and used by FOREST EUROPE, State of Europe's Forests 2020, FOREST EUROPE 2020, and in the description of national forest inventories in Tomppo E. et al., National Forest Inventories, Pathways for Common Reporting, Springer, 2010, and taking into account the methodology as set out in Annex V of Regulation 2018/1999 in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Indicator	Description, unit, and methodology for determining and monitoring the indicator
Share of forests with uneven-aged structure	**Description**: This indicator refers to the share of forests available for wood supply (FAWS) with uneven-aged structure in forests as compared to even-aged structure in forests. **Unit**: Percent of FAWS with uneven-aged structure. **Methodology**: as developed and used by FOREST EUROPE, State of Europe's Forests 2020, FOREST EUROPE 2020, and in the description of national forest inventories in Tomppo E. et al., National Forest Inventories, Pathways for Common Reporting, Springer, 2010.
Forest connectivity	**Description**: Forest connectivity is the degree of compactness of forest covered areas. It is defined in the range of 0 to 100. **Unit**: Index. **Methodology**: as developed by FAO, Vogt P., et al., FAO – State of the World's Forests: Forest Fragmentation, JRC Technical Report, Publications Office of the European Union, Luxembourg, 2019.
Common forest birds index	**Description**: The forest bird indicator describes trends in the abundance of common forest birds across their European ranges over time. It is a composite index created from observational data of bird species characteristic for forest habitats in Europe. The index is based on a specific list of species in each Member State. **Unit**: Index. **Methodology**: Brlík et al. Long-term and large-scale multispecies dataset tracking population changes of common European breeding birds, Sci Data 8, 21. 2021.
Stock of organic carbon	**Description**: This indicator describes the stock of organic carbon in the litter and in the mineral soil at a depth of 0 to 30 cm in forest ecosystems. **Unit**: tonnes organic carbon/ha. **Methodology**: as set out in Annex V of Regulation 2018/1999 in accordance to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, and as supported by the Land Use and Coverage Area frame Survey (LUCAS) Soil, Jones A. et al., LUCAS Soil 2022,

Related provisions

Art 17: **monitoring**:

§3: the monitoring of forest indicators shall **start on the date of entry into force** of the NRL.

§5: **monitoring** concerning:

- the standing deadwood, the lying deadwood, the share of forests with uneven-aged structure, the forest connectivity and the stock of organic carbon, shall be carried out **at least every three years, and, where possible, every year.**

- The **common forest bird index** shall be carried out **every year**.
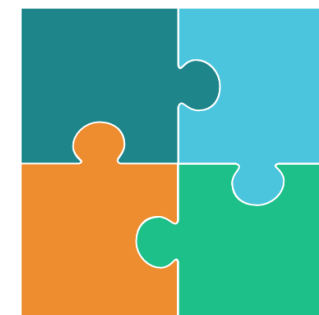
Related provisions

Art 17 §6:

Indicators on standing and lying deadwood and stock of organic carbon must be **monitored in a manner consistent with the monitoring required under Regulations (EU) 2018/841 and (EU) 2018/1999.**

Implementation framework - National Restoration Plans

- ❑ **What, where to restore** (based on preparatory work: monitoring / research)

- ❑ **How to restore** (planned restoration measures / by target)

- ❑ **How to finance restoration** (EU, national, public/private)

- ❑ **How will it link to other land and sea use activities** (renewables, go-to areas, benefits and co-benefits for climate change mitigation/adaption...)

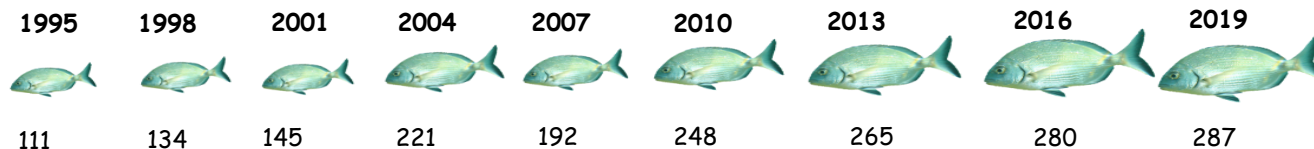- ❑ **Public/stakeholder participation** in preparing the plans

Financing

How will restoration be financed?

Under current MFF → €100 billion available for biodiversity spending

- More than **€20 billion** to be 'unlocked' for biodiversity **every year**, as part of the European Green Deal

- EU Multiannual Financial Framework for 2021-2027, biodiversity financing target:
  - ➢ **7.5%** of the EU budget dedicated to biodiversity from 2024,
  - ➢ **10%** for 2026 and 2027.

Who will benefit?

Benefits far outweigh the costs - every euro spent on restoration delivers a return on investment of at least €8

Examples:
- *Reversing the decline in pollinators → **boost agriculture***
- *Biodiverse forests → **more resilient to climate change***
- *Restoring marine ecosystems → **fish stocks recover…***

1995	1998	2001	2004	2007	2010	2013	2016	2019
111	134	145	221	192	248	265	280	287

French marine restoration project Cote Bleue → Mean weight x 2,6 – Size x 1,4

Implementation framework – Monitoring and Reporting

- Member States to monitor and report on implementation of restoration measures and results achieved

- Commission and European Environment Agency

  → assess progress in implementation and achievement of targets and obligations

Other provisions

- Access to justice

- Delegated powers

- Committee

- Review

Expected timeline

Second half of 2022

=> Discussions in Council under the Czech Presidency. Progress report expected at the December ENV Council.

=> Discussions in the European Parliament

First half of 2023

=> The Swedish Presidency aims at reaching a general approach before Summer (tbc)

=> The European Parliament aims at adopting its report before Summer (tbc)

Second half of 2023

=> Trilogues (tbc)

Thank you for your attention!

More info:

https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-law_en