

EU nature restoration targets – implementing and monitoring the EU Biodiversity Strategy to 2030.

Goals

15
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Restore degraded ecosystems at land and sea across the whole of Europe by:



Increasing organic farming and biodiversity-rich landscape features on agricultural land



Halting and reversing the decline of pollinators



Restoring at least 25 000 km of EU rivers to a free-flowing state



Reducing the use and risk of pesticides by 50% by 2030

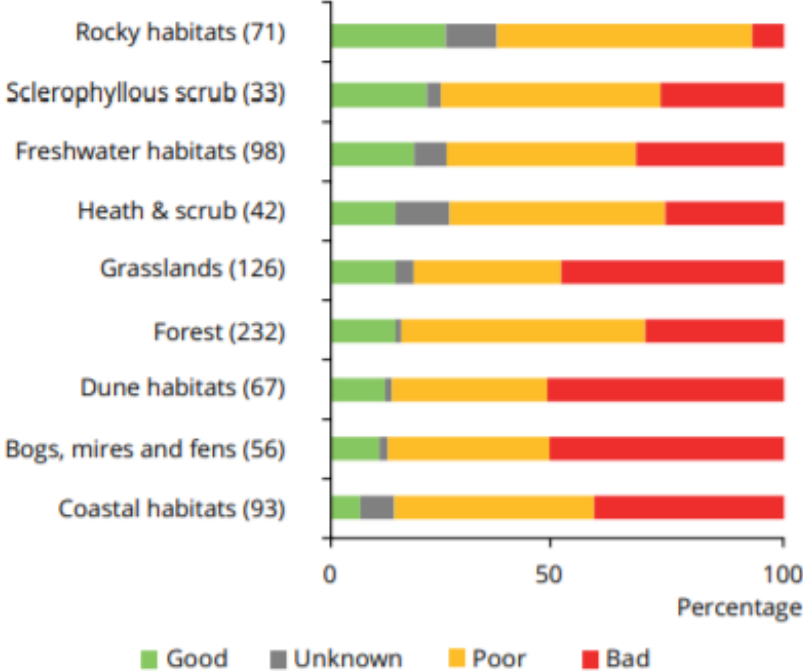
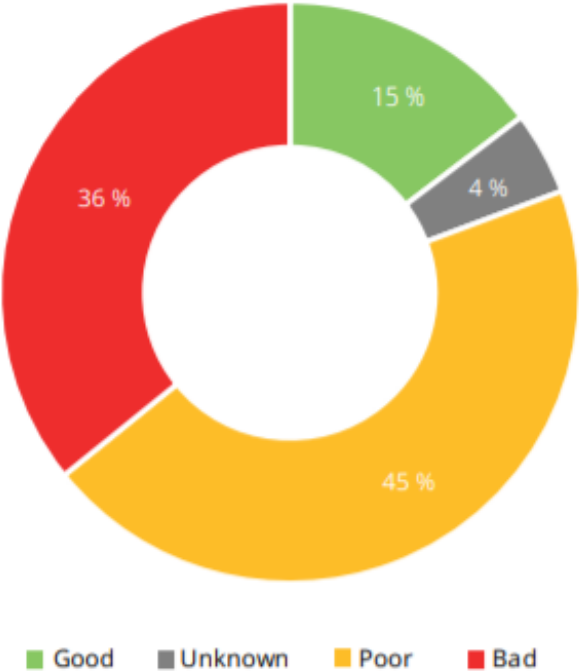


Planting 3 billion trees by 2030

Biodiversity

How is biodiversity doing in the EU?

We know that **15%** of **habitat** area considered to have a **Good** conservation status with **45%** having **poor** with **63%** **bad** (with the remainder unknown)



Source: [EEA State of Nature report 2021](#)

Biodiversity

Of the habitat groups that were reported on,

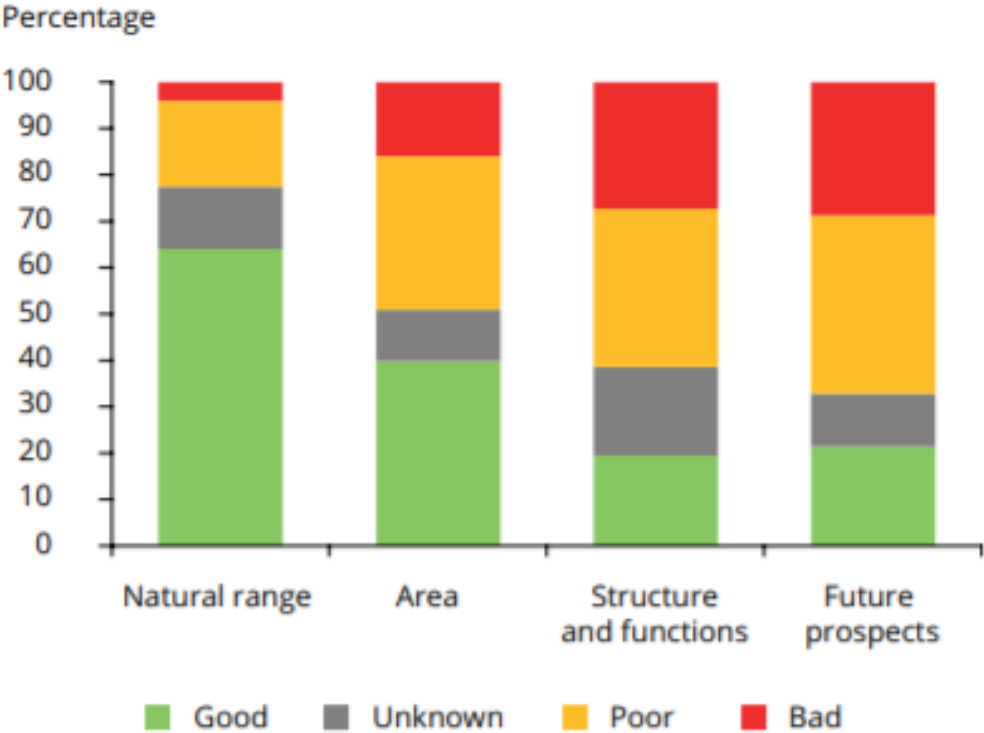
- **coastal** habitats have the lowest proportion of assessments showing good conservation status.
- **Dune habitats and bogs, mires and fens** are most frequently assessed as having a bad conservation status (over 50 %).
- As one of the most species-rich habitats in Europe, **grasslands** are also among the habitats with the highest share of assessments showing a **bad** conservation status (49 %); managed grasslands are in a particularly bad state

Biodiversity

What are the factors that drive this status?

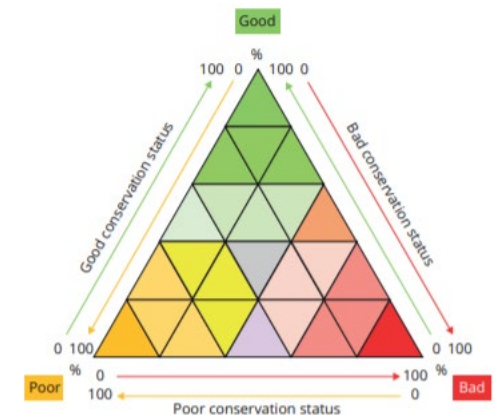
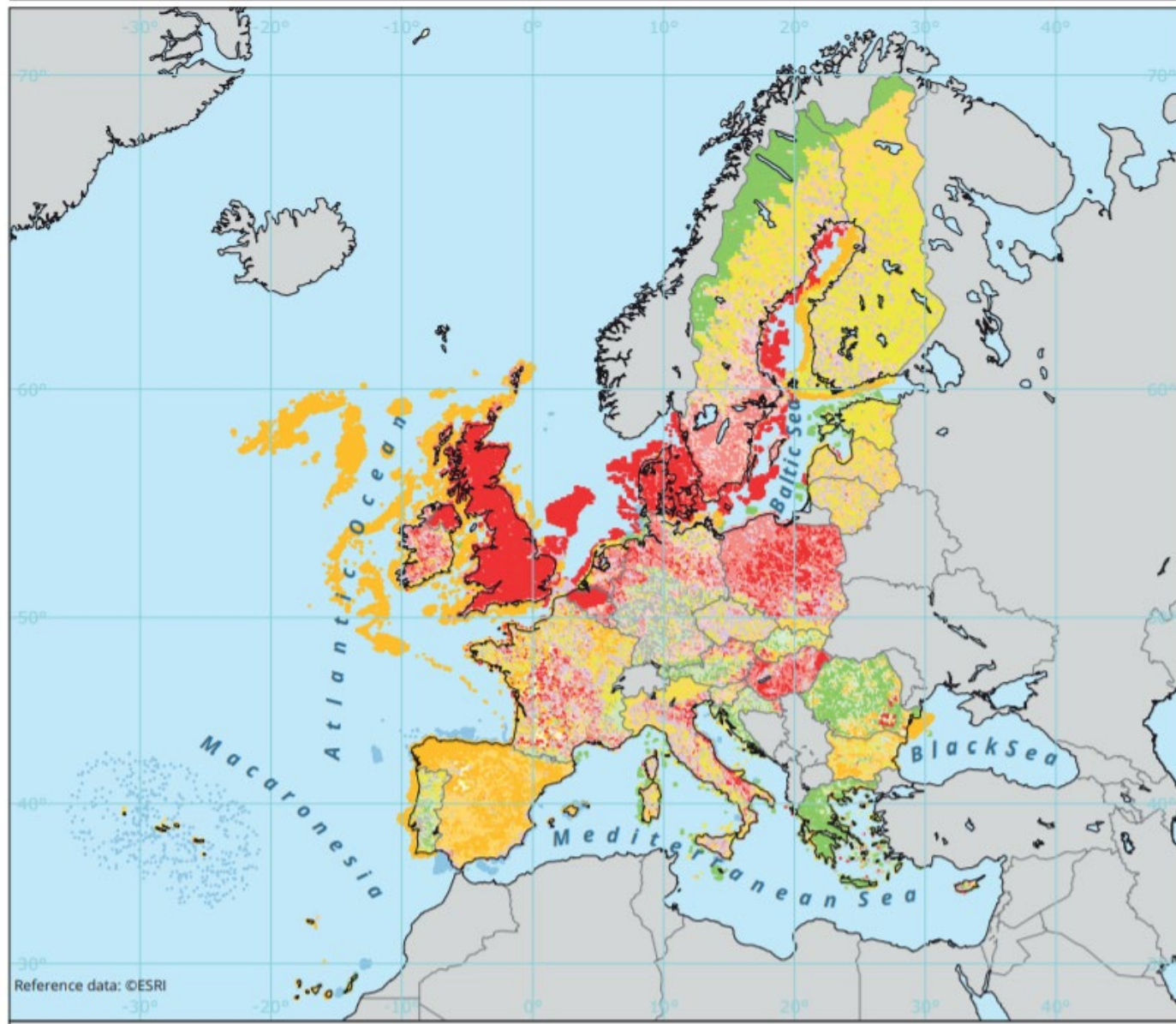
- A poor or bad overall conservation status is most frequently due to a poor or bad status of the habitat's **structure and functions** or **future prospects**

Figure 3.6 Status of parameters for habitats at EU level



Source: [EEA State of Nature report 2021](#)

Map 3.4 Spatial distribution of habitats' conservation status at Member State level represented in a 10 km × 10 km grid



Source: [EEA State of Nature report 2021](#)

Biodiversity

How is biodiversity doing in the EU?

We know that **27%** of **species** are considered to have a **Good** conservation status with **42%** having **poor** with 21% **bad** (with the remainder unknown)

Figure 3.9 Conservation status of species at EU level

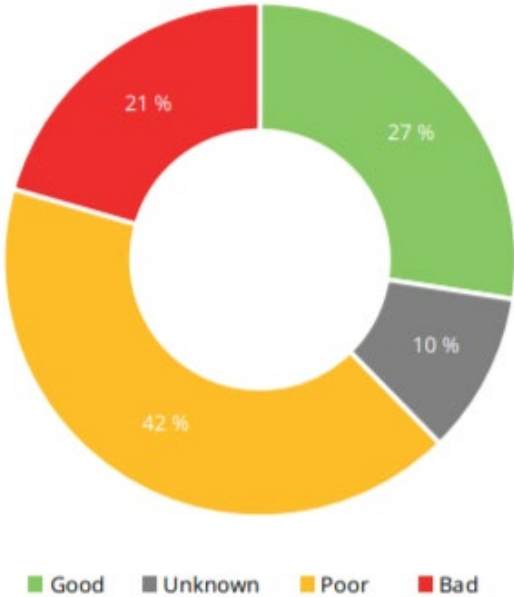
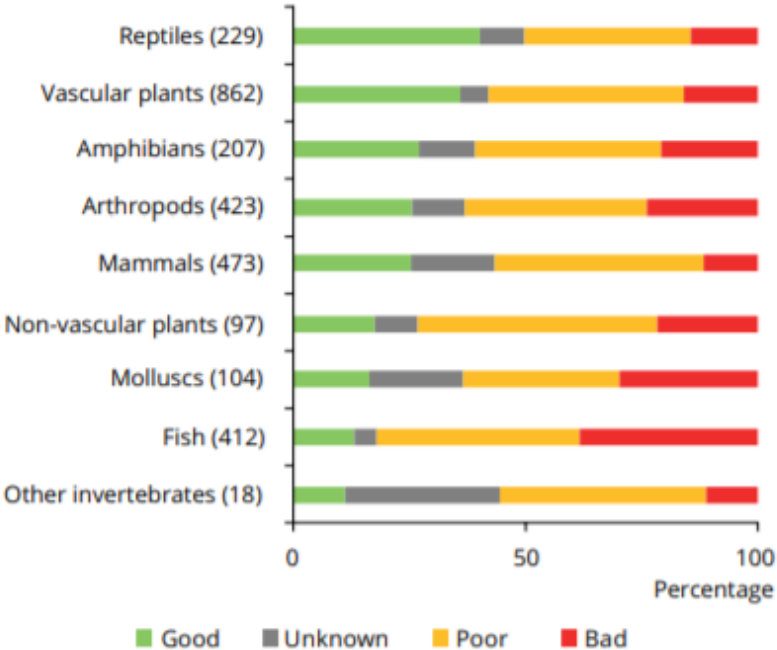


Figure 3.10 Conservation status per species group at the EU level



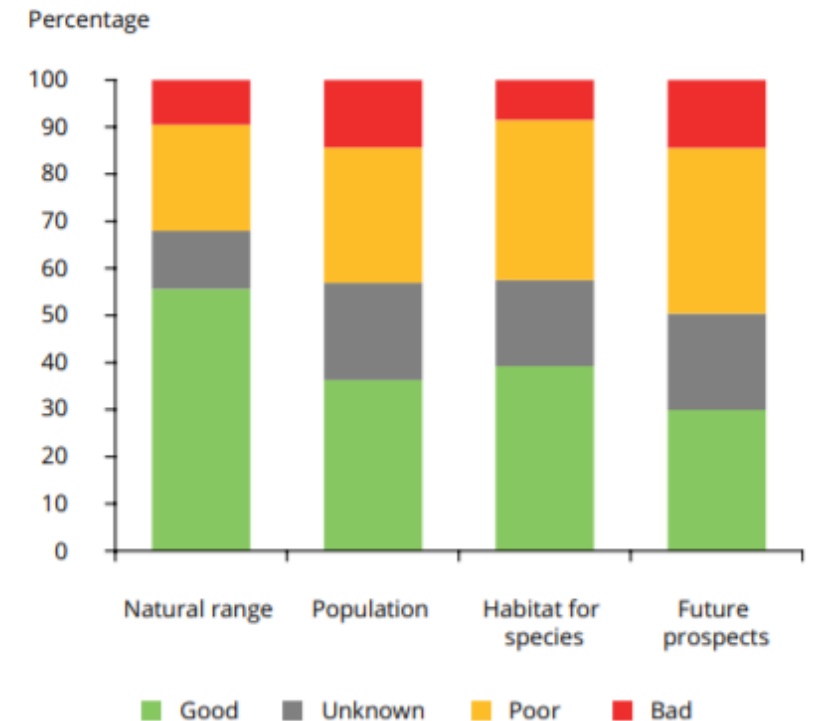
Source: [EEA State of Nature report 2021](#)

Biodiversity

What are the factors that drive this status?

- A poor or bad overall conservation status is most frequently due to a poor or bad status of the species's **population status**.
- It is worth highlighting that there are a number of well documented data gaps.

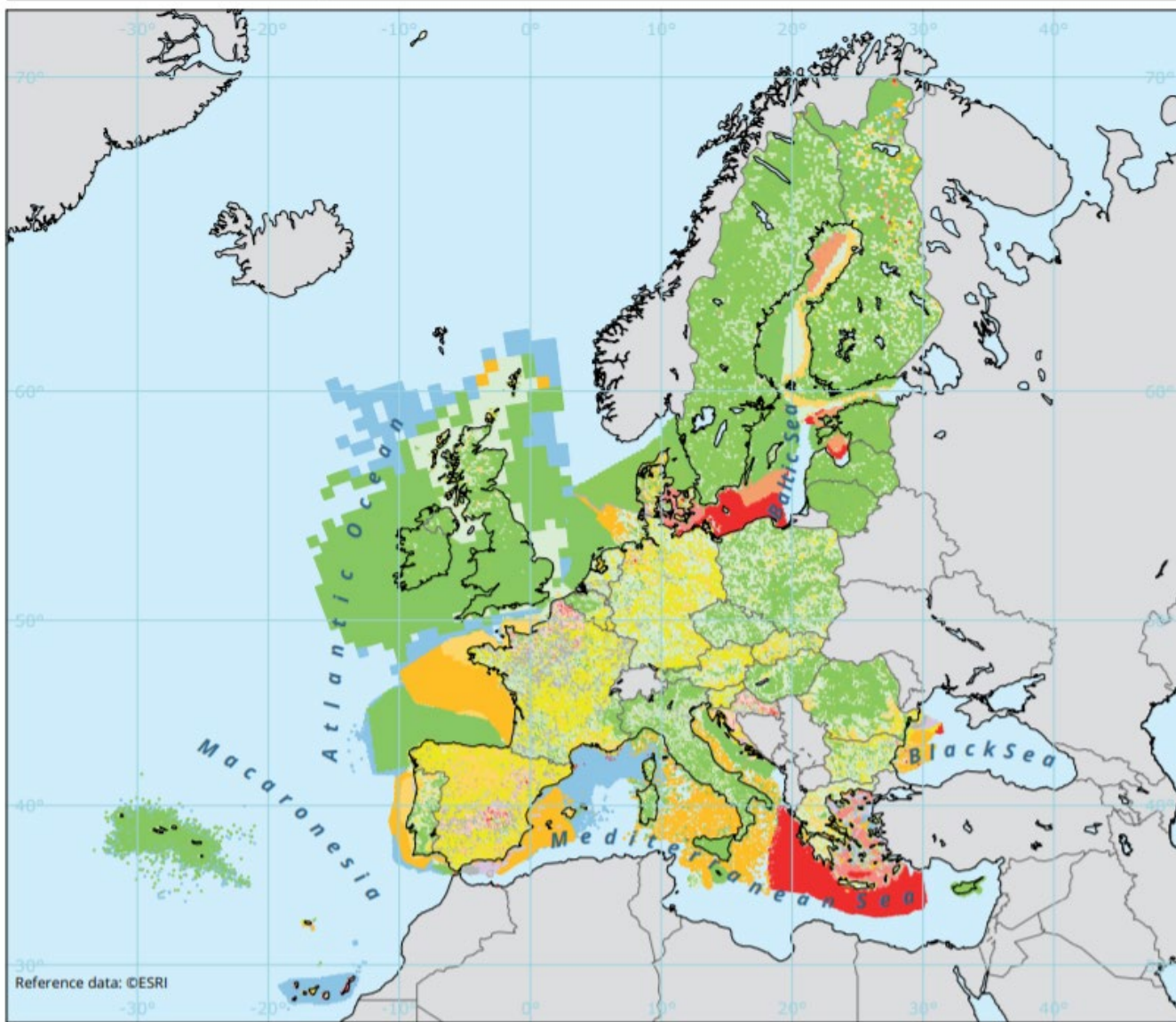
Figure 3.11 Status of parameters for species at EU level



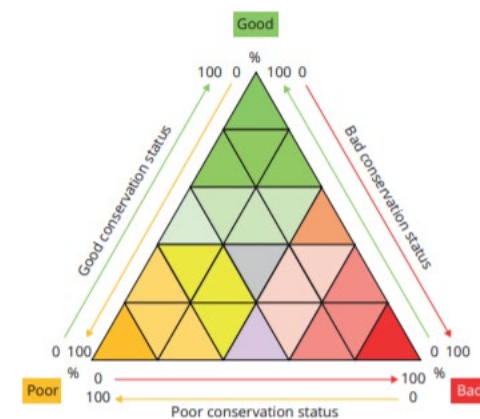
Source: [EEA State of Nature report 2021](#)



Map 3.5 Spatial distribution of species' conservation status at Member State level presented in a 10 km × 10 km grid



Spatial distribution of species conservation status at Member State level represented in a 10 x 10 km grid



Source: [EEA State of Nature report 2021](#)

Biodiversity policy aka what are we doing to rectify this?

The **EU Biodiversity Strategy** for 2030 lays out targeted action to put Europe on the path to ecological recovery within the next decade.

A key element of this Strategy is to protect a minimum of **30%** of the EU's Land and **30%** of the EU's sea area, with 1/3 strictly protected. Along with ambitious targets on **restoration**.

The post-2020 Global Biodiversity Framework by the CBD, to be agreed at Kunming later this year, will likely have a **30by30** target, that is in line with the EU Biodiversity Strategy with similar **restoration** targets.

The ongoing **SDG 15** has a focus on **protection** and **restoration** of terrestrial ecosystems.

Until 2030 is the UN decade on Ecosystem Restoration, aiming to prevent, halt and reverse the degradation of ecosystems worldwide.

Biodiversity policy aka what are we doing to rectify this?

Or in summary....

- We have strong policies focusing on **protecting** and **restoring** our biodiversity.

Protection & Restoration

Protected Areas

Current coverage of protected areas..

EU 27

25.7% of land

11.1% of ocean

Target

30%

30%

Distance to target

4.3%

18.9%

Source: EEA (2020).

Protected Areas = Natura 2000 + nationally designated areas.
Statistics based upon 2020 versions of data.
Natura 2000 = 18% of EU.

Quality not just quantity.

A key focus on the EU Biodiversity Strategy is on the qualitative aspects of protected areas. All protected areas need to be effectively managed, with clearly defined **conservation objectives** and **measures** with appropriate monitoring in place.

To date the focus on much of the protected areas targets at a global level as been on the quantitative aspect, the proportion of land and sea covered by protected areas.

This has led to another known unknow, due to a low rate of assessing the effectiveness of protected area, systematic EU assessments are so far inconclusive. There was a target by 2015 to assess 60% of protected areas in the EU, by this date 8% had been assessed.

This is in part due to existing management effectiveness standards are insufficiently known and understood among practitioners

Going forward we need to focus as much on the **qualitative** as the quantitative.

Restoration.

As was shown at the start of the presentation, it is clear that we need to restore much of our biodiversity.

Relying on the “protect” aspect of any policies is not sufficient, even if we have 30% of our land effectively protected we will not have our biodiversity at a level that it requires. Therefore we need to focus as well on the “restore” element.

The EU Biodiversity Strategy recognises this and places a priority on this element.

 Restore degraded ecosystems at land and sea across the whole of Europe by:

- 
Increasing organic farming and biodiversity-rich landscape features on agricultural land
- 
Halting and reversing the decline of pollinators
- 
Restoring at least 25 000 km of EU rivers to a free-flowing state
- 
Reducing the use and risk of pesticides by 50% by 2030
- 
Planting 3 billion trees by 2030

Restoration.

How will this be done?

proposal for legally binding EU nature restoration targets in 2021 to restore degraded ecosystems, in particular those with the most potential to **capture** and **store carbon** and to prevent and reduce the impact of **natural disasters**

Greater efforts are needed to restore **freshwater ecosystems** and the natural functions of **river, t** least **25,000 km** of rivers will be restored into **free-flowing rivers** by 2030

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Restoration.

EU Nature Restoration Plan: key commitments by 2030

1. Legally binding EU nature restoration targets to be proposed in 2021, subject to an impact assessment. By 2030, significant areas of degraded and carbon-rich ecosystems are restored; habitats and species show no deterioration in conservation trends and status; and at least 30% reach favourable conservation status or at least show a positive trend.
2. The decline in pollinators is reversed.
3. The risk and use of chemical pesticides is reduced by 50% and the use of more hazardous pesticides is reduced by 50%.
4. At least 10% of agricultural area is under high-diversity landscape features.
5. At least 25% of agricultural land is under organic farming management, and the uptake of agro-ecological practices is significantly increased.
6. Three billion new trees are planted in the EU, in full respect of ecological principles.
7. Significant progress has been made in the remediation of contaminated soil sites.
8. At least 25,000 km of free-flowing rivers are restored.
9. There is a 50% reduction in the number of Red List species threatened by invasive alien species.
10. The losses of nutrients from fertilisers are reduced by 50%, resulting in the reduction of the use of fertilisers by at least 20%.
11. Cities with at least 20,000 inhabitants have an ambitious Urban Greening Plan.
12. No chemical pesticides are used in sensitive areas such as EU urban green areas.
13. The negative impacts on sensitive species and habitats, including on the seabed through fishing and extraction activities, are substantially reduced to achieve good environmental status.
14. The by-catch of species is eliminated or reduced to a level that allows species recovery and conservation.

Challenges/Opportunities

- Tracking the restoration effort will be a challenge, though also an opportunity.
- There are **27Tb** of data a day coming from the Copernicus Satellite systems
- How can we use modern technology to help us track/model/understand the effort we are doing on protecting and restoring our biodiversity?
 - We can be more streamlined in how we collect data – ReportNet 3 at the Agency
 - Can we use Earth Observation to get nowcasting information?
 - Can we use Earth Observation to see the intensity of activity in certain areas or the change of land use/land cover over time?
 - How can we use Machine Learning and Artificial intelligence
 - This can be in the “simple” quality control of data, to identifying analogies or patterns or scenario planning,

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