



Amphibian and reptiles in EU nature legislation and policy

LIFE Platform Meeting: Amphibian and Reptile Conservation (ARC)
Challenges and Opportunities in Europe

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Frank VASSEN, European Commission, DG ENV.D3, Nature Protection Unit

EU State of Nature report (2019) – key messages



- Only 15 % of habitat assessments at EU level show a good conservation status, while the majority continues to show poor (45 %) or bad (36 %) status
- Grasslands, dunes, and bog, mire and fen habitats show strong deteriorating trends, while forests have the most improving trends.
- Around one quarter of species have a good conservation status at EU level. However, over 60 % of the species assessments report a poor or bad status.
- Amphibians are the species group with the highest proportion of declining trends of species at national level (>30 %), followed by fish, molluscs and vascular plants.
- Marine mammals (cetaceans) are among the species with the highest proportion of unknown assessments (over 78 %).
- The Atlantic and Continental regions contain highest share of poor and bad conservation statuses among all biogeographical regions for both habitats and species.
- A high percentage of unknown data indicates a need to establish or reinforce appropriate and ideally coordinated and state-supported monitoring schemes in all Member States.

Key pressures on habitats and species (SoN)

Figure 4.1 Summary of pressures and responses

Pressures and responses

The analysis of pressures and responses looks jointly at the results from both nature directives' reporting. Member States have reported over 200 different pressures categorised into 15 overarching sectors, and over 100 conservation measures are listed in 13 main categories, corresponding to the pressure sectors identified.

Member States reported over

67 000 individual pressures

With **21 %**, **agriculture** is the most frequently reported pressure for habitats and species. Abandonment of grasslands and intensification is particularly impacting pollinator species, farmland birds and semi-natural habitats

Urbanisation and leisure activities

account for **13 %** of all reported pressures, representing 48 % of all marine pressures.

Invasive alien species such as the False Indigo-bush, particularly affect dunes and sclerophyllous scrubs as well as species such as breeding seabirds.

The **modification on water regimes**, physical alterations of water bodies and removal of sediments predominantly affect freshwater habitats and fish.

Forestry activities represent **11 %** of all pressures, particularly affecting forest habitats, and woodland species.

13 % of all pressures for **birds** stem from the exploitation of species, mainly relating to **illegal killing and hunting**. In Europe, the annual hunting bag amounts to at least 52 million birds.

Climate change is reported as a rising threat, particularly due to ongoing changes in the temperature and the decrease of precipitation.

Almost **50 %** of all pressures related to **pollution** can be attributed to air, water and soil pollution caused by agriculture.

- Although drivers of habitat degradation and species decline are diverse, **changes in agricultural activities** such as abandoning extensive management and intensifying management practices are the most important pressures overall.
- **Urbanisation** is the second largest pressure, especially affecting habitats such as dunes and coastal and rocky habitats.
- **Pollution of air, water and soil** negatively affects a wide range of habitats and species.
- **Hunting, illegal killing and poisoning** remains a major pressure for many breeding, wintering and passage birds.
- Further pressures include:
 - **invasive alien species,**
 - **Modifications to hydrological regimes/ physical alteration of water bodies** (freshwater habitats, fish, amphibians)
 - **Hydropower installations** (affecting river habitats, freshwater fish, etc.);
 - **Collisions** with electricity and communication transmissions (mostly affecting birds),
 - as well as **climate change related droughts and decreases in precipitation** (affecting bogs, mires, fens, amphibians, etc.).

Reptiles & amphibians in EU legislation & policy

EU Habitats Directive (92/43/EEC)

Annex I: Natura 2000 habitat types

231 habitat type, many of direct relevance!

Ex. Mediterranean Temporary Ponds

Annex I: Natura 2000 species

25 amphibians

26 reptiles

Annex IV: strictly protected species

49 amphibians

86 reptiles

Annex V: species that can be exploited

4 amphibians

0 Reptiles

EU Species Red Lists (2009)

(Amongst all species groups, the Habitats Directive's coverage of Red listed species is highest for amphibians (85 %) and reptiles (70 %).

European Red List of Reptiles

Compiled by Neil A. Cox and Helen J. Temple



European Red List of Amphibians

Compiled by Helen J. Temple and Neil A. Cox



Natura 2000 network

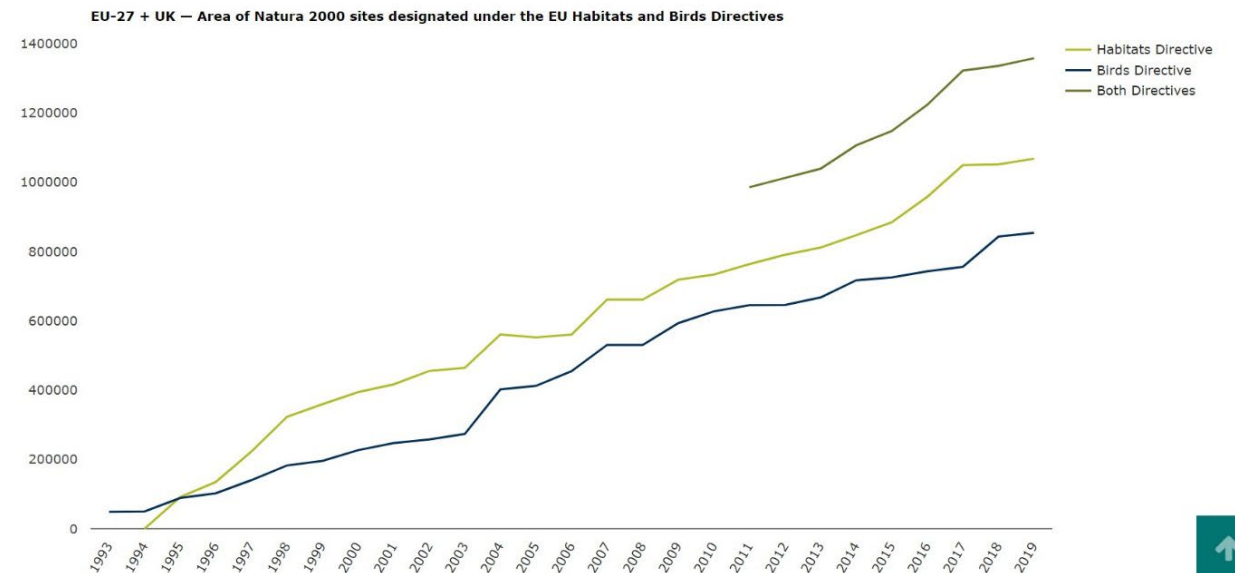
Total number of sites (EU27): 27.027

18,6 % of EU27 land area (767.000 km²)

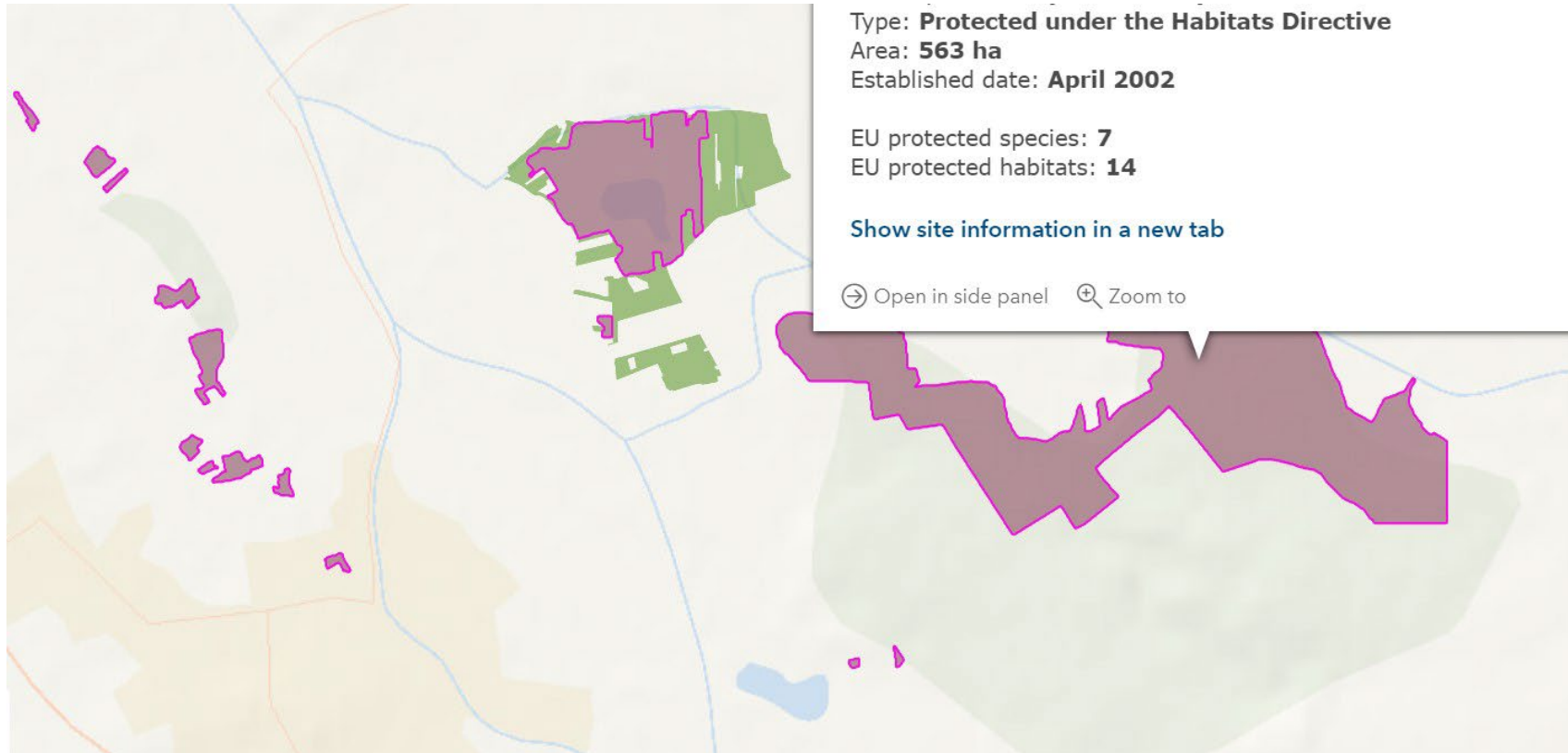
Large variation of coverage: 8,3 % (DK) - 37,9 % (SI)

> 8 % of EU marine area (452.000 km²)

Source: Natura 2000 barometer



Natura 2000 network



EU Biodiversity Strategy for 2030

- adopted by European Commission on 20th May 2020
<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX:52020DC0380>
- **to put biodiversity on the path to recovery** by 2030, by protecting and restoring nature and ecosystems in the EU
- **headline targets:**
 1. *Establish larger **coherent EU-wide network of protected areas***
 2. *Develop **EU Nature Restoration Plan***
- **endorsed by Member States** through Council Conclusions in October 2020, and by **European Parliament** in an own-initiative report adopted in June 2021

EU Biodiversity Strategy for 2030

Protected area target: key commitments by 2030

1. **Legally protect** a minimum of 30% of the EU's land area and 30% of EU's sea area as part of a truly coherent Trans-European Nature Network, and integrate ecological corridors.
2. **Strictly protect** at least a third of the EU's protected areas (10% of land and 10% of sea area), including all remaining EU primary and old-growth forests.
3. **Effectively manage** all protected areas, with clear conservation objectives and conservation measures, and monitor these areas appropriately.

Commission Guidance on the protected areas target

- Member States are responsible for identifying and designating additional Natura 2000 sites or additional sites under national protection.
- All protected areas should have clearly defined conservation objectives and measures.
- The target is an EU-level target, to be achieved for each EU biogeographical region → this requires cooperation between Member States to ensure effort sharing and trans-boundary coherence and connectivity of the network
- By the end of 2022, all Member State were expected to submit to the Commission a list of existing protected areas which fulfil the criteria as well as an initial pledge for new areas to be designated explaining:
 - (1) which criteria were used for their identification;
 - (2) the scientific evidence that leads to their selection for designation;
 - (3) the mechanism that will be put in place to ensure adequate site management and monitoring

Key challenges for the protected area target!

- **clarifying the baseline:** which and how much area already qualifies for the 30% target for protection and 10% target for strict protection?
- **how much additional area is needed** in different parts of the EU, where is it and for what reason should it become better protected (bigger, more robust sites, **representativeness (incl. species not covered by EU nature legislation)**, connectivity, etc.)?
- What is the role ***Other Effective Area-based Conservation measures*** (OECMs) can play for achieving the targets?
- **Biogeographical region breakdown / national “burden sharing”**
- **How to achieve all this in practise?**

➔ These points will keep us busy for the next years!

EU Biodiversity Strategy for 2030

EU Nature Restoration Plan: key commitments by 2030

1. Ensure there is no deterioration in conservation status of habitats and species; at least 30 % of those not already in favourable conservation status reach that category or show a positive trend.
2. Restore significant areas of degraded and carbon-rich ecosystems.
3. Reverse the decline in pollinators.
4. Reduce the risk and use of chemical pesticides and reduce the use of more hazardous pesticides is reduced by 50%.
5. At least 10% of agricultural area is under high-diversity landscape features.
6. At least 25% of the EU's agricultural land is under organic farming management, and the uptake of agroforestry is increased.
7. At least 3 billion new trees are planted in the EU.
8. Significant progress is made in the remediation of contaminated soil sites.

EU Biodiversity Strategy for 2030

EU Nature Restoration Plan: key commitments by 2030

9. At least 25,000 km of free-flowing rivers are restored.

10. 50% reduction in the number of Red List species threatened by IAS.

11. The losses of nutrients from fertilisers are reduced by 50%, resulting in the reduction of the use of fertilisers by at least 20%.

12. Cities with a least 20,000 inhabitants have an ambitious Urban Green Plan.

13. No chemical pesticides are used in sensitive areas such as EU urban Green areas.

14. Negative impacts on sensitive species and habitats, including on the seabed through fishing and extraction activities, are substantially reduced to achieve good environment status.

15. Eliminate or reduce the by-catch of species to a level that allows species recovery and conservation.

Commission Guidance on the “30% status improvement target”

- The target is closely aligned with the reporting under Article 17 Habitats Directive and Article 12 Birds Directive, covering all species and habitats on which Member States report !
- The target is a national-level target, that **needs to be achieved by each Member State** individually. There is no further breakdown of the target below the national level.
- By the end of 2022, Member States were expected to submit to the Commission a list of pledges that includes the following:
 - (1) a list of habitats and species that should at least show a strong positive trend by 2030;
 - (2) an explanation on the criteria used for selecting these habitats and species
 - (3) an additional list of habitats and species for which further measures should be taken to achieve non-deterioration by 2030
 - (4) an explanation on the **measures** need to achieve the desired positive/ stable trends by 2030
 - (5) If relevant, an explanation on why certain habitats and species are not expected to achieve the target, despite all possible measures taken; and a list of these habitats and species
 - (6) If relevant, an explanation on measures that will be taken to improve the quality of monitoring

Pledges for reptiles/ amphibians: CYPRUS

Status improvement by 2030

Mauremys rivulata

→ removal of IAS, additional Natura 2000 sites

Natrix natrix cypriaca

→ habitat improvements (additional ponds)

Chelonia mydas

→ Better nest protection (predators, human disturbance)

Non-deterioration by 2030

-

Improved knowledge by 2030

Mauremys rivulata

Natrix natrix cypriaca



Mauremys rivulata (Frank Vassen)

Pledges for reptiles/ amphibians: DENMARK

Status improvement by 2030

-

Non-deterioration by 2030

Rana arvalis

→ Re-establish new & improve condition of existing habitat area

Rana dalmatina

→ Re-establish new & improve condition of existing habitat area

Rana temporaria

→ Re-establish new & improve condition of existing habitat area

Triturus cristatus

→ Re-establish new & improve condition of existing habitat area

Lacerta agilis

→ Re-establish new & improve condition of existing habitat area

Improved knowledge by 2030

-



Rana temporaria (Frank Vassen)

Pledges for reptiles/ amphibians: LUXEMBOURG

Status improvement by 2030

Alytes obstreticans

- Prevent, control, eradicate or mitigate negative impacts of IAS

Bombina variegata

- Reintroduction / population re-inforcement
- Prevent, control, eradicate or mitigate negative impacts of IAS

Hyla arborea

- Improve condition of existing habitats (pond restoration)
- Prevent, control, eradicate or mitigate negative impacts of IAS

Pelophylax esculentus & *Pelophylax lessonae*

- Re-establish new habitat areas
- Prevent, control, eradicate or mitigate negative impacts of IAS

Triturus cristatus

- Reintroduction / population re-inforcement

Podarcis muralis & *Coronella austriaca*

- Improve condition of existing habitat area through active restoration

Non-deterioration by 2030

Rana temporaria

- Prevent, control, eradicate or mitigate negative impacts of IAS
- Improve condition of existing habitat area & continue recurring management



Hyla arborea (Frank Vassen)

Pledges for reptiles/ amphibians: SWEDEN

Status improvement by 2030

Pelobates fuscus

→ Reduce pressures on species by active measures against pollution

Bombina bombina

→ Reduce pressures on species by active measures against pollution

Rana dalmatina

→ Reduce pressures on species by active measures against pollution

Pelophylax lessonae

→ Reduce pressures on species by active measures against pollution

Non-deterioration by 2030

Triturus cristatus

→ Improve condition of existing habitat area

Lacerta agilis

→ Improve condition of existing habitat area

Improved knowledge by 2030



Pelobates fuscus (Ján Svetlík)

Pledges for reptiles/ amphibians: GERMANY

Status improvement by 2030

Bombina bombina
Bombina variegata
Coronella austriaca (Atlantic)
Hyla arborea (Atlantic, Continental)
Lacerta agilis (Atlantic)
Lacerta bilineata
Lacerta viridis
Natrix tessellata
Pelophylax ridibundus
Podarcis muralis
Rana dalmatina
Rana temporaria
Triturus cristatus (Atlantic)
Zamenis longissimus

Further deterioration unavoidable

Salamandra atra
→ due to global pressures (e.g. climate change)

Improved knowledge by 2030

Pelophylax esculentus
Pelophylax lessonae
Zamenis longissimus

Non-deterioration by 2030

Alytes obstetricans
Bufotes viridis
Coronella austriaca (Continental, Alpine)
Emys orbicularis
Epidalea calamita
Hyla arborea (Alpine)
Lacerta agilis (Continental, Alpine)
Pelobates fuscus
Pelophylax lessonae
Rana arvalis
Triturus cristatus (Continental, Alpine)



Salamandra atra (Frank Vassen)

Pledges for reptiles/ amphibians: SPAIN

Status improvement by 2030

Chelonia mydas

- Improve condition of existing habitat
- Regulatory approaches to reduce pressures

Chalcides simonyi

- Improve condition of existing habitat
- Regulatory approaches to reduce pressures

Coronella austriaca

- Improve condition of existing habitat
- Continue recurring management, reinstate recurring management
- Regulatory approaches to reduce pressures

Lacerta agilis

- Adapt recurring habitat management practices
- Improve condition through active restoration and non-intervention

Pelobates cultripes

- Adapt recurring habitat management practices
- Prevent, control, eradicate or mitigate negative impacts of IAS
- Improve condition through active restoration

Podarcis lilfordi & *Podarcis liolepis atrata*

- Prevent, control, eradicate or mitigate negative impacts of IAS
- Regulatory approaches to reduce pressures

Tarentola boettgeri

- Prevent, control, eradicate or mitigate negative impacts of IAS

Testudo graeca & *Testudo hermanni* (not all measures shown here)

- Reintroduction or population re-inforcement
- Prevent, control, eradicate or mitigate negative impacts of IAS

Triturus marmoratus

- Prevent, control, eradicate or mitigate negative impacts of IAS
- Active measures against pollution
- Regulatory approaches to reduce pressures

Non-deterioration by 2030 (measures not shown)

Alytes cisternasii, *A. dickhilleni*, *A. muletensis*, *A. obstetricans*

Bufo viridis

Calotriton arnoldi, *C. asper*

Chalcides bedriagai, *C. coerulopunctatus*, *C. sexlineatus*

Chamaeleo chamaeleon

Chioglossa lusitanica

Discoglossus galganoi, *D. pictus*

Emys orbicularis

Epidalea calamita

Gallotia atlantica, *G. galloti*, *G. galloti insulagae*, *G. simonyi*, *G. stehlini*

Hyla meridionalis, *H. molleri*

Iberolacerta aranica, *I. aureoloi*, *I. bonnali*, *I. tyreni*, *I. martinezricai*, *I. monticola*

Lacerta schreiberi

Mauremys leprosa

Pelophylax perezi

Podarcis liolepis atrata, *P. muralis*, *P. pityusensis*

Rana dalmatina, *R. iberica*, *P. pyrenaica*, *R. temporaria*

Tarentola angustimentalis, *T. delalandii*, *T. gomerensis*

Triturus pygmaeus

Vipera seoanei

Zamenis longissimus

Improve knowledge by 2030

Chalcides simonyi, *Hierophis viridiflavus*, *Hyla meridionalis*,

Iberolacerta galani, *Lacerta bilineata*, *L. schreiberi*,

Tarentola boettgeri

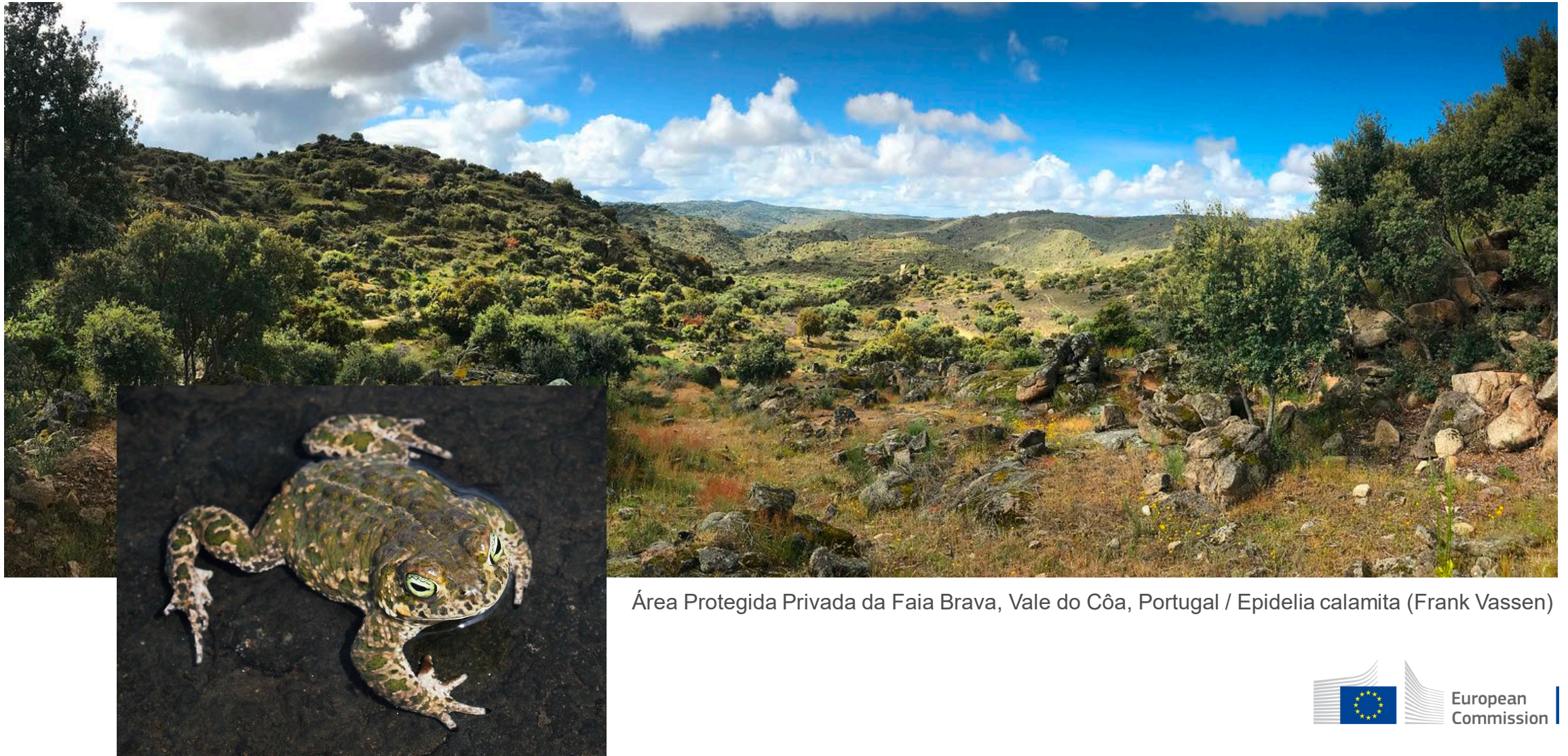
some findings from pledges

- **Habitat loss & deterioration:** by far the most significant pressures !
- Other pressures: **IAS, pollution, disturbance** (turtle beaches)
- Only 1 Member state reported **Climate change** as a significant threat (DE: *Salamandra atra*)!



Lacerta viridis (Frank Vassen)

Thank you for your attention !



Área Protegida Privada da Faia Brava, Vale do Côa, Portugal / *Epidelma calamita* (Frank Vassen)