# 2020 State of Nature in the EU - results from reporting under the nature directives 2013-2018

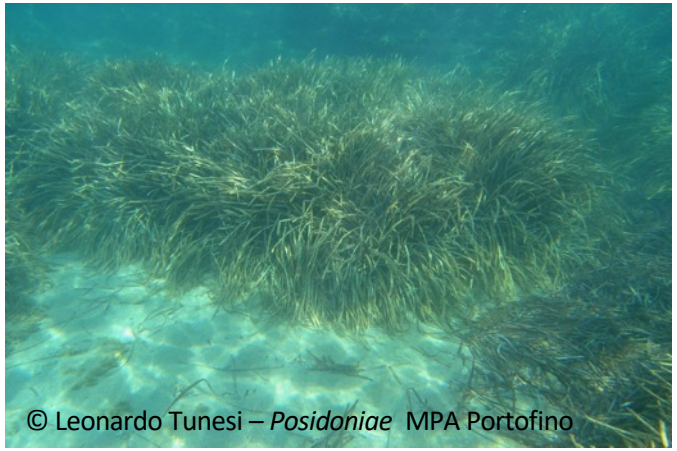
# Outline

- Overview of the ‘nature reporting’
- Reporting ‘features’ and ‘units’
- Main content of the MS reports
- Assessing ‘conservation status’
- State of Nature in the EU 2020

# Overview of the ‘nature reporting’? (i)

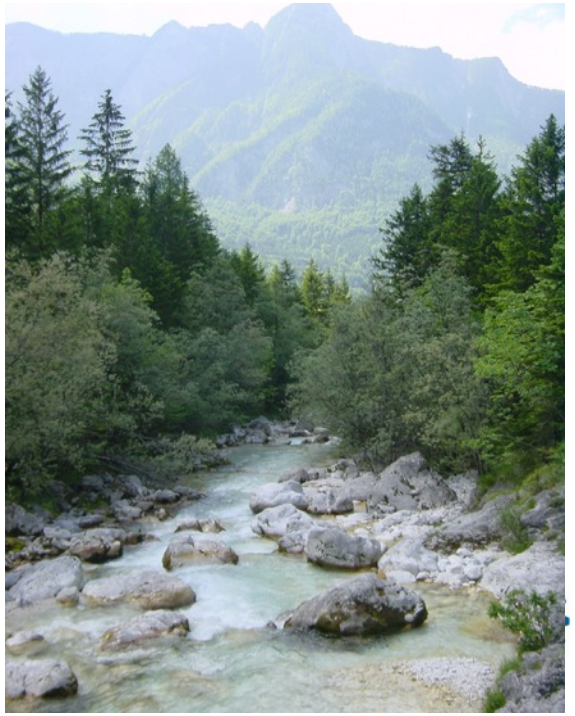
- Two EU reporting obligations
  - Article 12, Birds Directive
  - Article 17, Habitats Directive
- Results of the monitoring and assessment of
  - ≈ **500** birds
  - ≈ **1 400** other animals & plants
  - = **233** habitat types

MARINE



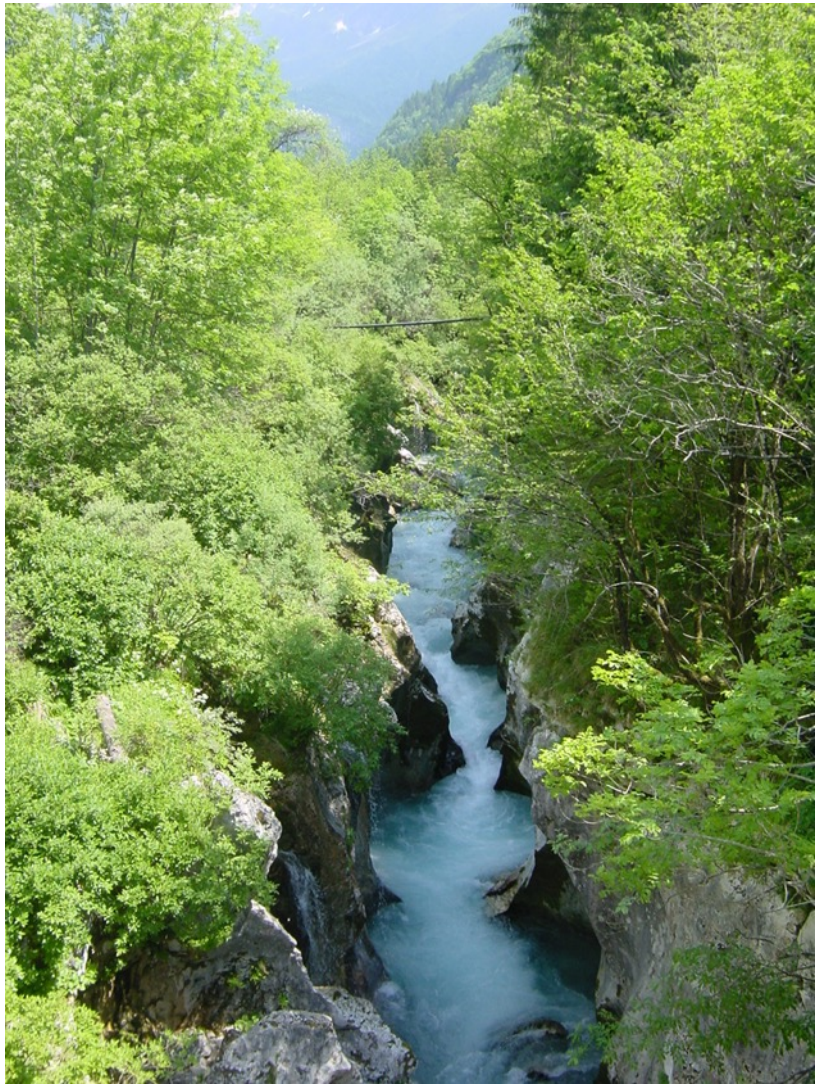

TERRESTRIAL

FRESHWATER



# Overview of the ‘nature reporting’? (ii)

- Many freshwater species
  - Birds
  - Fish and lampreys, including migratory
  - Mammals
  - Reptiles & amphibians
  - Crustaceans, insects, molluscs
  - Plants & bryophytes
- And habitat types
  - Standing water (10)
  - Running water (10)
  - Plus many others associated to freshwater (fens, bogs, forests, meadows,…)



# Overview of the 'nature reporting'? (iii)

- Reporting cycle: every 6 years
  - 1994-2000 (2001) – art 17 only text – EU15
  - 2001-2006 (2007) – art 17 data – EU25
  - 2007-2012 (2013) – art 12 & art 17, data – EU27
  - **2013-2018 (2019) – art 12 & art 17, data – EU28**
- Deadlines for MS reports (2013-2018)
  - Art. 17: **30 April 2019**
  - Art. 12: **31 July 2019**

# Reporting ‘units’ for each species/habitat type

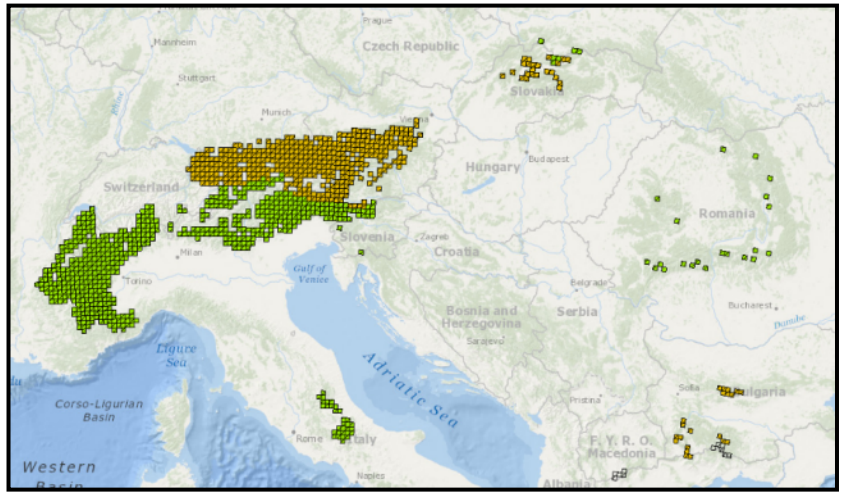
- Article 12: national level
- Article 17:
  - **national-biogeographical region** (9)

    Alpine, Atlantic, Black Sea, Boreal, Continental, Macaronesian, Mediterranean, Pannonian, Steppic
  - **national-marine ‘region’** (5)

    Marine Atlantic (North-East Atlantic Ocean)
    Marine Macaronesian (Macaronesia)
    Marine Black Sea (Black Sea)
    Marine Baltic (Baltic Sea)
    Marine Mediterranean (Mediterranean Sea)

# Main content of the Member States reports

**For each species & habitat**




- Distribution data and maps
- Population/area size & trends
- Pressures & threats (activities)
- Conservation measures
- Proportion & trends in Natura 2000
- Hunting/exploitation/collection
- **Conservation status (only Art 17)**

# Assessing conservation status (Habitats Directive)

- Habitats Directive mail goal: maintain or restore **favourable conservation status**
- **Conservation status**: combination of four parameters

| Species | Habitats |
|---|---|
| Range | Range |
| Population | Area |
| Suitable habitat | Structure & Functions |
| Future prospects | Future prospects |

| | | |
|---|---|---|
| Favourable | Green | FV |
| Unfavourable inadequate | Amber | U1 |
| Unfavourable bad | Red | U2 |
| Unknown | Grey | XX |

# Assessing conservation status (HD) (ii)

- Takes into account: PAST – PRESENT – FUTURE
- FAVOURABLE - very ‘challenging’ to reach
- ‘One out, all out’
  One parameter unfavourable, overall unfavourable

| | | | |
|---|---|---|---|
| All 'green' OR three 'green' and one 'unknown' | One or more 'amber' but no 'red' | One or more 'red' | Two or more 'unknown' combined with green or all “unknown” |

- Good Poor Bad Unknown

# EU level assessments (i)

- Assessments based on MS reports
- EU bird population status assessments

  Based on modified IUCN Red List criteria for birds

- Secure / unknown / near threatened, declining or depleted / threatened

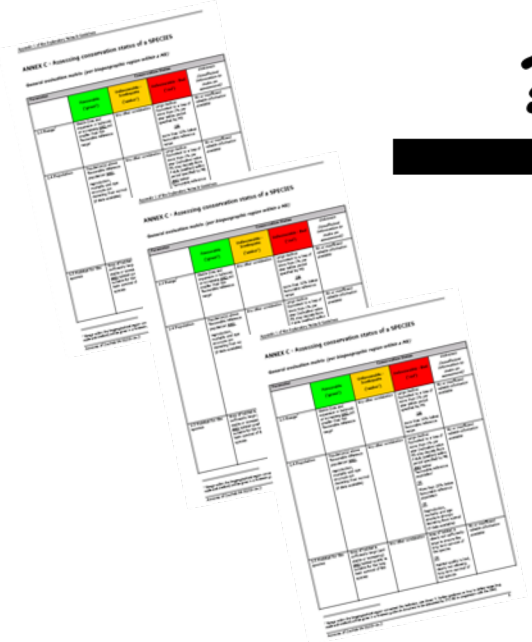
| GOOD | unknown | POOR | BAD |
|---|---|---|---|

- Favourable / unknown / unfavourable-inadequate / unfavourable-bad
- EU-biogeographical conservation status assessments

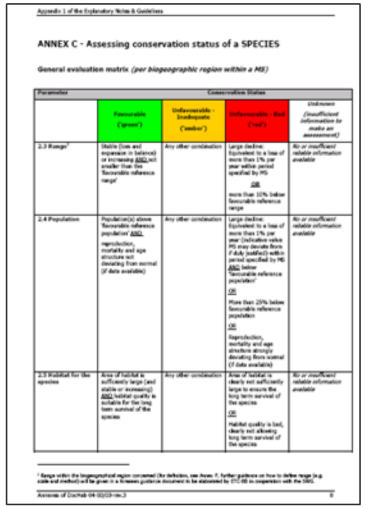
  Using the same evaluation matrices used by MS

# EU level assessments (ii)

- EU bird population status assessments
  - EC contractor (BirdLife/IUCN)
- EU-biogeographical conservation status assessments
  - EEA and its ETC on Biological Diversity



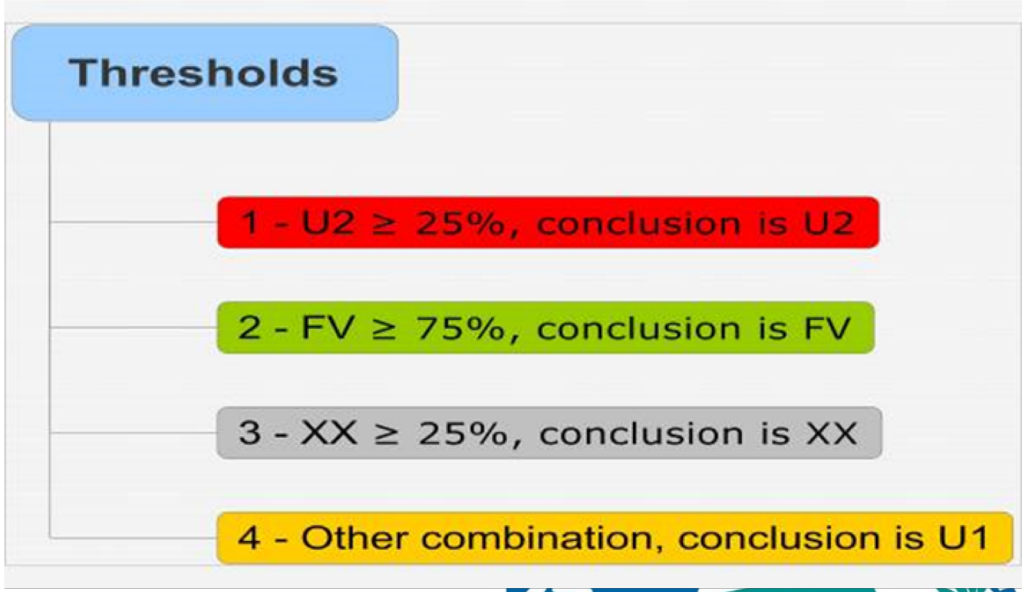
?



ANNEX C - Assessing conservation status of a SPECIES

General evaluation matrix *(per biogeographic region within a MS)*

| Parameter | Conservation Status | | | |
|---|---|---|---|---|
| | Favourable ('green') | Unfavourable - Inadequate ('amber') | Unfavourable - Bad ('red') | Unknown (insufficient information to make an assessment) |
| 2.3 Range* | Stable (size and expansion in balance) or increasing AND not smaller than the favourable reference range* | Any other combination | Large decline: Equivalent to a loss of more than 1% per year within period specified by MS<br>OR<br>more than 10% below favourable reference range | No or insufficient reliable information available |
| 2.4 Population | Population(s) above 'favourable reference population' AND<br>reproduction, mortality and age structure not deviating from normal (if data available) | Any other combination | Large decline: Equivalent to a loss of more than 1% per year (indicative value MS may decide from if duly justified) within period specified by MS AND below 'favourable reference population'<br>OR<br>More than 25% below favourable reference population<br>OR<br>Reproduction, mortality and age structure strongly deviating from normal (if data available) | No or insufficient reliable information available |
| 2.5 Habitat for the species | Area of habitat is sufficiently large (and stable or increasing) AND habitat quality is suitable for the long term survival of the species | Any other combination | Area of habitat is clearly not sufficiently large to ensure the long term survival of the species<br>OR<br>Habitat quality is bad, clearly not allowing long term survival of the species | No or insufficient reliable information available |



# First results from MS data (online dashboard) (i)

1. Conservation status | 2. Trend in conservation status | 3. Reason for change - CS & T

## Overall assessment of conservation status

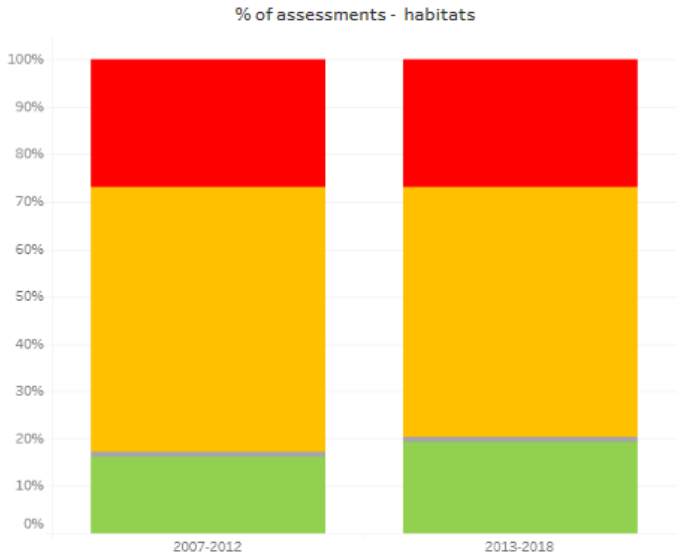
Conservation Status

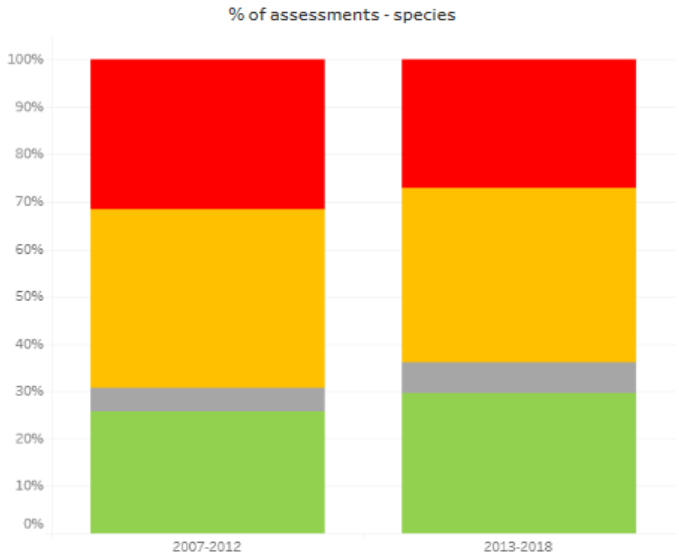
- Good: Favourable (FV)
- Poor: Unfavourable - inadequate (U1)
- Bad: Unfavourable - bad (U2)
- Unknown: XX
- Not applicable/Not reported: NA

Country: CZ

Methodology

Proportion of assessments in each category of conservation status for 2007-2012 and 2013-2018 reporting periods.




| Country | (% genuine change) |
|---|---|
| CZ | 20.4 |

| Country | (% genuine change) |
|---|---|
| CZ | 15.7 |

Proportion of habitats assessments categories of conservation status

| | | FV | | XX | | U1 | | U2 | |
|---|---|---|---|---|---|---|---|---|---|
| 2007-2012 | CZ | 15 | 16% | 1 | 1% | 52 | 56% | 25 | 27% |
| 2013-2018 | CZ | 18 | 19% | 1 | 1% | 49 | 53% | 25 | 27% |

Proportion of species assessments categories of conservation status

| | | FV | | XX | | U1 | | U2 | |
|---|---|---|---|---|---|---|---|---|---|
| 2007-2012 | CZ | 69 | 26% | 13 | 5% | 101 | 38% | 84 | 31% |
| 2013-2018 | CZ | 81 | 30% | 18 | 7% | 101 | 37% | 74 | 27% |

https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-17-national-summaries

25 1994-2019 European Environment Agency

# State of Nature in the EU - 2020

# EU State of Nature

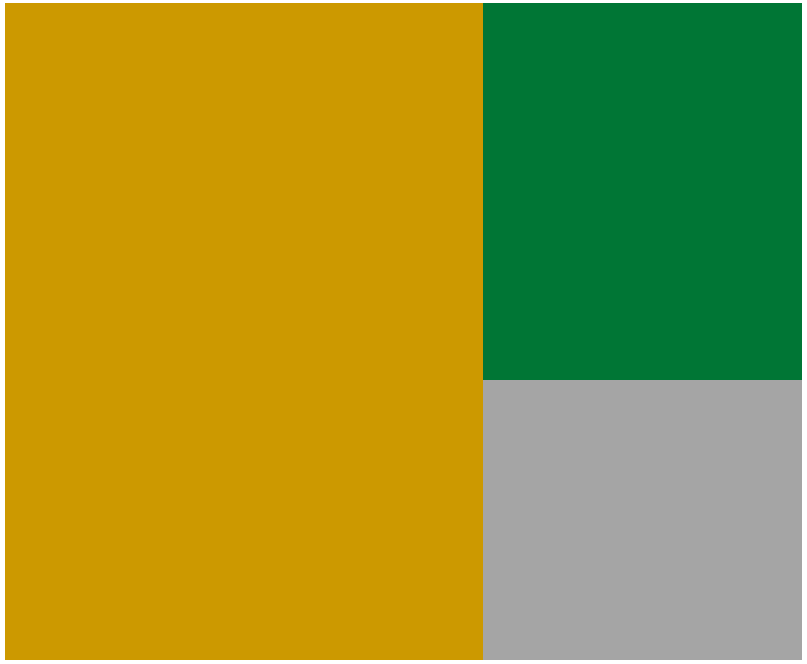
- EEA report + online data & information
- Input to
  - (final) Evaluation Biodiversity Strategy
  - EC composite report
  - Post-2020 Biodiversity policy

# Outline of the EEA report – EU State of Nature

1. Introduction
2. Overall results from Article 12
3. Overall results from Article 17
4. Natura 2000 and conservation status
5. Measuring progress towards targets 1 and 3

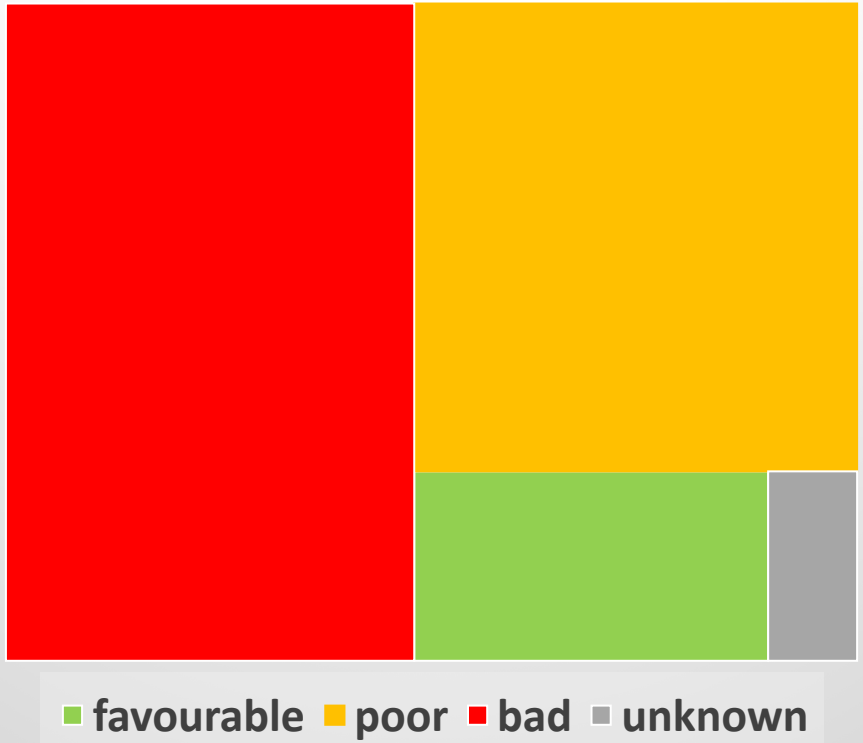
# Example (dummy data)

## Condition of habitat types




**Based on surface area**

## Conservation status




**Based on number of assessments**

Possible to analyse

- Groups of habitats
- MS or EU level
- Compare condition different groups
- Restoration needs
- …

# Natura 2000 & conservation status

- Proportion in N2000 and Status & trends
  - Birds & SPAs
  - Ann. I habitats & SACs
  - Ann. II species & SACs
- Inside vs. outside Natura 2000
  - Common birds
  - (Butterflies)

STATISTICAL ANALYSIS

# Focus on Target 1

- Target - Conservation Status
  - Halt deterioration of all species/habitats
  - Significant improvement: species 50 %, habitats 100 % more
- Actions – Natura 2000
  - Establish, manage, finance, involve, enforce
- Actions – Monitoring & reporting

# e.g. Target 3 (agriculture & forestry)

Separate analysis

- Habitats (species) where major pressures
  - Intensification
  - Abandonment
- Forests
  - Natural/semi-natural
  - Production

# Dates to watch for

- First summaries with MS data
  - End September: article 17
  - End November: article 12
- EU biogeographical assessments (art. 17)
  - February 2020 (tbc): public consultation
- **State of Nature in the EU, EEA report**
  - **June/July 2020 (tbc): Eionet consultation**
    in coordination with EC services and expert groups

# State of Nature home page: one door, many entries

https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu

# Thank you for your attention

25 1994-2019
European Environment Agency

# Supplementary slides with additional information

# Nature reporting

- **Reference portals in Reportnet (2013-2018)**

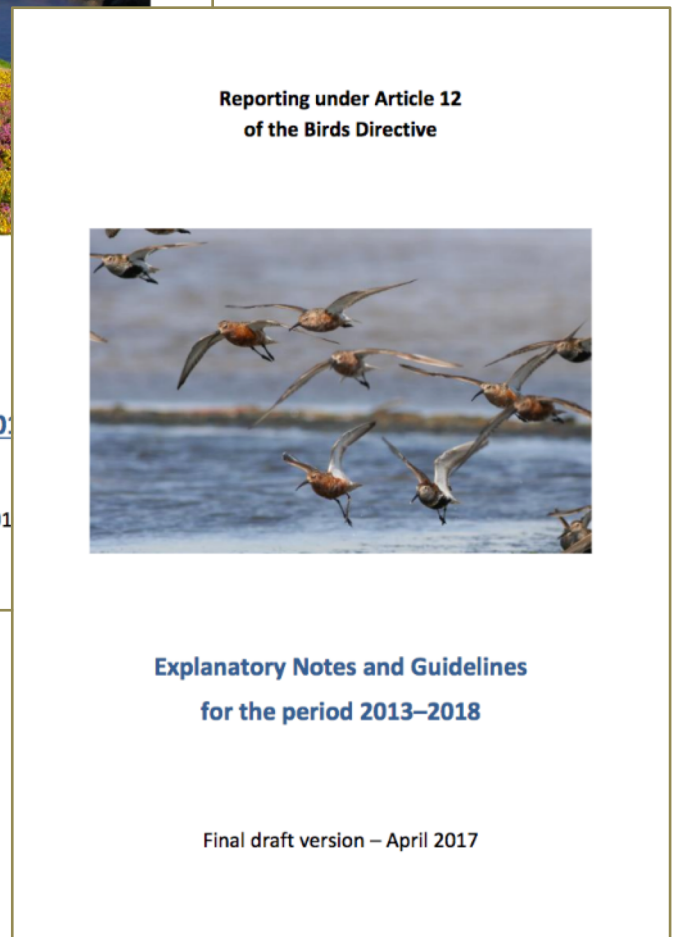
  **http://cdr.eionet.europa.eu/help/birds_art12**

  **http://cdr.eionet.europa.eu/help/habitats_art17**

- **State of Nature webpage**
  **https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu**

- EUNIS http://eunis.eea.europa.eu/
- BISE http://biodiversity.europa.eu/

# Formats, guidelines, supporting material


- Check lists: species & habitats
- Pressures & threats
- Conservation measures
- Reporting tool
- QA/QC rules
- Xml schemas


25 1994-2019
European Environment Agency

# Assessing conservation status (HD) (ii)

- **Range, population, area**
  - quantitative data (e.g. $km^2$, no. of individuals)
  - conservation status / **favourable reference values**
- **Suitable habitat, structures & functions**
  - qualitative assessment based on quantitative data and site monitoring
- **Future prospects**
  - evaluation of threats in near future (12 years)

# Assessing conservation status (HD) (iii)

| Parameter | Conservation Status | | | |
|---|---|---|---|---|
| | **Favourable ('green')** | **Unfavourable - Inadequate ('amber')** | **Unfavourable - Bad ('red')** | ***Unknown (insufficient information to make an assessment)*** |
| **Range** (within the biogeographical region concerned) | Stable (loss and expansion in balance) or increasing AND not smaller than the 'favourable reference range' | Any other combination | Large decline: Equivalent to a loss of more than 1% per year within period specified by MS<br>OR<br>more than 10% below favourable reference range | *No or insufficient reliable information available* |
| **Population** | Population(s) not lower than 'favourable reference population' AND reproduction, mortality and age structure not deviating from normal (if data available) | Any other combination | Large decline: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS AND below 'favourable reference population'<br>OR<br>More than 25% below favourable reference population<br>OR<br>Reproduction, mortality and age structure strongly deviating from normal (if data available) | *No or insufficient reliable information available* |
| **Habitat for the species** | Area of habitat is sufficiently large (and stable or increasing) AND habitat quality is suitable for the long-term survival of the species | Any other combination | Area of habitat is clearly not sufficiently large to ensure the long-term survival of the species<br>OR<br>Habitat quality is bad, clearly not allowing long-term survival of the species | *No or insufficient reliable information available* |
| **Future prospects** (as regards to population, range and habitat availability) | Main pressures and threats to the species not significant; species will remain viable on the long-term | Any other combination | Severe influence of pressures and threats to the species; very bad prospects for its future, long-term viability at risk. | *No or insufficient reliable information available* |
| **Overall assessment of CS** | All 'green'<br>OR<br>three 'green' and one 'unknown' | One or more 'amber' but no 'red' | One or more 'red' | Two or more 'unknown' combined with green or all "unknown" |

| Parameter | Conservation Status | | | |
|---|---|---|---|---|
| | **Favourable ('green')** | **Unfavourable – Inadequate ('amber')** | **Unfavourable - Bad ('red')** | ***Unknown (insufficient information to make an assessment)*** |
| **Range** (within the biogeographical/marine region concerned) | Stable (loss and expansion in balance) or increasing AND not smaller than the 'favourable reference range' | Any other combination | Large decrease: Equivalent to a loss of more than 1% per year within period specified by MS<br>OR<br>More than 10% below 'favourable reference range' | *No or insufficient reliable information available* |
| **Area covered by habitat type within range** | Stable (loss and expansion in balance) or increasing<br>AND<br>not smaller than the 'favourable reference area'<br>AND<br>without significant changes in distribution pattern within range (if data available) | Any other combination | Large decrease in surface area: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS<br>OR<br>With major losses in distribution pattern within range<br>OR<br>More than 10% below 'favourable reference area' | *No or insufficient reliable information available* |
| **Specific structure and functions (including typical species)** | Structures and functions (including typical species) in good condition and no significant deteriorations / pressures | Any other combination | More than 25% of the area is unfavourable as regards its specific structures and functions (including typical species) | *No or insufficient reliable information available* |
| **Future prospects** (as regards range, area covered and specific structures and functions) | The habitats prospects for its future are excellent / good, no significant impact from threats expected; long-term viability assured | Any other combination | The habitats prospects are bad, severe impact from threats expected; long-term viability not assured. | *No or insufficient reliable information available* |
| **Overall assessment of CS** | All 'green'<br>OR<br>three 'green' and one 'unknown' | One or more 'amber' but no 'red' | One or more 'red' | Two or more 'unknown' combined with green or all 'unknown' |

# Assessing conservation status (HD) (iv)

Evaluation matrix for species simplified

| Species | Favourable status | Inadequate status | Bad status |
|---|---|---|---|
| **Range** | Stable or increasing and ≥ favourable reference range | *Not qualifying for red or green* | Large decline (> 1% per year*) or more than 10% below f.r.r. |
| **Population** | ≥ favourable reference population and population structure normal | *Not qualifying for red or green* | Large decline (> 1% per year*) or more than 25% below f.r.p. or pop.struct. strongly deviating from normal |
| **Habitat for species** | Habitat sufficiently large and habitat quality suitable for long-term survival | *Not qualifying for red or green* | Area of habitat clearly insufficient or habitat quality not allowing long-term survival |
| **Future prospects** | Pressures and threats not significant, long-term viability ensured | *Not qualifying for red or green* | Severe influence of pressures and threats, bad prospects re. long-term viability |

# Assessing conservation status (HD) (vi)

Each habitat type and each species assessed at **two levels**

- **Member State** biogeographical/marine region
- **EU** biogeographical/marine region

**Current selection**: 2007-2012, Grasslands, 6140 Siliceous Pyrenean Festuca eskia grasslands, All bioregions. Show all Grasslands

**Treated data from Member States reports**

| MS | Reg | Range (km²) | | | | Area | | | | Struct & func. | Future prosp. | Overall asses. | | | | Areas from gridded maps(km²) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Surface | % MS | Trend | Ref. | Surface | % MS | Trend | Ref. | | | Curr. CS | Qualifier | Prev. CS | Nat. of ch. | Range | % MS | Distrib. | % MS |
| ES | ALP | 7365 | 45.8 | 0 | ≈7365 | 561.30 | 50.5 | x | >561.30 | XX | XX | U1 | x | U2+ | c1 | 9300 | 56.4 | 6200 | 55.4 |
| FR | ALP | 8700 | 54.2 | 0 | ≈8700 | 550 | 49.5 | 0 | ≈550 | FV | FV | FV | | FV | nc | 7200 | 43.6 | 5000 | 44.6 |
| ES | ATL | 7218 | 100 | 0 | ≈7218 | 75.70 | 100 | 0 | ≈75.70 | FV | FV | FV | | XX | c1 | 7800 | 100 | 5600 | 100 |

**Automatic Assessments** Show

**EU Biogeographical assessment and proposed corrections**

| MS/EU27 | Reg | Surface | Range Concl. | Trend | Ref. | Surface | Area Concl. | Trend | Ref. | Struct. func. | Future prosp. | Curr. CS Concl. | Qualifier | Prev. CS Concl. | Nat. of ch. | Target 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | Contrib. | Type | |
| EU27 | ALP | 16065 | 0 | 0 | ≈16065 | 1111 | 1 | x | >1111 | 2XA | 2XA | MTX | x | U2 | no | D | = | 0/0 EEA-ETC/BD |
| EU27 | ATL | 7218 | 00 | 0 | ≈7218 | 76 | 00 | 0 | ≈76 | 00 | 00 | MTX | = | XX | no | A | = | 0/0 EEA-ETC/BD |

# Post submission processes and milestones

| | Art 17 | Art 12 |
|---|---|---|
| Resubmission request (if needed) | within 1 month after submission (not after cut-off) | |
| 'Quick' National Summaries online | end Sept 2019 | end Nov 2019 |
| National Summaries for approval from MS | mid Nov 2019 | mid Jan 2020 |
| Publication of MS data in web viewers | Sept – Nov 2019 | Nov 2019 – Jan 2020 |
| EU level assessments | Sept 2019 – Jan 2020 | Nov 2019 – mid April 2020 |
| Public consultation | Feb 2020 (tbc) | |
| Publication of final EU assessments | end March 2020 | end April 2020 |
| Draft EEA SoN | early summer 2020 (tbc) | |
| Public consultation | early summer 2020 (tbc) | |
| Publication of EEA SoN, statistcs, Commision's composite report | Q4 2020 | |