



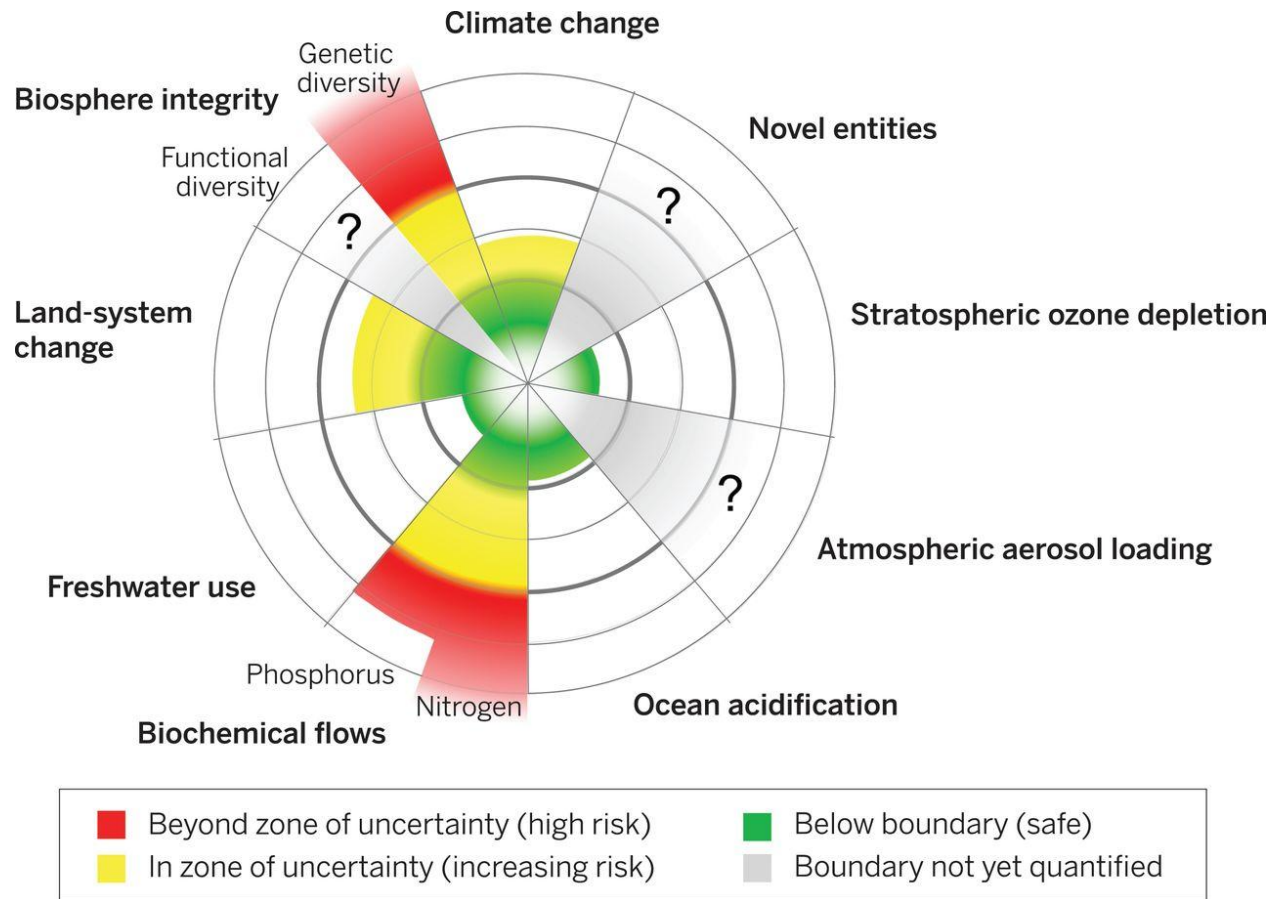
**Nature Conference**

**26-27 May 2015  
Riga**



# **MID-TERM REVIEW OF THE EU BIODIVERSITY STRATEGY TO 2020**

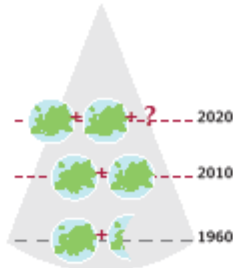
# Planetary boundaries: Guiding human development on a changing planet



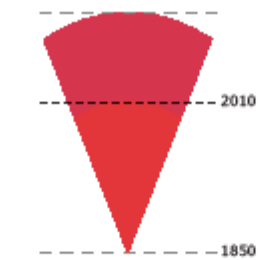
# EU 2010 biodiversity Baseline

## Global dimension

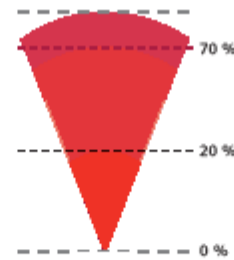
Between 12 % and 55 % of selected vertebrate, invertebrate and plant groups are threatened with extinction at the global level; the decline of wild vertebrate species between 1970 and 2006 is especially severe in the tropics (59 %) and in freshwater ecosystems (41 %) (GBO3, 2010). Currently, only 0.7 % of oceans are protected (WDPFA, 2010). The rate of tropical deforestation decreased nearly 20 % between 2000 and 2010 (FAO), but is still very high: 13 million hectares lost each year (equivalent to the area of Greece). In this context Europe's demand for natural resources goes well beyond its boundaries.



**Europe's ecological footprint — global impact increasing**  
Europe is currently consuming twice what its land and seas can produce. Global Footprint Network estimates that over the last 40 years, Europe's Ecological Footprint increased by 33 %. Europe needs to address the global dimension of its consumption.



**Ocean acidification — first signs of impacts on the food chain**  
Globally, ocean acidity has increased by 30 % in the last 150 years mainly due to increased CO<sub>2</sub> emissions (UNEP). Increased acidity in marine environments affects the survival of numerous marine organisms, which in turn may affect many species that feed on them.



**Coral reefs — an underestimated EU responsibility**  
20 % of the world's tropical coral reefs are already lost, an additional 50 % is at risk. More than 10 % of global coral reefs are located in the overseas territories of EU Member States (IUCN).

'Over the past few hundred years, humans have increased species extinction rates by as much as 1 000 times background rates that were typical over Earth's history' (MA, 2005).

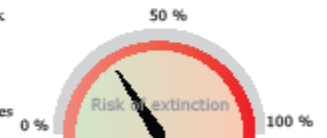


## European biodiversity baseline

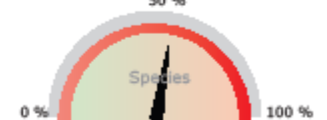
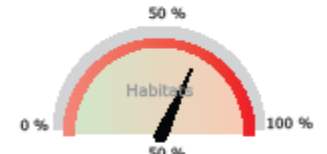
### Where does Europe stand in 2010?

There is mounting evidence that the status of many ecosystems is reaching or has already reached the point of no return. In the same way that a 2 degree rise in global temperature above pre-industrial levels would lead to catastrophic climatic change, the loss of biodiversity beyond certain limits would have far-reaching consequences for the very functioning of the planet. These limits are still being defined, but it is already clear to the scientific community that the current rate of biodiversity loss puts the future well-being of citizens in the EU and worldwide at risk (European Commission, 2010).

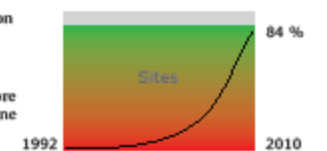
**Species faced with the risk of extinction**  
Up to 25 % of European animal species, including mammals, amphibians, reptiles, birds and butterflies face the risk of extinction and are therefore included in the EU Regional Red List by IUCN.



**Poor conservation status**  
62 % of the habitats and 52 % of the species covered by the EU Habitats Directive are considered to be in an unfavourable conservation status (EEA-ETC/BD, 2009).



**Natura 2000 site designation — nearly completed**  
Designation of Natura 2000 terrestrial sites in Europe is nearly completed. Much more effort is needed for the marine sites (EEA-ETC/BD, 2010).



Services	Ecosystems	Agro ecosystems	Forests	Grasslands	Heath and scrubs	Wetlands	Lakes and rivers
<b>Provisioning</b>							
Crops/timber		↓	↑			↓	
Livestock		↓				↓	
Wild Foods		↓				↓	
Wood fuel			↓				
Capture fisheries						↓	↓
Aquaculture						↓	↓
Genetic		↓		↓		↓	↓
Fresh water			↓			↑	↑
<b>Regulating</b>							
Pollination		↑	↓	↓			
Climate regulation			↑			↓	↓
Pest regulation		↑		↓			
Erosion regulation			↓	↓		↓	
Water regulation			↓		↑	↑	↓
Water purification						↓	↓
Hazard regulation						↓	↓
<b>Cultural</b>							
Recreation		↑	↓	↓	↑	↑	↓
Aesthetic		↑	↓	↓	↓	↑	↓

Status for period 1990–present: Degraded (red), Mixed (yellow), Enhanced (green), Unknown (grey), Not applicable (white)

## Ecosystem services in the EU

**Ecosystem services still degrading**  
Most of the ecosystem services in Europe are judged to be 'degraded' — no longer able to deliver the optimal quality and quantity of basic services such as crop pollination, clean air and water, and control of floods or erosion (RUBICODE project 2006–2009; marine ecosystems not included).

### Trend between periods

- ↑ Positive change between the periods 1950–1990 and 1990 to present
- ↓ Negative change between the periods 1950–1990 and 1990 to present
- No change between the two periods

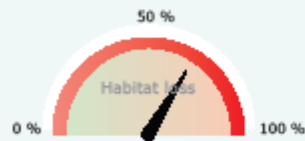
# EU 2010 biodiversity Baseline

## Threats

The main causes of biodiversity loss are changes in natural habitats. These are mostly due to: intensive agricultural production systems and land abandonment; construction and transport (fragmentation); overexploitation of forests, oceans, rivers, lakes and soils; invasion of alien species; pollution; and — increasingly — climate change. For any policy to be effective in maintaining and restoring biodiversity in Europe, it must address these threats.

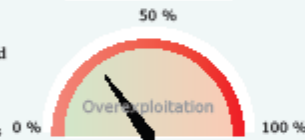
### Habitat loss — a major concern

70 % of species are threatened by the loss of their habitat (IUCN). Farmland birds declined by 20–25 % between 1990 and 2007 (Eurostat, 2010).



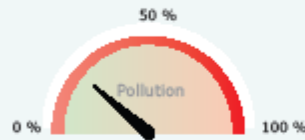
### Overexploitation — more sustainability needed

30 % of species are threatened by overexploitation (IUCN). For instance: 88 % of stocks are being fished beyond Maximum Sustainable Yields (ICES, 2008) and 46 % outside safe biological limits, which means that stocks may not be replenished (EEA, 2010).



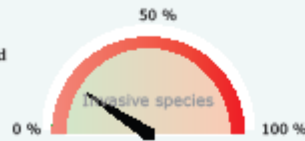
### Pollution — improvements in some areas

Despite improvements in some areas, 26 % of species are threatened by pesticides, and fertilisers like nitrates and phosphates (IUCN).



### Invasive alien species — an increasing phenomenon

22 % of species are threatened by invasive alien species (IUCN).

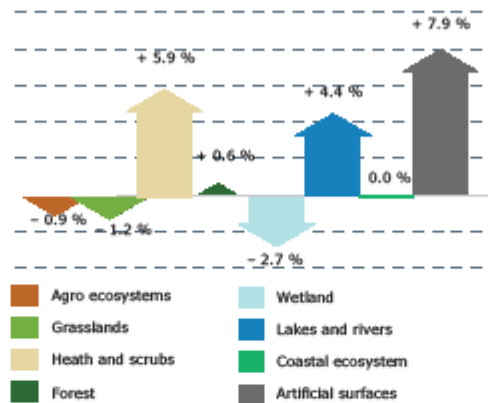


### Climate change

Shifts in habitats and species distribution are being observed, so is desertification. Climate change interacts and often exacerbates other threats.

## Ecosystems

### Changes in ecosystems between 1990 and 2006

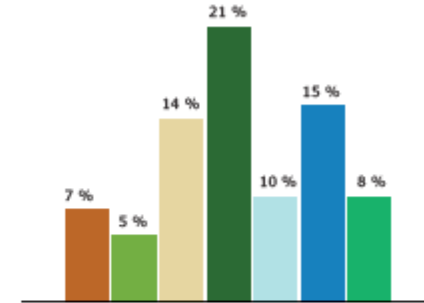


### Natural areas still being lost

The latest Corine Land Cover inventory (EEA, 2010) shows a continued expansion of artificial surfaces (e.g. urban sprawl, infrastructure) and abandoned land at the expense of agricultural land, grasslands and wetlands across Europe. Natural grasslands are still being turned into arable land and built-up areas. The loss of wetlands has slowed down (near 3 % lost in the last 16 years) but Europe had already lost more than half of its wetlands before 1990. Extensive agricultural land is being converted into forms of more intensive agriculture and for parts into forest.

Exploiting natural resources at current rates is steadily reducing biodiversity and degrading ecosystems. Simply designating protected areas is not enough to halt this decline. Biodiversity must be further integrated into other relevant policies (agriculture, fisheries, energy, transport, structural policies and development). To monitor progress and measure trends beyond 2010, the European Environment Agency and the European Commission have developed a 'baseline' — a snapshot of the current state of biodiversity to establish the evidence base necessary for stepping up EU action to address the global biodiversity crisis now. For further information please see [www.biodiversity.europa.eu](http://www.biodiversity.europa.eu).

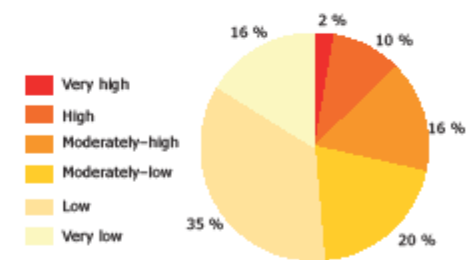
### Favourable conservation status of habitats



### Habitats in ecosystems — poor conservation status overall

The progress report for Article 17 of the EU Habitats Directive for the period 2001–2006 shows that the conservation status of species and habitats characteristic of the main ecosystems is poor. Depending on the ecosystem, the proportion of habitats in favourable conservation status is between 5 and 21 %.

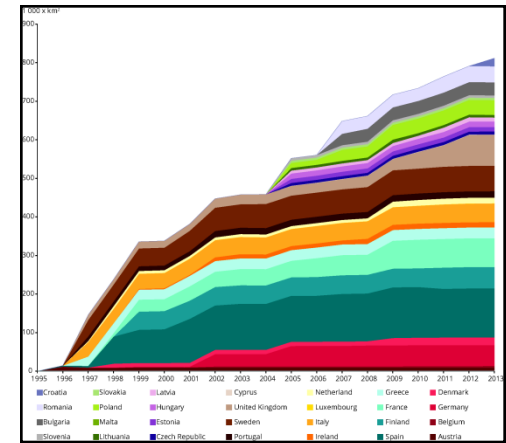
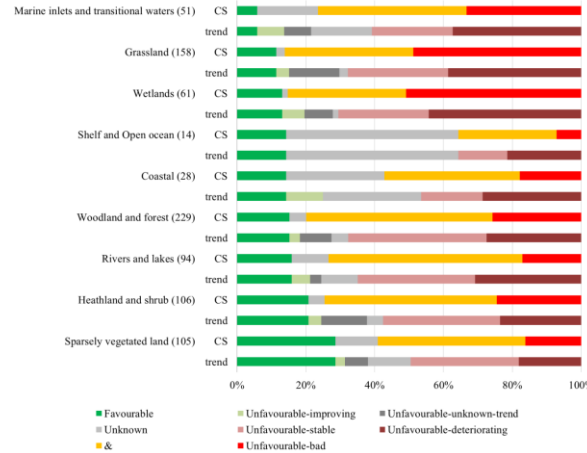
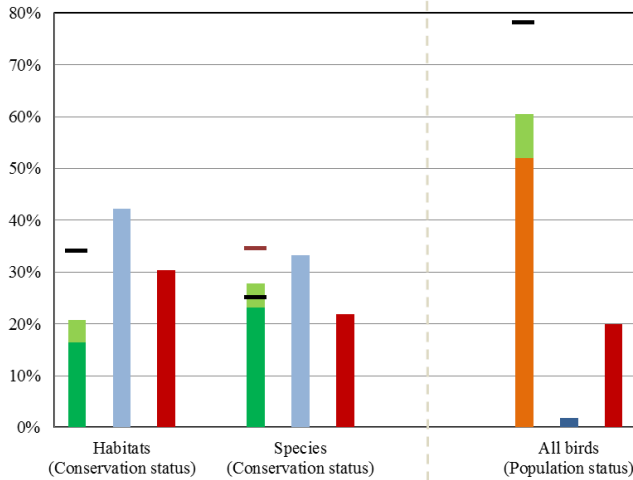
### Fragmentation in EU-27 (% of total area)



### Fragmentation threatens EU green infrastructure

The fragmentation of nearly 30 % of EU-27 land is moderately-high to very high due to urban sprawl and infrastructure development. Fragmentation affects ecosystem connectivity and their health and ability to provide services (EEA, ETC/LUSI, 2010).

# Identified trends since 2010



No significant change in status of habitats and species since 2010

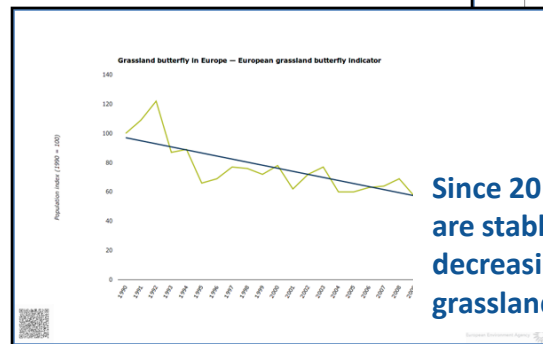
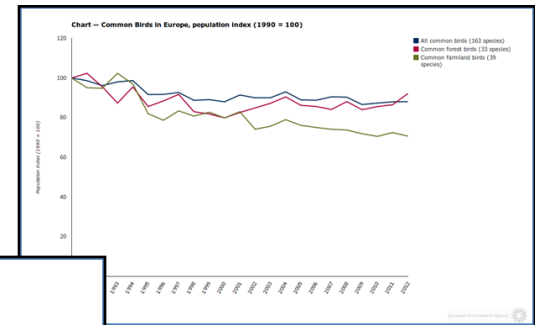
Grasslands and wetlands have the highest proportion of habitats with an unfavourable-bad and deteriorating status.

Network of Natura 2000 sites on land nearly completed; significant progress as regards marine;

Services	Ecosystems	Agro ecosystems	Forests	Grasslands	Heath and scrubs	Wetlands	Lakes and rivers
<b>Provisioning</b>							
Crops/timber	↓	↑	↑	↑	↑	↑	↑
Livestock	↓	↓	↓	↓	↓	↓	↓
Wild foods	↓	↓	↓	↓	↓	↓	↓
Wood fuel	↓	↓	↓	↓	↓	↓	↓
Capture fisheries	↓	↓	↓	↓	↓	↓	↓
Aquaculture	↓	↓	↓	↓	↓	↓	↓
<b>Regulating</b>							
Genetic	↓	↓	↓	↓	↓	↓	↓
Fresh water	↓	↓	↓	↓	↓	↓	↓
<b>Cultural</b>							
Recreation	↑	↑	↑	↑	↑	↑	↑
Aesthetic	↑	↑	↑	↑	↑	↑	↑

Status for period 1990-present: Degraded (Red), Mixed (Yellow), Enhanced (Green), Unknown (Grey), Not applicable (White)

No much change since 2010 – confirmed increasing trends of some provisioning services and decrease of services directly related to biodiversity (pollination)



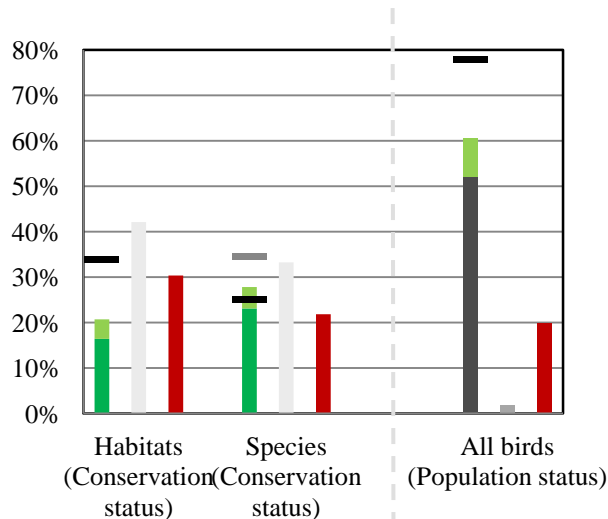
Since 2010, all common bird populations are stable except farmland birds still decreasing and forest birds increasing; grassland butterflies are still declining



# 2015 Mid-Term Review of EU 2020 Biodiversity Strategy

- **Policy Report** synthesising progress and identifying barriers and gaps for reaching the 2020 objectives
- **Background documents:**
  - Technical Assessment of EU Progress since 2011 (to be published on BISE)
  - Member States' contributions based on the 5th National reports to CBD
  - State of Nature in the EU Report

# Target 1: Fully implement the Birds and Habitats Directives

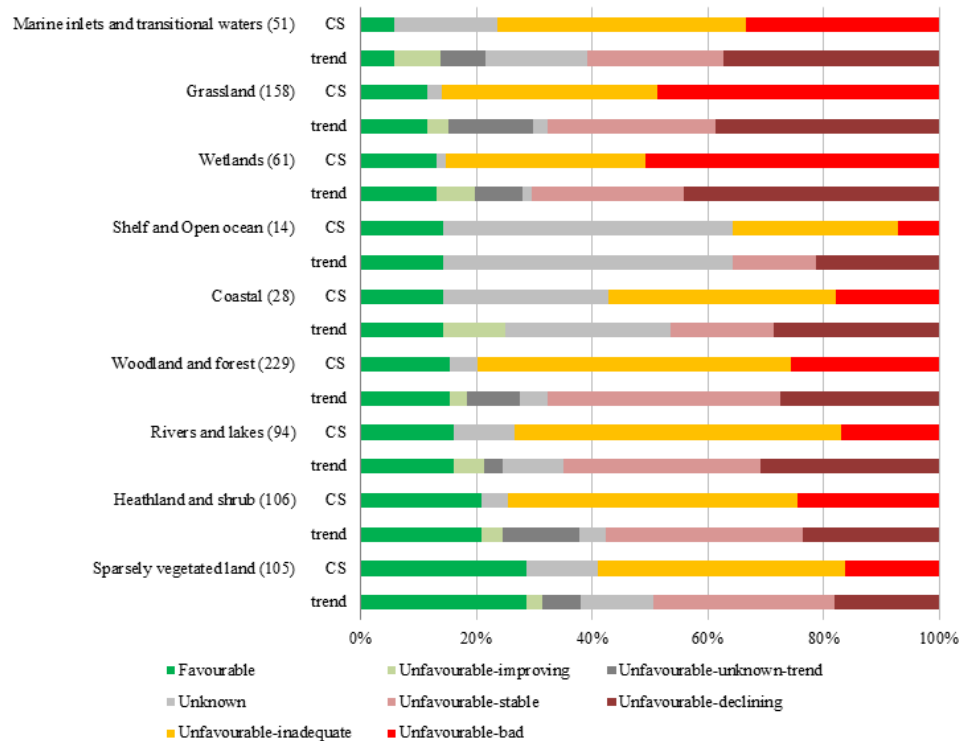


\*Rather 22% than 17% of species are likely to

- Overall status of species and habitats has remained relatively stable over the last 6 years
- Some significant improvements at local and regional levels
- Natura 2000 network largely completed for terrestrial habitats but need to ensure sites are efficiently managed
- Accelerated designation in the marine environment but large gaps remain



## Target 2: Maintain and restore ecosystems and their services



- Grasslands and wetlands have the highest proportion of habitats with an unfavourable-bad and deteriorating status.
- Not much change in ecosystem services since 2010 – confirmed increasing trends of some provisioning services and decrease of services directly related to biodiversity (pollination)

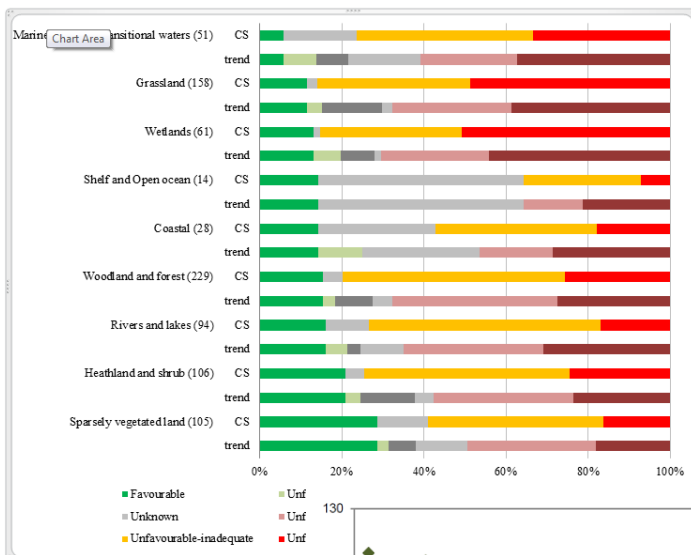
Figure 11 - Conservation Status (CS) and Trends of habitats per ecosystem type (MAES)  
– in brackets: n° of assessments



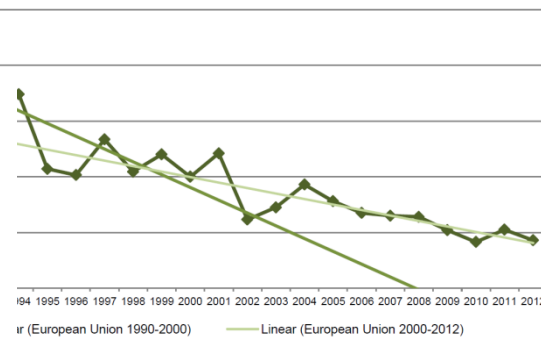
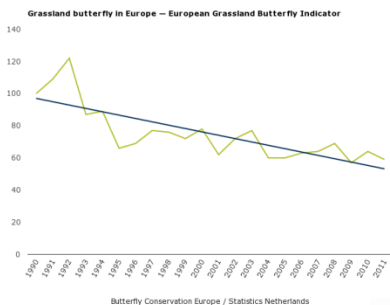


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Commission

# Target 3: Increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity



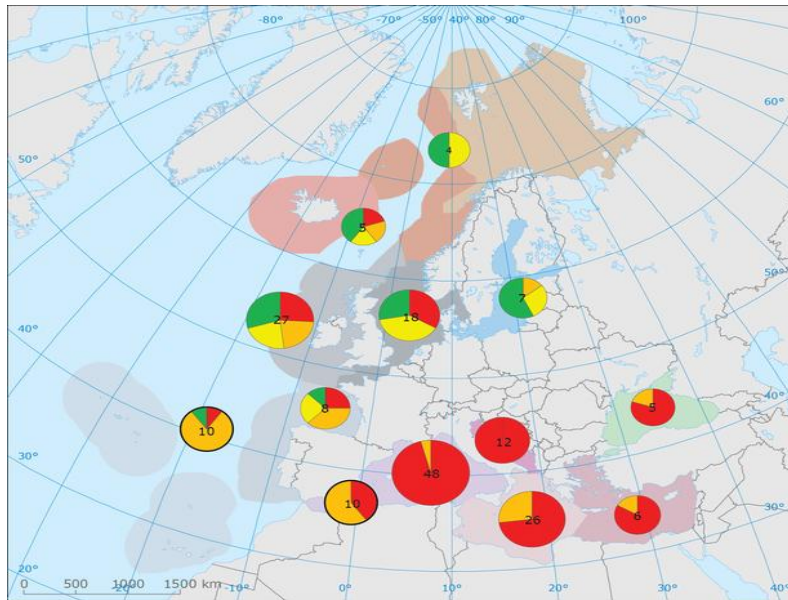
- Continuing decline in the status of forest and agriculture-related species and habitats, and of grassland in particular (cf. Report on State of Nature in EU)
- Farmland birds and grassland butterflies still declining





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# Target 4: Ensure the sustainable use of fisheries resources and achieve Good Environmental Status



Status of assessed fish stocks from regional seas around Europe, with respect to Good Environmental Status (GES). Status refers to fishing mortality (F) and reproductive capacity (SSB) criteria, as defined by the Marine Strategy Framework Directive



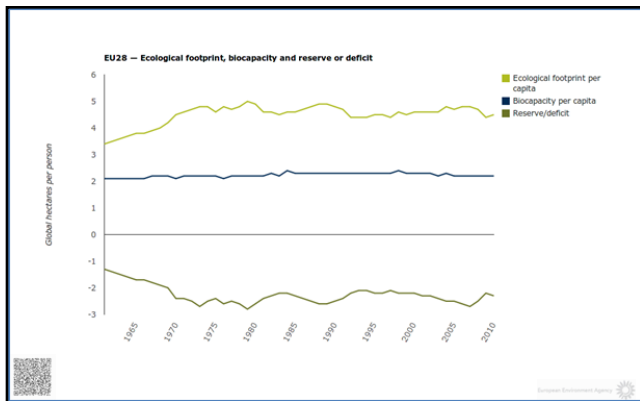
- Majority of EU assessed fish stocks remain overexploited and the EU will not deliver on MSY by 2015
- 4% marine habitats and species have achieved GES but 80% are unknown
- Only 9% marine habitats and 7% marine species are in favourable status;
- Considerable increase in Natura 2000 designation but still important gaps

## Target 5: Help combat invasive alien species



- 2015 entry into force of EU Invasive Alien Species Regulation  
Development of first list of IAS of Union concern to be adopted by MS later this year  
Ballast Water Convention not ratified yet  
Newly emerging concerns (e.g. increase in wildlife disease and release of alien macro-organisms for biological control)

## Target 6: Help avert global biodiversity loss



- EU is largest donor for biodiversity and considerable progress is made in increasing resources for global biodiversity
- Initial steps to reduce indirect drivers of biodiversity loss, including wildlife trade
- EU-28 footprint above its biocapacity
- Nagoya Protocol ratified in 2014, after adopting an EU Regulation



# Financing



- Further integration of biodiversity aspects into key EU financing instruments.
- Seizing existing opportunities.
- New tools/approaches: NCFF, tracking biodiversity-related financing in the EU budget

# Partnerships



- Cooperation enhanced through Natura 2000 Biogeographical Process
- Awareness raising through Natura 2000 Award scheme
- Engagement of private sector in Business and Biodiversity platform,
- Overseas partnership of (BEST)
- TEEB, and synergies with other conventions



# Strengthening of knowledge base



- Streamlining of reporting under the Nature Directives
- MAES instrumental in building the knowledge for the EU Biodiversity Strategy
- Indicator-based monitoring and reporting
- Access to information on BISE
- Support from Horizon 2020
- Still major knowledge gaps





**Thank you for your attention**