

Moving towards a restoration agenda: FACE info note on the EU MAES summary report

Background - MAES summary report:

Mapping and Assessment of Ecosystems and their Services (MAES) is an initiative of the European Commission and the EU Member States to increase our knowledge on ecosystems and their services in Europe.

Ecosystem services are the contributions of ecosystems to economic, social, cultural and other benefits that people derive from ecosystems. For instance, pollination, the provision of food, timber and clean air, water filtration, carbon sequestration and storage or nature-based recreation are all ecosystem services.

The MAES summary report for policymakers (SPM) provides a good overview of the trends in pressures on biodiversity and the condition of Europe's ecosystems. This report is available here: https://publications.jrc.ec.europa.eu/repository/handle/JRC120383 It presents an important ecosystem assessment covering the total land area of the EU as well as the EU marine regions. See Annex I for an overview of the organisation of the assessment.

Ecosystem services and hunting:

Ecosystem services are linked to hunting in different ways. For example, Cultural Ecosystem Services (CES) are non-material benefits people obtain from ecosystems, such as positive aesthetic or recreation experiences. Hunting, wild forest product harvesting, exercise, nature watching, relaxation and many other similar functions can be bundled within the concept of CES.

However, in general, CES have not been adequately valued or taken into account in policy and management decisions. This has resulted in the decline of ecosystem services and benefits such as access to nature, including from recreation.

From a hunting perspective, some work has been done to define an evaluation method for these services, for example, see (see Fagarazzi et al, $2021 - \underline{link}$). This is important because understanding the economic value of ecosystem services can implicate land use decision-making in the short and long term. Some work has also used the Payment for Ecosystem Services (PES) tool to hunting and wildlife management, which is a popular economic tool for the management of ecosystems (Papaspyropoulos, $2016 - \underline{link}$).

More information from FACE:

For further information, see FACE's overview on payments to ecosystem services: https://www.face.eu/sites/default/files/documents/english/payments for ecosystem services fi nal en 0.pdf

See also further work on a conceptual framework for assessing the vale of hunting: https://face.eu/sites/default/files/attachments/framework for assessing the economics of hunting final .en .pdf



With respect to hunting, Figure 1 below described an overview of the value of hunting and ecosystem services, adapted from the UK National Ecosystem Assessment (UK NEA, 2011)¹.

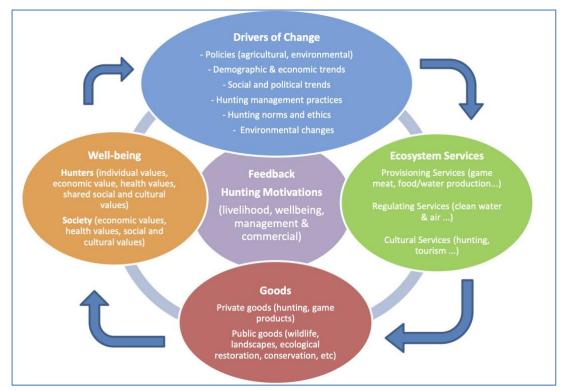


Figure 1: Overview of the value of hunting and ecosystem services, adapted from the UK National Ecosystem Assessment.

The above context to hunting is important when looking at the some of the findings of the MAES summary report, and in particular, how hunters can contribute to a broader restoration agenda.

Key messages - MAES summary report:

The following main conclusions of the MAES SPM report are relevant to FACE's focus on nature conservation and wildlife management:

- Pressures on ecosystems exhibit different trends.
- Impacts from climate change on ecosystems are increasing.
- Invasive alien species of union concern are observed in all ecosystems, but their impact is particularly high in urban ecosystems and grasslands.
- In the long term, air and freshwater quality is improving.
- In forests and agroecosystems, which represent over 80% of the EU territory, there are
 improvements in structural condition indicators (biomass, deadwood, area under organic
 farming) relative to the baseline year 2010 but some key bio-indicators such as tree-crown
 defoliation continue to increase. This indicates that ecosystem condition is not improving.
- Species-related indicators show no progress or further declines, particularly in agroecosystems.

¹ Emmett, B.A., Hails, R. and Maskell, L.C. (2011). UK National Ecosystem Assessment: Technical Report. UNEP-WCMC.



Another key message from MAES summary report is that the EU needs a better performing biodiversity observation network and more consistent ecosystem condition reporting. An EU-wide methodology to map, assess and achieve good condition of ecosystems will be delivered by the end of 2021.

A further key concern highlighted in the report relevant to the restoration agenda is that despite the wide coverage of environmental legislation in the EU, there are still large gaps in the legal protection of ecosystems. This has encouraged a greater focus on restoration within the EU policy agenda.

In terms of highlighting the issues on agricultural ecosystems, much more work is required particularly in the Common Agricultural Policy (CAP) implementation. The 7th report (2021) of the FACE Biodiversity Manifesto (BDM), which based on 484 initiatives undertaken by European hunters that contribute to biodiversity conservation, demonstrates how hunters actively conserve biodiversity. Hunters' actions are achieved via species and habitat management, research and monitoring as well as communication and awareness raising (link). While multiple actions are implemented, this BDM report shows that hunters invest considerable resources into species conservation and the restoration of wetlands, farmland and forest habitats.

With respect to the EU goal of "Restoring degraded ecosystems", through the maintenance and improvement of habitats as well as the inclusion of sustainable agriculture and forestry principles, hunters have undertaken actions aiming to restore, improve or maintain habitats in 207 case studies (BDM data, 2021 report).

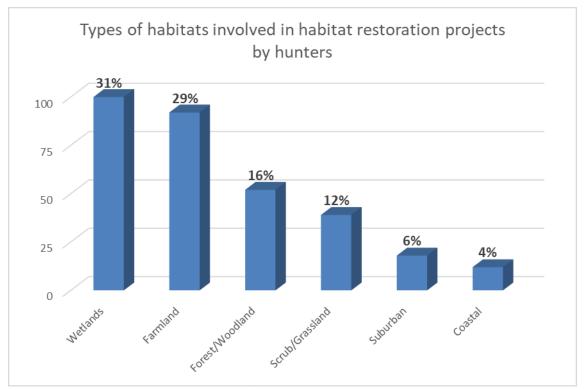


Figure 2. Types of habitats conserved/managed in BDM projects (2021 report) listed under the category "Habitat restoration".



Nature restoration under the EU Biodiversity Strategy for 2030 will include a strong focus on farmland habitats/ecosystems. In this context, it is essential that Member States ensure that the next CAP encourages farmers to provide more space for nature on farmland. With respect to the EU MAES report, Figure 3 provides a conceptual framework for comparing land use and trade-offs of ecosystem services. This shows that providing space for nature on farmland can deliver results.

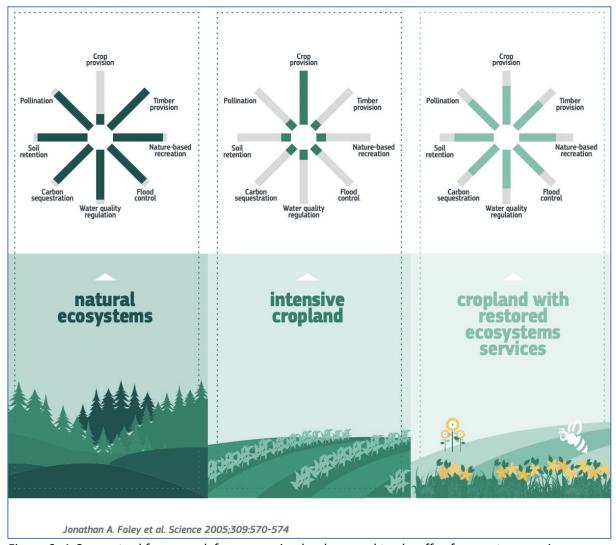


Figure 3. A Conceptual framework for comparing land use and trade-offs of ecosystem services.

IAS:

According to the MAES report, invasive alien species of union concern are observed in all ecosystems. Their impact is particularly high in urban ecosystems and grasslands. When considering habitats protected by the Habitats Directive, invasive alien species of union concern are most often reported by member states in coastal habitats, followed by forest and freshwater habitats.

The EU made substantial progress on IAS, through the adoption of the Regulation on Invasive Alien Species in 2014. European hunters are playing a key role in the eradication of IAS as shown in various BDM case studies.



For example, FACE's BDM highlights that most hunters' projects are typically involve monitoring and eradication of IAS carnivore species (such as the American Mink or the Raccoon Dog (*Nyctereutes procyonoides*), that are having a significant impact on ground nesting birds, such as the Common Eider (*Somateria mollissima*). Projects can also focus on research and eradication of other problematic invasive species such as the Copyu (*Myocastor coypus*) for example.

Ecosystem restoration - Support from rural people:

Most of Europe's biodiversity can be found in rural areas. New approaches to biodiversity conservation as identified in the MAES report should include mainstreaming nature protection outside protected areas, such as via other effective area-based conservation measures (OECM)². This can include hunting areas that maintain natural habitats and other flora and fauna as well as viable populations of hunted and non-hunted native species. Restoration must play a key role in the EU policy agenda.

From a more political perspective, the MAES report highlights that: "Preserving and restoring our ecosystem needs to guide all of our work. We must set new standards for biodiversity cutting across trade, industry, agriculture and economic policy." It also states that "ecosystem restoration will be essential to deliver win-win solutions for climate, biodiversity and human wellbeing by 2030". It highlights 10 key messages that need action. Above all, restoration must drive the EU policy agenda, which is positively captured in the Green Deal and the Biodiversity Strategy for 2030.

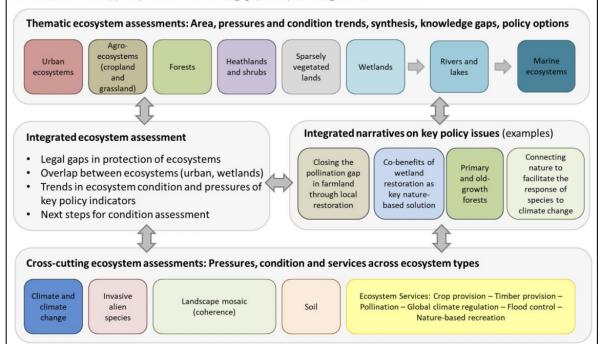
In general, more efforts are needed to bend the curve of biodiversity loss and ecosystem degradation and to put ecosystems on a path to recovery. As identified in the MAES report, the progress already made in certain areas such as pollution reduction, increasing air and water quality, increasing share of organic farming, the expansion of forests, shows that a persistent implementation of policies can be effective. These successes should encourage us to act now and to put forward an ambitious plan for the restoration of Europe's ecosystems. Europe's hunters will remain key partners in making this happen, as demonstrated by FACE's BDM data.

² See https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf and https://www.iucn.org/sites/dev/files/content/documents/recognising and reporting oecms - <a href="https://www.iucn.org/sites/dev/files/content/documents/recognising and recognising oecms - https://www.iucn.org/sites/documents/recognising/ oecms - https://www.iucn.org/sites/documents/recognising/ oecms - https://www.iucn.org/sites/documents/recognising/https://www.iucn.org/sites/documents/recognising/ oecms - <a href="https://www.iucn.org/sites/



Annex I: Organisation of the assessment

How was the assessment organised? The ecosystem assessment is designed in four main parts: 1) thematic ecosystem assessments, 2) crosscutting assessments, 3) an integrated assessment and 4) integrated narratives on key policy issues. The thematic ecosystem assessments describe the trends of the condition of different ecosystem types. The crosscutting assessments feed the thematic assessments with specific datasets but also provide a stand-alone analysis on their topic. The integrated assessment presents a summary of the different assessments. Concrete examples or story lines (integrated narratives) show how the knowledge generated by this assessment can support policies and existing gaps emphasising need for action.



How were the trends in pressures and ecosystem condition analysed? The different thematic ecosystem assessments used indicators to analyse trends in the pressures on ecosystems and in ecosystem condition. Every pressure and condition indicator used in this assessment has been analysed for short-term (since 2010) and long-term trends (before 2010). The assessment teams investigated the presence of upward (improvement) or downward (degradation) or no trends (no change). The analysis was based on relevance of the change (changes higher than 5% over 10 years) and statistical significance. Each indicator was also subject of a confidence analysis, to determine how reliable the data lend themselves to making statements about the trends in ecosystems.

Taken from the summary report: Mapping and Assessment of Ecosystems and their Services: An EU ecosystem assessment (pg.13): https://publications.jrc.ec.europa.eu/repository/handle/JRC123783