NEWSLETTER December 2021



Edito

2021 has been a special year for the European Topic Centre on Biological Diversity, and unexpected new challenges meant the prolongation of the Consortium by one year, before a full change towards a more integrative European Topic Centre in 2023. 2021 was nonetheless intense and diverse across many themes: advancing with long-standing actions in support of the implementation of the Nature Directives (Habitats Directive reporting, Natura 2000 network) and new projects towards the targets of the Biodiversity Strategy to 2030.

Indeed, there is an greater need for high quality data and enhanced knowledge to meet ambitions set at European level and, along with the European Environment Agency, the partners of the ETC/BD consortium have been working on the process to achieve.

To facilitate the implementation of targets as set by the European Strategy for Biodiversity 2030, such as ensuring an improvement of at least 30 % of habitats and species in unfavourable status, the effective protection of 30 % of both the EU's land and sea area, and the restoration of degraded ecosystems across land and sea, the ETC/BD has been working actively with the European Environment Agency and the European Commission to prepare for this great task ahead of us through building on the experience and results of the Nature Directives to achieve these targets.

As in all, there is a lot of work for the coming year of a continued ETC/BD, and 2022 will certainly keep us busy!

Stéphanie Hudin, Deputy Manager (European Topic Centre on Biological Diversity)

Focus on IUCN World Conservation Congress

Organised every four years by the IUCN, the 2020 World Conservation Congress was finally held from September 3 to 11, 2021 in Marseille, France. This first major environmental event to take place in a hybrid format brought together nearly 10 000 registered participants, around 6 000 on site and 3 500 online.

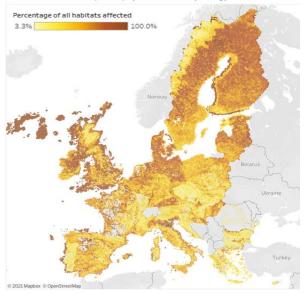


The IUCN members adopted 137 policy recommendations and resolutions on the various issues of biodiversity as well as 12 governance motions, and elected Razan Al Mubarak (UAE) as the new IUCN President, the second woman to chair IUCN in 72 years. The Congress final declaration, "the Marseille Manifesto", calls for the protection of nature to be integrated into post-COVID economic recovery plans, to adopt an ambitious and effective new global biodiversity strategy at COP15 Biodiversity, and to urgently tackle the interconnected climate and biodiversity crisis, while the 2021-2024 IUCN global program will include an addendum addressing the broader implications of the pandemic and human health in the "Nature 2030 Agenda". ETC/BD was an active participant, both online and on site, including a contribution to the online session on Natura 2000 organised by the European Commission.

Nature Directives

Reporting under the Nature Directives

Pressures on habitats (Art. 17) by Modification hydrology



As a part of preparation for the next cycle of the nature reporting, 2021 has focussed on reviewing the reporting cycle 2013-2018 with a view to improving the reporting mechanism for 2019-2024.

Progress has been made on reviewing the reporting formats, which have been discussed with Member States in the Expert Group on Reporting under the Nature Directives and which have been presented to Habitats Committee for comment in November. The format will be finalised in 2022. Work has also commenced on reviewing part of the guidelines, namely the structure and functions parameter and the exceptions to the list of population units. The review of the guidelines will begin in early 2022: the updated field-by-field section for both Articles 12 & 17 will be finalised towards the end of 2022 and the second part on definitions being finalised towards the start of 2023.

Based on the reporting data from 2013-2018 period, ETC/BD has undertaken a series of test analyses, the objective of which was to explore options for further exploitation of the nature reporting data from 2013-2018 and crosslinking them with data related to other targets of the EU Biodiversity Strategy.

Within this scoping analysis, ETC/BD looked at options for integrating the nature reporting data with data related to river connectivity and free flowing rivers, and to high biodiversity features in agricultural landscapes. With the objective to produce spatially explicit outcomes, the scoping analysis on pressure hot spots was performed. The finalisation of this work is expected in 2022.

The ETC/BD also finalised the first stage of work on ecological grouping. The objective is to identify groups of habitats and species related to main biodiversity drivers and/or linked to policies impacting the EU's biodiversity. The work will continue in 2022, when a public consultation is foreseen.

In October, European Topic Centre on Biological Diversity (ETC/BD) and European Topic Centre on Inland Coastal and Marine Waters (ETC/ICM) had a joint seminar bringing together experts from both ETCs and EEA. The objectives were to exchange on various aspects of assessments of the status under Habitats and Water Framework Directives and to discuss a possibility of linking water and nature data in elaborating a water biological indicator.

Natura 2000

Natura 2000 Standard Data Form (SDF)



In 2021, the ETC/BD prepared the revision of the Standard Data Form (SDF) used by the Member States to transfer data on Natura 2000 sites to the European Commission. In several meetings with the Expert Group on Reporting, changes to the SDF fields have been discussed according to a list of rationales such as providing information for analysing the contribution of the network to conservation status (needed for HD, BDS2030), management effectiveness and streamlining with other data-flows (e.g. Articles 17/12 reporting, PAFs, derogations reporting, IAS regulation, MSFD, etc.). Next steps in the revision process are to improve the explanatory notes and prepare a final draft for approval by the Habitats Committee.

SEBI indicators

The EEA has been working, over the past few months, on a new template for all the 122 indicators that are maintained by the Agency. These indicators are organised by "set" covering 13 environmental topics, from Air pollution (APE, Air Pollutant emissions) to Transport (TERM, Transport and environment reporting mechanism), including Biodiversity Ecosystems through the SEBI (Streamlining European biodiversity indicators) set. All these indicators will then be presented in a harmonised manner, including a summary informing about the indicator trend, and addressing their respective progress at both EU level and at the country level, for EU, EEA members and EEA cooperating countries. ETC/BD is providing support to the EEA in reviewing the SEBI set, according to the new indicator template and to the most recent data available.

SEBI 007 (Nationally designated terrestrial protected areas in Europe) was updated according to the consolidated Nationally designated areas dataflow (CDDA). SEBI 008 (Natura 2000 sites designated under the EU Habitats & Birds Directives) now shows the most recent statistics on the N2000 network, following the withdrawal of the UK in 2020. SEBI 017 and 018 (Forest growing stock & Forest deadwood) are now based on statistics from the last State of European Forest Database from FOREST EUROPE, showing harmonized data for the year 2015.



Finally, SEBI 006 (Livestock genetic diversity) will benefit from its first update since 2010, using the most recent data on local breed risk status from the Domestic Animal Diversity Information System of the FAO, for cattle and sheep breeds within the EU Member States.

The harmonised and updated indicators will be available online in 2022:

https://biodiversity.europa.eu/track/streamlined -european-biodiversity-indicators

Ecosystem Assessments

Support to the EU Pollinators Initiative

The ETC/BD published in 2020 a Technical paper proposing a ranking of habitat types from the Annex I of the Habitats Directive, according to their importance for pollinating insects. Following this work, 2021 was dedicated to improve the classification of typical plant species for Annex I habitat types regarding their importance for pollinating insects (used as food source), but also to analyse the spatial distribution of the most important habitat types within the EU. As such, about 900 new plant species were additionally classified according to their importance for pollinating insects (83 % of all typical plant species identified), allowing for a new ranking of all habitat types within their respective habitat groups ('Natural and semi-natural grassland formation', 'Sclerophyllous scrubs habitats', 'Temperate heath and scrubs habitats', 'Raised bogs, mires and fens habitats'. 'Coastal sand dunes and inland dunes 'Coastal and halophytic habitats', habitats', 'Freshwater habitats' and 'Rocky habitats and caves').

As for the mapping analysis, the experts have created a specific weighting process, that consider both the number of habitat types per grid cell and their respective importance for pollinating insects. When showing the spatial distribution of all habitat types from all eight habitat groups, the map reveals that mountainous areas more often provide a higher density of habitats important for pollinating insects. The Alpine region in particular is a huge hot spot of habitat types comprising a lot of plant species that are important for pollinating insects. In contrast, lowlands areas provide less diversity in plant species. Some areas even show no habitat types important for pollinating insects, which is in many cases connected with an intensive land use.

EUNIS

EUNIS habitats

The revised EUNIS habitat groups were published in October with the revised habitat groups: coastal, grassland, forest, heathland, sparsely vegetated and vegetated man-made habitat groups. Along with the marine habitat group published in 2019 this brings us to 7 habitat groups that have been fully revised and published online as part of the EUNIS revision project, which has been underway since 2012. The revision includes crosslinks to other typologies; Annex I Habitats Directive habitats and the European Red List of habitats, and the revised groups can also be linked to the Resolution 4 habitat typology under the Council of Europe Emerald Network of protected areas through crosslinks with EUNIS 2012. The excel files of the revised groups are accessible here.

2022 will focus on the remaining habitat groups: inland waters, wetlands and habitat complexes.

The inland waters habitat group revision to level 3 was completed by consortium partners Wageningen Environmental Research (WENR) and the Muséum national d'Histoire naturelle (MNHN) along with the European Topic Centre on Inland Coastal and Marine Waters (ETC/ICM). The remaining work for 2022 will be the finalisation of crosswalks to other habitat typologies and to describe habitats at level 4 with associated biological communities (fish, macroinvertebrates, phytoplankton, macrophytes and benthic algae).



Mapping of habitat groups has continued with consortium partner WENR taking the lead in producing maps for most habitat groups:

distribution, suitability and probability maps. The latest set of maps produced are probability maps for marine saltmarsh habitats and sparsely vegetated habitats.

Invasive Alien Species (IAS)

Based on distribution data from reporting under the IAS regulation and the Habitats Directive, a report prepared by the ETC/BD consortium partner Environmental Agency Austria (EAA/UBA) investigates where invasive alien plant species and habitats important for pollinators coincide. The preliminary results provide some insight into possible risks for pollinators and the pollinating service at a coarse scale.



Vespa velutina nigrithorax, Didier Descouens, Jardin des Plantes de Toulouse, France https://commons.wikimedia.org/wiki/File:Vespa velutina nigrithorax MI-INT.jpg

Nationally Designated Areas (CDDA) reporting

The ETC/BD supports the EEA activities for implementing and improving the harvesting for the Nationally Designated Areas (CDDA) reporting. Already for the next reporting, spring 2022, the new version of Reportnet 3.0 will be used by the countries. Furthermore, the improvement of content and structure will be discussed during the coming year. The goal is to make the CDDA fit for underpinning indicators on protected areas and strict protection as well as on OECMs (Other effective area-based conservation measures) according to the criteria laid out in the European Commission's guidelines on protected areas.

News from EEA and EIONET

Towards an Eionet modernisation

The European Environment Information and Observation Network (Eionet) is a partnership network of the European Environment Agency (EEA) that includes 38 member and cooperating countries. The EEA is responsible for developing Eionet and coordinating its activities together with National Focal Points (NFPs) in the countries.

Following the EEA-Eionet (European Environment Information and Observation Network) Strategy for 2021-2030, this knowledge network is evolving to become more flexible and innovative. This evolution aims to better connect country-level and European level expertise. Numerous tools are in development to support this network, of which the two main pillars are the coordination of the data flow and knowledge co-creation.

The Eionet relies also on the active participation of its members, and the Eionet groups contribute actively to EEA-Eionet Activities by working as facilitators between European and national level, as well as ensuring a two-way sharing of knowledge and information. The Eionet groups, who will replace the National Reference Centres (NRCs), are an important mechanism for the implementation of the EEA-Eionet Strategy 2021-2030, and the Member States representatives number of tasks ranging have a participation in workshops and seminars, in which the participants are expected to share examples of good practice, to sharing the priorities of the group's work and connecting to relevant national organisations and networks, ministries, climate advisory bodies and research bodies.

These working groups are currently being restructured and the Member States are called to nominate their representatives to the two different Eionet groups linked to Biodiversity and Ecosystems, by the end of the year. The newly formed groups will be effective from the 1st January 2022.

News from our partners

Joint Nature Conservation Committee (JNCC)

JNCC has published the 2021 update of the UK Biodiversity Indicators – see www.jncc.gov.uk/ukbi for details.



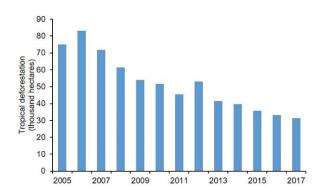
A new experimental statistic has been released that will act



as an indicator of the global environmental impacts of UK consumption, alongside a globally relevant interactive dashboard providing data for many other countries too. Results estimate the hectares of deforestation, the biodiversity loss and the scarcity weighted water use associated with consumption, alongside a range of other impact types. The dashboard allows users to visualise and interact with the data, for example by breaking it down to see results for specific commodities and producer countries of interest. The work to produce the indicator was funded by Defra, with JNCC leading on its development, and analyses undertaken by the Stockholm Environment Institute at the University of York.

Additional support towards developing the dashboard was also provided by Trase and the GCRF Trade Hub. To find out more, take a look at the <u>indicator</u> itself, the <u>dashboard</u> and the technical documentation.

Area of tropical deforestation associated with UK consumption (hectares)



Notes: estimates refer to tropical and subtropical deforestation as a result of crop, cattle-related, and timber commodities only.

Source: calculated via application within the IOTA (Input Output Trade Analysis) framework (Croft et al, 2018) using data from Exiobase; the Food and Agriculture Organisation of the United Nations; and Pendrill et al., 2019a, 2019b, 2020.

Results for other impact metrics are presented on the <u>indicator webpage</u>.

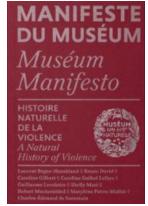
Muséum national d'Histoire naturelle (MNHN)

The Museum has just published its 5th manifesto: **A natural history of violence**.

We have all felt the pain and torment that are associated with violence. But what is really behind the term?

This manifesto pro-vides some answers through various scientific disciplines such as zoology, ethology, anthro-pology, history and prehistory, and even social psychology.

On the one hand, the human species belongs to the most violent group of mammals, the primates;



on the other hand, the rate of lethal civil violence in Western Europe has never been so low... Can we really compare all forms of violence? What are the natural origins of violence?

Drafted by a committee formed in 2021 at the initiative of **Bruno David** (paleontologist, biologist, and President of the Muséum national d'Histoire naturelle). The committee was chaired by **Guillaume Lecointre** (zoologist, systematician and professor of the MNHN). Authors: **Laurent Bègue-Shankland**, **Caroline Gilbert**, **Caroline Guibet Lafaye**, **Shelly Masi**, **Robert Muchembled**, **Marylène Patou-Mathis**, **Charles-Édouard de Suremain**.

Publications

ETC/BD Technical Papers and Working papers

ETC/BD Technical paper 1/2021: Revision of the EUNIS inland water habitat group - Outcome of the expert workshop 16th March 2021

As part of the EUNIS habitats revision, a workshop was held on March 16th 2021, organised by the EEA, ETC/BD and ETC/ICM, to further progress with the revision of the inland water habitat group.

18 experts from 12 different countries and 16 different universities and national environmental agencies across Europe attended online bringing expertise from both the Habitats Directive and the Water Framework Directive as well as specific freshwater habitats and biological communities. The outcome of discussions held in that workshop are summarised in the report Revision of the EUNIS inland water habitat group - Outcome of the expert workshop 16th March 2021

The ETC/BD and its predecessors have produced many reports over the past 25 years. A selection of these reports is available on our website in the ETC/BD Technical papers and Working papers section.

ETC/BD reports are also available on Zenodo, the open-access European repository, in a dedicated community curated by EEA: the European topic centre knowledge hub.

Other news

The Marie-Claire Cronstedt Price 2021 has been awarded to the botanist Mora Aronsson for his deep commitment to Swedish botany and biotope protection and for his grassroots edu-



cational efforts on flora and nature conservation. The price was awarded by King Carl XVI Gustaf at WWF's autumn meeting on 22 October at Ulriksdal Castle.

Mora Aronsson has a degree in plant ecology, plant systematics and Quaternary geology, mainly from Stockholm University. For 10 years he was at the Swedish Royal Museum of Natural History's herbarium in parallel with his education. For 30 years, he has been working for SLU's (Swedish University of Agricultural Sciences) Species Databank as a vascular plant

expert - now with a lot of focus on increasing knowledge about invasive alien plants.

The winner has had a great NGO involvement from the late 1970s in the field biologists and later in botanical associations, as chairman of the Stockholm and Uppsala associations and the nationwide Swedish Botanical Association. He has shown in an exemplary way that we can combine professional development work in nature conservation, on a scientific basis, with a deep non-profit commitment and educational efforts at grassroots level.

The current European Topic Centre on Biological Diversity (ETC/BD) is a consortium of 11 partner organisations led by the Muséum national d'Histoire naturelle (MNHN) under a framework partnership agreement with the European Environment Agency (EEA) which runs from January 2019 until the end of 2022.

MNHN Ecologic ILE-SAS JNCC NATURALIS NCA-CR S4E SLU UBA URJC WENR



This newsletter is produced twice a year.

If you have any contributions for the next issue, please forward to Muriel Vincent (muriel.vincent@mnhn.fr)

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