Seirbhís Leabharlainne 7 Taighde Library & Research Service

L&RS Note

EU Nature Restoration Law

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In advance of a Statement on the proposed Nature Restoration Law at 13:44 on 07 March 2024 in Dáil Éireann, the Library & Research Service is pleased to provide members with the following *Note* on the topic.

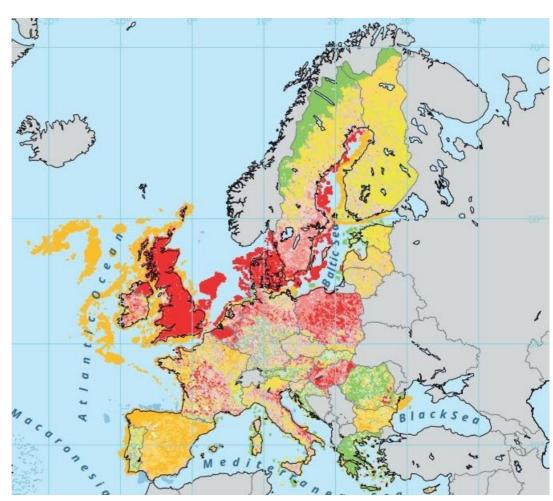


Context – Catastrophic Worldwide Declines in Nature

Globally, natural areas are under severe pressure due to human activity, with the situation worsened by the impacts of climate breakdown. This is true in the EU as well where, despite some improvements, there has not been substantial progress in halting biodiversity loss and nature destruction. Currently, 81% of habitats and 63% of species that are protected under the Habitats Directive have a predominantly unfavourable conservation status. Only 15% of habitats and around 27% of species have a good conservation status at EU level. In this context, it is clear that current nature protection is insufficient in the EU and that significant additional efforts are urgently needed to reverse the current trends and deliver net benefits to nature, society and the economy.

Several recent lines of evidence suggest that **global biodiversity loss is even more severe than currently recognised**. One study suggests biodiversity decline is much higher than previously thought, with 48% of species declining toward extinction, another finding that supposedly protected areas are being threatened by cropland expansion and many more documenting, for example, the imminent extinction wave in Madagascar, half a century of rising extinction risk of sharks and rays, and the collapse of amphibian populations. All of these studies were published in 2023, and represent a tiny fraction of the overwhelming evidence that nature is in dire straits and requires immediate, large-scale intervention to avert extensive species extinction.

Spatial distribution of habitat conservation status at Member State level represented in 10x10 km grid. Green indicates habitats in good condition and yellow and red indicates poor and bad condition, respectively. (Source: EEA <u>2020</u>, p.45)



How is Ireland doing?

Ireland's biodiversity is not in good condition. Data from the National Parks and Wildlife Service (NPWS) states that **Ireland is also suffering widespread habitat destruction and nature loss**. <u>Ireland's 6th National Report to the Convention on Biological Diversity (2019)</u> states that "91% of listed habitats were assessed by the Article 17 report as being in "Unfavourable Conservation Status" with 31% in a declining condition and 16% in an improving condition", with about 50% of habitats showing a trend of declining quality.

Birdwatch Ireland <u>reported</u> in 2022 that "25% of Ireland's regularly occurring bird species are in severe decline with an additional 37% showing moderate declines. **All together 63% of Ireland's bird species are in serious trouble**", and more recently in 2023 that <u>Irish Hen Harriers are</u> "closer to extinction" than ever before.

Additionally, the European Commission has referred Ireland to the Court of Justice of the European Union for its failure to fully implement environmental legislation. A recent example of this was on June 29th 2023, when the Court of Justice of the European Union issued its judgement in the case of C-444/21 EU Commission v Ireland - 2021/03933, known as the Measures Case. Described as a "damning indictment of Ireland's failure to protect nature" by the Irish Wildlife Trust, the judgement found that Ireland had failed to designate 217 of 423 sites of Community importance as Special Areas of Conservation (SACs); neglecting to set "site-specific detailed conservation objectives" (SSCOs) at 140 sites; and failing to establish necessary conservation measures to maintain or restore a favourable conservation status on species and habitats.

Water Quality

Water quality in Ireland's rivers, lakes and groundwater is of particular concern in Ireland, not least because of its **implications for retention of our Nitrates Directive Derogation**. The EPA report, *Water Quality in 2022: An Indicators Report*, found "no significant improvement in the biological quality of our rivers or lakes in 2022; improvements are happening in some areas but these are offset by declines elsewhere." The report found significant sources of nitrogen pollution from agricultural fertilisers and manures have increased in rivers and groundwater in 2022. Additionally, phosphorus levels, mainly from agricultural runoff and wastewater discharges, are generally stable but still too high in many rivers and lakes. These pollutants can degrade biodiversity, and the report identified ecological damage from these pollutants in Glashaboy Estuary (Cork), Wexford Harbour, Castletown Estuary (Louth), Upper Barrow Estuary (Kilkenny) and Corock Estuary (Wexford).

What's driving nature loss?

Many factors are driving the loss of Irish habitats, species and natural spaces, with the <u>EPA</u> <u>identifying</u> the top five pressures as:

- Agricultural activity,
- Alien & invasive species,
- Conversion of vegetated land to built land,
- Extraction of resources (e.g. peat, quarrying),
- Forestry

A common theme of these pressures is land use change; agricultural land becomes more intensively farmed, vegetation cover changes due to invasive species, farms and greenspaces are developed for housing, peat is mined away, etc.

Is there any good news?

There have been **some conservation success stories in Ireland**. The National Biodiversity Data Centre lists <u>several recent examples</u> of successful efforts to bring species back from the brink of extinction in Ireland. The Curlew, which was thought to be heading for extinction by 2025¹, **has seen its numbers rise thanks to years of dedicated conservation efforts from the <u>Curlew Conservation Programme</u>. The population of Red Squirrels, severely impacted due to the invasive Grey Squirrel, has increased thanks to the <u>recovery</u> of the Pine Marten,** showing that protecting one species can have positive spill over effects on others. However, despite these good news stories, the **overall situation is poor**.

Ireland's 4th National Biodiversity Action Plan

In the face of this crisis of biodiversity loss, successive Irish governments have introduced policy measures to address the issue. Of note are the <u>National Biodiversity Action Plans</u> (NBAPs), which endevour to deliver transformative changes required to the way in which nature is valued and protected in Ireland. The <u>4th NBAP (covering the period 2023-2030)</u> was <u>published</u> on 25th January 2024 and is significant in a number of ways. It is the **first NBAP to be backed by legislation**², with **legal requirements for public bodies** to the objectives and targets in the 4th NBAP.

Why should we care? Why conserve nature?

Natural spaces that are rich in biodiversity are not just nice to have, they provide a multitude of critically important services that enable human health and wellbeing, as well as providing the foundation for economic prosperity. Examples of what these **ecosystem services** give to society include:

- Provisioning services: e.g. wild foods, timber, clean air, fresh water, medicinal compounds
- Regulating services: e.g. soil fertility, pest control, flood mitigation, crop pollination, air purification, coastal defences, carbon storage & sequestration
- Cultural services: outdoor recreation areas, culturally important sites

When ecosystems are degraded, they stop providing these services so **nature restoration can be seen as an economic investment that yields a return**. The EU estimates that for <u>every €1</u> <u>invested into nature restoration, this adds €8 to €38 in benefits to society</u>. This view is shared by the European Central Bank (ECB). Frank Elderson, member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, has stated that "<u>Humanity needs</u> <u>nature to survive</u>, <u>and so do the economy and banks</u>. <u>The more species become extinct, the less</u> <u>diverse are the ecosystems on which we rely. This presents a growing financial risk that cannot be</u>

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¹ Curlew conservation programme annual report-2022 - NPWS

² The Wildlife (Amendment) Act 2023 introduced a new public sector duty on biodiversity. The legislation provides that every public body, as listed in the Act, is obliged to have regard to the objectives and targets in the National Biodiversity Action Plan. See https://www.npws.ie/legislation for further details.

<u>ignored</u>". He outlined how nature loss poses a serious risk to humanity as it threatens, *inter alia*, food supplies, medicines, clean water, timber, minerals, etc. The ECB found that **nearly 75% of all bank loans in the euro area are to companies that are highly dependent on at least one ecosystem service**. This means that these companies depend on ecosystem services to continue producing their goods or providing their services.

Irish examples of the value of nature

In Ireland, the value of different ecosystem services has been estimated by a number of different studies³. The Pollival project estimated that the value of pollination to home-produced crops in Ireland was estimated to be €20–59 million per year, while the ESManage project estimated that, on average, Irish people would be willing to pay between €85 and €108 per household per year to ensure our rivers were restored to a level compliant with the Water Framework Directive. Teagasc has estimated the annual value of forest biodiversity is estimated to be €68 million. Additionally, ecosystem services are not limited to rural areas; the ESRI has found that nearby urban green spaces can boost house prices by 7%-9%, with one study estimating that Dublin's parks have a value of €3.4bn capitalized into the nearby housing stock.

The Nature Restoration Law

What are its aims?

The Nature Restoration Law seeks to set multiple binding restoration targets and obligations across a broad range of ecosystems, including forests, agricultural land, rivers, marine habitats and even urban areas. In total, by 2030 these nature restoration measures should cover at least 20% of the EU's land and sea areas, and all ecosystems in need of restoration by 2050. Member States would be required to develop national Nature Restoration Plans to achieve these targets, with these plans being assessed by the Commission to ensure compliance.

Why is it necessary?

Despite the EU having legislation to protect nature, as noted above **nature is globally imperiled**. These biodiversity and ecosystem declines are degrading the <u>long-term provision of ecosystem services</u> essential to human life and to effective climate action. In this context, and in line with the <u>EU biodiversity strategy for 2030</u>, the European Commission committed to developing an ambitious <u>EU nature restoration plan</u>. A core element of this plan is the **proposal for legally binding EU nature restoration targets** to restore degraded ecosystems, i.e. the 'Nature Restoration Law', which was tabled on 22 June 2022.

What happened next?

After its proposal by the Commission in 22 June 2022, the proposed Law was examined by the European Parliament and European Council.

³ The Irish Natural Capital Accounting for Sustainable Environments (INCASE) Project compiled a comprehensive list of Irish ecosystem service valuations (see P.210 of final report)

European Council

On 20th June 2023, the European Council <u>reached an agreement</u> on the general approach to the Nature Restoration Law. The Council (**including Ireland**) agreed that Member States would put in place restoration measures that bring at least 30% of habitats in terrestrial, coastal, freshwater and marine ecosystems that are not in good condition, into good condition by 2030. This would apply to at least 30% of the area of the habitat types that are deemed not in good condition, as opposed to the total area for each habitat group, as initially proposed by the Commission. Member States would however set restoration measures on at least 60% by 2040 and on at least 90% by 2050 of the area of each habitat group that is not in good condition. Member States added an exception for marine areas that have soft sediment habitats⁴. For soft sediments, Member States will be able to apply a lower percentage for the targets and the 2030 target would not apply.

Additionally, **the Council softened the targets for rewetting of peatlands**, to take account of the fact that some member states are disproportionately impacted by these obligations. The Council set to restore 30% of drained peatlands under agricultural use by 2030 and 50% by 2050, with the possibility for member states that are heavily affected to apply a lower percentage.

European Parliament

The Nature Restoration Law faced considerable resistance in the European Parliament, particularly from politicians aligned with the European Peoples Party (EPP) and agrilobby groups. The EPP was accused of spreading disinformation about the Law, stating it will reduce food security. However, these claims have been refuted in an Open Letter signed by more than 3,000 scientists, who note that the "claims not only lack scientific evidence, but even contradict it". The proposed Law was voted against in Agriculture and Fisheries Committees, and MEPs in the Environment Committee were tied 44-44 on adopting a position. The text of the Law was adopted by the Parliament in plenary on 12th July 2023, in a knife-edge vote.

Council and Parliament agree a compromise text

On 9th November 2023, the Council and European Parliament <u>reached a provisional political</u> <u>agreement</u> on the Nature Restoration Law. This compromise text included **an emergency brake**, i.e. that the provisions of the Law could be suspended related to agricultural ecosystems for up to one year in the event of unforeseeable and exceptional events outside of the EU's control and with severe EU-wide consequences for food security.

On February 27th 2024, the <u>European Parliament adopted</u> this compromised text of the <u>EU Nature Restoration Law</u>, with a larger proportion of MEP voting in favour of the Law compared to the July 2023 vote. The new law sets a target for the EU to restore at least 20% of its land and sea areas by 2030 and all ecosystems <u>in need of restoration</u> by 2050. It now also has to be adopted by Council, before being published in the EU Official Journal and entering into force 20 days later.

⁴ Soft Seiment habitats consist of sandy and/or muddy expanses in open water.

What does this mean for Ireland?

The Commission's Impact Assessment estimates that to comply with the Law's ambitions, between 5,493 – 6,297km² of Irish land will be affected. This equates to between 7.8% – 8.9% of our land area. An important factor to consider is that Ireland is already trying to conserve 11,396 km² of land (13.5% of land area) designated as Natura 2000 sites under the Birds and Habitats Directives, though the conservation status of many of these sites is unfavourable. Therefore, proper rehabilitation, conservation and management of Natura 2000 sites offers a substantial opportunity to contribute to the goals of the Law, at least to 2030.

What does it say about agricultural lands and rewetting?

<u>Article 9</u> of the Law deals with restoration of agricultural ecosystems. It seeks to:

- Increase grassland butterflies and farmland birds,
- Increase the stock of organic carbon in cropland mineral soils, and the share of agricultural land with <u>high-diversity landscape features</u>,
- Restore drained peatlands under agricultural use

Much of the commentary surrounding the Law has focused on the latter point of restoring drained peatlands, i.e. rewetting peatlands. **Concern has been expressed about what rewetting will mean for farming on these lands**. As noted above, the position of the European Council calls for Member States to "put in place restoration measures for organic soils in agricultural use constituting drained peatlands". Those measures shall be in place on at least:

- 30% of such areas by 2030, of which at least a quarter shall be rewetted;
- 40% of such areas by 2040, of which at least half shall be rewetted;
- 50% of such areas by 2050, of which at least half shall be rewetted;

Additionally, the text defines "rewetting peatland" as the process of changing a drained peat soil towards a wet soil. This definition will allow Member States the flexibility to determine what level of rewetting is appropriate. Importantly, restoring areas of peat extraction_counts towards these targets and there is sufficient capacity on State-owned lands to reach at least the 2030 targets.

Are urban areas mentioned?

Yes, the Nature Restoration Law applies to urban areas. It aims to ensure no net loss of urban green space by 2030, and a 5% increase by 2050. Additionally, it seeks to ensure a minimum of 10% tree canopy cover in every European city, town, and suburb, and net gain of green space that is integrated to buildings and infrastructure.

Rewetting land

What is rewetting?

Rewetting of peatlands means raising the water table nearer the ground surface. It does
not mean flooding the land. How high this water level is raised depends on the site, and the Law allows Member States, where justified, to reduce the level of rewetting of peatland under agricultural use to less than required if such rewetting risks having significant negative impacts on infrastructure, buildings, climate adaptation or other public interest.

Why rewet peatlands?

Rewetting peatlands represents a rapid and effective action to reduce carbon (C) emissions from the land, with <u>studies in Ireland</u> confirming the "importance of rapid rewetting of drained peatland sites to (a) achieve strong C emissions reductions, (b) establish optimal conditions for C sequestration and (c) set the site on a climate cooling trajectory".

Can farming still happen on rewetted lands?

<u>Yes</u>, farming can still occur on rewetted lands. To reiterate, **rewetting does not mean flooding the land**. Research conducted in Ireland (e.g. FarmCarbon project, see below) which raised the water table by 20cm on peaty grassland has shown that **emissions of up to 10t C0**₂/ha/year can be avoided.

Examples of farming transitions on peatland areas

Several projects are taking place in Ireland that provide information on how farming and peatland restoration can be achieved at the same time. Some examples mentioned in the Climate Action Plan 2023 and elsewhere include:

- Wild Atlantic Nature: a 9-year EU-funded LIFE Integrated Project, works with farmers, local communities and land owners to add value to the wide range of services provided from the Special Area of Conservation (SAC) network of blanket bogs and associated areas. These peatlands provide clean drinking water, store carbon, support biodiversity, produce high quality food and support resilient rural economies and livelihoods through farming, tourism, recreation and other activities. As part of the project, a pilot voluntary results based payment scheme (RBPS) will be linked to the quality of the habitat, thereby putting landowners and their skills, expertise and knowledge of their land central to the development of this project.
- <u>FarmCarbon</u>: The Farm Carbon aims to **reduce Greenhouse Gas emissions** released from agricultural peatlands and thereby help address the <u>climate crisis</u> while also enhancing rare biodiversity and improving water quality. It is a **results-based agrienvironmental programme**, where the <u>farmer is in control</u> of how much and where to rewet.
- The BRIDE Project: This innovative agri-environment project is based in the River Bride
 catchment of north-east County Cork and west Waterford. Massively successful, the project
 designed and implemented a results-based approach to conserve, enhance and restore
 habitats in intensive dairy farmland.
- FarmPEAT Project: This project is piloting a results-based agri-environmental
 programme. It seeks to improve the environmental quality of agricultural lands surrounding
 a selection of raised bogs in Counties Roscommon, Offaly, and Westmeath. The
 Department of Agriculture Food & the Marine are working with 51 farmers to rollout the
 results-based agri-environmental scheme. FarmPEAT is also developing a practical
 streamlined model for approaching rewetting actions on farms and the scoring of farm
 habitats.
- Green Restoration Ireland co-operative project: The project aims to develop clear, workable guidelines for a transition programme to carbon farming. Pilot 'lighthouse farms' in Counties Laois, Offaly and Westmeath act as 'living laboratories' using a citizen/farmer-science strategy, supported by the relevant expertise.
- <u>Danú Farming Group</u>: This project has set up control and trial plots in the Midlands to develop clear, workable guidelines for a transition programme to biological farming

based on a sound understanding of soil structure, chemistry, biology, and plant nutrition. All 12 Danú farmers now apply biological farming principles to all their farmed lands. Livestock farms have seen a reduction of artificial nitrogen usage by an average of 35 to 40% without any reduced output. Arable farms have reduced artificial nitrogen usage by 10 to 15% with no reduction in output. Insecticides have been reduced by at least 50%; fungicides by 30 to 50%; and herbicides by 30 to 40%.

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