

Biodiversity & Climate Change

Setting the Scene

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This article is more than 3 years old

Irish parliament declares climate emergency

Greta Thunberg says Dublin decision to follow British MPs' lead is 'great news'



Dublin students marching for action to tackle climate change in March. Photograph: Niall Carson/PA

Ireland's parliament has become the second after Britain's to declare a climate emergency, a decision hailed by the Swedish teenage environmental campaigner Greta Thunberg as "great news".

An amendment to a parliamentary report declaring a climate emergency and calling on the parliament "to examine how [the Irish government] can improve its response to the issue of biodiversity loss" was accepted without a vote late on Thursday.

The Irish Green party leader, Eamon Ryan, who moved the amendment, called the decision "historic".



Press Releases / Declaration of biodiversity and climate emergency warmly welcomed

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Declaration of biodiversity and climate emergency warmly welcomed

May 9, 2019 by [Niall](#)



IMMEDIATE RELEASE

The Environmental Pillar warmly welcomes the Dáil's declaration of a climate and biodiversity emergency.

The surprise move makes Ireland only the second country to do so, following in the footsteps of the UK that last week recognised the crisis at our door.

The issue was raised during a debate on a motion to accept and endorse the recommendations of the new [landmark climate report from the Joint Oireachtas Committee on Climate Action](#).

Declaration of an Emergency- 2019

- Global Heating and Climate Breakdown
- Has Biodiversity Loss been eclipsed by Climate Change on the international agenda ?
- On the national agenda ?
- Where does it feature on your Local Authority's Agenda ?
- Why does climate change feature more widely in our media than biodiversity?
- Are you being affected by biodiversity loss ?
- Why don't we notice it ?
- The Sixth Mass Extinction



Carbon pools and sequestration potential of wetlands in the European Union



Authors:

Dania Abdul Malak, Ana I. Marín, Marco Trombetti, Sonsoles San Román (Universidad de Málaga - UMA)



Biodiversity and Carbon Storage

- **Wetland Habitats**-highest carbon pools in terrestrial ecosystems
- **Salt marshes** 225-300 Mg ha⁻¹
- **Bogs and fens** 150 -225 Mg ha⁻¹
- **Forests** 75 -225 Mg ha⁻¹
- **Coastal and marine** systems hold high ranges of carbon - **seagrass beds and intertidal sediments** storing between 10-50 Mg ha⁻¹ of carbon





Biodiversity and Carbon Sequestration



Forests- $3.17 \text{ Mg ha}^{-1} \text{ y}^{-1}$ (local conditions dictate but in the range of $0.05\text{-}9.26 \text{ Mg ha}^{-1} \text{ y}^{-1}$)

Wetlands - range of $0.49\text{-}6.5 \text{ Mg ha}^{-1} \text{ y}^{-1}$

Healthy coastal and marine wetlands can hold carbon stock in the range of $50\text{-}150 \text{ Mg ha}^{-1}$

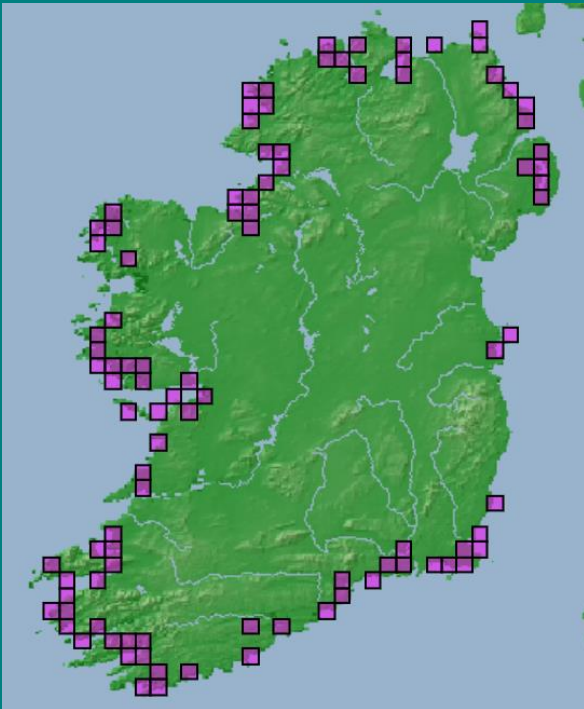


Blue Carbon - in Europe saltmarshes and seagrass carbon storage represents about 1.5-4% of global blue carbon

Zostera /Seagrass Beds



76 large seagrass beds
around the Irish coastline



2.2 million tonnes of CO₂
Beds have declined from
18,000m² to 10,600m² since
2019 due to invasive
seaweeds, eutrophic algae,
heat stress, pollution and
trampling

To store carbon - Retain and protect peatlands and wetlands
To sequester carbon - Protect woodland and plant more trees

- In your local authority have you reviewed /enforced planning applications under Class 17 of Schedule 2 of the Planning and Development Regulations in relation to Peat extraction ?
- How many planning applications/enforcement cases have been taken in relation to Class 11 of Schedule 2 of the Planning and Development Regulations in relation to Land Reclamation- drainage and/or reclamation of wetlands greater than 0.1 ha ?
- Referrals received under the EIA (Agriculture) Regulations from the Department of Agriculture ?
- Have you carried you an inventory of wetlands in your local authority area and are they listed for protection in the County Development Plan ?
- Does your local authority have a Tree Strategy/ Active Tree Planting Programme ?
- If you are a coastal county what is the conservation condition of Saltmarshes and Sea Grass beds where they occur ? Are they in a SAC or will they be in a Marine Protected Area ?

<http://www.southernassembly.ie/eu-projects/blue-green-city/blue-green-city-other-publications>



Catalogue of Nature –based Solutions

- Agroforestry
- Beach Nourishment
- Bio-retention Areas
- Buffer Strips & Hedgerows
- Channels and Rills
- Cliff/Seafront Stabilisation
- Dune Reinforcement & Strengthening
- Filtration Strips
- Forest Cove
- Green Roofs and walls
- Greenways
- Habitat creation on buildings
- Kelp Forests- Seed Planting
- Living Seawall
- Managed Coastal Realignment
- Natural Riverbank Stabilisation
- Native Woodland restoration & Creation
- Parks
- Permeable Pavements and Surfaces
- Ponds
- Rain Garden, Rainwater Harvesting
- River Restoration & Revitalisation
- Seagrass Meadow Restoration
- Sediment Capture Pond
- Temporary Flood Water Storage
- Urban Trees with bioretention areas
- Vegetated Swales & Ditches
- Wetland Creation and Enhancement
- Wildlife Corridors

Positive Actions for Local Authorities

- Urban design and development
- Tourism
- Active Travel
- Tree Planting
- Upgrading and Retrofitting Lighting
- Restoration of Wetlands

Work Practice and Policy Conflicts

- Urban design and development



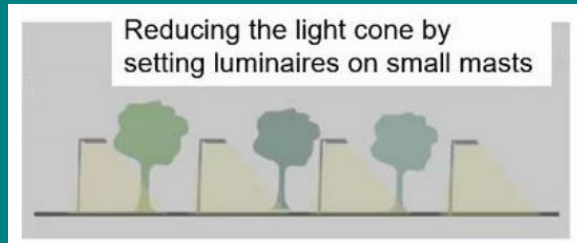
- Tourism

- Active Travel

- Desire to retain existing watercourses and hedgerows. Achievable within housing density guidelines, housing crisis and profit margins vs construction costs ?
- Save our Sand Dunes- may not prove popular as we have more trips to the coast with impacts on sensitive sand dune habitats
- Promoting sustainable travel but may impact on ecological corridors of local biodiversity importance.

Work Practice and Policy Conflicts

- Tree planting
- Hedgecutting Notices under Roads Act, fear of falling trees and Forestry Act allows trees to be cut within 10m of a public road without a felling licence – leading to the removal of mature trees (carbon stores) sometimes without need.
- Upgrading and Retrofitting Lighting
- ALAN-Artificial light at night. Lighting and impacts on bats- design of lighting specification to consider bat roosts, commuting and foraging lines.
- Restoration of wetlands
- Initial stages will release methane but longterm will act as net carbon sinks as carbon sequestration rates outbalance methane emissions.



Resources and training

- Setting up of Four CAROs
- Roll out of Climate Change Training in 2021 and 2022
 - Championing Leadership
 - Raising Awareness
 - Building Capacity
 - Empowering Change
 - Delivering Action
 - Actioning Policy
- 14 local Authorities now have Climate Action Officers
- Climate Adaptation Strategies, Climate Action Plans
- Need equivalent for biodiversity and this conference is a good start.
- Five local authorities have Biodiversity Officers and six new Biodiversity Officers to be recruited in six local authorities around the country by the end of 2022 with further rollout in 2023 and 2024.
- 32 local authorities have Heritage Officers and Heritage and Biodiversity Plans.
- Fourth National Biodiversity Action Plan
- Biodiversity Loss Citizens Assembly 2022- submissions review in October/November.

What your LA can do following this conference

- **Resources-** Appoint a Biodiversity Officer, Climate Action Officer, Climate and Biodiversity Team.
- **Training-** Liaise with CARO, LANSTG on possible training opportunities for staff to upskill in biodiversity management and enhancement.
- **Policy** –Integration of BGI and Nature Based Solutions into Development Management and Local Authority Projects.
- **Regulation-** Policy rich, process compliant but work practice poor ? Training and development of Ecological Clerk of Works. Strengthen planning enforcement on Class 11 and Class 17 unauthorised development and in coastal SAC and SPAs (Zostera Beds and Salt Marsh).
- **Habitat Survey-** Commission a Wetland Survey and list sites for protection in Co. Development Plan. Identify wetland sites for restoration and enhancement. Explore Marine Protected Areas for Seagrass Beds.

What your LA can do following this conference

- **Land Management-** Tree Planting programmes on LA owned land. Collate/Finalise the LA Assets Register. Make room for the river. Retention, rewetting of benefitting lands.
- **Coastal Protection-** use of Natural Climate Buffers.
- **Walking and cycling trails-** Ecological survey of proposed Schemes should require not only biodiversity protection but biodiversity gain. Commit to No Net Biodiversity Loss.
- **Work Practices -** Review your **hedge cutting notice** and explain this is not a requirement to cut down mature trees. **Lighting Schemes- Reduce night light pollution**, incorporate design guidance from NPWS/Bat Conservation Ireland.
- **Development Management-** Incorporate trees, hedgerows and watercourses into new development.

What Local Authorities can do

- Follow the Science



- Identify the Opportunities-
We need to Scale Up- replanting,
rewetting, restoring habitats



- Expand on Training and Resources



- Advocate for and Enable Action in Policy,
Work Programmes and Work Practice



Useful References

- *Carbon pools and sequestration potential of wetlands in the European Union* (2021) European Environment Agency, European Topic Centre on Urban, Land and Soil Systems
- <http://www.southernassembly.ie/eu-projects/blue-green-city/blue-green-city-other-publications>
- Defining Natural Climate Buffers- www.eurosites.org
- Biodiversity Net Gain- <https://thelandtrust.org.uk>
- *Our House Is Burning: Discrepancy in Climate Change vs. Biodiversity Coverage in the Media as Compared to Scientific Literature*
<https://www.frontiersin.org/articles/10.3389/fevo.2017.00175/full>

