



Coilte Nature: Restoring Woodlands For Multiple Benefits By Working With Nature

Nature-Based Solutions to protect and restore
Urban, Rural, Coastal and Riverine environments

Forest Genetic Resources Trust Scientific Meeting
5th December, 2024

Dr Declan Little, Ecological Lead

Forests for Nature: The Role of Coillte Nature



 RESTORING BIODIVERSITY

Restoring biodiversity by investing in major habitat improvements



 REGENERATING URBAN FORESTS

Regenerating and creating new urban forests for the benefit of people and nature



 REHABILITATING ECOSYSTEM SERVICES

Rehabilitating ecosystem services by improving the health of sensitive, degraded ecosystems



 AFFORESTING LANDSCAPES

Afforesting landscapes by planting new native woodlands to mitigate climate change

Theme Overview



Rehabilitating ecosystem services by bringing sensitive or degraded lands into better health

Wild Western Peatlands
On the Western seaboard

Midlands Native Woodlands
BnM Cutaway Raised Bogs



Reforesting our landscapes by planting new native woodlands on un-forested land

The Nature Trust (TNT)
Nationwide



Restoring important biodiversity areas by investing in major habitat improvements

Restoring Hazelwood
Adjacent Sligo Town
LIFE Insular
Wexford & Donegal



Regenerating urban forests for the benefit of people and nature

Dublin Mountains Makeover
Eastern Region – adjacent urban environments

Theme 1: Restoring Biodiversity Devil's Glen, Co. Wicklow

- **Devil's Glen biodiversity project:** 135ha – selected as biodiversity area in 2023 as almost certainly contains Ancient Woodland fragments with high biodiversity status
- **Designation:** pNHA - substantial investment required to restore biodiversity, and facilitate significant amenity footfall
- **Priority areas:** native woodland: EU Annex 1 habitat 91A0 Old Sessile oak woods and Oak-birch-holly woodland (WN1). The Vartry river, an important sea trout habitat, flows through the woodland
- **Key threats:** invasive species – predominantly cherry laurel, pheasant berry, rhododendron & dogwood. Also deer grazing
- **Management Objectives:** improve condition & extend native woodland cover. Manage invasive species, reduce deer numbers & removal/control non-native species. In-stream enhancement to improve sea trout spawning potential. Improve recreation facilities/loop walks & signage
- **Timeframe:** 5 years duration, commenced 2023
- **Partnerships:** IFI, NPWS & the local community



The Vartry River, Devil's Glen

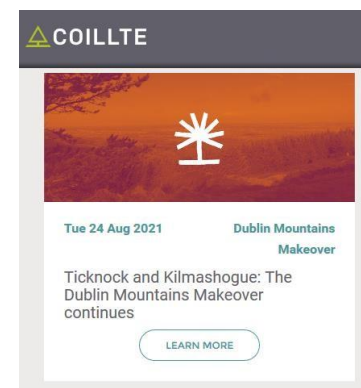
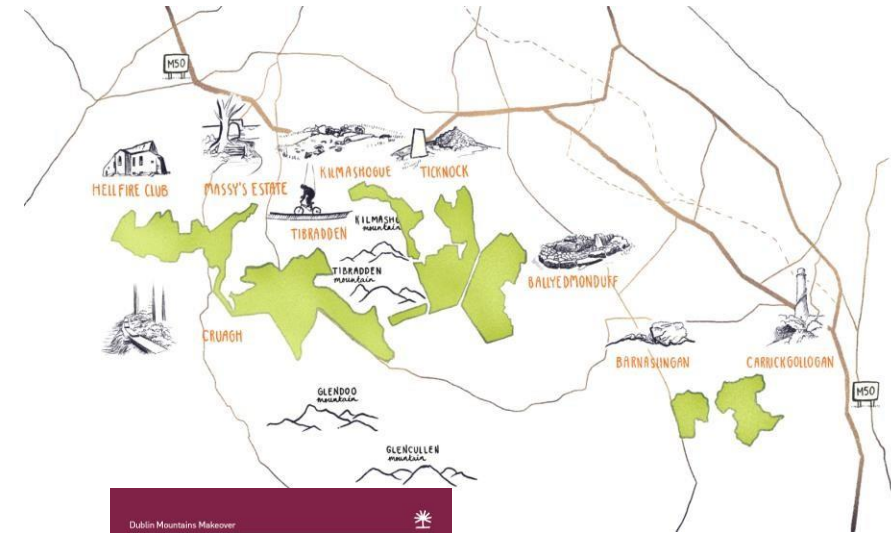
Theme 2: Regenerating Urban Forests

A long-term project to transform 910 hectares for people & nature in nine forests in the Dublin Mountains which has very high amenity use

Objectives: The Dublin Mountains Makeover (DMM) will increase species diversity of native tree species to 24% by 2040 & improve amenity values & experience

Operations:

- **Continuous cover forestry (CCF)** to maintain a permanent forest cover, facilitate natural regeneration & improve structural diversity
- **Remove and Replant (R&R)** to clearfell small areas of mature conifers & replant with native woodland communities, i.e. Scots pine, birch, oak, rowan, holly, hazel, hawthorn & blackthorn
- 32 long-term Biodiversity monitoring plots to assess baseline biodiversity value & monitor restoration impacts on future biodiversity values
- Project communicated through events, signage, videos, blogs & newsletters – vital to the success of this project



Theme 3 - Rehabilitating Ecosystem Services: Midlands Native Woodland Project

- Collaboration with Bord na Mona (BnM) to afforest industrial cutaway bogs - complements BnM rewetting programme

Objectives: Climate mitigation - plant & seed high bog areas (that cannot be rewetted) with native pioneer species to mimic/accelerate natural regeneration already occurring to stabilise bare peat, reducing CO₂ emissions

Research: Native woodland trials - planting, seeding & cuttings on different peat types & depths to determine best approach

- In 2020, 100 trial plots established – pioneer woodland species. Excellent establishment to date at over 90%, especially on shallow, fen peats
- Afforestation Application, NIS and EIAR submitted to Forest Service (DAFM) for 150 ha afforestation (i.e. 4% of total cutaway bog area)



Theme 4 – Afforesting Landscapes

- A new not-for-profit Company Limited by Guarantee founded by Coillte Nature & Forestry Partners - 2021
- **Objectives:** to create *new* native woodlands in communities across Ireland primarily to address climate mitigation – also biodiversity!
- The project combines public (i.e. Native Woodland Scheme) & private (corporate) funding
- TNT launched during Climate Finance Week Ireland, 2021 & has secured €20m in funding to date
- Green bonds are offered to investors in tranches
- All lands are assessed before purchase to ensure suitability
- Approx. 200 ha acquired & 90 hectares planted. A further 400 ha targeted for acquisition – will be planted with diverse, appropriate native woodland communities
- The average rate of carbon sequestered is 647tCO₂e per hectare over 100 years
- Entire forest sector and general public benefits, i.e. private forest companies, nurseries, local communities, etc.



Imelda Hurley (Coillte CEO), John Beckett (Forestry Partners), Antoinette McDonald (Axa) & Minister Hackett at launch of Axa investment, August 2021

www.naturetrust.ie



Theme 4 – Afforesting Landscapes

- New native woodlands created using native trees and shrubs sourced from seed and cuttings (i.e. willow) in Ireland - 'source identified'
- **Objectives:** to create *new* native woodlands that underpin genetic integrity and conservation objectives as far as possible
- Irish provenance seed collected from woodlands in the 'National Register of Basic Material' to produce saplings that are planted to create native woodland communities, i.e. oak, hazel, birch, alder, Scots pine, cherry, holly, rowan, guelder rose, hawthorn, blackthorn, spindle and willow (cuttings derived on or adjacent to afforestation sites)
- TNT organised Acorn Gathering events in 2023 & 2024 to boost acorn collections and promote the initiative
- Schools, staff from sponsor companies and local communities collected over 150kgs of acorns collected at Ballygannon Wood, Co. Wicklow last season and 300 volunteers helped collect at 4 oak woodlands this year
- Response hugely positive – participants felt they were contributing in a practical way to the Climate and Biodiversity crises; will be expanded!
- Coillte is financially supporting FGRT research to identify oak seed stands to expand acorn collections and identify Ash Dieback resistant ash trees in woodlands on the Coillte estate



Enthusiastic local school children collecting acorns at Brackloon Wood, Westport, Co. Mayo in October 2024

Conclusions

- Coillte Nature established to address climate and biodiversity crisis at scale
- Primary objectives are biodiversity enhancement and climate mitigation through native woodland creation and habitat restoration
- Additional objectives and benefits include recreation and water quality protection and enhancement
- Nature-based solutions employed to mimic native woodland succession using a variety of techniques including CCF, planting, seeding, cuttings and natural regeneration. Other habitats present are restored to create a viable habitat mosaic
- Partnerships with statutory bodies are vital to ensure best practise and a holistic approach to habitat management
- Support from local communities essential to success of restoration initiative. It ensures co-operation at site level and value-added technical input to management plans
- Co-operation with NGOs such as FGRT help to boost acorn collections during mast years and progress Ash Dieback resistant research
- These projects benefit ecosystems, society and the forestry/environmental sectors



Further Information

Information on Coillte Nature on the Coillte website:

- [About - Coillte](#)

The Nature Trust

- [The Nature Trust - Creating New Native Woodlands in Ireland](#)
- [And that's a Wrap! Acorn Gathering 2024 - The Nature Trust](#)

For further information contact Decan Little at declan.little@coillte.ie