

Re-establishing native woodlands

Fuelling the passion for growing quality oak

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Irish native woodlands came to the verge of disappearance at the beginning of the 1900s when less than 1% forest cover remained. Since then, following the foundation of the Irish State, remaining native woodlands have been secured and, in more recent years, new woodlands have been planted, primarily thanks to the Native Woodland Establishment Scheme.

New opportunities for landowners

The scheme supports the planting of oak mixtures and other native broadleaves and, to date, it has delivered over 1,000ha of new woodlands on farms with further funding available for up to 450ha per annum in the coming years. The scheme is of interest to landowners for a number of reasons:

- It allows for forestry development in areas where water or landscape sensitivity currently rule out other afforestation schemes
- It offers the highest forestry premium to farmers (up to €680/ha/year) to reflect the wide range of benefits to the local environment and communities.
- It offers great water quality protection and landscape enhancement potential, especially important in areas of high-status water quality and where tourism forms a central part of the local economy, eg in southwest Kerry

However, in general, it requires lower elevation and better land, com-

Summary of native woodland scheme establishment premium and follow-on support measures

(All establishment costs plus four-year maintenance costs are covered)

Annual premium <10ha = €665/ha for 15 years

Annual premium >10ha = €680/ha for 15 years

BPS premium retained on the same land. Income tax exempt. USC and 4% PRSI deductible – PRSI liability for applicants under 66 years old.

Forest road development grant available within three years of first thinning: €1,000/ha

Broadleaves first thinning grant (woodland improvement) available from when trees reach 8m height (12 to 15 years of age): €750/ha

Broadleaves second thinning grant (woodland improvement grant) typically four years after first thinning: €500/ha

Continuous Cover Forestry (CCF)

CCF is a management approach which allows for the production of quality timber without the loss of forest cover at any time. It is ideally suited to broadleaves forest and relies on selective harvesting and progressive renewal either through natural regeneration or small-scale planting.

This management style is, in many respects, similar to the process of managing a herd for beef production as it involves harvesting the "biological increment" with selective breeding of the "tree herd". Once in place, CCF can deliver regular cashflow to the owner with a range of additional environmental/landscape benefits arising from long-term forest retention.

Following a recent Forestry-Programme-Mid-Term review, the Forest Service is now offering funding to develop existing plantations through CCF.

The new scheme is offering three payments of €750/ha as part of a 12-year forest plantation transformation plan.

pared with other forestry options and this can represent a significant barrier for landowners. In this context, the Department of Agriculture, Food and the Marine will explore the potential of an additional forestry fund for establishing new native woodlands.

Biodiversity, landscape protection and timber production

Biodiversity and ecosystem services are at the core of the scheme. How-



Paddy Gleeson measuring one of his selected oak trees on impressive 24cm DBH at 24 years of age with 1cm diameter growth adding on every year – well in excess of expectations.

ever quality hardwood production is also envisaged through continuous cover forestry (CCF).

Hardwood production relies on achieving long straight stems with a minimum 40cm diameter at breast height (DBH). Looking at the twisted poor form of many of our older, mature native trees, we might conclude that no hardwood production potential exists.

However, a quick check at our historical records shows that large quantities of quality oak were produced in Ireland (and exported to Britain) in past centuries.

The current poor form of many mature trees is a consequence of continued removal of quality trees and lack of management.

Also recent research, on a novel

approach to oak management, reveals that quality timber can be achieved earlier through greater intensity thinning: a process called "free-growth-active silviculture". In this scenario, minimum saw-log dimensions for oak and other native broadleaves can be reached much earlier than expected, with significant implications for profitability.

Recent public presentations by forest researchers of the results of Oak "free growth" 50 year-Crumbland trials in Wales and 30 year-Fernelmont trials in Belgium revealed that oak saw-log dimensions is achievable far earlier than expected.

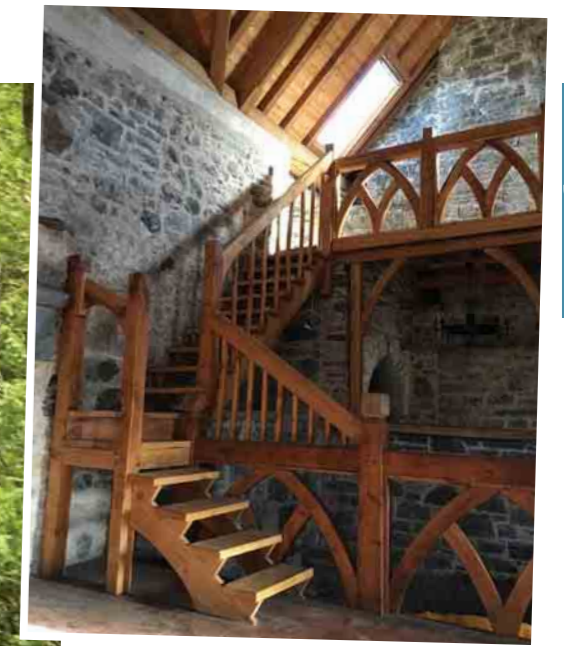
Paddy Gleeson runs a small farm in east Clare, just outside the village of Bodyke including a 6ha mixed oak forest planted in 1994. I first met him

in 2009 and found his enthusiasm and passion for his young plantation infectious.

Nature

"All my life I had an interest and appreciation for wildlife and nature," says Paddy. "Some 24 years ago, I decided to take advantage of the introduction of forestry grant and premium schemes to diversify income and habitats on my farm. The primary objective was to provide for wildlife while at the same time growing hardwoods for the long term. The natural choice was to plant mix broadleaves with primarily native species. Which is what did."

The land selected at the time was wet, heavy clay-rushy fields, difficult to farm.



Refurbishment of a 15th century tower on the Sykes farm using on-farm mature oak. The tower is now rented out for wedding receptions and other functions.

Since then, Paddy has taken a very hands-on approach to managing his forest including two commercial firewood thinnings, the development of a local firewood supply from his forest and collaborations with the local school for nature education. "Working in the forest gives me great satisfaction... and makes money, too," says Paddy.

Paddy has fully utilised the forestry support schemes available to him over the years such as a forest road development grant and the first thinning grant. He is now about to apply for a second thinning grant and is also considering the new CCF forestry scheme announced this year.

The initial forestry premium payments finished in 2014 but the forest continues to make money for him through regular firewood sales.

The next thinning is planned for 2019 and Paddy is looking forward to harvesting higher-value oak as fencing strainers as the trees are now rapidly "fattening". This is a direct consequence of his proactive management of past 10 years which has maintained quality trees in a "free growth" dynamic state.

"For me, planting oak on my farm was the right choice as it provides me with the right balance of income, legacy and personal satisfaction," concludes Paddy.

To further assist with the economics of early hardwoods management, and to bridge the gap until higher value saw log maturity, Teagasc forestry researchers are currently involved with the EARTH project funded by CO-FORD, led by NUI Galway and with GMIT Letterfrack Furniture College, to explore potential to add value to small-medium diameter hardwoods.