

The benefits of trees

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A question for every landowner: how can you plan for some level of tree planting to maximise the potential benefits?

With a new Common Agricultural Policy (CAP) around the corner, along with a new Forestry Programme, now is a great time to reflect on land use and plan towards how we can shape farms and the broader rural landscape to maximise environmental benefits, while optimising food and timber production (Figure 1).

While policymakers endeavour to create supports to facilitate this optimum land use, landowners can also look around to see at farm level where trees might be planted. While tree planting is generously supported through grants and premium payments, landowners have to take on the reality that planting trees is a long-term decision. Whether planting trees in a field corner, or



FIGURE 1: A range of benefits from trees.

planting a new woodland on a larger scale, this decision must be made with a view to trees being there for generations to come. This continuity of tree cover aims to future-proof the benefits from trees, such as carbon capture, soil stability, and water protection.

When to plant?

Trees should be planted when they are dormant from November to February. This season can be extended by using trees that are in containers or bare-rooted trees that have been stored in cold storage. Planting individual trees or small areas of

trees (<0.01 ha) will not need much planning time, whereas larger areas will need a licence and grant approval if applied for. The current forestry programme continues to accept applications and is open to areas as small as 0.1 ha.

Growing and managing woodland

Teagasc is planning tree planting promotion events between March 21 and April 1. These events will be held around the country in forest sites (Covid-19 regulations permitting). These will be a great opportunity to see tree planting in action and discuss how tree planting might apply to individual sites.

Details will be available on:
www.teagasc.ie/forestry.

As well as the tree planting events, there is a complete calendar of forestry events planned for this year. While this year's events will initially be delivered digitally, we are hoping to revert to pre-Covid-19 formats and meet people face-to-face when possible. We will maintain the flexibility to convert our events from digital to local or vice versa.

Details of our planned events are as follows;

- March/April: Afforestation promotion – regional events;
- April/May: Collaborative pine weevil project stakeholder conference;
- May: Forest recreation – regional events;
- June: Ash dieback event;
- July: Continuous cover forestry event, Caherconlish, Co. Limerick;
- July: Forestry presence at Energy in Agriculture, Gurteen, Co. Tipperary;
- August: Forest village at the Tullamore Show;
- September: National Ploughing



Teagasc Forestry will host many events this year, from tree planting to managing mixed woodlands.

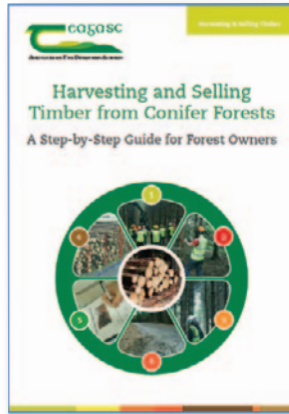
- Championships, Ratheniska, Co. Laois;
- September: Talking Timber — conifer timber marketing event; and,
- October: Woodland for water event, Cork.

By attending a forestry event – be it a webinar or in the field – you will always pick up useful information, hear about an alternative approach, learn about the latest research, or pick up useful management tips.

Harvesting and selling timber from conifer forests

A step-by-step guide called 'Harvesting and Selling Timber from Conifer Forests', is now available. This publication is very timely, as the forecasted increase in timber supply to the Irish market in future years will come almost exclusively from privately-owned forests. The mobilisation of this important supply is dependent on timely and active management of what is traditionally referred to as the "farm forest". Active management commences with individual forest owners developing an awareness and understanding of their own forests. This allows for timely planning of activities, such as providing suitable access to forests. Forest management is a relatively new venture for many forest owners. The steps involved in organising forest harvests and timber sales, including knowing where to start and who to approach, can be challenging, particularly if putting the initial 'toe in the water'.

This booklet offers a step-by-step guide to forest owners in getting timber from their conifer forests to the marketplace. Teagasc recommends that planning for this process begins in good time, i.e., a few years out from the actual harvest. Gaining knowledge of timber assortments and products, the paperwork involved, the potential buyers,



along with required preparation in the forest, all need a significant lead-in time.

The key messages for owners considering forest management and timber sales as set out in this booklet are: start the process in good time; access good advice; engage people who will work with you for the benefit of your forest; and, have a good contract in place to ensure a successful outcome. This

approach will greatly help in optimising your valuable forest resource. This booklet is available from Teagasc at: www.teagasc.ie/media/website/crops/forestry/advice/Harvesting-and-Selling-Timber-from-Conifer-Forests.pdf, or a hard copy is available by phoning 091-845 200.



The booklet offers a step-by-step guide to selling timber from conifer forests.

RESEARCH UPDATE

Genetic diversity

DHEERAJ SINGH RATHORE reports on BroadGen, a study of the genetic diversity and resilience of commercially important broadleaved tree species in Ireland.

Genetic diversity of tree species through tree breeding and improvement programmes will enable new and existing forests to contribute positively to productivity and increase forest resilience to changing climate and potential biotic threats.

In Ireland, we have conservation gene banks and seed orchards of commercially important broadleaved tree species such as alder, ash, birch (silver and downy), and sycamore. However, the genetic diversity of these tree species in the Irish gene banks and seed orchards remains understudied.

Therefore, the BroadGen project is focused on: (1) evaluating the genetic diversity of the alder, birch, and sycamore tree species in Irish gene banks; and, (2) assessing the susceptibility of ash and alder gene banks to ash dieback and *Phytophthora*, respectively.

The research will characterise genetic relationships within and among the tree populations of each tree species. The project will utilise the techniques of molecular biology, DNA fingerprinting, bioinformatics, and plant pathology to understand the genetic relationship among the individual trees, as well their resilience to existing diseases for ash and alder in Ireland.

Also, the genetic profiling of the seed orchards for broadleaved species will maximise their utilisation and complement the previous work and time invested in the establishment of these seed orchards. The results will indicate whether the existing seed orchards of these broadleaved tree species are diverse enough to continue our reliance on them, or whether we need to

diversify the population by adding genetically diverse genotypes to the seed orchards that are suitable to Irish climatic conditions, as well as embrace their quality and productivity. In addition, verifying the disease tolerance of ash and alder genotypes in the gene banks to their major pathogens will improve the perception of stakeholders towards these two species by reducing concerns of their use in forestry. Overall, findings from the BroadGen project will deliver greater understanding of the extent and nature of genetic diversity and resilience in gene bank collections, thereby enhancing the role of these resources in improvement programmes of these broadleaved tree species in Ireland.

Funding: The BroadGen project is funded by Teagasc under the Walsh Scholarship Programme for four years.

For further information on Teagasc research, see: www.teagasc.ie/forestry.



BroadGen will assess the genetic diversity of tree species in Irish gene banks.

