

Upcoming events on ash and CCF

Edited by
Frances McHugh,
Forestry Development
Officer

Forestry event focusing on ash dieback – June 28

Teagasc, in association with the Department of Agriculture, Food and Marine (DAFM), is organising an event focusing on ash dieback on Tuesday, June 28, near Freshford, Co. Kilkenny. Ash dieback is a serious disease of ash trees caused by the invasive fungal pathogen *Hymenoscyphus fraxineus*, which originated in Asia and was found in Europe in the early 1990s. Today, the pathogen covers most of the natural range of ash in Europe, causing high mortality rates of ash trees. Ash dieback was first detected in the Republic of Ireland in October 2012. The disease is now prevalent throughout most of the island of Ireland and can affect ash trees of any age and in any setting. The disease can be fatal, particularly among younger trees. Teagasc is carrying out research to establish a gene bank composed of



Scan QR code to access further details and registration for each event.

genotypes of ash tolerant to ash dieback, with the aim to produce planting stock for forests and hedgerows in Ireland.

Ireland's ash woodlands, particularly first rotation plantations, are quite unique and are at a particular risk of rapid decline. Urgent action is required in order to minimise the economic, ecological and social impact of the disease. In order for this to happen, forest owners require guidance regarding potential positive management interventions.

The DAFM provides financial support to owners of ash forests through the Reconstitution and Underplanting Scheme (RUS). Options include site clearance, or partial clearance, as well as

reconstitution, which involves either under-planting or the complete replacement of ash trees with alternative species.

On June 28, we will have a forestry event on a recently reconstituted site that has been replanted with young broadleaves. At the event, items to be discussed include:

- introduction to ash dieback disease;
- the RUS;
- access and infrastructure;
- harvest and reconstitution of an affected ash site;
- species selection and planting;
- crop protection and deer control;
- site management and maintenance; and,
- ongoing Teagasc research.

On the day, the event will be run in the morning and repeated in the afternoon, so you can choose between the morning or afternoon session. Registration is essential for either session. Numbers will be limited due to onsite parking. Please register online to receive a ticket by scanning the QR code on page 1 with your phone camera, or see www.teagasc.ie/forestry.

Continuous cover forestry event – July 5

This event in Caherconlish, Co. Limerick will showcase the transformation to continuous cover management of a 10ha young spruce/oak forest. Continuous cover forestry (CCF) is an alternative forest management approach, where the forest canopy is maintained without clear felling. Initial works on this forest began in 2020 and have been funded under the DAFM CCF Scheme. To date, this has been a collaborative effort between the owner and his extended family, working closely with local forestry professionals, along with support from the local Teagasc Forestry Development Officer, Jonathan Spazzi.



Ash dieback is now very visible in the landscape.

During this event, participants will visit several stops within the forest and will be able to discuss a wide range of topics, including:

- the DAFM CCF Scheme details;
- the management plan and recent thinning operations;
- maintenance and pruning;
- findings of the recent TranSSFor project;
- management to promote biodiversity and recreation; and,
- timber production under CCF to date and future outlook.

The event will be run in the morning and repeated in the afternoon so you can again choose between the morning or afternoon session. The event is free but registration is required. Upon registration, you will receive an email with meeting point details including an Eircode. Register by scanning the QR code on page 1 with your phone camera or see www.teagasc.ie/forestry.

RDS Teagasc Farm Forestry Award 2022

“Surprised and delighted” – this was Cathal Rudden’s reaction to the news that he is the winner of the 2022 RDS Teagasc Farm Forestry Award. The Award recognises working farmers successfully integrating their farming and forestry enterprises.

Cathal, from Stradone, Co. Cavan, was presented with his award by Teagasc Director, Prof. Frank O’Mara and Minister of State Pippa Hackett at the recent RDS Spring Livestock and Forestry Awards in Dublin. Receiving the Special Commendation Award in the 2022 RDS Teagasc Farm Forestry Category were Cork farmers Willie and Avril Allshire from Roscarbery.

In 2014, Cathal planted forestry for its strong economic and environmental credentials to complement his main suckler enterprise. Today, his young 20ha forest of Sitka spruce and oak is thriving and forms an integral part of the family farm. Cathal is already planning for the first thinning in the next few years and is aware of the importance of active forest management. He is



From left: Noel Kennedy, Teagasc, pictured with Rita and Cathal Rudden, award winners, presented with their award by Minister of State, Pippa Hackett and Teagasc Director, Prof. Frank O’Mara.

building his own forestry knowledge through advice from Teagasc and his involvement with the North East Forest Owners group. He is looking forward to managing his forest to achieve the best economic and environmental outcomes to contribute to a bright and sustainable future for his farm and family.

Do you have a forest to be considered for next year’s awards? For more information on the RDS Teagasc Farm Forestry Awards see www.rds.ie/agriculture/forestry or contact your local Teagasc forestry development officer.

RESEARCH UPDATE

Ash breeding for tolerance to dieback disease in Ireland

European common ash (*Fraxinus excelsior*; Irish: *Fuinseóg*) is one of the most important native broadleaf tree species of our hedgerows and traditional woodlands. The species is now under threat from ash dieback disease (ADB), caused by the invasive fungal pathogen *Hymenoscyphus fraxineus*. Ash dieback is a highly destructive disease of ash trees (*Fraxinus* species), especially the Irish native common ash. The disease’s

causal agent originated in Asia, and was first found in Europe in the 1990s. In Ireland, ash dieback was first noticed in 2012. The disease is observed in all counties in Ireland. Symptoms of the disease include leaf death, shoot dieback, diamond shape lesions on branches/tree trunk, and crown thinning, eventually resulting in the mortality of most trees.

Teagasc is leading the research on improving the genetic tolerance of ash to dieback disease in collaboration with the DAFM and Coillte, Irish universities/RPOs, and other European partners.





Dr Dheeraj Rathore, Teagasc Research Officer on Tree Improvement is breeding ash for disease tolerance.

The ash-breeding programme to develop dieback-tolerant genotypes started in 2015. As part of this research work, a field trial consisting of 1,000 Irish genotypes was established in Lithuania; a high disease pressure region at the time, to screen and identify dieback-tolerant genotypes. In addition, Teagasc has built a collection of over 200 genotypes of ash comprising tolerant material from different ash-breeding programmes in Europe.

Teagasc research is continuously monitoring and including grafts of tolerant genotypes. Recently, 18 new Irish genotypes showing a higher level of tolerance to the disease have been added to 208 existing genotypes for further testing. Three gene banks have been established and disease tolerance data is collected on a regular basis. The graft technique is deployed to bulk up the tolerant material to set up field trials in 2023 with support from Coillte. Teagasc is continuously working to secure sites for both conservation as well as screening of the plant material selected as tolerant to ash dieback.

Based on preliminary data collected over the last two years, ~15% of the trees are showing higher tolerance to the disease. Research shows that around 1-2% of ash trees would naturally be tolerant to ash dieback disease. Every surviving healthy tree is extremely valuable for tree breeding, reforestation efforts, and genetic conservation of this valuable native tree species. Therefore, one recommendation that tree breeders and researchers can provide is not to cut the ash trees that have survived the disease over the last decade or so, but to retain them for potential breeding. Preliminary results from the ongoing breeding programme to improve disease tolerance are encouraging, but this is an ongoing process, which will take time to come to fruition. The long-term aim of this work is to multiply these tolerant genotypes to establish clonal seed orchards and to continue field testing the clones and their progeny to restore ash in the Irish landscape. For further information, see www.teagasc.ie/crops/forestry/advice/forest-protection/ash-dieback/research.