

The "marteloscope" training network

Enhancing forest owners' confidence and ability in managing diverse forests

Jonathan Spazzi

FARMER'S EXPERIENCE OF MARTELOSCOPE TEAGASC COURSE

Donagh O'Grady is a progressive, active farmer and hands-on forest owner who attended one of the Teagasc marteloscope courses in 2022 in Co. Limerick.

"For me, the course content and presentation were excellent and gave me a much better understanding of many issues around forest management including production and biodiversity," he said. "I now have the confidence to go into the forest and pick out the better trees. I think for those owners growing timber, a course like this is absolutely invaluable. The practical day in the forest was particularly enjoyable and informative."

A busy schedule of workshops is planned for 2023. Dates and registration details will be circulated through the Teagasc newsletter and other channels.

Background

Land owners often plant and manage forests for multiple reasons such as timber production, biodiversity enhancement, water protection, recreation and wellbeing. A mix of forest management systems is therefore required to cater for the diversity of forest types, site conditions and the owner's objectives. Both national and European forest policies are increasingly directed towards the promotion of diverse and integrated management. The aim is to enhance forest resilience in the face of climate disruption, to sustain production while delivering diverse ecosystem services. In this context, Teagasc's Forestry Development Department has developed a programme of "marteloscope" workshops.



Marteloscopes provide a new knowledge transfer initiative to enhance owners' confidence and ability in managing a diverse range of forests. The main aim is to equip forest owners with the necessary skills to choose the most appropriate management systems (ranging from clear-fell to continuous cover management systems) to meet their objectives and to help integrate and enhance the production and ecosystem services value of each forest,

What is a marteloscope?

A marteloscope is a specially prepared forest plot, ranging 0.4ha to 1.0ha in size, which is commonly used across Europe for training purposes.

Above, right: Kevin O'Connell Teagasc Forestry Development Officer discussing forest management options with participants.

The name comes from the French “martelage” meaning “hammering”. This refers to the way traditionally trees were marked for thinning across Europe by using a purpose-built hammering tool. In essence, a marteloscope plot is an outdoor-classroom forest facility for training participants in tree selection and tree marking. It facilitates “learning-by-doing”.



INFOMAR software loaded onto a weatherproof grade table used as part of the marteloscope training for transformation thinning simulation. This valuable information is then used by participants to carry out thinning simulations and to analyse the impact of different choices both on indicative financial return and biodiversity potential.



Minister of State, Pippa Hackett with Jonathan Spazzi, Teagasc and consultant forester Padraig O’Tuama Prosilva Ireland when Minister Hackett launched the Teagasc marteloscope training programme in Oak Park in Carlow in February 2022.

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The European Forest Institute (EFI) has, in recent years, further enhanced marteloscope plot usage with specially designed software integrated into touch screen tablets. These are used by owners while in the forest. Since then, the EFI has facilitated the development of a network of more than 180 marteloscope training plots across 24 countries in Europe. The Teagasc Forestry Development Department has partnered with the EFI, in collaboration with Coillte and Pro Silva Ireland, to make this resource available in Ireland to forest owners, foresters, students and other groups. For each marteloscope plot, every tree is numbered, measured and its timber and biodiversity values estimated. All the information is then inputted to the tablet-based software.

Exercises almost always lead to active group discussions, thereby facilitating valuable peer-to-peer learning. To date in Ireland, we have a total of eight marteloscope plots, three installed by Teagasc and five by Coillte.

Teagasc has installed one plot in Co. Limerick in Curraghchase forest in partnership with Coillte and two further plots in the Teagasc Research Centre in Oak Park, Co Carlow. The latter includes a conifer and a broadleaf plot to cater for varying participants' needs. The training plots are available to forest owners for one-day forest workshops

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