



EFIATLANTIC



International Summer School June 2017
Forest Planning and Management
Training in New Tools and Techniques



Waterford Institute of Technology

Waterford, Ireland

19-23 June 2017



Waterford Institute of Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LAIRGE

PROGRAMME OVERVIEW

Sunday, 18/06	Evening	Arrival
Monday, 19/06	Morning	Concepts in forest management planning
	Afternoon	Talks on forest and property level tools
Tuesday, 20/06	All day	Field training: Measurements and demonstrations
Wednesday, 21/06	Morning	Talks on stand and tree level tools
	Afternoon	Laboratory training on planning and forecasting
Thursday, 22/06	Morning	Laboratory training on planning tools
	Afternoon	Laboratory training on stand and tree tools
Friday, 23/06	Morning	Discussion, feedback and group work
	Afternoon	Depart



Photo: Nick McCarthy (WIT)

DETAILED PROGRAMME

Sunday 18 June

AFTERNOON	Arrival
Dinner (own plans)	

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Monday 19 June

MORNING	
Welcome by Nick McCarthy (WIT)	
Concepts in forest management planning	Tutors
Forest planning (strategic)	Felipe Bravo (University of Valladolid)
Forest growth modelling background	Margarida Tomé (ISA)
Risk management	Céline Meredieu (INRA) Barry Gardiner (EFIATLANTIC)
Data collection in support of forest planning (tactical)	Glen Murphy (GE Murphy & Associates Ltd.)
Lunch	
AFTERNOON	
Talks on forest and property level tools:	Tutors
Economic tools and support systems	John Casey (Teagasc)
Risk modelling	Barry Gardiner (EFIATLANTIC)
Decision support for licencing and regulation of the forest sector in Ireland (e.g., GIS, visualisation tools)	Myles McDonncadha (Silvalytics) Frank Barrett & Fergus Moore (DAFF)
Integrated management systems (optimisation and planning)	Liam Malone (Coillte) Ola Eriksson (SLU) Henry Phillips (Forest Solutions)
Landscape tools (e.g., CAPSIS-SIMMEM)	Christophe Orazio (EFIATLANTIC)
Summer School Dinner	

Tuesday 20 June

MORNING & AFTERNOON

GROUP 1 Field Training: Planning and forecasting

Strategic (data collection for forest planning and management)

Tutors

Mapping forests
 (e.g., forest inventories, surveys, GPS, roads, tree locations)

Daniel McInerney (Coillte)
 John Redmond (DAFM)
 Enda Nolan
 (Coastway Surveys Ireland)

Using GIS and planning tools in the field
 (checking and updating information)

Myles McDonncadha (Silvalytics)
 Juan Suarez (Forest Research)

Remote sensing (e.g., aerial photography, LiDAR, satellite data) and testing against ground truth

Enda Nolan
 (Coastway Surveys Ireland)
 Juan Suarez (FR)

GROUP 2 Field Training: Stand and tree tools

Operational (tariffs, measuring & valuing stands pre-harvest, assessing species suitability):

Tutors

Hand-held tools (e.g., hypsometers, digital callipers, smart phone applications such as TRESTIMA, etc.)

Michael Pedini & Nick McCarthy (WIT)
 Liam Malone (Coillte)

Measurement using terrestrial LiDAR (stem form, tree volume, product mix, etc.)

Enda Keane (TreeMetrics)

Measuring timber quality (e.g., acoustic tools)

Elsbeth Macdonald (UHI)
 Luka Kranjz (Teagasc/NUIG)

Site characterisation training (e.g., Ecological Site Classification)

Duncan Ray & Alice Broome (Forest Research)

Lunch

AFTERNOON

GROUPS 1 & 2 Demonstrations

Demonstrators

Stand level measurement using drones and scanners

Enda Nolan
 (Coastway Surveys Ireland)

Barbecue Dinner

Wednesday 21 June

MORNING

Talks on stand and tree level tools:	Tutors
Use of existing stand growth simulators	Margarida Tomé (ISA)
Wood quality assessment (e.g., acoustic tools)	Elsbeth Macdonald (UHI) Luka Kranjz (Teagasc/NUIG)
Pre-harvest data collection and optimisation software (e.g., terrestrial LiDAR)	Enda Keane (Treemetrics) Glen Murphy (GE Murphy & Associates Ltd.)
Tracking harvest material (e.g., bar-coding or genetic tagging)	Björn Möller (KTH)

Lunch

AFTERNOON

GROUP 1 Laboratory Training: <i>Planning and forecasting</i>	Tutors
National Forest Inventory and forecasting	John Redmond (DAFM) Edwin Corrigan (Silvalytics) Cian O'Connor (Teagasc)
Decision support for licencing and regulation of the forest sector in Ireland	Frank Barrett and Fergus Moore (DAFF)
GROUP 2 Laboratory Training: <i>Stand and tree tools</i>	Tutors
Site quality, yield and species choice	Duncan Ray & Alice Broome (Forest Research)

Dinner (own plans)

Thursday 22 June

ALL DAY : Poster displays by commercial companies

MORNING

GROUP 1 Laboratory Training: Planning tools	Tutors
Accessing satellite and airborne data and GIS mapping	Daniel McInerney (Coillte) Juan Suarez (Forest Research)
Risk modelling	Barry Gardiner (EFIATLANTIC) Celine Meredieu (INRA)

GROUP 2 Laboratory Training: Stand and tree tools	Tutors
Stand growth simulation (e.g. GROWFOR, CAPSIS)	Paddy Purser (Purser Tarleton Russell Ltd.) Celine Meredieu (INRA)

Lunch and Poster Displays

AFTERNOON

GROUP 1 Laboratory Training: Planning tools	Tutors
Economic planning	John Casey (Teagasc) John Landy (Coillte)
Optimisation tools, artificial intelligence, and heuristic techniques	Ola Eriksson (SLU)

GROUP 2 Laboratory Training: Stand and tree tools	Tutors
Assessment of volume and product output from LiDAR	Enda Keane (TreeMetrics)
Assessment of timber quality	Elsbeth Macdonald (UHI)

Dinner (own plans)

Friday 23 June

MORNING

Final Session

Facilitators

Discussion, evaluation, and practical application of topics, tools and training presented during the course (group work)

Nick McCarthy (WIT)
 Maarten Nieuwenhuis (UCD)

Report back from group work and general feedback from participants

Christophe Orazio
 & Barry Gardiner (EFIATLANTIC)

Lunch

AFTERNOON

Depart