



WATERFORD  
INSTITUTE OF  
TECHNOLOGY,  
IRELAND

24-28 JUNE

# INTERNATIONAL SUMMER SCHOOL 2019

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PROTECTING THE **FOREST**  
RESOURCE: RISK ASSESSMENT  
AND MANAGEMENT USING  
INNOVATIVE TOOLS

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Waterford Institute of Technology  
INSTITIÚID TEICNEOLAÍOCHTA PHORT LAIRGE



# PROGRAMME OVERVIEW

SUNDAY, 23 JUNE

ARRIVAL: BUS FROM DUBLIN AIRPORT  
AT 20H

MONDAY, 24 JUNE

MORNING | FIELD VISIT: FORESTS  
SHOWING IMPACT ON DIFFERENT  
HAZARDS  
AFTERNOON | GROUP WORK:  
DISCUSSIONS BASED ON FIELD VISIT

TUESDAY, 25 JUNE  
OPEN SEMINARS

MORNING | TALKS OF RISK TOOLS  
DEVELOPED IN THE PLURIFOR  
PROJECT  
AFTERNOON | TALKS ON FOREST RISK  
TOOLS

WEDNESDAY, 26 JUNE

ALL DAY | VISIT TO JFK ARBORETUM:  
COLLECT FIELD DATA & TEST TOOLS

THURSDAY, 27 JUNE

MORNING & AFTERNOON |  
LABORATORY: USING TOOLS WITH  
FIELD DATA

FRIDAY, 28 JUNE

MORNING | TALKS: MITIGATING RISK  
AND CRISIS MANAGEMENT  
GROUP WORK: SCENARIO  
TESTING, CRISIS MANAGEMENT, GROUP  
PRESENTATIONS  
AFTERNOON | DEPART: BUS TO  
DUBLIN AIRPORT AT 13:30H



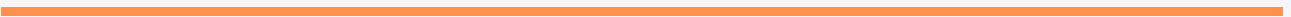
# PROGRAMME

SUNDAY, JUNE • 23

AFTERNOON

ARRIVAL: FREE BUS IN EVENING  
AT 20:00 FROM DUBLIN AIRPORT  
TO WATERFORD

DINNER (OWN PLANS)





MONDAY, JUNE • 24

**FIELD VISIT:**

SITE VISIT TO FORESTS AFFECTED BY SERIOUS DISTURBANCE (E.G. FIRE, SOIL EROSION, WIND DAMAGE, DEER BROWSING, PESTS AND DISEASES)  
COILLTE FIELD STAFF + TUTORS  
(SEE AFTERNOON SESSION)

**MORNING**  
DEPART 08:00  
RETURN 13:00

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**LUNCH**

WIT CANTEEN

13:00-14:00

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**GROUP WORK:**

COLLECTIVE AND TEAM DISCUSSIONS ON ISSUES RELATED TO THE SITE VISIT. PARTICIPANTS WILL IDENTIFY PROBLEMS FROM THE FIELD SITE AND DISCUSS HOW TO DEAL WITH THEM. THEY WILL BE PROVIDED WITH SITE MAPS AND ASKED TO DEVELOP MANAGEMENT PLANS INCLUDING THE RISKS IDENTIFIED IN THE SITE VISIT

**AFTERNOON**  
14:00-18:00



MONDAY, JUNE • 24

**TUTORS:**

DR. NICK MC CARTHY (WIT)  
DR. BARRY GARDINER (EFI)  
MR. MIKE POWER (COILLTE)  
DR. JUAN SUAREZ (FR)  
ING. J. CHRISTOPHE ORAZIO (EFI)  
MR. JOHN CASEY (TEAGASC)  
DR. NAHIA GARTZIA BENGOETXEA (NEIKER)  
MR. CIARAN NUGENT (FOREST SERVICE IRELAND)  
PROF. STEPHEN WOODWARD (UNIV. OF ABERDEEN)  
PROF. TUGBA DOGMUS (SULEYMAN DEMIREL UNIV)

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**DINNER**

SUMMER SCHOOL BANQUET



TUESDAY, JUNE • 25

WELCOME BY DR. NICHOLAS MC  
CARTHY (WIT)

8:30 - 8:40

8:40 - 9:00

OPENING BY MR. FERGUS MOORE  
(DAFM, IRELAND)

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**LECTURES:** TALKS ON RISK  
TOOLS DEVELOPED IN THE  
PLURIFOR PROJECT

-SILVALERT: ING. J. CHRISTOPHE  
ORAZIO (EFIPLANT)

-FUEL MAPS WITH LIDAR DATA  
AND ASSESSING DEFOLIATION  
WITH UAVS: DR. SANDRA  
SÁNCHEZ (CETEMAS), JOSÉ MARÍA  
FERNÁNDEZ/ENRIQUE JIMÉNEZ  
(CIF-LOURIZÁN)

**MORNING**  
9:00-12:00  
OPEN FOR  
DAY  
ATTENDEES

-MODELLING WIND RISK IN  
MIXED STANDS: DR. BARRY  
GARDINER (EFIPLANT)

-FOREST SOIL DISTURBANCE  
MONITORING PROTOCOL: DR.  
NAHIA GARTZIA BENGOETXEA  
(NEIKER)

-DETECTION OF EMERGING PESTS  
IN SOUTH-WEST EUROPE: DR.  
ING. HERVÉ JACTEL (INRA)



TUESDAY, JUNE • 25

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**LUNCH**

WIT CANTEEN

12:00-13:30

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**LECTURES: TALKS ON FOREST  
RISK TOOLS**

-WIND DAMAGE RISK MODELLING IN  
IRELAND: DR. AINE NI DHUBHAIN (UCD)

-FIRE RISK PREDICTION TOOLS: MR.  
CIARAN NUGENT (FOREST SERVICE)

-DEER IMPACT ASSESSMENT  
METHODOLOGY: DR. HELEN ARMSTRONG  
(BROOMHILL ECOLOGY) AND MR. CIARAN  
NUGENT (FOREST SERVICE)

-CHALARA OUTBREAK IN IRELAND: MR.  
TOM HOULIHAN (TEAGASC)/ MR. TOM MC  
DONALD (DAFM)

-DETECTION OF ALIEN INVASIVE  
PATHOGENS: PROF. STEPHEN WOODWARD  
(UNIV. OF ABERDEEN) AND PROF. TUGBA  
DOGMUS (SULEYMAN DEMIREL UNIV.)

**AFTERNOON**

13:30-17:00

OPEN FOR

DAY

ATTENDEES

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**DINNER**

OWN PLANS



WEDNESDAY, JUNE • 26

**FIELD WORK:**

VISIT TO JFK ARBORETUM AT  
BALLYSOP TO COLLECT FIELD DATA  
AND TEST TOOLS

**MORNING**

8:00-12:00

- SILVALERT
- FORESTGALES
- DEER IMPACT ASSESSMENT
- FIRE RISK ASSESSMENT
- DRONE FLIGHT DEMONSTRATION
- PLANT HEALTH CHECKER
- GENIE II PATHOGEN IDENTIFICATION

**TUTORS:**

DR. NICK MC CARTHY (WIT)  
DR. BARRY GARDINER (EFIPLANT)  
DR. TOM LOCATELLI (FOREST RESEARCH)  
MR. JOHN CASEY (TEAGASC)  
DR. JUAN SUAREZ (FOREST RESEARCH)  
ING. J. CHRISTOPHE ORAZIO (EFIPLANT)  
DR. HELEN ARMSTRONG (BROOMHILL ECOLOGY)  
MR. CIARAN NUGENT (FOREST SERVICE IRELAND)  
DR. SANDRA SÁNCHEZ (CETEMAS)  
MR. JOSÉ MARÍA FERNÁNDEZ AND MR. ENRIQUE JIMÉNEZ (CIF-  
LOURIZÁN)  
DR. ING. HERVÉ JACTEL (INRA)  
PROF. STEPHEN WOODWARD (UNIV. OF ABERDEEN)  
PROF. TUGBA DOGMUS (SULEYMAN DEMIREL UNIV)  
MS. KATY MARFLEET (BGCI)  
MR. MICHAEL ANDREOU (OPTISENSE LTD)





WEDNESDAY, JUNE • 26

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PICNIC LUNCH

12:00-13:00

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FIELD WORK:

VISIT TO JFK ARBORETUM AT  
BALLYSOP TO COLLECT FIELD  
DATA AND TEST TOOLS

AFTERNOON

13:00-17:00

- SILVALERT
- FORESTGALES
- DEER IMPACT ASSESSMENT
- FIRE RISK ASSESSMENT
- DRONE FLIGHT DEMONSTRATION
- PLANT HEALTH CHECKER
- GENIE II PATHOGEN IDENTIFICATION

TUTORS (SEE MORNING SESSION)

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DINNER BARBECUE

19:00



THURSDAY, JUNE • 27

**MORNING**

8:30-12:00

**LABORATORY WORK: USING TOOLS WITH  
FIELD DATA TO ASSESS RISK**

**TUTORS:**

DR. NICK MC CARTHY (WIT)  
DR. BARRY GARDINER (EFIPLANT)  
DR. TOM LOCATELLI (FOREST RESEARCH)  
DR. AINE NI DHUBHAIN (UCD)  
DR. JUAN SUAREZ (FOREST RESEARCH)  
ING. J. CHRISTOPHE ORAZIO (EFIPLANT)  
DR. HELEN ARMSTRONG (BROOMHILL ECOLOGY)  
DR. SANDRA SÁNCHEZ (CETEMAS)  
MR. JOSÉ MARÍA FERNÁNDEZ AND MR. ENRIQUE JIMÉNEZ (CIF-LOURIZÁN)  
DR. ING. HERVÉ JACTEL (INRA)  
PROF. STEPHEN WOODWARD (UNIV. OF ABERDEEN)  
PROF. TUGBA DOGMUS (SULEYMAN DEMIREL UNIV)  
MS. KATY MARFLEET (BGCI)  
MR. MICHAEL ANDREOU (OPTISENSE LTD)

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**LUNCH**

WIT CANTEEN

12:00-13:30

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**AFTERNOON**

13:30-17:00

**LABORATORY WORK: USING TOOLS WITH  
FIELD DATA TO ASSESS RISK**

**TUTORS (SEE MORNING SESSION)**

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**DINNER**

OWN PLANS



FRIDAY, JUNE • 28

**MORNING**

8:30-10:00

**TALKS:**

-MANAGEMENT OPTIONS TO MITIGATE RISK: DR. BILL MASON (FOREST RESEARCH)

-CRISIS MANAGEMENT: MR. MICHAEL POWER (COILLTE)

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10:00-12:00

**GROUP WORK AND PRESENTATIONS:**

SCENARIO TESTING, CRISIS MANAGEMENT PLANS, RISK MANAGEMENT

THE PARTICIPANTS WILL FOCUS ON HOW TO USE THE TOOLS THAT HAVE BEEN DEMONSTRATED TO THEM DURING THE SUMMER SCHOOL WHILE MAINTAINING ECOSYSTEM SERVICES FROM THE FOREST

**TUTORS:**

DR. NICK MC CARTHY (WIT)  
DR. BARRY GARDINER (EFIPLANT)  
ING. J. CHRISTOPHE ORAZIO (EFIPLANT)  
DR. BILL MASON (FOREST RESEARCH)  
MR. MIKE POWER (COILLTE)



FRIDAY, JUNE • 28

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**LUNCH**

WIT CANTEEN

12:00-13:30

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**AFTERNOON DEPART**

FREE BUS AVAILABLE TO DUBLIN AIRPORT AT 13:30

FOR ALL INQUIRIES, PLEASE SEND AN EMAIL TO [CLAUDIA.ANTONIOTTI@EFI.INT](mailto:CLAUDIA.ANTONIOTTI@EFI.INT)



# STEERING COMMITTEE

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NICK MC CARTHY (CHAIR) | WIT  
MICK POWER | COILTTE  
NUALA NÍ FHLATHARTA | TEAGASC  
FERGUS MOORE | DAFM  
PAT O’SULLIVAN | SOCIETY OF IRISH FORESTERS  
BARRY GARDINER | EFIPLANT

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WITH THE SUPPORT OF



**An Roinn Talmhaíochta,  
Bia agus Mara**  
Department of Agriculture,  
Food and the Marine

