

TEAGASC PHD WALSH SCHOLARS OPPORTUNITY

AgriAdapt: "Modelling the impact of rising temperature and seasonal drought on the productivity of key forest species in Ireland"

REF: 2023281

We are offering a four-year PhD Scholarship opportunity to assess the impact of rising temperature and seasonal drought on the productivity of key forest species. This is an exciting opportunity to work with a multidisciplinary team on a project that will inform the adaptation of Irish forestry to future climate change.

Background

AgriAdapt is a strategic research project funded by DAFM which brings together academic researchers from Teagasc, UCD, Dundalk Institute of Technology, and Met Eireann to develop strategies for the different sectors of Irish Agriculture to adapt to Climate change challenges. One of the measures is to investigate how forest tree species will adapt to the changing environmental conditions of rising temperature and associated seasonal drought.

PhD description

There is a need to examine the suitability of planting material which may prosper in warmer and drier conditions. The study also aims to investigate the impact of rising temperature and seasonal drought on the productivity of key forest species in Ireland. Models such as the Standard Precipitation Evapotranspiration Index (SPEI) has the potential to assess the potential impact of drought on forest tree species to assess the impact the growth for tree species owing to future climate scenarios. Study sites within forests will be assessed with good meteorological data and measurements of yield and the effect of drought on growth will be assessed. These data can be used to parameterise models to predict future growth patterns. Further information on the proposed research is available [here](https://drjonyearsley.github.io/agriadaptPhD.html)

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Requirements

Applicants should have a good primary degree (first or upper second-class honours) or M.Sc. in an appropriate discipline such as forestry, plant biology or wood science. The successful candidate should be highly motivated, have good communication skills, be prepared to work closely with PhD supervisors and be a self-starter. The applicant should hold a full EU driving licence have a very good working knowledge of English (spoken and written) and where English is not the first language of applicants, English language requirements are available [here](#).

Award

This PhD Scholarship is a joint research project between Teagasc, Athenry and University College Dublin, Ireland. The student will be based at a Teagasc centre in Dublin or Galway and at UCD, under the supervision Dr Niall Farrelly of Teagasc and [Dr Jon Yearsley](#) of UCD. The scholarship provides an annual stipend of €25,000 and up to €6,000 for fees.

Further Information

Dr. Niall Farrelly (niall.farrelly@teagasc.ie) or Dr Jon Yearsley, UCD (jon.yearsley@ucd.ie).

Application Procedure

Submit an electronic copy of Curriculum Vitae and a letter of interest (**as a single PDF file**) to: Dr Niall Farrelly (niall.farrelly@teagasc.ie) and Dr Jon Yearsley, UCD (jon.yearsley@ucd.ie) quoting the reference number (**2023281**) in the subject field.

Closing date: 20th June 2025