



Centre for
Forest Protection

Six month paid internship from Oct 2024

Project title: A survey of pine-associated nematodes of the UK

The Centre for Forest Protection is offering this opportunity as part of an exciting programme of six-month science project internships. This placement will be based at Forest Research and provides training in research and professional skills, as well as work experience with Great Britain's principal organisation for forestry and tree-related research.

General Information

Salary

£24,323 per annum

Location

This project will be based at Forest Research, Alice Holt, Farnham, Surrey. GU10 4LH. The majority of the work will be carried out within the Holt lab which is a state-of-the-art quarantine facility.

Host Department

Entomology

Supervisor

Dr Sarah Facey

Project details

Pine wilt disease (PWD) is a lethal wilting disease that affects susceptible tree species in the genus *Pinus* as well as other conifer genera (*Picea*, *Cedrus*, *Larix*, *Pseudotsuga*, *Chaemaecyparis* and *Abies*, with the exceptions of *Thuja* and *Taxus*). It is considered one of the most serious threats to conifer forestry worldwide. The causative agent of PWD is the pinewood nematode, *Bursaphelenchus xylophilus* (PWN).

The UK is currently free of PWN and as part of this 'free from' status, the UK receives protections and certain requirements are enforced on wood entering from countries that are PWN positive. To maintain these protection levels, the UK is required to perform an annual survey to uphold its status.

There is a lack of studies describing the nematode fauna of UK forests. Such work will be important to identify which plant parasitic nematodes associated with pine are already present in the UK. This work will reveal if there are any nematodes currently present in the UK which are closely related to PWN. If PWN was to be introduced in the UK, work describing our current pine associated nematode fauna will be crucial to identify likely potential UK vectors to assess the present threat to UK based forestry.

You will be working on laboratory-based experiments, contributing to a UK-wide pine-associated nematode survey. Your work will also involve sample storage, management, and data handling. Fieldwork may also be involved enable you to observe how a nationwide survey is co-ordinated between multiple organisations, tracking a sample from the field to the laboratory.

What you will gain through this internship

- Experience working within an interdisciplinary team and contributing to a major UK research project.
- Experience of working on a phytosanitary project within a Level 2 Quarantine Laboratory.
- Nematode identification along with appropriate survey techniques.
- Nematode laboratory techniques including slide preparation and sample mounting.
- Experience of laboratory work both individually and as part of a team.
- Experience of managing data and best laboratory practice.
- Opportunities to communicate science to non-science audiences.
- Opportunities to build networks and access leaders in their fields.

Person specification

Applicants must have the right to work in the UK

Education and experience

- Bachelor's degree in an appropriate subject area (e.g. Zoology, Ecology, Biology, Forestry or similar).
- Experience in data collection, analysis and interpretation within a research project.
- Experience of lab work and microscopy. Electronic data management through use of spreadsheets and competent user of MS Office.
- Experience / familiarity with the use of taxonomic keys for identification - can be with plants or invertebrates.
- Experience of nematology or entomology would be beneficial, however training can be provided.

Personal skills

- Good attention to detail.
- Ability to work independently and as part of a team.
- Good verbal and written communication skills.
- A willingness to listen, learn and adapt.
- A self-starter able to manage their own time effectively.

Application Information

Closing date:

4th August

Interviews:

Between 8th and 22nd August

For more information on the project:

Contact Dr Sarah Facey sarah.facey@forestresearch.gov.uk

To apply for this position:

Please email your C.V. to Dr Suzanne Sancisi-Frey suzanne.frey@forestresearch.gov.uk together with a personal statement addressing:

- Why you are interested in this post (250 – 300 words)
- How you feel you could contribute to the project/s (250-300 words)