

A practical MSc Project that could help shape the health of Lake District and its lakes. The University of Cumbria has funding to support research work by South Cumbria Rivers Trust, a professional team dedicated to conserving fresh water habitats and local wildlife.

MSc Ecosystem Services Evaluation

<https://www.cumbria.ac.uk/study/courses/postgraduate/ecosystem-services-evaluation/>

South Cumbria Rivers Trust:

Preventing the Spread of Invasive Non-Native Species by Identifying the Pathways of Introduction.

THE PROJECT

The Cumbria Freshwater Invasive Non-Native Species (CFINNS) Initiative has been promoting biosecurity since its inception in 2010. Invasive non-native species (INNS) threaten local environments and the economy as they continue to arrive and spread through the UK.

This project seeks assess the remaining 'pathways' for introduction and identify opportunities to prevent the spread of INNS to Cumbrian lakes. There are a number of potential pathways for the introduction of INNS presenting a significant risk to the environment and economy of the Lake District. A range of innovative techniques will be used to understand the potential introduction pathways, extent of the risk and current knowledge/willingness to implement biosecurity. Outputs will inform future campaigns and investment for the protection of the Lake District.

The Lake District National Park is now a World Heritage site, home to iconic lakes including Windermere and Coniston water, with beautiful lower fells reaching up to breath taking mountains. This is a unique and exciting opportunity to help protect our beautiful natural landscape.

THE ORGANISATION

South Cumbria Rivers Trust (SCRT) are a charity dedicated to conserving and protecting the freshwater habitat and wildlife of the local area. <https://scrt.co.uk/>

SCRT objectives are:

- To monitor, conserve and protect and when necessary rehabilitate and improve biodiversity of the lakes, rivers and streams of South Cumbria including adjacent waters for the public benefit.
- To advance the education of the public, companies and public bodies in:
 - The understanding of the lakes and rivers including their fauna, flora, socio-economic and amenity value and the management of water.
 - The need for, and benefit of, conservation, protection, rehabilitation and improvement of the aquatic environment.

SCRT host the Cumbria Freshwater Invasive Non-Native Species (CFINNS) for Cumbria.

Research Element of MSc:

The programme of research will fall under three key phases:

Phase 1: Identifying existing pathways for the introduction of INNS and understanding what prevention measures are already in place.

Phase 2: Gathering data from waterbody users and events managers

Phase 3: Evaluation, analysis and presentation of data to SCRT and communication to waterbody users

This research will help South Cumbria Rivers Trust understand how effective the CFINNS initiative has been to date. It will continue to promote the CFINNS as a successful initiative, raising the profile and recognition for the importance of preventing the spread of INNS. New mechanisms and technologies derived from the research will create further scope for preventing the introduction of INNS to the Lake District and changing the way that CFINNS influences and implements change.

This research will help to increase the awareness and understanding of biosecurity measures and reduce the risk of the spread of INNS across the Lake District by a better understanding of 'pathways'.

Skills

- Developing questionnaires
- Speaking with event organisers/participants
- Analysis of social data
- GIS skills desirable but not essential

Benefits

The research is supported by the ERDF funded **Eco-innovation Cumbria** project www.cumbria.ac.uk/eco led by the University of Cumbria. The University is committed to providing excellence in academic practice together with a supportive and stimulating environment in which to conduct your studies. Benefits include:

- A tax-free stipend of £4,666
- Research course fees paid by the industry sponsor (SCRT) £2,500
- Project Travel costs
- Become part of a cohort of student researchers working on industry-led projects in eco-innovation.

Application process

<https://www.cumbria.ac.uk/study/courses/postgraduate/ecosystem-services-evaluation/>

To apply please visit the website for details of the entry requirements which must be met and to access the application form.

Please include a covering letter telling us why you want to study for a MSc, what interests you about this project and highlight the skills and experience you will bring.

For any queries relating to admissions please contact Research Student Admissions rsa@cumbria.ac.uk

If you wish to find out more about the project in the first instance please contact:

Jayne Wilkinson, *Catchment Planning and Monitoring Officer, at SCRT* jayne@scrt.co.uk

or

Dr Darrell Smith, lecturer in environmental modelling, at UoC darrell.smith@cumbria.ac.uk

Interviews to be conducted in Ambleside, Cumbria. Candidates will be required to give a short presentation on an environmental project to be advised.