

Application of monitoring techniques to assess the spawning distributions of the anadromous Twaite shad in the River Severn

Internship length: 70 days at £96.15 per day (based on a 7.5 h day). There is some flexibility in when these days are worked (e.g. does not need to be 5 days per week).

Start date: Flexible, but with field work commencing in May and concluding in late June 2021, but with data analyses able to be completed over the summer / autumn.

Location: The work is a combination of field-based studies (completed on the River Severn, Worcestershire and Gloucestershire), and data analyses that, due to Covid-19 restrictions, have to be completed remotely. The Intern will require their own computer for data analyses. PPE (waders/ life-jacket/ Covid-19 related PPE) will be provided. All work will be subject to risk assessment and will adhere to national guidelines on Covid-19 at all times.

Qualifications / previous knowledge required: M.Sc. in relevant subject / field experience. Due to Covid-19 restrictions, the intern must be able to travel independently to River Severn field sites by car.

Overview: Since 2017, we have been working with partners including the Severn Rivers Trust, Environment Agency, and the Canal and Rivers Trust on the project 'Unlocking the Severn' (<https://www.unlockingthesevern.co.uk>), where the weirs in the lower River Severn have been modified to facilitate the upstream spawning migration of twaite shad. Our work has included development and application of a range of methods to determine the shad spawning distributions in the river, including the use of internal acoustic transmitters (tags), acoustic recording of shad spawning activities and an environmental DNA (eDNA) assay.

The focus of this internship is to assist the application of some of these methods during the 2021 shad spawning season. The emphasis of the internship in relation to the different methods will be dependent on the river conditions encountered in May and June, although there is an expectation there will be a strong focus on the collection and subsequent analysis of acoustic recordings of shad spawning activities, with additional work including assisting collection of eDNA water samples. There will also be opportunity to assist in the collation of data from fixed receivers that detect the tagged fish when they are in the vicinity. Where the start date of the internship is out of sequence with the shad spawning season, the focus of the internship will be on analyses rather than collection.

To apply: Please email Dr Demetra Andreou with a CV and expression of interest in the first instance (dandreou@bournemouth.ac.uk). **Deadline for expression of interest: Tuesday 4th May.** Due to a likely high volume of interest, you will only hear back from us if we short-list you for interview. Please note that the internship is sponsored by the Fishmongers' Company (<https://fishmongers.org.uk/fish-fisheries/>).