BioSS seeks a statistician, mathematician or quantitative scientist with an interest in, and ideally experience of, ecology or environmental sciences, to work on applied research and projects relating to the impacts of offshore renewable energy on marine mammals and seabirds.

BioSS has an international reputation for methodological development in statistics, mathematical modelling and bioinformatics. We offer a stimulating working environment, with over 40 staff and students at four locations, collaborating on applications in ecology & environmental science, agriculture, animal health & welfare, and nutrition & human health.

The UK government is committed to reaching net zero emissions by 2050. In the power sector, progress in switching to renewable energy has accelerated in recent years, with renewables generating more electricity than fossil fuels in 2020. Legislation protecting the marine environment requires that offshore renewable devices are delivered in a sustainable manner. Offshore renewable developments have the potential to impact protected seabird and marine mammal populations, principally from collisions with turbine blades, displacement from important habitat, barrier effects to movements and noise disturbance.

BioSS carries out quantitative research on the impacts of offshore renewable energy on marine mammals and seabirds primarily in collaboration with the UK Centre for Ecology and Hydrology (UKCEH). This position offers the opportunity to work in a small team with a large number of collaborators, working on a mix of short and long-term projects. Additionally, there are opportunities to be involved in other long-term research projects, working with UKCEH scientists and developing interesting statistical approaches to solve real-world spatio-temporal problems.

The team are based at the BioSS Headquarters in Edinburgh, located in the James Clerk Maxwell Building at the University of Edinburgh, King’s Buildings campus. We offer extensive opportunities to develop collaborations with scientists in both the research institute and university sectors.

We are an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees, and encourage applications from underrepresented groups in STEM, particularly women, BAME and LGBTQ+. We encourage flexible working and are happy to discuss options at interview stage.

**Purpose of the post**

- Provision of statistical expertise to collaborative research projects in ecological and environmental areas.

- Contribute to revenue generation through completion of existing projects and statistical and other support to BioSS tendering for ecological and environmental research opportunities.
• Develop research in applied statistics or at the interface between statistics, mathematical modelling or bioinformatics, motivated by quantitative problems encountered in collaborative projects.

Main responsibilities of post
• Work in support of senior BioSS staff in tendering for funding from Marine Scotland Science and other government bodies, UKRI, and commercial projects relating to the impacts of offshore renewable energy developments on seabirds and marine mammals, and on delivering the project(s) where successful.

• Collaborate with scientists working in UKCEH on one or more of the following research areas: spatio-temporal modelling (e.g. time series, spatial models, spatio-temporal models, integrating multiple data sets), or quantifying and propagating uncertainty (e.g. atmospherics, process-based, mathematical modelling).

• Develop research relevant to ecology or the environment in one of BioSS’s three research themes (statistical methodology, process and systems modelling, or statistical genomics & bioinformatics).

• Contribute to the development and delivery of BioSS training courses for scientists.

• Under direction of line manager, seek external funding for research and consultancy projects under the BioSS-UKCEH Framework Agreement.

Grade, starting salary and duration
• This post will be offered at Hutton Grade D (statistician, salary range £31,522 - £38,442).
• This is a permanent appointment.
• All individuals wishing to work within the UK must be entitled to do so before they can be employed.

Knowledge, skills and experience

Essential
• MSc or PhD in a relevant quantitative subject, such as statistics, quantitative ecology, data science, mathematics or physics.

• Candidates without a PhD also need to have relevant work experience.

• Enthusiasm for collaborative working at the interface between statistics and the biological sciences, experience in the analysis of varied data types.

• Evidence of ability to interact positively, effectively and confidently with collaborators in formal and informal situations.

• Ability to work independently.

• Evidence of willingness to seek funding.

• Enthusiastic about development and application of statistical methods.

• Ability to handle, process, manipulate, and analyse large data sets.
- Good programming ability in a statistical programming language such as R, python, SAS, or Matlab.

- Good written communicator.

- Willingness and ability to give spoken presentations presenting technical methods and results to non-quantitative audiences.

Desirable
- Track record of research and/or collaboration evidenced by scientific papers, preferably in a field relevant to ecological and/or environmental statistics.

- Experience in development and implementation of modern statistical methods.

- Experience of collaborative working at the interface between statistics and the applied sciences.

- Experience of managing projects and communicating with government and commercial clients.

- Experience in working with tracking, biologging, accelerometry, depth, aerial/at-sea survey, or environmental data.

- Evidence of ability to manage and motivate staff.

- Evidence of experience and ability in seeking funding.

- Strong general skills in statistical methods used in ecology, covering some of the following areas: power analysis, spatial and temporal modelling, movement modelling, Bayesian inference, mixed models, generalised linear models.

How to apply for this post
Applications for this post (Ref: BioSS-01 21) should be made through the recruitment pages of BioSS’s parent organisation, the James Hutton Institute [www.hutton.ac.uk/careers](http://www.hutton.ac.uk/careers)

The application process involves creating an account and uploading personal details along with:
- a CV, including as a minimum your education and employment history plus your relevant scientific achievements;
- names and addresses of three referees, one of whom must be your current employer;
- a short explanation of why you consider yourself suitable for this post, including a description of your current and planned research activities.

The closing date for applications will be 25th March 2021; the interview date is to be confirmed.

Potential applicants may contact Dr Esther Jones (esther.jones@bioss.ac.uk) or Dr Adam Butler (adam.butler@bioss.ac.uk) to discuss this position.

BioSS has been awarded IIP Gold Status and is formally part of The James Hutton Institute, a Scottish charity No. SC041796 and an equal opportunities employer.
The James Hutton Institute is a Stonewall Diversity Champion; Athena SWAN Bronze Status Holder; Disability Confident Committed Employer and a Living Wage Employer.