ATLANTIC SALMON TRUST
PATRON: HRH THE PRINCE OF WALES KG, KT, GCB, OM

Battleby House
Redgorton
PERTH
PH1 3EW

Telephone : 01738 827200
Email: info@atlanticsalmontrust.org

Data Specialist
Battleby, Perthshire, Scotland

The Missing Salmon Alliance is a partnership of the leading non-governmental organisations involved in salmon conservation across the United Kingdom. This is a collaborative partnership to use the individual skills and resources of the partner organisations to more effectively deliver management of the remaining salmon stocks. At the core of this partnership is a statistical framework to conceptualise all of the impacts on salmon during their freshwater migration phase and subsequent marine migration. This is the Likely Suspects Framework for Atlantic salmon

The Alliance, through the Atlantic Salmon Trust, is looking to appoint a Data Specialist to lead on the construction and management of databases of biological records and environmental parameters, using the PostgreSQL database server, in support of the Likely Suspects Framework. The Likely Suspects Framework project aims to build and populate a conceptual model of the Atlantic salmon's ecosystem, explaining mortality processes and accounting for the observed reductions in survival.

Underpinning this project is the development of suitable infrastructure. This research assistant role will work as part of a team and design a centralised spatial database to allow access to a range of environmental and biological parameters over various time periods. The design must be robust and resilient enough to integrate a range of historical, new and emerging datasets.

The successful candidate will utilise available tools (PostgreSQL) to develop an application programming interface (API) that will allow for visual inspection of the spatial and temporal elements of the database, whilst allowing for seamless data submission and retrieval by various user groups. Data will be sourced from, and accessed by, partner organisations and be integrated into modelling of salmon mortality factors. The ability to communicate effectively and work with multiple stakeholders from various countries will therefore be paramount to the success of the project.

The Data Specialist will report in the first instance to the Principal Investigator, who will manage the post on behalf of the Atlantic Salmon Trust.

Key Duties and Responsibilities
- Lead on the construction and management of SQL databases of biological records and environmental parameters using the PostgreSQL database server
- Perform database health monitoring, maintenance, administration and diagnostics
- Design, implement, maintain and automate the appropriate backup and recovery architecture as required
- Design a data sharing platform that is interoperable and can be accessed by many people.
- Building positive working relationships across partners and within LSF team.
- Advise on best practices regarding data management, data architecture, and data design
- Contribute to the development of peer-reviewed publications

Conditions of Employment

The terms of employment will be detailed in a contract and accompanying staff handbook, along with this job description.

The position described will be a fixed term contract for 36 months, with the possibility of an option to extend. The starting salary will be in the region of £30,000 per annum, plus contribution towards a pension scheme.

The Trust operates a flexible 37.5 hour working week, which will on occasion require working evenings and weekends. The Data Specialist position will be hosted at the Department of Biological and Environmental Sciences (BES), in the University of Stirling, Scotland. This is a thriving research environment with more than 40 principal investigators, alongside postdoctoral researchers and 60 PhD students. Along with the Principal Investogator and ecological modeller, the research assistant will split their time between BES and the Atlantic Salmon Trust offices in Battleby, Perth.

It should be noted that the postholder will be required to travel, work with partners across the UK and further afield.

The Trust also operates a policy of continuous professional development and will help support the development of the career of the postholder.

The following are a set of criteria against which the applications from potential candidates will be appraised.

1. Knowledge / Qualifications

Essential

- Master's degree in Computer Science or related subject , with heavy emphasis on data management
- Previous experience in database technologies (desirably PostgreSQL)
- Solid experience in database building, tuning, security, backup, recovery, and archival concepts and procedures.
- Strong background in SQL
- Good appreciation of European General Data Protection Regulations
- Strong technical background in one or more programming languages (e.g. Python)
- Excellent understanding of server side and client side processes (particularly javascript) for building secure web applications.
- Good understanding of spatio-temporal data and integration to databases.
- Exposure to Cloud or Virtual Application environments
- Excellent communication skills including the ability to effectively communicate with technical and non-technical colleagues.
- Strong problem solving, testing, and network troubleshooting skills

Desirable

- PhD in related subject
- Strong leaning towards open source technologies
- Good understanding of LINUX operating system and hardware requirements to tune database
- Appreciation of GIS webserver technologies such as Mapserver and/or Geoserver.
- Application Servers and Open Source Components
- Storage Engineering and Network storage
- Security: Encryption; Network security; Network topology; Cellular Network Connectivity

Skills

- Inventive and creative
- Organised and independent
- Self-motivated and confident
- Able to communicate well, both orally and in written form
- Work well and collaboratively in a small team environment

Applications from suitable canidates are invited by submitting CV and covering letter by email to pamela@atlanticsalmontrust.org

Further details on the post can obtained by contacting Dr Colin Bull via email at colin@atlanticsalmontrust.org

Closing date for applications is Midday,13th January 2020. Skype interviews will take place during the week of 20th January with an anticipated starting date as soon as possible after appointment.