



## **Faculty of Environment School of Geography**

### **ForestPlots.net Database Manager**

This position is an exciting opportunity to play a leading role developing the ForestPlots.net initiative. We are looking for a skilled ecoinformatics specialist with database computing skills, a proven flair for focussing on quality in data-management, and a strong desire to communicate and connect with database contributors and users.

ForestPlots.net aims to help forest scientists and forest people worldwide, especially in tropical countries, generate greater scientific and societal impact from forest inventory and monitoring. ForestPlots.net promotes scientific synergies across countries while enabling partners to access, analyse and manage the information from their long-term plots. This includes permanent forest plot data that form part of several tropical networks (e.g. RAINFOR, AfriTRON) co-ordinated by the University of Leeds, as well as supporting other research programmes and individual researchers worldwide, and national institutions such as Servicio Nacional de Areas Naturales Protegidas, Peru (SERNANP). Our work is currently supported in grants from the UK NERC, European Research Council, the Gordon and Betty Moore Foundation, and the Royal Society.

You will have a PhD or Masters in ecoinformatics, bioinformatics, computational biology, quantitative ecology, scientific computing or a related area, and a passion for, and experience in SQL programming, managing data, and communicating with a wide variety of users. You will have strong and proven skills and interest in developing and managing databases and the skills needed to train others and facilitate collaboration amongst diverse groups. The position will be based at the University of Leeds, with occasional opportunities for leading training courses with our collaborators in tropical countries.

The University of Leeds' commitment to women in science has been recognised with a national accolade. The University has received the Athena SWAN Bronze Award and the Faculty of Environment holds the Athena SWAN Bronze Award in recognition of our success in recruiting, retaining and developing/promoting women in Science, Engineering and Technology (SET). We are proud of our commitment to equality and inclusiveness.

The University also offers family friendly policies including generous maternity and paternity leave; full details of the policies can be found here <http://hr.leeds.ac.uk/homepage/4/policies>.

**University Grade 7 (£32,004 - £38,183 p.a.)**

**Informal enquiries may be made to Professor Oliver Phillips, tel +44 (0)113 343 6832, email [o.phillips@leeds.ac.uk](mailto:o.phillips@leeds.ac.uk)**

**Closing Date: 6 January 2017**

**Ref: ENVGE1045**

**Click here for further information about working at the University of Leeds  
[www.leeds.ac.uk/info/20025/university\\_jobs](http://www.leeds.ac.uk/info/20025/university_jobs)**

## **Job Description**

**Responsible to: Head of School of Geography**

**Reporting to: Professor Oliver Phillips**

### **Summary of Post:**

You will work with and support the Ecology and Global Change research group and our project partners by coordinating the management, development and promotion of the application ForestPlots.net. This data repository and management applications supports the research of several academic staff in EGC, as well as collaborators worldwide particularly in tropical countries. The Database Manager will support the overall scientific and strategic goals of the research agendas of the users of ForestPlots.net in macro-ecology, biodiversity, forest dynamics, and global change, by providing world-class data management and support to the forest ecology group at Leeds and to a growing worldwide network of data contributors and users.

At Leeds, as well as the Line Manager and other project Principal Investigators, you will work with one or more Database assistants and colleagues with roles, a Database Programmer, Post-doctoral Researchers, and PhD students. Worldwide, you will work with diverse scientists and students from many nations, both contributors to and potential users of the database. The role requires timely task completion and flexibility, with changing demands primarily reflecting the needs of the main time-limited grants which support this role and the group's activities.

The two key areas are maintaining and developing the database. As well as technical skills these both require frequent communication with database contributors and users, and some support for their analytical needs.

### **Main duties and responsibilities:**

#### **Data management and curation**

**Successfully manage and promote a complex database of long-term tropical tree and liana dynamics and floristics, including information on demography, growth and species traits, and associated physical environmental data, by:**

- Ensuring data integrity and data security
- Facilitating data sharing among the users of ForestPlots.net, including efficiently providing access to datasets, and developing data sharing agreements between Leeds and project partners as appropriate
- Coordinating the upload of high quality new data, including the development of SQL routines to check data and implement quality control procedures during data upload
- Efficiently ensure timely and transparent decisions are made about data use and strategic developments of ForestPlots.net, including coordinating the ForestPlots.net steering committee

- Ensuring that the taxonomic information is curated to a high standard in collaboration with users of ForestPlots.net, including efficiently incorporating new determinations, newly described species, and morphospecies and ensuring higher-level taxonomy is up to date with international standards (e.g. APGIV)
- Supervising database assistant(s) managing workload and assigning duties, including their vital support to field teams
- Organising regular local team meetings
- Coordinating international training, including delivering in-person training workshops and internet meetings on the use of ForestPlots.net

### **Database and web-application development**

**Successfully ensure timely, periodic upgrades of ForestPlots.net that add value for users, including the following:**

- Improve the user-friendliness and usability of ForestPlots, including inputting, viewing and outputting raw data
- Implement changes in the SQL database structure as needed to improve its functionality
- Maintain a list of SQL queries within the database to assist in the uploading, data quality assurance and basic analyses of the data within the database
- Develop and implement bespoke queries (T-SQL) used for research purposes, with priority on tree-level computation of biomass and carbon dynamics and outputs for paid-for research projects
- Support researchers with R package functionality if required by core users
- Manage application development with the front-end developer, to implement as timely as possible front-end new features based on core-user priorities, following agreed standards to ensure that individual deliverables are tested and function as specified
- Contribute to the development strategy of the database
- Provide quarterly basic statistics on the content and use of the database

### **General IT / web development liaising**

- First point of contact for our website and server hosting, liaising with University IT staff and promoting discoverability
- Any other duties as may be reasonably required

## **University Values**

All staff are expected to operate in line with the University's values and standards, which work as an integral part of our strategy and set out the principles of how we work together. More information about the University's strategy and values is available at <http://www.leeds.ac.uk/comms/strategy/>.

## **Person Specification**

### **Essential**

- A PhD or Masters in Ecoinformatics, Bioinformatics, Quantitative Ecology, Computational Biology, Scientific Computing or a related area
- Experience of programming and managing a large SQL database
- Experience of managing other people
- Proven ability of attention to detail to ensure data quality
- Proven ability to coordinate strategic database developments to improve functionality
- High level of competence in Spanish or Portuguese, in addition to English
- Able to work independently and flexibly
- Able to work effectively with others in a team environment
- Able to balance the competing pressures of short-term deadlines and long-term strategic developments, while maintaining a professional approach to all aspects of the role
- Excellent interpersonal and communication skills with the ability to communicate with a wide variety of users of databases
- Ability to train others and facilitate collaboration amongst diverse groups

### **Desirable:**

- Experience with R programming
- Experience of working with botanical or ecological databases
- Experience of managing other people involved in data entry
- Experience of fieldwork in a tropical forest environment
- Experience of contributing significantly to a research programme
- Experience in data collection and analysis of tropical forest inventory data
- Evidence of obtaining own funding
- Experience of successfully leading database user training
- Willingness to travel overseas
- High level of competence in French
- Interest in the effective management or monitoring of protected areas in the tropics
- Experience in successfully communicating scientific results to external stakeholders to achieve impact

## **Additional Information**

The University offers generous terms and conditions of employment, a wide range of benefits, services, facilities and family friendly policies. Full details are available on the Human Resources web pages accessible at [www.leeds.ac.uk/hr](http://www.leeds.ac.uk/hr)

## **The Partnership**

The Partnership has been developed by students and staff and describes the mutual expectations of us all as members of the University of Leeds community. More information about the Partnership is available at <http://partnership.leeds.ac.uk>

## **Criminal Record Checks**

This post is covered by the Rehabilitation of Offenders Act 1974 and as such, applicants who have 'unspent' convictions, cautions, reprimands and warnings, including any pending criminal proceedings, must declare this in the 'other personal details' section of the application form and send details to the Recruitment Officer at [disclosure@leeds.ac.uk](mailto:disclosure@leeds.ac.uk).

Criminal record information will be held securely by the University and in accordance with the Data Protection Act and the University's Data Protection policy, available at [http://www.leeds.ac.uk/secretariat/data\\_protection\\_code\\_of\\_practice.html](http://www.leeds.ac.uk/secretariat/data_protection_code_of_practice.html)

Any offer of appointment will be in accordance with our policy, a copy of which is available at [http://hr.leeds.ac.uk/criminal\\_records](http://hr.leeds.ac.uk/criminal_records)

## **Disabled Applicants**

The post is located in the School of Geography. Disabled applicants wishing to review access to the building are invited to contact the department direct. Additional information may be sought from the Recruitment Officer, email [disclosure@leeds.ac.uk](mailto:disclosure@leeds.ac.uk) or tel + 44 (0)113 343 1723.

Disabled applicants are not obliged to inform employers of their disability but will still be covered by the Equality Act once their disability becomes known.

**Further information for applicants with disabilities, impairments or health conditions is available in the applicant guidance.**