Junior Database Developer
Information Systems Team
British Trust for Ornithology
BTO harnesses the skills and passion of birdwatchers to advance our understanding of ornithology and produce impartial science, communicated so that it can be of benefit to everyone.

OUR GOALS
BTO increases knowledge of birds and other wildlife, and their relationships with the environment and people, by:

- Enabling more people to learn about birds and science and grow through participation in environmental discovery.
- Delivering impartial, impactful and relevant science.
- Inspiring and empowering people with an understanding of birds and the importance of knowledge.

OUR PRIORITIES
We will reach our goals by:

- Providing more and better opportunities for people to contribute to our work.
- Monitoring the status of species, researching their ecology and understanding how they respond to change.
- Communicating great stories that bring to life the long-term data, information and knowledge that we hold.

OUR IMPACT
Our surveys, monitoring schemes and research programmes are designed by expert scientists to answer some of the most pressing questions affecting birds and their habitats. Because of our independence we are able to share our data, expertise and knowledge to inform decision-makers, educate the public and support conservation action. Our long-term datasets provide a measure of change and enable us to look for impacts and test solutions. Our vibrant volunteer network makes us highly effective and ensures that our work reflects the interests of those for whom birds and wildlife are important.

OUR FOUNDATIONS AND VALUES
The success of BTO is based on firm foundations that include: motivated and skilled staff and volunteers; a strong reputation; a robust business model and effective governance systems and processes.

We are:

- Inclusive and supportive
- Impartial
- Passionate
- Collaborative and open to new ideas

BTO is a Registered Charity Number 216652 (England & Wales), SC039193 (Scotland).
ABOUT THE ROLE

Are you a college graduate or do you have some previous experience of Database Development and are looking for an organisation where you can develop your skills? The British Trust for Ornithology is looking for a Junior Database Developer to join its team. The team includes people specialising in database management, creation of applications, website design and systems support, although some overlap in roles does occur.

The post-holder will be expected to play a key role in the technical development of BTO’s database systems. These databases underpin the scientific and engagement work of BTO as well as its internal business processes. The principal focus will be on development within Oracle and/or MariaDB environments and the role will involve working closely with a wide range of staff across the BTO.

Home-working is likely to be required initially as a result of the Covid-19 pandemic; a mixed model of office/home working can be discussed thereafter.

WHAT YOU WILL DELIVER

The role of the successful applicant will be:

• To develop and maintain high quality database applications, using personal initiative whilst working closely with a range of technical and non-technical colleagues. Our principal database technologies are:

  1. Oracle SQL and PL/SQL database software applications for the entry, management and reporting of ornithological data collected from the web and other sources.
  2. MariaDB databases underpinning our in-house CiviCRM system and Drupal website.
  3. PostgreSQL for building data warehouse functionality to improve efficient access to the Trust’s ornithological datasets.

• To undertake the maintenance and development of links between our multiple database systems to ensure integrity and synchronization.

• To contribute to the technical administration of the BTO’s databases.

• To write high quality comprehensive specifications and technical documentation for the applications under development, in collaboration with survey organisers and users. This will cover both user instructions and technical information required for software maintenance and further development.

• To evaluate the results of user testing and to make necessary corrections to the software.

• To maintain and develop a good level of expertise in relevant aspects of Oracle and/or MariaDB database operation.

• To help with any issues that arise from our volunteers and members via our web support email; liaising with them directly to troubleshoot and diagnose potential problems with surveys and users’ account access.

• To contribute to the systems administration of the Trust’s computers and websites, including monitoring...
users, security, backups and resource use, and to provide advice to staff at all levels on a wide variety of computing topics.

- To undertake occasional weekend monitoring of the online database and web applications on a rota system.

This is not an exhaustive list; the successful applicant will agree objectives with their line manager.

WHAT YOU’LL BRING TO THE ROLE

ESSENTIAL:

- A knowledge of the principles of building, maintaining and interrogating SQL databases, ideally within Oracle and/or MariaDB (or MySQL) environments.

- An understanding of the importance of ensuring database integrity in a complex multi project database.

- An understanding of the importance of designing database objects for efficiency of storage and performance.

- Understanding of creating properly tuned PL/SQL stored procedures and SQL statements for efficient DML statements and reports.

- Understanding of the use of multi-user database systems to manage complex data, and the ability to communicate well with users to identify requirements and translate them into database structures.

- Excellent organisational and documentation skills, and understanding of the approach of coding in a team using version control.

- The ability to write clear and well-presented requirement and specification documents.

- An understanding of secure coding principles and recognised standards.

- A good general knowledge of computing and a willingness and aptitude to investigate and use new and more efficient techniques as they evolve.

- Ability to work effectively on own initiative, individually and within a small team.

- The ability to communicate well with individuals within the Trust, members, volunteers and the public with a wide range of expertise and to be able to explain or discuss technical issues in understandable terms.

- Where necessary, the ability to learn new skills and techniques on the job, supported by a combination of guided training and self learning from a variety of sources.

DESIRABLE:

- Specific knowledge of PostgreSQL

- A basic knowledge of web applications, particularly using web forms to collect, store and retrieve data.

- A working knowledge of Linux in a server environment, together with the use of Windows and Macs to perform development work.

- An interest or active engagement in wildlife, conservation or science generally.

FIND OUT MORE ABOUT THE ROLE

For an informal chat about the position please contact Andrew Joys, Senior Database Officer (telephone 01842 750050 or email andrew.joys@bto.org).
**SALARY AND BENEFITS**

A starting salary of £22,431 – £26,668.68 depending on experience (including a 7% MFS).

A 37-hour working week.

The post will be based at BTO, The Nunnery, Thetford, Norfolk, IP24 2PU. Home-working is likely to be required initially as a result of the Covid-19 pandemic; a mixed model of office/home working can be discussed thereafter.

Annual leave entitlement on starting is 25 days plus bank holidays. The post holder will qualify for life assurance (four times salary) and be automatically enrolled in the BTO group personal pension scheme, benefitting from an 11% employer contribution.

**MAKING AN APPLICATION**

For further information and to apply visit our website: www.bto.org/vacancies

If you have a disability or long-term illness that otherwise prevents you from meeting any of the essential criteria, please contact us to discuss whether a reasonable adjustment could be made.

*As users of the disability confident scheme, we guarantee to interview all disabled applicants who meet the minimum criteria for the vacancy.*

Images by John Harding, Sarah Kelman, Austin Thomas, David Tipling and Mike Toms