



# Senior Systems Manager

British Trust for Ornithology

# BRITISH TRUST FOR ORNITHOLOGY

## 'A WORLD INSPIRED BY BIRDS AND INFORMED BY SCIENCE'

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).



# SENIOR SYSTEMS MANAGER

## ABOUT THE ROLE

For almost 90 years, BTO has been, and remains, an organisation built around data. The development of computer technology and the advent of the Internet were embraced by the organisation. However, the pace of change continues to be rapid and BTO is dedicated to keeping at the forefront of information systems. We are now recruiting a Senior Systems Manager, who would have overall responsibility for providing computer infrastructure, software packages and support to about 130 staff, based variously at our HQ (The Nunnery, in Thetford), our satellite offices, and working from home; and to support online access to BTO web applications by our supporters and the wider public. Security of our networks is a key role, alongside enabling our developers and scientists to undertake their work in a flexible and effective manner.

The Information Systems Department consists of 16 staff specialising in software development, database management, website design and systems support, managed by the Director of Information Systems, to whom the post holder will report. Additionally, the role involves interacting with a wide range of other BTO staff as required.

## WHAT YOU WILL DELIVER

- Management and operation of all of the Trust's computer systems, operating a high quality computing service for all BTO staff.
- Line management of the Computing Support Officer, and responding when issues are escalated from that

first-line role. Providing timely and effective support to users with respect to the resolution of computing problems. Maintaining an up-to-date information resource via the BTO Intranet.

- Taking lead responsibility for the provision of robust and reliable email and other electronic office services for all Trust staff, including secure access for staff from outside The Nunnery.
- Continuing the transition of the organisation from a wholly office-based culture, to a model of hybrid working, aiming to realise the benefits both of a vibrant workplace as well as the flexibility of home-working.
- Helping develop a DevOps culture within the team by provision of a high quality computing service for BTO volunteers and the public by maintaining and developing the infrastructure needed to support BTO's on-line applications.
- In close collaboration with colleagues, taking lead responsibility for the management and operation of Linux servers used to support BTO's databases and line of business applications. Developing these systems to provide a high level of resilience to hardware failures, and a capability for rapid recovery in the event of unexpected problems.
- Strategic development of the Trust's computing infrastructure, ensuring that appropriate hardware,

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software, support arrangements and technical expertise are in place to meet the Trust's computing needs. Working closely with the Director of Information Systems, BTO staff, management and Committees to identify computing needs. Commissioning consultancy and reviews as required.

- Maintaining and implementing a rolling plan and budget for the strategic development and operation of computer systems required to support the work of BTO in consultation with the Director of Information Systems. Drawing up and implementing annual budgets based on this plan.
  - Overseeing an appropriate process for major supply of computing equipment and services, obtaining competitive quotations, personally undertaking major or difficult negotiations, making purchasing decisions and ensuring delivery according to specification. Involves frequent discussion and meetings with potential suppliers and consultants.
  - Maintaining the security of, and access to, the BTO's network, computer systems and web servers. Implementation of effective security procedures for all BTO computing systems including firewalling, passwords, file access, encryption, anti-virus software and anti-spam software. Giving particular attention to the security of personal data, financial information and payments made over the Internet. Maintaining an effective computer security policy and acceptable computer use policy for BTO to underpin these procedures. Maintain security accreditation to at least Cyber Essentials level.
- Maintaining a backup and resilience policy for all BTO computer systems to ensure that all BTO data are adequately secured, and that systems can be recovered rapidly in the event of hardware or software failure. Overseeing the implementation of this policy including hardware and software resilience, backup systems, monitoring of system logs and maintaining secure off-site copies of data.
  - Maintaining disaster recovery plans for the rapid recovery of BTO computer systems in the event of failures, ranging from the failure of individual mission-critical servers to the loss of a whole site. Organising rehearsals of key elements of this plan to ensure that it could be implemented quickly and effectively if required.
  - Overseeing the maintenance of proper records of hardware, software and support agreements. Ensuring all software in use is properly licensed and that maintenance agreements are kept up to date.
  - Disposing of old and outdated computer equipment in a secure and environmentally responsible way, including all necessary purging of data and software.
  - In collaboration with the Director of Information Systems, developing and enabling appropriate levels of systems knowledge amongst all members of the IS team so that they are able to assist with systems duties when necessary.

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- Developing BTO's cloud computing capabilities, in particular through supporting development teams to make effective use of the opportunities that cloud computing can bring to our organisation.
- Maintaining up to date and relevant technical skill sets and be aware of industry trends. Maintaining a good overview of developments in computer hardware and systems software that are likely to affect the BTO by attending appropriate courses and seminars and through reading. Maintain a network of contacts and consultants able to provide necessary expertise and advice that is not available in house.

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

## WHAT YOU WILL BRING TO THE INFORMATION SYSTEMS TEAM

- A collaborative and enabling manner, willing and able to engage well with colleagues both within the Information Systems Team and more widely around the organisation.
- A willingness to help team colleagues achieve continuous improvement to their systems through iterative processes and ongoing conversations.
- Excellent administrative skills, planning and personal organisation.
- A high level of technical expertise in the configuration and operation of Linux Servers, particularly with respect to the operation of databases and web servers.
- A high level of technical expertise in computer networking, email systems and the internet.
- A thorough technical knowledge of the hardware and software infrastructure required to run web applications and web-enabled databases.
- A thorough technical knowledge of the configuration and operation of Windows servers.
- A thorough technical knowledge of PC hardware, operating systems and software.
- Ability to maintain and implement virtualisation technologies such as Hyper-V.
- Good knowledge of cloud technologies including Google Workspace, AWS, Azure AD and Office 365.
- A thorough technical knowledge of Computer Security issues, including data security and the protection of personal data.
- Good knowledge and experience of project management methods, particularly with respect to computing infrastructure projects.
- The ability to source products within the budgetary constraints of a non-for-profit organisation; the ability to negotiate effectively.

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- Experience of using consultancy services and technical support arrangements effectively, and of researching technical computing information on a wide range of topics.
- Good ability to manage budgets effectively.
- An appreciation of the strengths and limitations (notably financial constraints) associated with managing computing infrastructure for a charity engaged in scientific research and public engagement.
- Experience of provisioning software to support DevOps and Continuous Delivery Principles, e.g. Jira products, Deployment automation and scripting (Ansible or similar), global systems monitoring (Kibana or similar), GIT code management, etc.
- Experience of providing infrastructure to support PCI compliance requirements would be beneficial.
- Experience of VOIP systems would be beneficial.
- The ability to work effectively under pressure to resolve any unexpected problems that may arise.
- An expectation of working at evenings and weekends where this is necessary, particularly with respect to making system changes at times that will not disrupt the work of BTO staff.

## FIND OUT MORE ABOUT THE ROLE

For an informal chat about the position, please contact Ed

Hanrahan on [ed.hanrahan@bto.org](mailto:ed.hanrahan@bto.org) or 01842 750050.

## SALARY AND BENEFITS

A starting salary of £38,164 rising to £42,405 after two years.

A 37-hour working week.

The post will be largely based at the BTO's Nunnery headquarters in Thetford, Norfolk.

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

If you have what it takes then we look forward to hearing from you – send your completed application form with a CV to Holly Stevenitt via [recruitment@bto.org](mailto:recruitment@bto.org) stating the job title in the subject line.

Closing date for receipt of applications is 1pm on Wednesday 29 September 2021.

It is anticipated that interviews will be held remotely at the earliest possible opportunity.

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.*