Who can Participate?

Anyone with an interest in monitoring migration of organisms in and around the British Isles can set up a listening station but the use of radio tags would need to be under the BTO ringing scheme.

How do we get involved?

Initial contact can be through your local area champion, by contacting the Project Leader, The BOC lead or the BCT lead. There is also lots of information on the project website and the Motus website.

https://univhullornithgroup.wixsite.com/horc/motus-telemetry

https://motus.org

Contacts?

Project Advice:

Project Lead: Lucy Mitchell, lucy.mitchell@hull.ac.uk

BOC Contact: Steve Stansfield, warden@bbfo.org.uk

BTO Contact: chris.hewson@bto.org

BCT advisor: Jan Collins, jcollins@bats.org.uk

Bird Observatory in your area:

South West – Portland Bird Observatory, profpjmorgan@hotmail.com

South East – Dungeness Bird Observatory, dungenessobs@vfast.co.uk

East Anglia – Landguard Bird Observatory, landguardbo@yahoo.co.uk

Motus UK Project Information

What is Motus?

The Motus Wildlife Tracking system is an international collaborative network that uses automated radio telemetry to track movements of birds, bats, insects and other animals.

Receivers automatically track signals from transmitters that are fitted to the bird or other animals and these have a wide range of applications.

It harnesses the collective resources of many independent researchers and is the largest collaborative automated telemetry array in the world. For more information go to: https://motus.org

What is the Motus UK Project?

The Motus UK Project originated as a project to use and develop modern radio telemetry technologies to track birds and bats, as has been done in N America and continental Europe for several years. Such technology is viewed as being complimentary to other tracking techniques such as satellite and geolocation. We have set up a Strategic Steering Group, with representation from the Bird Observatories Council, the BTO, The University of Hull and the Bat Conservation Trust, to take the pilot project forward. The project is also known as “Project Yellow-browed” to reflect the fact that we are interested in learning more about reverse migration of many species, perhaps best symbolised by the enigmatic Yellow-browed Warbler.

With the help and support of friends and advisors at Wageningen University, Heligoland and The Bat Conservation Trust. Here in Britain, we have installed receiver stations at Landguard, Spurn, Dungeness and Sandwich Bay Bird Observatories as well as stations on the East Anglian coast (see motus.org map), with more observatories looking to join the network soon. The project is therefore in its early stages with a few early adopters acting as pathfinders for future observatories and stations

What equipment do we need and how much will it cost?

The basic receiver station equipment consists of 4 antennae mounted on a pole, fixed to a building or attached to a free-standing tower. Cabling from the antennae is attached to the Raspberry Pi operating system in a weatherproof cabinet. This will need electricity, although it is possible to solar power remote receivers. The data can be downloaded manually or uploaded direct to Motus via wifi or sim card.

Approximate costs are £3,500-£4,500 depending on configuration and installation needs.

Planning permission may be necessary, but hasn’t been a difficult procedure so far.

Running Costs vary but annual costs are roughly £300 as the stations need to be registered and there is a cost for data processing etc. funding is hoped to be covered through any big grant application.

At the moment individual Bird Observatories are covering their own maintenance. It might be possible to acquire a local funder who is specifically interested in investing in local stations.
Biological records centres may be interested. The equipment should last a decade or more with servicing so giving value over time.

Funding Opportunities?

Most current stations were self-funded by the Observatories with three being installed by the Bat Project at Wageningen University. The Bat Conservation Trust are also looking into various funding possibilities. The University of Hull is in the process of putting in for several bits of funding, including an HLF grant which would apply for a £1 million or so to install receivers in many coastal and inland sites, and to set up lots of opportunities to engage with groups on the ground.

Tagging Licences and Training?

At present we are just listening stations, as there are no licences for tagging birds, bats or other animals on the continental frequency of 150.1 MHz. The University of Hull are working with the BTO, BOC and the Home Office to get licence permissions and training opportunities in place.

Data Management?

The University of Hull are looking to set up a centralised data repository to store all the data at the University. There are strict data management procedures in place which will ensure that our data is very secure. The data in its raw form directly from the receiver needs to be processed by Motus online to make it into anything readable. Once they have processed it, it can be downloaded again using a free open source statistical package called ‘R’. You will see any detections your receiver has made on the website, within minutes of the files being uploaded. There will be more information on the project website.