



The Badger Cattle Contact Project was established in 2012 to investigate contact between badgers and cattle to understand how bovine tuberculosis is transmitted between the species. We are independent scientists with no alliance to either side of the debate on managing TB in cattle and badgers. Our research is funded by DEFRA.

Aim

Our aim is to monitor badger and cattle movements on farms to understand where, when and how contact occurs between the species, which could result in transmission of bovine tuberculosis.

Currently, it is not known precisely how transmission occurs. It could occur either through direct contact between the two species, or indirectly, if, for example, both species use the same areas and become infected through contaminated food or water.

Methods

Our research is based on dairy and beef farms in four areas across Cornwall, which range in badger density. To give an unbroken picture of badger and cattle movements both indoors and outdoors, we are using a combination of:

- > GPS collars (to monitor animal movement)
- > 'proximity' collars (to detect when a collared badger is within a 2 metre radius of a collared cow and the location of the contact)
- > CCTV surveillance (to monitor indoor spaces)

The combination of all three methods in parallel allow us to identify when and where there is direct contact between badgers and cattle, and where the 'hotspots' of overlap in their use of the environment are.

The project is ambitious and unprecedented in its scope. From 2012 until spring 2015 we have tracked badger movements for more than 5,500 nights (representing the movements of more than 60 badgers) and have tracked cattle herd movements on all study farms. We have also run simultaneous small scale, intensive experiments using camera traps to see how cattle and badgers respond to environmental stimuli associated with the other species and how their behaviour is affected by different farm management practices.

The task now is to analyse the large volume of data collected to build the picture of where and when the interactions between cattle and badgers occur. This forms the final phase of the project and is due to be completed later in 2015.

General note: Where necessary, our work is licensed by Natural England and the Home Office.

Current status

We are nearing the final phase of the project in which the field work is concluded and data are analysed. During spring and early summer 2015 collars will be removed from badgers and cattle at all farms and monitoring equipment such as CCTV, camera trap experiments and weather stations will be retrieved.

We wish to express our sincere thanks to the farmers who have allowed us to trap and collar badgers on their land and to collar their cattle. We are also grateful to the volunteers who have helped analyse many hours of CCTV footage and assisted in other elements of the field work.

ZSL Staff Involved

Research Technician: Naomi Stratton

Research Technician: Cally Ham

Postdoctoral Research Assistant: [Sam Cartwright](#)

Principal Investigator: [Rosie Woodroffe](#)

For more information on this project, please contact [Rosie Woodroffe](#)

Badger vaccination

ZSL is researching whether badger vaccination can reduce TB infection in the badger population, and whether this helps control TB in cattle. We are looking for landowners and volunteers to get involved with the project.



FIND OUT MORE >