

Department for Environment, Food and Rural Affairs

Badger Edge Vaccination Scheme (BEVS)

General information

September 2014

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Badger vaccination and the TB Strategy

The government's [bovine TB strategy for England](#) published in April 2014 announced new support for privately-led vaccination initiatives in what it called “the Edge Area” of England.

The Edge Area falls between the High Risk Area and the Low Risk Area.

The High Risk Area covers the South West, West Midlands and East Sussex. A relatively high proportion of cattle herds are infected with bovine TB, and a high proportion suffer repeated breakdowns. A recognised reservoir of infection exists in badgers.

The Low Risk Area covers large parts of the North and East of England and has a low incidence of bovine TB and no recognised reservoir of disease in wildlife.

The Edge Area is the buffer zone between the High and Low Risk Areas. It contains local disease fronts that are advancing geographically from the High Risk to the Low Risk Area. It includes all of Berkshire, Buckinghamshire, Hampshire, Leicestershire, Northamptonshire and Nottinghamshire and parts of Cheshire, Derbyshire, East Sussex, Oxfordshire and Warwickshire (referred to as ‘split’ counties). A list of parishes within the split counties is [available](#).

Purpose of the scheme

Launched in September 2014, and taking forward the commitment in the TB Strategy, the Badger Edge Vaccination Scheme (BEVS) offers long term financial and other support to privately led vaccination campaigns in the edge area.

The purpose of BEVS is to support the creation of a protected badger population in uninfected areas. This will:

- Form a “cordon sanitaire” between areas where bovine TB is present in cattle and areas without bovine TB, or
- Limit the establishment of the disease in badgers where bovine TB is beginning to appear in the cattle population.

For more information on the government's support for badger vaccination or to discuss potential applications, please contact comms.tb@defra.gsi.gov.uk

Scheme criteria

How to demonstrate compliance with the scheme criteria is set out in the guidance for applicants. The rationale for each criterion is explained below.

Criterion 1: Vaccination area should be generally within the Edge Area of England

Under the TB Strategy for England, Defra is seeking to support badger vaccination in the Edge Area. Vaccination areas should therefore generally be wholly within the Edge Area.

However, it may be appropriate to include in a proposal some land that falls outside the Edge Area. For example, in order to cover whole farms.

Criterion 2: Vaccination area should be at least around 15km²

The greater the area effectively vaccinated, the greater the expected benefit. For this reason, and taking into account the roaming behaviour of badgers, vaccination needs to take place over large areas. Ideally this would cover several neighbouring badger social groups and whole farm areas.

The minimum size expected for applications under BEVS will be approximately 15km². This area should consist of largely contiguous, accessible land. Entire farms should be included unless there is a compelling reason not to. Areas larger than 15km² are strongly encouraged. The AHVLA, the National Trust and the Welsh Government have run significantly larger vaccination projects, which have demonstrated that vaccination campaigns over larger areas can be achieved.

Slightly smaller areas may also be eligible if they are designed to take advantage of barriers to badger movement or for other practical reasons.

The intention is that as expertise and capacity increases, the minimum size for new applications will also increase in subsequent years.

Criterion 3: Applicants should demonstrate commitment to vaccinate for a minimum of 4 years

Badger vaccination needs to be repeated annually for a number of years in order to take account of the badger population change (with turnover rates of about 20-25% each year), the unknown impact of how long the protective effect of BCG in badgers may last, the impact of any inaccessible land in the vaccination area, the potential for infected badgers outside the vaccination area to act as a source of bovine TB. Modelling which takes account of the factors set out above, shows that the longer a vaccination campaign continues, the greater the benefits that are achieved. As one of the intentions of BEVS is to form a "cordon sanitaire", it is reasonable to assume that vaccination needs to be repeated annually for a number of years.

This should be shown through evidence of effective planning, including in respect of personnel and an ability to provide match funding throughout the four year period.

Criterion 4: Applicants should demonstrate their ability to carry out a vaccination campaign

Delivering an effective vaccination campaign which is able to trap and vaccinate a large proportion of badgers in a given area during the trapping open season (which for trapping and vaccination of badgers runs from 1 May to 30 November) will involve practical and logistical challenges. Effective operational plans should therefore be in place, including:

- sufficient access to land for vaccination
- confirmation that a Natural England licence to trap badgers for the purposes of vaccination against bovine TB is granted or expected to be granted
- availability of all necessary resources, including equipment and personnel, including for deployment of cage trapping effort
- confirmation that competently trained vets or lay vaccinators will carry out the vaccination
- a good understanding of the location of active badger setts and, wherever possible, estimates of badger numbers within the area, reflected in a cage trapping plan
- a work plan that sets out the key milestones for vaccination campaign against which progress can be measured
- confirmation that discussions have taken place with local AHVLA veterinary officers and as far as possible reflect that advice.

Criterion 5: Agreement should be given to accurately keep records and data

Applicants will be required to keep records. These are set out in the information for applicants and toolkit.

Criterion 6: Vaccination campaigns should represent value for money

All bids for support must demonstrate value for money, for example by:

- Providing details of anticipated costs for trapping and vaccinating badgers (based on actual or estimated density of setts)
- Clearly justifying all costs and setting out steps to generate efficiencies.

Prioritisation criteria

Having assessed applications against the criteria set out above, if it is necessary to rank bids of similar quality, three additional prioritisation criteria will be used.

Prioritisation criteria 1: Areas at potential increased risk of spread or where benefits of vaccination are likely to be greatest

Within the Edge Area, there are some areas with higher risk factors than others, indicating a potential increased spread of disease. These are areas where there are relatively high cattle densities at risk in proximity to areas of bovine TB spread in cattle.

Areas at potential increased risk of spread or where benefits of vaccination are likely to be greatest will be given priority, should the need arise. The [maps provided](#) indicate example areas where Defra considers vaccination may be worthwhile but each proposal will be carefully considered in its own right before being compared to others.

Prioritisation criteria 2: Areas where local knowledge of badger density and cattle epidemiology indicates vaccination will be beneficial

The benefits of vaccination could be maximised by taking localised factors into account. These include location of badger setts and potential barriers to badger movement, the local epidemiology of disease and location of cattle. All applicants are expected to work with their local AHVLA office to help develop their understanding of these factors. Those areas with more beneficial local features would be preferred over those without.

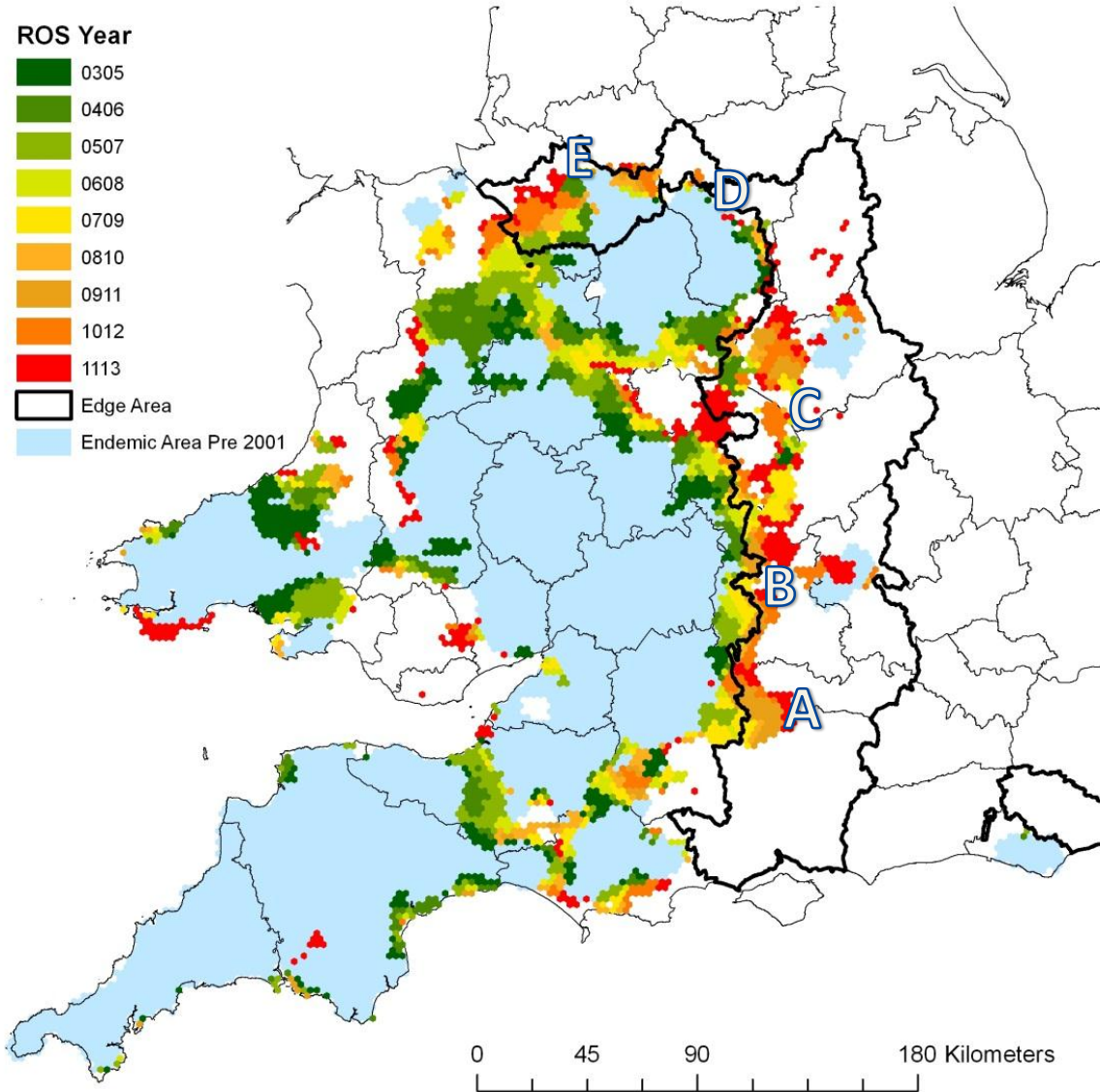
Prioritisation criteria 3: Area size

Effective vaccination over larger areas will generate relatively greater benefits. Applications for funding for vaccination of larger areas, or with the potential to become larger areas in time, will be preferred over applications of similar quality for vaccination of smaller areas.

Maps indicating potential spread of bovine TB

The maps below illustrate the spread of bovine TB in the Edge Area of England alongside cattle densities.

Spread of the TB endemic area into the Edge Area with five suggested vaccination areas A-E



The Edge Area is the area within the thick line on the map. Five suggested vaccination areas are labelled A, B, C, D and E. There is no order of preference.

Rate of spread per year: Colours denote the 2 year time period in which each hexagon was first considered an endemic area as defined by having three OTFw breakdowns within 7km. For example, ROS Year 0305 means that there were three of these breakdowns within 7km between 2003 and 2005.

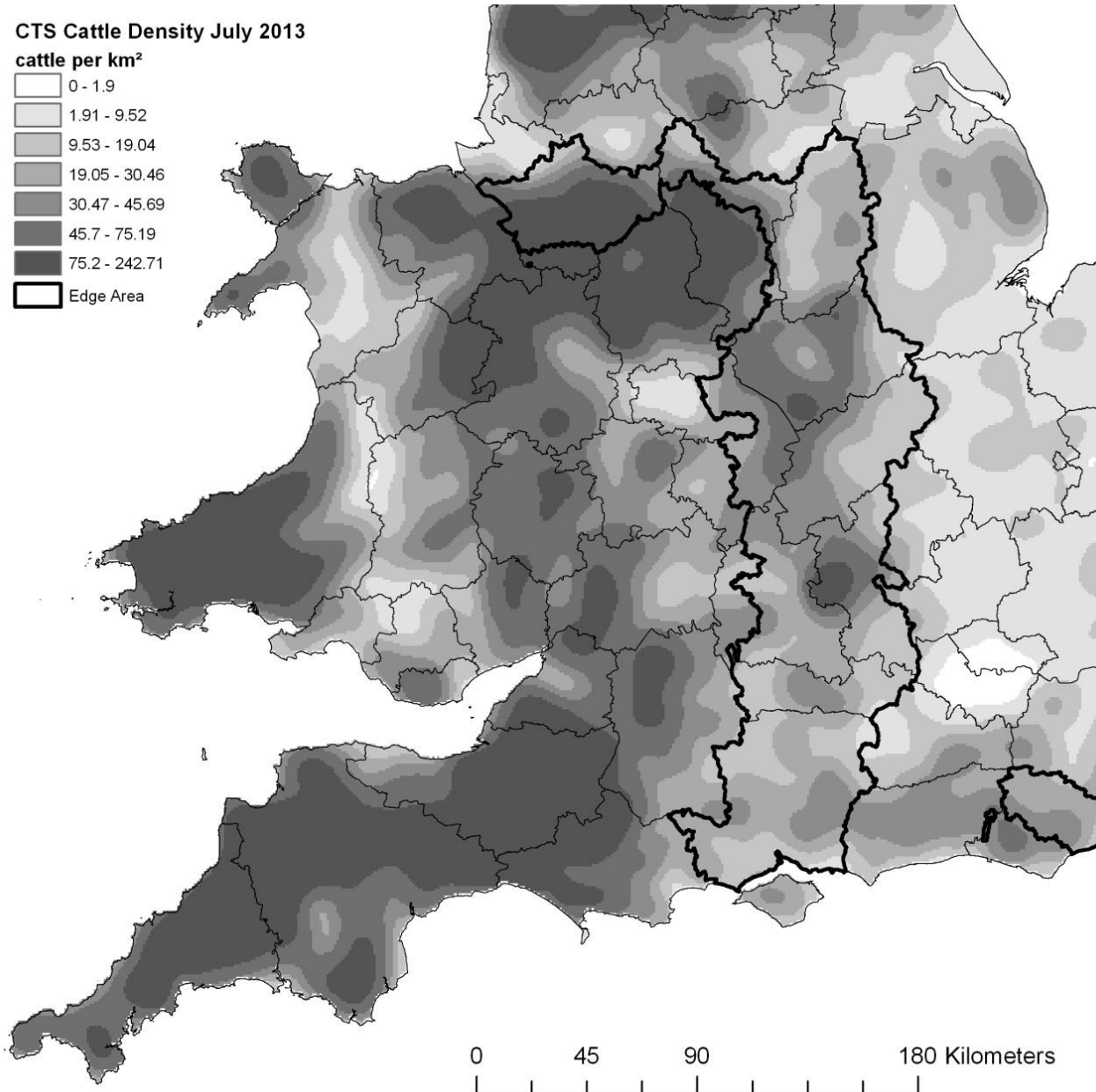
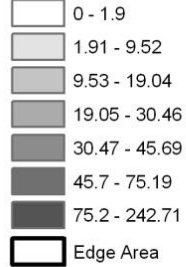
‘OTFw’ breakdowns means Officially Bovine Tuberculosis Free status was withdrawn from a cattle herd.

Other parts of the Edge Area where vaccination would be particularly beneficial may also be identified following local AHVLA advice.

Cattle density map

CTS Cattle Density July 2013

cattle per km²

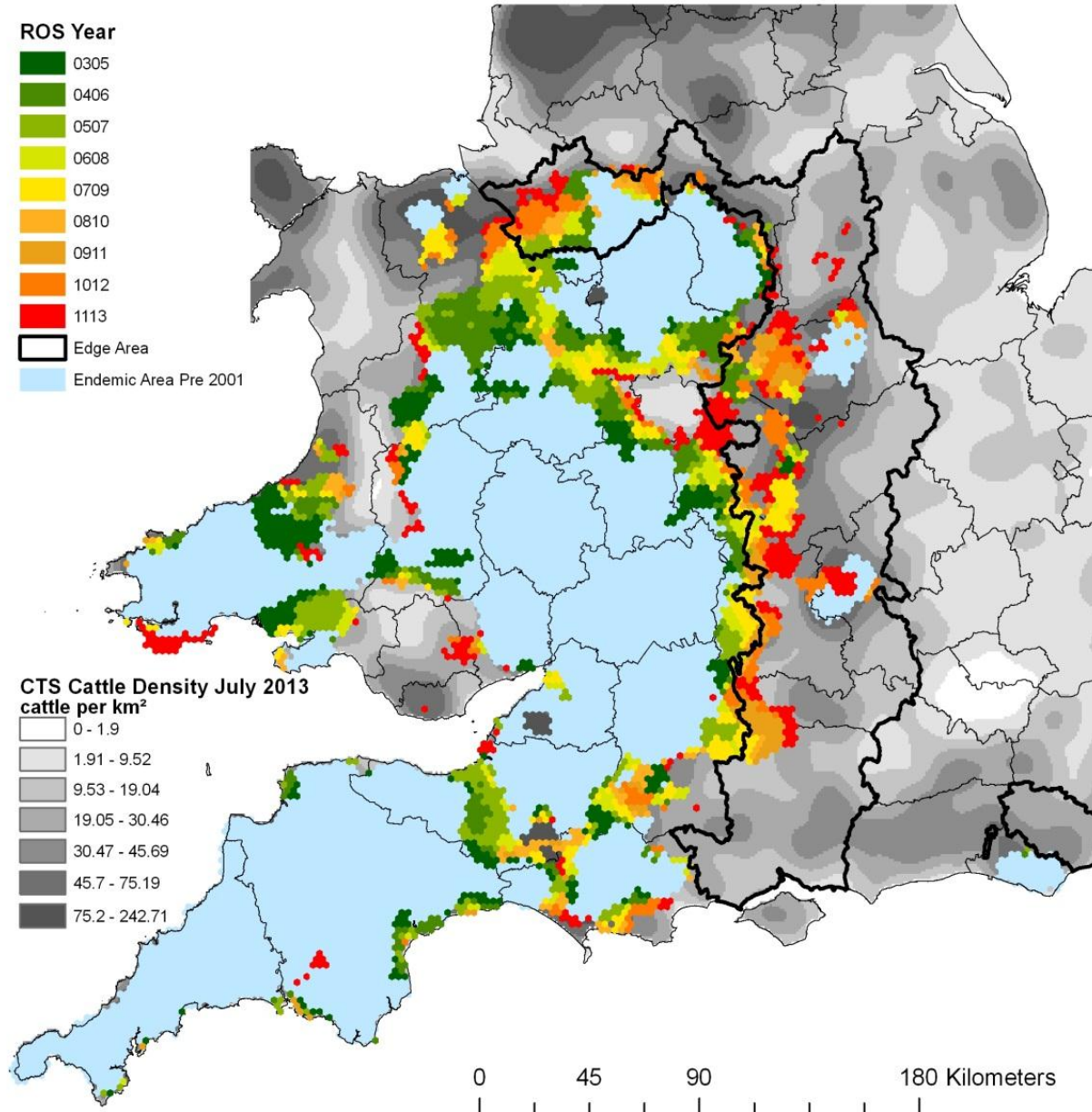


Darker shaded areas indicate areas with greater density of cattle.

The Edge Area is the area within the thick line on the map.

‘CTS’ stands for the Cattle Tracing Service, the source of the data.

Combined map showing cattle density and spread of the TB endemic area into the edge area



The Edge Area is the area within the thick line on the map.

Rate of spread per year:
Colours denote the 2 year time period in which each hexagon was first considered an endemic area as defined by having three OTFw breakdowns within 7km.

Darker shaded areas indicate areas with greater density of cattle.

‘CTS’ stands for the Cattle Tracing Service, the source of the data.



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