



[REDACTED]
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Our ref: RFI 6387

Date: 01/04/2014

Dear [REDACTED]

REQUEST FOR INFORMATION: Badger Culling in Ireland

Thank you for your request for information about Defra analysis of badger control policy in the Republic of Ireland, which we received on 07 March 2014. We have handled your request under the Environmental Information Regulations 2004 (EIRs).

The EIRs apply to requests for environmental information, which is a broad category of information defined in regulation 2 of the EIRs. Public authorities are required to handle requests for environmental information under the EIRs. They give similar access rights to the Freedom of Information Act 2000 (FOIA).

I am writing to advise you that the information that you have requested is not held by Defra.

The link between TB in cattle and badgers in Ireland and the effect of culling badgers on bovine TB in Ireland has been demonstrated and analysed in a variety of scientific papers listed below.

Therefore given that:

- 1) several peer reviewed scientific studies have shown the effectiveness of badger culling in reducing the incidence of TB in cattle several different scientific studies in different parts of Ireland,
- 2) the widespread application of badger culling in Ireland shortly after the completion of those scientific field studies in the early 2000s,
- 3) the observed subsequent decline in the incidence (and other epidemiological indicators) of the disease in cattle,

- 4) the logical impossibility of simultaneously applying a disease control measure to an entire country and then formally proving beyond doubt what would have happened if you had not applied that intervention,

The Irish Government's assertion that:

“Notwithstanding the difficulty in attributing trends to a single factor and the cyclical nature of the disease, the Department is satisfied that the culling of infected badgers, which is underpinned by research studies and sound science, has led to a significant reduction in the incidence of TB in cattle over the past decade.”

is, in our view, a reasonable conclusion supported by epidemiological evidence.

Any further correspondence on this issue should be addressed to the Irish Department of Agriculture, Food and the Marine, who can be contacted at info@agriculture.gov.ie.

A selection of scientific papers on the issue can be found below:

Eves, J.A., 1999. Impact of badger removal on bovine tuberculosis in east County Offaly. *Ir. Vet. J.* 52, 199–203.

Martin, S.W., Eves, J.A., Dolan, L.A., Hammond, R.F., Griffin, J.M., Collins, J.D., Shoukri, M.M., 1997. The association between the bovine tuberculosis status of herds in the East Offaly Project Area, and the distance to badger setts, 1988-1993. *Preventive Veterinary Medicine* 31, 113-125.

Griffin, J.M., Williams, D.H., Kelly, G.E., Clegg, T.A., O'Boyle, I., Collins, J.D., More, S.J. 2005. The impact of badger removal on the control of tuberculosis in cattle herds in Ireland. *Preventive Veterinary Medicine* 67, 237-266.

Griffin, J.M., More, S.J., Clegg, T.A., Collins, J.D., O'Boyle, I., Williams, D.H., Kelly, G.E., Costello, E., Sleeman, D.P., O'Shea, F., Duggan, M., Murphy, J., Lavin, D.P.T., 2005. Tuberculosis in cattle: the results of the four-area project. (2005) *Irish Veterinary Journal* (11) 629-636.

Olea-Popelka, F.J., Fitzgerald, P., White, P., McGrath, G., Collins, J.D., O'Keeffe, J., Kelton, D.F., Berke, O., More, S.J., Martin, S.W., 2009. Targeted badger removal and the subsequent risk of bovine tuberculosis in cattle herds in county Laois, Ireland. *Preventive Veterinary Medicine* 88, 178-184.

Kelly, G. E., Condon, J., More, S. J., Dolan, L., Higgins, I., Eves J. 2008, A long-term observational study of the impact of badger removal on herd restrictions due to bovine TB in the Irish midlands during 1989–2004. *Epidemiol. Infect.* 136, 1362–1373.

Costello, E., O'Grady, D., Flynn O., O'Brien, R., Rogers, M., Quigley, F., Egan, J., Griffin, J. 1999. Study of restriction fragment length polymorphism analysis and spoligotyping for epidemiological investigation of *Mycobacterium bovis* infection. *Journal of Clinical Microbiology*, vol. 37, no. 10, pp. 3217–3222.

Olea-Popelka, F. J., Flynn, O., Costello E., McGrath, G., Collins, J.D., O'keeffe, J., Kelton, D.F., Berke, O., Martin, S.W. 2005. Spatial relationship between Mycobacterium bovis strains in cattle and badgers in four areas in Ireland," *Preventive Veterinary Medicine*, vol. 71, no. 1-2, pp. 57–70.

Murphy, C., Costello, E., Murphy, D., Corner, L.A., Gormley, E. 2012. DNA typing of Mycobacterium bovis isolates from badgers (*Meles meles*) culled from areas in Ireland with different Levels of Tuberculosis prevalence. *Veterinary Medicine International Volume 2012*, Article ID 742478, 6 pages. doi:10.1155/2012/742478

Murphy, D., Gormley, E., Collins D. M., McGrath, G., Sovsic, E., Costello, E., Corner, L.A. 2011. Tuberculosis in cattle herds are sentinels for Mycobacterium bovis infection in European badgers (*Meles meles*): the Irish greenfield study. *Veterinary Microbiology*, vol. 151, no. 1-2, pp. 120–125.

I attach an annex giving contact details should you be unhappy with the service you have received.

If you have any queries about this letter, please contact us.

Yours,

Defra TB Programme

Ccu.correspondence@defra.gsi.gov.uk

Annex

Complaints

If you are unhappy with the service you have received in relation to your request you may make a complaint or appeal against our decision under section 17(7) of the FOIA or under regulation 18 of the EIRs, as applicable, within 40 working days of the date of this letter. Please write to Mike Kaye, Head of Information Standards, Area 4D, Nobel House, 17 Smith Square, London, SW1P 3JR (email: requestforinfo@defra.gsi.gov.uk) and he will arrange for an internal review of your case. Details of Defra's complaints procedure are on our [website](#).

If you are not content with the outcome of the internal review, section 50 of the FOIA and regulation 18 of the EIRs gives you the right to apply directly to the Information Commissioner for a decision. Please note that generally the Information Commissioner cannot make a decision unless you have first exhausted Defra's own complaints procedure. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF