



## Red squirrel leprosy

*Last updated: December 2017*

### What is red squirrel leprosy?

Over the years Saving Scotland's Red Squirrels have had a number of queries accompanied by photographs of red squirrels with a distinctive skin disease. In 2005 the Royal (Dick) School of Veterinary Studies in Edinburgh found that the organism causing the disease was similar to *Mycobacterium lepromatosis*, a bacterium that causes leprosy in humans.



Little is known about how the disease spreads in red squirrels. Individuals with the characteristic symptoms have been observed visiting bird-tables over many months, so it would seem that they are able to live reasonably well with the disease for an extended period alongside other squirrels which appear unaffected (although early symptoms may not be obvious). Grey squirrels are not known to suffer from the disease.

Professor Anna Meredith of Edinburgh's Royal Dick School of Veterinary Studies, urged members of the public to report sightings of infected animals.

"We suspect this disease is more widespread than the six cases we have confirmed," she says.

## What does leprosy in squirrels look like?

The disease is unmistakable: there is gross swelling and loss of hair around the snout, lips, eyelids, ears, genitalia and sometimes feet and lower limbs. This bare skin has a “shiny” appearance. The squirrel is usually in generally poor body condition and may have a heavy burden of parasites like fleas, ticks and mites.



## What should you do if you see a red squirrel with suspected leprosy?

Professor Anna Meredith at the Royal Dick School of Veterinary Studies is keen to see how widespread this disease is in the wild. Therefore, please notify Saving Scotland’s Red Squirrels of your observation: try to get a photograph of the affected animal so that Professor Meredith can provide a preliminary diagnosis. If the animal is very poorly, arrange for either SSRS or the Scottish Society for Prevention of Cruelty to Animals to try to catch the animal for humane euthanasia.

## What should you do if a red squirrel with leprosy is trapped?

A red squirrel with leprosy will not recover. Therefore if the trapped squirrel is judged to be suffering you can legally despatch it humanely, even though the species is protected under the Wildlife & Countryside Act. However a better option would be to take it to a nearby vet for humane euthanasia, so that the intact body can be sent for post mortem. Although we do not know whether there are implications for further spread of the disease to other squirrels if a diseased animal is released, there is a concern that it may be shedding the bacteria, creating a potential source of infection for others. Secondly, once trapped you have a duty of care to the animal under the Animal Welfare Act, and if it is suffering you are legally obliged to act to prevent that, hence euthanasia is the best option.

It is suggested you initially contact the local vet in the area to brief them, before taking the squirrel in to the surgery. Provide the vet with Professor Anna Meredith’s contact details for further information if they are concerned. Ensure that the body is sent to Professor Meredith for post mortem.

**It is very important to then thoroughly clean and disinfect the trap using Virkon before re-use.**

## Handling the animal or its trap

Don't panic! Leprosy is very difficult to catch so the risk is considered very low as long as you take simple, sensible hygienic precautions. Wear disposable gloves – or use an intact polythene bag if gloves are not available – and thoroughly wash hands and all equipment that has been in contact with the squirrel.

## Veterinary Contact

Anna Meredith  
Veterinary Pathology Unit  
Royal (Dick) School of Veterinary Studies  
University of Edinburgh  
Easter Bush Veterinary Centre  
Roslin  
Midlothian  
EH25 9RG  
Tel: 0131 650 7650  
Reception: 0131 650 6247 or 0131 651 7300  
[anna.meredith@ed.ac.uk](mailto:anna.meredith@ed.ac.uk)

## Saving Scotland's Red Squirrels contact

[squirrels@scottishwildlifetrust.org.uk](mailto:squirrels@scottishwildlifetrust.org.uk)

## About Saving Scotland's Red Squirrels

*Saving Scotland's Red Squirrels is supporting local communities to take action to ensure red squirrels continue to be a part of Scotland's special native wildlife. Together we are working to protect Scotland's core red squirrel populations threatened by the spread of the non-native grey squirrel. The project is led by the Scottish Wildlife Trust in partnership with Scottish Natural Heritage, Forestry Commission Scotland, RSPB Scotland, Scottish Land & Estates and Red Squirrel Survival Trust.*

*The project is funded by National Lottery players through the Heritage Lottery Fund, project partners, the Dumfries & Galloway LEADER fund, Loch Lomond and the Trossachs National Park Authority, Aberdeen Western Peripheral Route (Balmedie-Tipperty), Margaret Davies Charitable Trust, Mrs Lascelles Charitable Trust, Dulverton Trust and the Robert O'Curle fund.*

For more information visit [scottishsquirrels.org.uk](http://scottishsquirrels.org.uk).

