

Another year of progress



Red Squirrel Appreciation Day Twitterstorm 2022

Join us on 21 January 2022
12:00-14:00 GMT

Tweet, like and share
using the hashtag
#RedSquirrelAppreciationDay

Thanks everyone for another wonderful year working to protect and expand red squirrel populations, and ensure we have healthy trees and woods for the future. Thanks to our research team and others, and generous donations from supporters, we made further positive strides to develop a grey squirrel oral contraceptive. Together we also raised greater awareness of issues, solutions and successes. Join us again for another great year.

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Fertility control update

UK Squirrel Accord and supporters are funding research into a grey squirrel oral contraceptive and species-specific feeding hopper to protect red squirrel populations and young broadleaf trees.

The Animal and Plant Health Agency team conducting our research completed work on year three of the five-year project.

Contraceptive development

Testing was conducted on three oral contraceptives:

- **Two immunocontraceptives** – fertility is reduced by inhibiting the GnRH hormone that produces the sex hormones.
- **One cholesterol inhibitor** – cholesterol is vital for creating sex hormones, so decreasing it can inhibit reproduction.

One immunocontraceptive and the cholesterol inhibitor are taken forward into year four. The best one will go to the final stages and registration.

Contraceptive delivery

[Summer field trials for 2021](#) focused on refining the species specificity of the feeding hopper. It is important to create a delivery mechanism that allows grey squirrels to access the bait, which will contain a contraceptive, but not non-target species.

Field trials were conducted with Northumberland red squirrel volunteers to test if non-APHA staff could set up and manage the feeding hoppers. The volunteers were more than capable. It also assessed whether red squirrels could access the weighted door. Some of the heaviest were able to open it. Further refinement of the mechanism that allows entry or an alternative is needed for red areas.

Another part of the research looked at placing hoppers in pine marten areas in Wales. UK populations of this mammal species are recovering. No pine martens were recorded gaining access.

Fundraising

We have raised **over £900,000** to fund the research and need another **£150,000**. All donations are greatly appreciated: www.squirrelaccord.uk/donate



Red Squirrel Appreciation Day 2022

Red Squirrel Appreciation Day 2022 will take place on 21 January. Get involved in this important opportunity to raise awareness of the UK's red squirrels and the need for their conservation.

If you have any events, activities or communications taking place that day and want the UK Squirrel Accord to help promote them then email details and web links to info@squirrelaccord.uk. We can add them to our website and social media to share information.

Join us for the third annual Twitterstorm from 12:00 to 14:00 on Red Squirrel Appreciation Day. Tweet, like and share lots of your own and other posts during this time using the hashtag **#RedSquirrelAppreciationDay**

The more posts we can get out there the more likely we are to get this hashtag trending on Twitter and ensure more people become aware of the day and our precious red squirrels. Do use the image below to help promote the Twitterstorm. **Thanks for your support.**



Scottish news

To celebrate the Saving Scotland's Red Squirrels (SSRS) funded project, an online Knowledge Fair was held in December 2021.

If you missed the event, catch up on the videos and presentations from the SSRS team and others via YouTube.

[Click here](#) for the event playlist.

The SSRS project was due to end in March 2022. [Scottish Wildlife Trust announced](#) that the HLF-funded project has secured initial funding for a two-year transitional project phase starting in April 2022.

This extension will enable SSRS to complete its project aims and plan a sustainable future.

AI acoustic monitoring

The Mammal Society has teamed up with the University of Bristol, Huawei Technologies and Rainforest Connection to use bio-acoustic and artificial intelligence technologies to analyse sounds in UK woods in order to assess and monitor red squirrel populations.

Huawei's partnership with Rainforest Connection has already deployed audio-monitoring stations in 18 countries across five continents to monitor a range of endangered species, such as the Darwin fox in Chile. This is their first project in the UK.

Find out more about the initiative in this [online article](#).



Welsh legislation

Following a petition to the Welsh Government, set up by Dr Craig Shuttleworth, the Welsh Senedd supported new laws to better protect red squirrels and their habitat.

Habitat destruction is a key driver of biodiversity loss and can have major impacts on endangered species such as red squirrels.

During a Senedd debate, Darren Millar MS, Wales' Species Champion for Red Squirrels, gave a speech in support of a change to Welsh forestry laws.

The changes will enable conditions to be placed on tree felling licenses to better protect red squirrel habitats. This will help safeguard trees and woods containing dreys.

Further information [is in this article](#) highlighting cross-party support.

Videos and blogs

Our latest videos are on the [UK Squirrel Accord YouTube channel](#) – subscribe to receive notifications. Our recent blog posts include one on this summer's grey squirrel fertility control research field trials and another on red squirrel conservation on the Isle of Wight, and can be [read on our website](#).

Videos:

- [Woodland management and grey squirrel damage webinar with Charles Dutton and Graeme McVittae](#)
- [Grey squirrel bark stripping interview with Nick Cooke](#)
- [Grey squirrel fertility control research interview with Dr Giovanna Massei](#)
- [Northumberland red squirrel conservation with Mike Allport](#)
- [Red squirrel conservation UK update 2021 with Mel Tonkin, Katy Bell, Stephen Trotter and Craig Shuttleworth](#)

Blog posts:

- [Developing a grey squirrel feeder for targeted contraceptive delivery – Sarah Beatham](#)
- [The not-so-secret red squirrel island – Wight Squirrel Project](#)

Please share this content with your networks to spread knowledge. You could also use the links during our Red Squirrel Appreciation Day Twitterstorm (see page 2) on 21 January 2022.

Red squirrel research

Impact of squirrelpox virus in red squirrels in Wales

A study carried out in northern Gwynedd, Wales, used opportunistic data collection to assess impacts of squirrelpox outbreaks on red squirrel populations.

The paper by Dr Craig Shuttleworth et al. is open access: [An opportunistic assessment of the impact of squirrelpox disease outbreaks upon a red squirrel population sympatric with grey squirrels in Wales](#)

Red squirrels, *Sciurus vulgaris*, living in an area of Gwynedd also inhabited by grey squirrels, *Sciurus carolinensis*, are surviving thanks to active management of the grey squirrel population.

Squirrelpox disease was recorded in the red squirrel population in 2017 and 2020/21. Low survival of red squirrels was recorded. Only 17.4% of animals caught and marked in June 2019 were recorded as still present in March 2021. This supports previously published accounts of survival rates during outbreaks.

This is the first study in Wales to use conservation dogs as a means of detecting red squirrel carcasses. This can be a highly effective way of locating carcasses that would otherwise not be found. The dogs helped researchers detect and confirm the expansion of one squirrelpox outbreak in Gwynedd.

Balancing timber production with red squirrel conservation

A Scottish study assessed impacts of forest thinning operations on red squirrel breeding, activity, survival, population density and home range.

The paper by Louise de Radd et al. is available online: [Managing forests for the future: Balancing timber production with the conservation of Eurasian red squirrel \(*Sciurus vulgaris*\)](#)

In Scotland, red squirrels are a protected species that need to be carefully considered when planning and carrying out forest management.

In 2017, red squirrels were radio tracked in a conifer plantation in the Scottish Highlands. Stand thinning operations were carried out in May 2017. Results showed relatively high survival rates compared to sites without forest operations and that density was higher after thinning.

Space use changed for a small number of individuals, but home ranges and core areas were not significantly different.

Scottish red squirrel populations are higher than other UK areas. Could similar operations differently impact more fragmented populations?

Botstiber Institute for Wildlife Fertility Control Europe

The Botstiber Institute for Wildlife Fertility Control (BIWFC) recently opened a European Office. Based at the University of York and overseen by Dr Giovanna Massei, it will expand the organisation's global reach.

Fertility control is increasingly being used around the world as a sustainable method to manage species and mitigate human-wildlife conflicts.

“The BIWFC Europe office will carry out the Institute's general mission, purpose and goals focusing on promoting fertility control through knowledge exchange and stakeholder and public engagement.” [Read more in this online article.](#)

Giovanna will also continue to lead the UK Squirrel Accord funded research into a grey squirrel oral contraceptive being carried out at the UK's Animal and Plant Health Agency (APHA).

The APHA team will attend and present aspects of their research at the forthcoming [BIWFC hosted 9th International Conference on Wildlife Fertility Control](#) in Colorado, 23-25 May 2022. This will promote our innovative research on the global stage.

Watch an [interview on our grey squirrel fertility control research with Dr Giovanna Massei](#) via the UK Squirrel Accord YouTube channel.