



Fertility control solution to reduce the millions of pounds worth of damage caused annually to UK's broadleaf woodland by grey squirrels

The control of grey squirrels in the UK is not only vital to protect the native red squirrel population, but also to reduce the increasing damage caused to the UK's broadleaf woodland, according to experts at the [UK Squirrel Accord](#) Autumn conference this week which was held at the APHA (Animal and Plant Health Agency) in York.

The conference, titled "Squirrels, Tree Health and Disease," brought together leading representatives from the woodland and timber industry in addition to conservation organisations from all over the UK. Their aim is to bring a concerted and coordinated approach to securing the future of our red squirrels and woodlands, and to controlling the introduced grey squirrel.



The Earl of Kinnoull, Chair of [RSST](#) (Red Squirrel Survival Trust) and UK Squirrel Accord, says: "The threat of grey squirrels, which are a non-native species, to the native red squirrel population is widely recognised in the UK. An incredible amount of work has been done in recent years to protect red squirrels particularly in Scotland, Northern England, Northern Ireland and Wales. However, what has often been overlooked is the significant economic, environmental and social damage caused to our broadleaf woodland.

"The impact is devastating, and it is important the wider public are aware of the potential landscape damage that is, and will be, caused by grey squirrels. It is therefore vital that effective controls are introduced to minimise this and protect our broadleaf woodlands."

Dr. Giovanna Massei, [National Wildlife Management Centre, Animal and Plant Health Agency](#) (APHA) reported on progress from the first year of a 5-year project on fertility control research.

"Oral contraceptives for grey squirrels offer a humane and safe option of population control that might be used in addition to other control methods. Our research provides a vaccine to the grey squirrel in an encapsulated form using a natural capsule of a pollen or spore grain (known as a SPeC). These SPeCs are added to a bait and when the animals eat the bait, the 'sticky' SPeCs attach to the intestine and release the fertility control vaccine into the blood stream.



“A grey squirrel-specific food hopper is used and is weighted to prevent entry of other mammals such as red squirrels. The fertility control vaccine stimulates the production of antibodies and all sexual activity is decreased so resulting in the animals remaining in a non-reproductive state as long as a sufficient level of antibodies is present.

“If all trials and formal registration of the vaccine are successful it is possible that vaccine could be brought to market within 6-8 years. This is a very exciting development in the potential control of grey squirrels in the UK and could revolutionise the management of the population in future,” she concludes.

Dr Julie Lane National [Wildlife Management Centre, Animal and Plant Health Agency \(APHA\)](#) reported on progress on the various control methods currently or previously employed and the pros and cons of each:

- Warfarin (no longer used)
- Free shooting
- Drey poking/ shooting
- Live trapping
- Kill traps

All control has to comply with the Animal Welfare Act and the Agreement on International Humane Trapping Standards, though the latter only currently applies to stoats, badgers and pine martens. A number of kill traps are allowed under the Spring Trap Approval Order, which APHA test prior to Defra approval.

The presentation also described progress with the Good Nature Squirrel Trap and the pros and cons of this multi-capture trap. Following modification the Good Nature 18 Squirrel Trap has been recommended to Defra for approval. This is expected by spring or summer 2018. Dr Lane emphasised its potential role as part of an integrated programme of control – not a single ‘silver bullet’.

Glen Graham, an experienced Red Squirrel Ranger – National Trust [Wallington Hall](#), Morpeth. In his presentation - *Fertility Control in Grey Squirrel Control - Working together in the future*. described the transformation he’d achieved in restoring red squirrels and grey control in and around the Wallington Hall Estate. This had been achieved through intensive monitoring using feeders and hair traps, shooting and trapping, achievable due to his focussed attention and dedication to the work. He noted the challenges of securing engagement of neighbours whose grey havens beyond the estate boundary posed a threat, and welcomed the prospect of new control measures that could encourage other owners and add to his own ‘arsenal’.

Andrew Woods, President from the [Royal Forestry Society](#), gave his perspective on a winning planting strategy and tree Disease problems arising costing the Woodland Industry Andrew contrasted his experience as a young forester when 15 – 20 per cent of his time could legitimately be spent on grey control, with the situation for today’s foresters.

Moreover, deer were less of a problem then (though rabbits were); the Broadleaved Woodland Grant Scheme incentivised planting; and warfarin was available.



Grey squirrels remained a scourge of commercial woodland development, however, and control was an essential component of profitable management. More care was needed on species selection, not least to create more market options, and obligations should be placed on land managers to encourage active squirrel management using all the current and emerging tools in the toolbox.

John Grimshaw, of the [York Arboretum](#), mentioned his organisation's aspiration to set up a tree health centre alongside a red squirrel enclosure. He commented "We plan to have a red squirrel enclosure in the York Arboretum so the public can interact with the squirrels and sitting alongside this will be a tree health centre so the public can learn about the issues of tree health. There will be a citizen science project running alongside this and a training centre for professional tree and woodland people."

Dr Charles Lane of [FERA](#) in his presentation for *The English Woodland's Race for Survival*. Noted the context of the Government's Plan Protection Strategy 2014 and the importance of harnessing public awareness and action through, for example, the Tree Health Early Warning System. He described various online channels for citizen science including OPAL: [Open Air Laboratories](#) and [Observatree](#).

He exemplified several tree diseases which had been imported and then spread to other continents and how these manifested themselves. There is evidence several diseases are triggered in bark wounds, for example, so the threat posed by squirrel damage in accelerating the spread of tree diseases was now becoming obvious.

Adrian Vass, Manager of [UK Squirrel Accord](#) adds, "A nationwide and coordinated landscape approach to red squirrel conservation and woodland management is absolutely vital to red squirrel conservation.

"Woodland owners have a virtually impossible job of controlling grey squirrels if it is not done through a landscape approach. Sharing information is vital to success and we encourage the industry to come together to control this growing and concerning issue. So, I invite woodland owners and their agents to talk to us at the UK Squirrel Accord about the new Countryside Stewardship and discuss any grant opportunities," he concludes. "If we can succeed in supporting progress, then our woodlands and red squirrel populations will have a healthy future."