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SAVE OUR REDS CIC

# Red Squirrels

Britain's native squirrel, the threats it faces, and what can still be done.

**3.5m**

Red squirrels thought to have lived in Britain before the decline began

**120,000  
–290,000**

Left across Britain today, estimates vary. Around three-quarters are in Scotland

**15,000**

How low Natural England's modelling puts the population in England

**2051**

When mainland England loses its reds if nothing changes

The red squirrel was here before we were. *Sciurus vulgaris* has been present in Britain for roughly ten thousand years, and for most of that time it was simply the squirrel: the only one we had. Once common across the UK, these shy, iconic mammals now cling on in a handful of woodland strongholds, and most people in England today have never seen one.

## 1 Meet the red squirrel

### Small, light and built for the canopy

Head and body measure roughly 18 to 24cm, with a tail of up to 17.5cm. An adult weighs around 250g and rarely more than 350g, about half the weight of a grey. They can leap more than two metres between branches.

### Not always red

Coat colour runs from pale wheaten through ginger to dark chocolate brown, and the tail often bleaches almost blonde by late summer. The tufted ears everyone pictures are a winter feature: they are shed in the spring moult and grow back in autumn.

### Telling reds from greys

Size is the reliable cue, not colour. Greys are noticeably bigger and carry a fringe of silvery hairs around the tail. They never grow ear tufts in any season. Some reds look distinctly grey-brown, and some greys carry ginger along the flanks.

### Awake all winter

Red squirrels do not hibernate. They sleep more in the coldest weeks but must feed year-round, which is why a failed seed crop matters so much. Each squirrel keeps two or three dreys and moves between them to shed parasites and confuse predators.

### Foresters in fur

They eat pine, larch and spruce seed, acorns, hazelnuts, beech mast, fungi, shoots and buds. One squirrel can work through the seed of 20,000 cones in a year. What they bury and forget grows: reds are significant dispersers of oak and hazel.

### Slow to recover

Mating runs from midwinter into early spring, with a second attempt in early summer if food allows. Gestation is about 38 days and litters average three kittens. Only 20 to 50 per cent reach adulthood, and average life expectancy in the wild is around three years.

## STATUS AND LEGAL POSITION

Red squirrels are classified as **Endangered** on the Great Britain Red List, and Endangered in England and in Wales specifically. In much of England they are all but gone. They are protected under Schedules 5 and 6 of the Wildlife and Countryside Act 1981, and listed as a Species of Principal Importance under Section 41 of the NERC Act 2006. Neither instrument delivers the breeding-site, resting-place and licensing protections given to bats, dormice, otters and beavers.

## 2 A decline you can date

Most extinctions creep up without a start date. This one has one. In 1876 the banker Thomas Brocklehurst released a pair of North American grey squirrels into the grounds of Henbury Park in Cheshire, a fashionable Victorian novelty brought back from a trip abroad. Around thirty further documented releases followed between 1876 and 1930, in country estates and public parks across England, Scotland and Wales. Greys were still being deliberately spread, and treated as a charming addition to the countryside, well into the last century.

What followed was not a fair fight. Greys now number around 2.7 million. They are roughly twice the weight of reds and can exploit tannin-rich seed such as acorns far more efficiently, stripping the broadleaf larder before reds can reach it, and they reach far higher densities: up to about 15 animals per hectare against 2 to 3 for reds. In mixed and broadleaf woodland, greys will replace reds well within fifteen years through competition alone. Where squirrelox takes hold, reds can decline 17 to 25 times faster than through competition alone.

### A NOTE ON THE NUMBERS, AND WHY THEY DIFFER

Population figures vary between sources, and it is worth being straight about that rather than picking the most dramatic one. Once numbering around **3.5 million**, reds are now confined to pockets of northern England, Scotland and a handful of islands. Somewhere in the region of **120,000 to 290,000** remain across Britain, with around three-quarters of those in Scotland. In England the picture is starker still: Natural England's modelling puts the population as low as around **15,000**, within a modelled starting range of approximately 15,000 to 29,500. Wherever in those ranges the truth sits, the red squirrel is rarer in England than the otter, estimated in the tens of thousands, and the hazel dormouse, estimated in the low hundreds of thousands. Both of those are Schedule 2 species. The red squirrel is not.

## 3 Where reds still survive

England's red squirrels are effectively confined to the north and to islands. Scotland holds the great majority of the British population, but even there the front line is moving.

### Scottish Highlands

Effectively grey-free north of the Highland Boundary Fault, held by a sustained control line rather than by geography alone.

### Isle of Wight

Around 3,500 reds and no greys, though woodlands are small, fragmented and cut through by busy roads. A fixed link to the mainland would carry real risk.

### Brownsea Island, Dorset

A closed island population of roughly 200 to 250 animals, long used as a research and monitoring site.

### Kielder Forest, Northumberland

England's single most important stronghold, holding around half of the country's remaining reds in one connected block of conifer.

### Anglesey

Reds recovered from roughly 300 animals to around 700 to 800 once greys were cleared. That gain is now at risk: greys have crossed back from the mainland, stowing away on vehicles, and woodland at Penrhos faces a felling threat.

### The northern and western fringe

Survivors in Cumbria, County Durham, north Lancashire and Merseyside, plus Clocaenog and mid Wales, and across Northern Ireland.

### Watch a species disappear

Our interactive map traces the retreat of the red squirrel and the advance of the grey across Britain from 1876 to the present day. Drag the slider and 150 years of loss plays out in a few seconds. It is the quickest way to show a reader, a class or an MP what has actually happened.

[saveourreds.netlify.app](https://saveourreds.netlify.app)



## 4 The threats, in order of weight

### 1. Competition from the grey squirrel

This is the engine of the decline and everything else runs behind it. Greys are larger, more fecund, better able to exploit broadleaf woodland and tolerant of human landscapes. They do not attack reds. They take the food first and in far greater numbers, and reds quietly fail to breed. Greys also strip bark from young trees, killing them or opening the way for pests and disease: the damage bill is put at around £37 million a year in England and Wales.

### 2. Squirrelpox virus

Greys carry squirrelpox with no ill effects, and antibody surveys have found it widespread in apparently healthy grey populations. In reds it is usually fatal within about a fortnight: scabbing lesions around the eyes, nose, mouth, feet and genitals, then lethargy, loss of feeding and death from dehydration or secondary infection. An outbreak at Formby in 2007 killed an estimated 85 per cent of the local reds.

The picture is not uniform. Some populations in Dumfries and Galloway have persisted, and in places thrived, despite the virus circulating. But once squirrelpox is established in an area it is very difficult to remove, which is why rapid grey control at the point of detection matters so much. In April 2024 it was confirmed for the first time north of Scotland's central belt, at Dunfermline in Fife.

### 3. Adenovirus

A more recently recognised and much less understood threat, first flagged as an emerging factor in red squirrel conservation in 2014. Squirrel adenovirus causes severe enteritis and can kill reds outright, and it circulates in populations where greys are entirely absent: 42 per cent of red squirrels found dead on Anglesey tested positive. Surveillance there found it more widespread than anyone had suspected, which is precisely why feeding stations must be cleaned regularly.

### 4. Felling, habitat loss and fragmentation

It is illegal to harm a red squirrel, yet felling the trees they live in is not, and it is happening in the very places where reds are making their last stand. Forestry Commission Operations Note 65 recommends pre-felling surveys, seasonal restrictions, retention of drey trees and canopy connectivity, but it is advisory and compliance is not centrally monitored. Clear-felling can destroy occupied dreys, kill young and force adults and juveniles to disperse into poorer habitat, and replanted woodland can take twenty-five years or more to produce useful tree seed again. Camera-trap work on Anglesey found red squirrel abundance negatively associated with canopy openness. Grant schemes that favour small-seeding native broadleaves can quietly lower a woodland's carrying capacity for reds. Thriving squirrel woodland at Killhope and Pow Hill in County Durham has already gone.

### 5. Roads, gardens and the domestic world

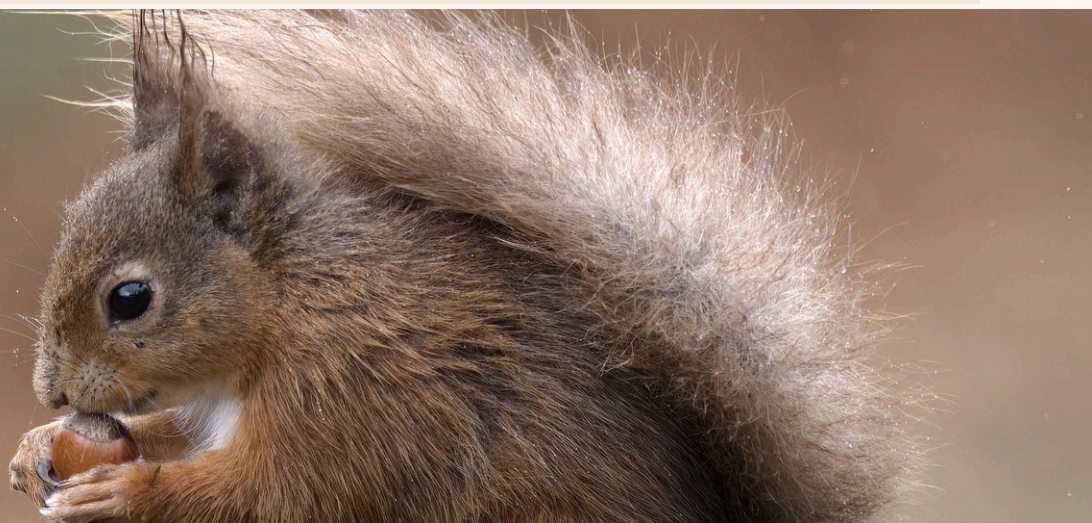
Traffic is a heavier killer than most people assume. Studies across the UK and Europe attribute between 20 and 65 per cent of recorded red squirrel deaths to vehicles, and on the Isle of Wight 61 per cent of 215 dead squirrels recovered over two years had been hit by cars. Where woodland meets housing, reds are also lost to cats, rat poison, wrongly sited traps and drowning in open water butts.

### 6. Predation and the pine marten question

Reds are taken by buzzards, goshawks, foxes, stoats, badgers, pine martens and domestic cats. In healthy woodland this is ordinary ecology. In a stranded population of a few hundred it is not. Research from Aberdeen and Queen's University Belfast has shown that recovering pine marten populations can suppress greys, which are naive to the predator and spend more time on the ground, with knock-on benefits for reds. The finding is real, but it is not a strategy: martens predate reds too, the effect depends heavily on habitat and marten density, and it does nothing about squirrelpox or felling. Save Our Reds does not treat pine martens as a substitute for grey control and habitat protection.

#### THREE THINGS WORTH KNOWING

- 1 Baby red squirrels are called kits, or kittens.
- 2 A red squirrel can tell a good nut from a bad one just by holding it in its paws.
- 3 When they talk to each other, red squirrels make a distinctive "chuk chuk" sound.



## 5 Plenty of policy. Very little delivery.

Britain does not lack red squirrel policy. It lacks enforcement, accountability and joined-up habitat protection. Government published a Grey Squirrel Policy Statement in January 2026, and Natural England its Red Squirrel Recovery Strategy that April, six years in the making. The strategy is sound and blunt: on current management, reds are gone from mainland England within around 25 years. But it names no delivery body, sets no timetable, and says little about habitat protection or enforcement, while red squirrel woodland goes on being felled. That makes it a reference document, not a catalyst for action. The science, meanwhile, is moving.

### Grey control does the work

The Highland Boundary Fault line keeps northern Scotland effectively grey-free, and Anglesey went from a few hundred reds to seven or eight hundred once greys were cleared. It is the only intervention with a proven record of reversal, and the clearest warning: greys have since crossed back to Anglesey on vehicles, and years of work can be undone in a season.

### Fertility control: a world first

APHA, funded by the UK Squirrel Accord with the Roslin Institute, MV Diagnostics and Sporomex, has achieved infertility in rats by free-feeding an oral immunocontraceptive. Feeders are in development, including a weight-triggered design at 450g that admits over 90 per cent of adult greys while excluding reds. The Red Squirrel Recovery Network, led by Northumberland Wildlife Trust with £4.86m of Heritage Fund backing, will trial delivery at landscape scale.

### The vaccine gap

A protective vaccine against squirrelpox is in development, building on feasibility work done at Moredun two decades ago. What it lacks is money and a clear regulatory route into the field: £250,000 announced by the UK Squirrel Accord in 2017 never became a sustained programme, and Natural England's strategy still treats vaccination as an emerging tool rather than a funded commitment. With the virus now north of Scotland's central belt, closing that gap is urgent.

## 6 Our Five-Point Emergency Action Plan

These actions are practical, cost-aware, and implementable within existing policy frameworks. They do not require new primary legislation. They require political will and institutional accountability.

- 1 Legally protect red squirrels and their woodland habitats.** Add red squirrels to the Conservation of Habitats and Species Regulations 2017 (like beavers in 2022). Establish enhanced protection for all known red squirrel habitats. No large-scale felling without mandatory wildlife impact assessment, independent oversight and enforceable penalties.
- 2 Enforce existing wildlife law with named accountability.** Red squirrels are already protected in law, but that protection is too often ignored. Government must properly enforce existing legislation across all red squirrel areas, with clear responsibility placed on Forestry England, land managers and relevant authorities.
- 3 Deliver and audit biodiversity commitments.** Publicly funded woodland schemes already incorporate biodiversity design standards. These commitments must now be properly implemented while safeguarding red squirrel habitat and canopy connectivity, with transparent monitoring and public reporting across all publicly funded woodland schemes.
- 4 Fund and accelerate squirrelpox vaccine and grey squirrel fertility control research.** Scientists have made real progress in both areas, but further investment is needed to move from laboratory promise to practical results in our woodlands.
- 5 Deploy rangers on the ground now, not next year.** Dedicated, trained wildlife rangers must be deployed immediately across red squirrel strongholds in Great Britain to monitor populations, support volunteers and respond rapidly to threats. Protection on paper means nothing without presence on the ground.

Full case and legal mechanism: [saveourreds.netlify.app/framework.pdf](https://saveourreds.netlify.app/framework.pdf)

### The science is settled. The evidence is in. What is missing is delivery.

In a Save Our Reds poll of 1,590 respondents in late 2025, **99 per cent** wanted stronger protection of red squirrel habitats and **97 per cent** supported mandatory impact assessments before felling. More than **110,000** people have now signed the petition. A remarkably consistent response, waiting on government action.

#### WHAT YOU CAN DO

- Ask your MP to sign our Parliamentary Pledge calling for action: [pledge.saveourreds.uk/pledge](https://pledge.saveourreds.uk/pledge)
- Sign and share the petition at [change.org/save-our-reds](https://change.org/save-our-reds).
- Report red and grey sightings to your local group: distribution data triggers action.
- Clean squirrel feeders regularly. Dirty stations spread squirrelpox and adenovirus.

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**Sources:** Natural England, England Red Squirrel Recovery Strategy (NECR669), April 2026; Defra, Grey Squirrel Policy Statement, January 2026; JNCC GB Red List and Mathews et al. (2020); Wildlife and Countryside Act 1981; NERC Act 2006 s.41; Conservation of Habitats and Species Regulations 2017; Forestry Commission Operations Note 65; UK Squirrel Accord and APHA fertility control research; Northumberland Wildlife Trust, Red Squirrel Recovery

Network; Red Squirrels Northern England; Shuttleworth, Lurz and Halliwell (eds.), *Shared Experience of Red Squirrel Conservation Practice*; Univ. of Edinburgh R(D)SVS and APHA, squirrelpox in Fife, April 2024; Save Our Reds national poll, 2025. Full references in our Conservation Action Framework. Figures current at September 2026.