Grey Squirrel Control in Woodland Management

1. Introduction



Grey squirrels (*Sciurus carolinensis*) are an invasive, non-native species present in almost all woodlands in Wales. Their impacts on woodland structure, regeneration, and economic viability are well documented. For landowners seeking to improve woodland condition, increase resilience, and enhance biodiversity, grey squirrel control remains a necessary – if undesirable – component of active management.

This guidance summarises: why grey squirrel control is relevant to woodland restoration; the evidence for their impacts; the legal framework in England and Wales; and the practical options available, with welfare and by-catch considerations. It is based on over thirty years of practical woodland management experience alongside published evidence. As well as discussing alternatives, it details the method that is documented to provide the highest level of success.

2. Why Control Grey Squirrel?



Squirrels can cause severe tree damage often leading to total loss of the tree

Grey squirrels are not native to Britain and have only been here since the late 1800s. It is estimated that there are around 2.5 million in Great Britain and local densities can be very high. The economic damage they cause to forestry is estimated at over £37 million per annum (UK Gov 2026). On top of that they severely reduce sapling survival rates and regeneration of some tree species which slows the process of improving woodland spread and biodiversity generation. Although immune themselves, they carry squirrel pox which is lethal to our native Red Squirrels (*Sciurus vulgaris*). Grey squirrels do take bird eggs and nestlings, but numbers are probably not high, and they are not considered to have a major impact on bird numbers, although they can have localized influence.

Grey squirrels have few natural predators in Britain. With the exception of Goshawks (*Accipiter gentilis*), our hawks are too small or too slow to be a significant threat. We know that goshawks prey on grey squirrels and they may provide a good natural control in time, but their numbers are still recovering, and they don't favour smaller broadleaf woodlands to hunt in.

There is recent evidence that in areas where Pine Marten (*Martes martes*) are recovering, grey squirrel populations are reducing (University of Aberdeen, 2022). The thinking is that greys are larger, heavier, and less nimble, and cannot evade pine martens by climbing to the lighter branches of trees as red squirrels can. However, before we celebrate this possible solution consider that this popular news story ignores some important facts. In one study, it was found that red squirrel constituted around 50% of the pine marten's diet (Bangor University 2019), and at least one licence has been issued for the control of pine marten because of predation on ground nesting bird's eggs. Birds, fledglings, and eggs can make up to about 15% of a pine marten's diet. Pine martens are not likely to be the silver bullet people hope for as far as other wildlife is concerned.

3. What are the Options?

If we accept that, for the foreseeable future, we will have to take action to control grey squirrel numbers if woodland is to be developed, what are the options with the lowest risks and best chance of success?

Poisoning has quite rightly been banned. So, we are limited to trapping or shooting. Those two solutions further divide into: live-traps, spring traps, and reloading traps; and shooting with a shotgun or using an air-rifle (using a firearm is not acceptable when shooting up into a tree canopy or on land not approved for firearm use).

I have not used spring traps for squirrel, all the other methods I have used with varying degrees of success.

Spring Traps

A spring trap is one that triggers when the prey approaches or takes the bait and kills it with a spring-loaded strike-arm, usually by striking the back. It may be in a cage or simply a baseplate, spring and arm, much like a large mouse trap. Legally they must be set in a natural or man-made 'tunnel' to limit by-catch (the catching and or killing of non-target species).

The main advantages are you don't have to visit the trap to check on the welfare of anything caught because, theoretically, it should be dead, and you don't have to be involved in dispatching the prey.

The main disadvantage is that it can, even with careful trap selection, result in by-catch. Depending on the siting of the trap and the exact design (entrance size etc.) the by-catch can be hedgehog, stoat, weasel, polecat, mice and even small birds. Although the bait used will not be a natural attractant to some of these species, they are often inquisitive. Simple mitigation for some, but not all, of these is to mount the trap off the floor on a platform or in a tree.

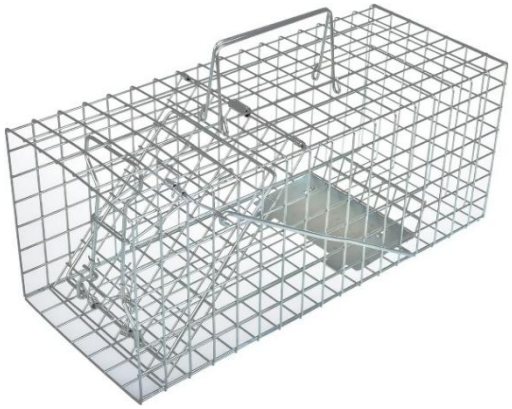


The other obvious disadvantage is they are not always lethal and may result in the animal, target or not, lying in pain and suffering for hours.

The use of Spring Traps is discouraged, though, providing suitable mitigation is applied, legal at the time of writing. The specific trap must be approved for use on grey squirrels (Spring Traps Approval Orders). There are a number of restrictions on how they are used and how to set them to minimize by-catch.

Live Traps

A live trap is a cage with a spring-loaded door that closes when the prey triggers the latch. It does not kill the target but merely traps it. Versions are available that enable multi-trapping, i.e. catching more than one of the target species.



The trap should be set near trees and where squirrels have been seen feeding. The area can be baited for days or even weeks beforehand to accomplish this. The trap should be covered, to protect anything caught from the elements.

Once baited and armed the trap should be investigated at least every 24 hours, though I have always tried to visit traps twice a day. If a grey squirrel is trapped, it must be dispatched in a humane way. The recommended ways are using an airgun to the back of the head or a single hard hit with a blunt heavy baton to the back of the head. It is illegal to use drowning and may result in a prosecution. Do not be tempted, as one neighbour was, to use a shotgun; he wrote off the trap.

Do not use multi-traps where red squirrel may be present; if they are caught in the trap with a grey, they can die of stress. Small birds, such as robin and wren can trigger the trap and, unless the mesh size is large enough for them to escape, they will often die of stress. Most traps have a mesh size no bigger than 25mm.

The main advantage of these traps is that any by-catch is not usually killed. Again, mitigation against some by-catch is to mount the trap on a platform or in a tree.

The clear disadvantage is that you must dispatch the trapped squirrel; you cannot take it somewhere else and release it without risking prosecution.

Reloading Traps

Reloading traps, such as the GoodNature trap, are relatively new on the scene. Again, these are lethal traps and must be approved before they are legal to use in the UK. The GoodNature A18 uses a compressed gas cylinder to fire a piston at the head of the target when it reaches inside to gain access to the bait above the trigger. Each gas cylinder is capable of firing the piston up to 18 times and so, in theory, the unit can dispatch up to 18 squirrels before needing attention.



These are well designed and well-made pieces of kit and they do work. They are typically mounted on a tree trunk or on a post in an area squirrel are known to feed. The area should be baited as for other traps.

The clear advantage of these traps is they do not need to be visited on a daily basis and, although killed squirrel may be removed from under the trap by scavengers, the counter tells you how many times it has triggered.

From my experience, there are a number of disadvantages to these traps. The first, and most trivial, is they are more difficult to install and consequently there is a temptation to leave them in place rather than try new locations. The second issue was that they were not as effective as I had hoped. Despite being up for some time, kill numbers were much lower than quoted. However, I have been told of people that have had good success using these traps. And the last problem is that I am not at all sure about the by-catch danger. GoodNature themselves say not to use the traps where there are red squirrel, pine marten, or dormice. But any small animal capable of sticking its head in a 45mm hole could trigger the trap. On one occasion I found nuthatch feathers below the trap; I don't know for certain the bird was killed by the trap and then scavenged, or if it was caught by a predator and the feathers below the trap were a coincidence. Some people have reported non-lethal triggering leaving squirrels injured; I have not witnessed this.

If you try these traps, put them up too high for inquisitive children to reach; a finger in this trap would be crushed. For that matter, if you put them anywhere passers-by may see them, put a large warning notice on them. Also, consider using a camera trap to evaluate any by-catch danger.

Shotgun

Using a shotgun, 410 or 12 bore, is a traditional way of dealing with grey squirrel. It is often combined with drey-poking – that is using a long pole to poke up through dreys and shoot the escaping squirrels. This practice should only be used if the area has no red squirrel, no possibility that the drey is being used as a nest site, and grey squirrel have been seen entering the drey.

This method is considered 'sport' by some practitioners; I do not kill anything for 'sport'. However, it is effective and can result in good numbers of squirrel being killed.

The main advantage is that it takes very little time and preparation to deal with a few squirrels.

The disadvantages are that it is very noisy, in many cases any other squirrel around will have taken cover; and it needs at least two people to carry it out.

Although not currently a legal requirement, if you do use a shotgun, use lead-free shot. Lead-free shot is to be phased in from summer 2026 and will be compulsory in future legislation.

You need a shotgun certificate to own a shotgun and that requires secure storage in a gun cabinet and good reason for possession. There is currently a proposal for the law to be changed which will require shotguns to be put on a firearm certificate, and that is a lot more complex.

Air-rifle

For the sake of this discussion the air-rifles I am talking about are below the 12ft/lb limit beyond which a Firearms Certificate is required. Using the methods described, an air rifle of between 10ft/lb and 12ft/lb is more than adequate. There is no licensing requirement for these air-rifles in England and Wales.

There are two basic methods of using an air-rifle to kill grey squirrel: stalking involves slowly and quietly walking the woods and shooting any seen; baited shooting involves creating a baited area where you can shoot squirrel from a hidden position. Whereas 'volunteer' shooters will often prefer to use stalking, you will kill orders of magnitude more Greys using the static method.

There are no advantages in the stalking approach other than some people like the idea of 'the hunt'. It can only realistically be carried out in winter when there is good visibility into the tree canopy. The variation in range and inclination of the shot means accuracy is reduced and the potential to maim rather than kill is increased. In addition, you cannot easily choose the backdrop to ensure the safest shot.

Of all the methods discussed so far, the baited position shooting will achieve far better results leading to greater success in control of numbers. The advantages are: there is zero by-catch; you know exactly the range to your feeder so the shot can be accurately placed; once established it's possible to shoot a large number of squirrel in just an hour or two of patience; you choose the position of your feeder and your 'hide' so a good backdrop is always available. Because this method is so much more successful than any others I have tried (independent evaluation has also documented it to be the most productive) I'll detail the process.

4. Baited Shooting using an Air Rifle

Preparation



Home-made Feeding Hopper

Preparation of the baiting station is everything. You need to choose an area that squirrels are happy to approach, for example, not needing to cross open ground to reach it. You will need a feeder – you can buy one or make one. It should be able to hold a good amount of bait and, ideally, will have a metal reinforced feed hole and a metal lid. Basically, it's just some form of hopper, a tube or box, that holds the bait with a hole at the base that allows bait to exit onto a platform. The one shown I have made from a spare piece of stove flue.

The area must also have a good place to sit and hide from the squirrels. It should be no more than 25m range and ideally nearer 15m depending on your shooting proficiency. A simple hide can be made or you can buy a ready made hide used for photography.

Set up your hide so the wildlife gets used to it being there, then fill the feeder with peanuts or sweetcorn/maize. Scatter some bait around the floor. Repeat the process over a couple of weeks, returning every few days. If after the first week no significant amount of bait has been taken, consider moving your position.

The Process

Once you are satisfied that grey squirrels are visiting the site regularly you can start shooting.

You should have practiced your shooting and sighted in your rifle over the weeks you have been baiting the site. You know the exact distance from your hide to the bait so you should have your skills honed to being able to consistently hit a 1cm or smaller target at that range. Whereas a chest shot is a good lethal shot, a head shot is preferable.

Make yourself comfortable in your hide position before the prime feeding time. Unpack everything you need to minimize activity later. Don't be tempted to take a shot as soon as the first squirrel appears; give them time to settle. Once you have shot your first target stay in place; don't be tempted to jump up and retrieve the corpse. Although any other squirrels will most likely have scattered, they will quickly return and ignore their fallen comrade. Even with a clean head shot, the dead squirrel may still 'twitch' for some time. However, if you suspect it has not been a clean kill then either take a second shot if one presents itself or go and dispatch the animal with a blow to the back of the head. Wounded squirrels will bite, wear gloves!

If you have gone through the preparation process, and can sit for a couple of hours, enjoying the other wildlife that will present itself, you will get a good number of squirrels. Repeat the process after a couple of days – remembering to keep the feeder baited. The number of squirrels will drop quickly, and you can then stop shooting for a while or move to another baited area at least 100m away from the first. You can, of course, set up several baited areas at the same time and alternate your site.

Disposal

After the kill you need to dispose of or make use of the bodies. Beware of any potential for disease and remember squirrels do carry fleas. Some people will leave the carcasses in the wood or in nearby fields/hedgerows for the benefit of scavengers. However, only do this once you have removed the part of the body with the lead embedded (a good reason for practicing the head shot). Although one round won't kill a bird of prey or a badger by lead poisoning, the toxicity is cumulative. It is illegal to dump dead animals so you can only leave carcasses on your own land or on land where you have permission to do so. Small numbers can be disposed of in normal household waste if it is considered disease free; it should be double bagged. Burning carcasses in the open air is illegal. You can arrange for animal disposal collection by licensed organisations. You can legally bury the carcasses on your own land provided you do so in a manner that ensures no water course contamination and at a depth that will prevent scavenging.

On the other hand, Squirrel makes good eating, but only their hind quarters are worth preparing.

Air Rifle Choice

I don't intend to give advice on the specifics of choosing an air-rifle in this short article; whole books are written on the subject. However, I will make a couple of observations. Most air-rifles come in one of two calibres: .177" and .22" (though .20" and .25" are available). The smaller calibre is generally preferred for target shooting because it has a flatter flight trajectory. However, for the range we are shooting over, that is immaterial and the .22" is generally preferred for short range vermin control although views on that appear to be changing. I use .22". There are various designs of air-rifle but the only two I am considering are spring loaded piston types ('Springers') and Pre-Charged Pneumatic types (PCP). I have and use both.

A Springer can be bought new from around £150 plus the scope, or a perfectly good one can be found second hand for less than £100.

PCP air rifles have a compressed air tank that is pumped up to high pressure (typically 200 to 300bar) that is used as the power reservoir. When the tigger is pulled, a measured volume of high-pressure air is released to propel the pellet down the barrel. Typically, over 200 pellets can be fired before the tank needs recharging.

PCP air-rifles are generally more expensive. A cheap one will be £300, and you can pay over £2,000 for one. There are plenty of good ones under £1,000 new. They tend to hold their price well second hand so expect to

pay about £500 for a gun that will cost £800 to £900 new. On top of the gun, scope, and pellets, you will need a means of pumping high pressure air into the tank. I use a cheap multi-stage stirrup pump. For the amount of shooting I do it is perfectly suitable and cost less than £40 – I just take my time, over a couple of sessions, to pump up the tank.

So, why pay the extra money for a PCP? It has distinct advantages: it is quieter; it has virtually no kick-back because there is no piston mass moving; they can be multi-shot, with a magazine holding 8 or 10 pellets; and they are reloaded with simple bolt-action type levers meaning there is no big body movement as there is reloading springers. The only disadvantage, other than price, is they can be a little heavier.

5. The Options in Summary

I know a number of people who swear by the use of traps and many professional vermin controllers prefer them because they can visit and deal with many sites in one day. The professionals also tend to favour spring-traps because, theoretically, they don't have to be concerned about visiting the traps frequently enough to deal with stressed trapped animals. However, I suspect they do not worry about or report by-catch. Stressed animals will die even in live traps if left too long or in the wrong conditions.

I will continue to experiment with the GoodNature A18 reloading trap, but I'll use a trail camera alongside it to monitor for by-catch. At this moment in time, I don't trust it and, if there is any chance of red squirrel, pine marten or dormice present, they should not be used.

To put everything in perspective, in the same period the A18 trap dispatched 3 grey squirrels, I shot 26 at the feeding station using an air-rifle. In an earlier year, I shot 46 squirrels over a period of 4 weeks in only a few hours of effort. Once the process is set up, and the learning curve is overcome, I am convinced that baited site shooting with an air rifle is the most efficient and cost effective.

Method	Advantages	Disadvantages
Spring Traps	- No requirement (usually) to dispatch caught animals - Reduced need for frequent visits	- Risk of by-catch mortality - Risk of non-lethal triggering
Live Cage Traps	- By-catch is usually released alive - Less legislation about deployment	- Requires frequent inspection - Captured squirrels must be humanely dispatched - Stress mortality of by-catch
Self-Resetting Traps	- Reduced checking frequency - Multiple kills per deployment	- Risk of by-catch mortality - Deployment complexity - Risk of non-lethal triggering
Shotgun	- Considered 'sporting' by some	- Noisy - Drey-poking requires several people - Relatively expensive - Shotgun licence required
Air Rifle – baited position	- No by catch - Very effective - High accuracy - Low disturbance - No licence required in England & Wales	- Initial costs - Initial preparation

6. The Future

There is a glimmer of hope based on research into suitable safe contraception delivery but that is some way off and will not be cheap. Current trials suggest that a combination of culling and contraception will yield worthwhile reductions. Culling will remain necessary because dominant grey squirrels have been shown to keep others away from bait and will prevent widescale take-up of the contraception. However, we are not yet certain about by-catch risks. On top of that, there is a weight overlap between red and grey squirrels. As weight is

currently used as the species discriminator for access to the bait, it means that to prevent red squirrels from taking the contraception, some grey squirrels will be excluded; maybe all that will be achieved is selective breeding of small grey squirrels!

7. The Law

There is no requirement for a licence to carry out grey squirrel control. However, one may need consent from the relevant Conservation Agency (NRW in Wales) to carry out control activity on land with a Site of Special Scientific Interest (SSSI) or Area of Special Scientific Interest (ASSI) designation.

In addition, there are a number of regulations that control how one goes about the process:

- You must not release a trapped grey squirrel back into the wild
- You must use a humane way to dispatch any live-trapped grey squirrel
- Drowning is not considered humane and its use can lead to prosecution.
- Any trap used must be approved to UK standards for grey squirrel control
- You are responsible for the welfare of any trapped animal
- You must dispose of dead squirrels in accordance with the law

Conversely, there is also no legal requirement to carry out grey squirrel control. However, the UK Government's "Grey Squirrel Policy Statement", Feb 2026, encourages land owners to adopt coordinated control.

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