

## NOTES ON SQUIRREL CONTROL

### Squirrel Control

#### Introduction

In Britain we have two species of squirrel. The smaller, native red squirrel (*Sciurus vulgaris*) and the larger grey squirrel (*Sciurus carolinensis*), introduced from North America. The latter has displaced the former over much of southern Britain over the past 100 years and has moved into and colonised the urban environment. Here it thrives on hardwood trees in parks and recreation areas and in suburban gardens, where its diet is supplemented from bird tables etc.

Red squirrels seldom achieve pest status and are protected by law, but grey squirrels can cause considerable damage to young trees, by their habit of bark-stripping to access the sappy tissue below. Additionally, in suburban areas they can also cause considerable noise disturbance in attics and lofts of human dwellings.

Control of these damaging pests is hampered by the public perception of grey squirrels; they are indeed interesting animals to observe. However, where serious damage is resulting from squirrel populations, or where stress is caused by their presence in lofts and attics, control is necessary. Nonetheless, we need to be sensitive to public feelings when undertaking their control, and ensure we keep within the legal requirements pertaining to this species.

#### Control Methods

Control methods available for grey squirrels include: shooting and drey poking, trapping using cage or spring traps and the use of poison baits. These are dealt with in turn below.

**Shooting and Drey Poking.** This method should be carried out during late winter/early spring when the absence of leaves on the trees allows the dreys to be seen. It is more effective if the weather is cold, wet and windy, as under these conditions the squirrels are most likely to be sheltering in their dreys. On fine, sunny days squirrels can be foraging away from the drey and not return until after the operation has been completed. Squirrels resting in holes in trees will be missed, therefore the method needs to be used as part of an integrated control programme employing other methods.

A drey poking team should consist of at least three people, ideally with a dog or dogs, capable of taking any squirrels that come to ground. Poles made of light aluminium tubing joined together with spring clips are available. These are usually in 2 metre sections and 10 sections usually gives sufficient length[1]. The top section has a hook to dislodge the dreys. One or two people operate the poles while the remainder, equipped with 12 bore shot guns, shoot the emerging squirrels.

A softly-softly approach to the drey should be adopted. A light touch will often result in a cautious emergence of squirrels, often singularly, making for an easier target. If the pole and hook is brought crashing through the drey its occupants will dart away in all directions making shooting difficult.

All dreys should be destroyed, even old dreys which may be used for cover once the operation has commenced.

**Cage Traps.** Single or multi-catch traps are available for grey squirrels. Single catch cage traps should be deployed, one for each hectare of vulnerable crop, spaced at least 100 metres apart and multi-catch traps one for every 3 hectares of vulnerable crop, spaced 200 metres apart.

The best trap sites are under trees known to be used by squirrels travelling between the canopy and ground or along an old hedge or bank line with tree cover. The ground should be clear of vegetation, leaving a carpet of dead leaves on which the traps can be camouflaged and wedged or pegged into position.

Pre-baiting of the traps using yellow whole maize is essential and should continue for five days. The maize should be placed inside the unset trap with its doors open and broadcast near the entrance and in the immediate vicinity. The trap should be visited on alternate days, gradually reducing the amount of maize outside and increasing the amount inside. On day five the trap should be set and maize placed only inside.

Once set, the traps must be visited daily. Single catch traps in areas of high squirrel populations are worth visiting twice a day as they can be very effective after adequate pre-baiting. Most of the squirrels in the immediate area will be caught within the first two days and the traps should be moved to a new site or the operation discontinued after four days. If the trapping operation requires a number of trap areas on the same site, it is easy to pre-bait a second site while trapping at a first, then move the traps after the fourth day to the second site, cutting down on pre-baiting time.

Squirrels caught in cage traps should be humanely destroyed by running them into a sack and striking them with a sharp blow to the head. Drowning is not permitted.

**Spring Traps.** Also called humane traps or tunnel traps, these are sometimes more useful than cage traps as they give

a rapid kill without pre-baiting. Only approved squirrel traps can be used and they must be set in natural or artificial tunnels. Once set they must be visited daily. Spring traps should be sprung every 4 to 5 days to prevent rust reducing their efficiency and all traps should be stored in their sprung position.

Spring traps are sited as for cage traps and are best set in natural tunnels such as tree roots, dry drains, holes in banks, hollow walls and stumps. Where tunnels have to be constructed, these can be made from turf, logs, pipes, land drains etc. They should be large enough to allow the trap to operate but should have the entrance reduced to deny access to birds and any non-target animals. The trap should be positioned so that the treadle is as flush as possible with the tunnel floor.

**Poison Baits.** The use of warfarin against grey squirrels is regulated under the Grey Squirrel (Warfarin) Order 1973 under the Agriculture (Miscellaneous Provisions) Act 1972. The act specifies that warfarin and the soluble salts of warfarin can only be used in counties that do not have viable populations of red squirrels, that it must be used at a concentration of 0.02% evenly distributed on a whole wheat bait and presented in hoppers consisting of the following: a tunnel of not less than 230 mm long and not more than 100 mm internal diameter or square dimension and; a container of any size or shape to hold the poisoned bait. The container must be firmly attached to one end of the tunnel and securely closed so that the bait is accessible only to animals which have entered and passed along the tunnel. Access by the animal to the bait at the junction of the tunnel/container must be through a gap of not more than 20 mm high and no wider than the tunnel.

Other specifications include dates when use is prohibited and areas where restrictions apply (Cumberland, Westmorland, Anglesey, Durham, Lancashire, Norfolk, East Suffolk, Isle of Wight, Northumberland, Caernarvon, Denbigh, Flint, Merioneth, Cardigan, Montgomery, Carmarthen, Northern Ireland).

Warfarin for grey squirrel control is purchased as a liquid concentrate and should be mixed with whole grain wheat in a large clean drum or polythene sack. Weigh 12.5 kg of clean whole wheat into the container, then pour the contents of one 500 ml bottle of grey squirrel liquid concentrate on to the wheat and shake vigorously for 2-3 minutes. When all the grain is coloured red, leave to stand for 2-3 hours before use. One kg of prepared bait should be sufficient to kill 4 squirrels, and the density of squirrels outside is usually 2-8 squirrels per hectare.

Hoppers should be placed one to 4 hectares of vulnerable crop or more frequently if the squirrel population is large, but not more than one per hectare. Fill the hopper and visit every 2-3 days, topping up, to ensuring a constant supply of bait. Any spillage should be removed on each visit and on completion of a treatment or at the end of the specified date when baiting is permitted, all bait must be removed and destroyed.

Success depends on siting hoppers where they will be frequently visited by squirrels. The best sites are as for traps (see above) and care should be taken to protect the grain from rain water as damp grain is unpalatable. If badgers disturb the bait hoppers they can be sited off the ground, either set in the fork of a tree or on a specially constructed table or platform.

Warfarin treatment of grey squirrels in roof spaces indoors can be carried out at any time of year and in all areas of the country using 0.02% Warfarin bait as for rats in roof spaces. However, traps might be more efficient indoors.

[1] It is important to avoid overhead power lines when using 20 m aluminium poles for obvious reasons.