FCS Technical Note: August 2009

Support for red squirrel conservation under the Scottish Rural Development Programme (SRDP): Rural Development Contracts – Rural Priorities (RDC-RP)

Introduction

This technical guidance note is aimed at landowners, managers and their advisors who are considering undertaking woodland management for red squirrels, or control of grey squirrels, under RDC-RP. Woodland management to benefit red squirrels can be divided into two categories:

- 1. Habitat management to improve the quantity, quality and consistency of their food supplies;
- 2. Protection of red squirrels through grey squirrel control.

This note provides information on how such management might be supported and assessed.

The red squirrel is a UKBAP Priority species. It is also one of the key woodland species identified for action by Forestry Commission Scotland in the <u>Scottish Forestry Strategy</u> 2006. Forestry Commission Scotland has published a <u>Species Action Note</u> setting out conservation needs and priorities in more depth than is included here.

Species information

The red squirrel is one of very few mammals in Scotland that is completely reliant on woodlands. It can thrive in coniferous and mixed woods and is able to live in broadleaved woodlands in the absence of competition from grey squirrels. The spread of the introduced north American grey squirrel *Sciurus carolinensis* has pushed red squirrels out of broadleaved and mixed woods in most of England and Wales. Without intervention it is likely that parts of southern and eastern Scotland will shortly follow the English population decline, with the result that red squirrels will be confined to large conifer forest areas which are relatively unattractive to grey squirrels. These include native pinewoods and planted forests of spruce, pine, fir and larch.

To take advantage of the different habitat preferences of the two squirrel species, Forestry Commission Scotland has recently consulted on a series of 20 'stronghold sites' where the composition of the forest allows the ecological balance to be tipped in favour of the red squirrel. When finalised, these sites will be managed to increase their attractiveness to the red squirrel while making them increasingly unattractive to grey squirrels.

Scotland holds at least three quarters of the remaining British population of red squirrels but the likely continued spread of grey squirrels poses a major long term threat to the species. Priorities for grey squirrel control in Scotland have been set out in the Grey Squirrel Control Strategy (out to consultation at time of publication).

1. HABITAT MANAGEMENT FOR RED SQUIRRELS:

The following grants are not specific to red squirrels; all of these grants can be used to achieve a number of different regional priorities including the conservation of red squirrels where appropriate.

Long term forest planning

Planning of forest management can be very beneficial for red squirrels because it allows managers to ensure a continuity of suitable habitat within the forest, and availability of suitable food supplies. This is particularly important in strongholds and in other large forests with potential to provide long-term habitats for red squirrels. Having a forest plan in place is a pre-requisite for many other grants, and is often the first stage to go through before applying for other support measures. The following grant can help with planning:

<u>Woodland Improvement Grant: Forest Plan Preparation</u> – This requires a framework for specific woodland management actions that will enhance all aspects of an owner's forestry including the environmental value of the woodland, through the production of a 20 year strategic plan. The production of this plan receives a payment rate of £20/ha for the first

200ha and £5/ha thereafter with a minimum payment of £400 and a maximum payment of £15,000. Further guidance is on the Forestry Commission Scotland website.

Improving the forest habitat

The estimated number of red squirrels required for a viable long-term population is at least 200 individuals. Such a population could be supported by between 200 and 2000 hectares of habitat, depending on habitat quality.

Aim for a mix of species and age classes for a continuity of food supply (ideally about two thirds of the forest should be of seed producing age). The suggested age class mix for conifer forests for optimal red squirrel habitat is:

Spruce/larch dominated	Pine dominated
20-30% of 0-15 years	20-30% of 0-20 years
20-30% of 15-30 years	20-30% of 20-40 years
At least 40% of 30+ years	At least 40% of 40+ years

Focus on enhancing the conifer element where appropriate, particularly on diversifying the main conifer species in single-species plantations. Suitable conifers are shown in bold in the table below. Plant other species to benefit red squirrels in groups within the plantation or along rides or edges.

Depending on the soil type and management objectives, the following species are appropriate where red squirrel conservation is an objective:

Species of benefit	to red squirrels	Other species of neutral value for red squirrels, which do not benefit grey squirrels
Norway spruce	red cedar	willows
Scots pine	cypress	aspen
Lodgepole pine	hawthorn	alder
Douglas fir	blackthorn	birch
larches	bird cherry	rowan
yew	wild cherry	ash
dog rose	guelder rose	sycamore
holly	bramble	juniper

To further improve seed production, establish south facing plantations with irregular boundaries and, where landform allows, long south-facing edges to east-west coupe boundaries. Both measures will increase the amount of edge habitat available. Red squirrels are not good at crossing large tracts of open ground, so to maintain a suitable habitat network it will be important to plan felling and restocking carefully.

In strongholds 'large-seeded broadleaves' (oak, beech, chestnuts and hazel) should not be planted, because these can help grey squirrels to establish themselves. Where opportunities arise to remove large-seeded broadleaves already in strongholds, these opportunities should be taken. In the rare cases where other biodiversity priorities require the establishment of large-seeded broadleaves at a stronghold site, consult your local Conservancy office for advice.

The following grants can assist with the costs of managing the habitat to benefit red squirrels:

Sustainable management of forests: native woodland and low impact silvicultural systems (LISS). This provides the means to manage or restore native woodland, and to implement LISS. This option supports net costs over a period of 10 years, subject to a review after 5 years. It attracts a payment rate of £28/ha. A Forest Plan is a pre-requisite for this grant.

<u>Sustainable management of forests: restructuring</u>. This provides the means to restructure even-aged plantations. Payment rates are £130/ ha/year for a period of 4 years following the completed coupe felling. A Forest Plan is a pre-requisite for this grant.

<u>Woodland Improvement Grant: improving woodland habitats and species</u>- particularly UKBAP species. This provides means to re-space regeneration; pre-commercial, non-commercial

and small scale thinning; and fencing. This attracts payment rates of between £105 - £210/ha and requires the production of a Management Plan to show how BAP species and habitats will benefit. This option also provides grants for small scale tree and shrub planting which support planting of trees, as enrichment, within existing woodlands in locations not exceeding 0.25Ha. Payment rate is currently £2 per tree or shrub.

<u>Woodland Improvement Grant: improving even-aged woodland for biodiversity</u> – This provides an opportunity to design the restocking of felled areas to benefit BAP species and habitats. This receives a payment of £134 - £385/hectare depending on the choice of species and ideally proposals should be outlined in the Forest Plan.

<u>Woodland creation</u> - Occasionally woodland creation can be of benefit to red squirrels. This is particularly the case where the new woodland expands or connects existing red squirrel habitat. This option supports a single payment per hectare for initial tree planting and, depending upon land type, can support an annual recurrent payment for maintenance for 5 years. Rates of payment are dependent upon the type of woodland being established.

2. SUPPORT FOR GREY SQUIRREL CONTROL

Grey squirrel control can help to conserve red squirrels in three main ways:

- Keeping grey squirrels away from the remaining red squirrel-only areas of Scotland, such as the Highlands and parts of Argyll, Grampian and northern Tayside.
- Preventing the spread of the squirrelpox virus from the Scottish border area into the wider Scottish grey squirrel population (thereby protecting the majority of red squirrels in Scotland from contact with the disease)
- Reducing the level of competition from grey squirrels at stronghold sites, if grey squirrels reach these sites.

The priority locations for this work are shown in the Scottish Natural Heritage <u>Grey Squirrel Control Strategy</u>. Grey squirrel control work is being co-ordinated and encouraged by the <u>Saving Scotland's Red Squirrels</u> project and, in South Scotland, by <u>Red Squirrels in South Scotland</u>. The Project Officers for both projects can give advice to private landowners and managers about whether their land is located in a priority area for grey squirrel control.

The following grant is available:

Control of invasive non-native species – grey squirrels. To support the trapping and removal of grey squirrels in targeted areas. This is available to protect red squirrels or to protect stands of high biodiversity value broadleaf woodland. Detailed information on trap deployment and on the results of trapping must be supplied. The payment rate for single-capture traps to protect red squirrels is £185 per trap site per year, with a guideline of approximately 1 trap per hectare and 4-6 trapping sessions per year. The actual number of traps and trapping sessions will vary depending on the grey squirrel habitat quality and the local grey squirrel population. To protect broadleaf woodland using multi-capture traps, the rate is £111 per trap site per year.

3. ASSESSMENT OF APPLICATIONS

The Rural Priorities is a competitive grant scheme and applications with the highest scores have the highest chance of success. Applications are assessed against a number of categories, under three group headings. To have a chance of funding, the application must be able to score 'high' for as many categories as possible. The following list shows how it might be possible to score 'high' for each category when choosing to score an application under <u>either</u> a red squirrel conservation <u>or</u> a grey squirrel control regional priority. <u>Each case will be judged on its merits by the appropriate Case Officer</u>.

Group 1: Scale of Contribution to Regional Priorities and National Targets

- Quality Scored high if the application aims to achieve a 'regional priority' which is relevant
 to your region. As part of this, RPACs will be able to take into account whether your
 application is within a stronghold, or areas described in the SNH Grey Squirrel Control
 Strategy.
- Quantity Scored high if you can demonstrate that, for the regional priority you have selected, your application 'intends to commit as much of your available resources as is feasible or reasonable, and you have not simply chosen to do the minimum'. In the case of red squirrel habitat management it is therefore important to show how you will be supporting the species across the entire site. This may mean not only creating/maintaining suitable habitat, but also making the whole site more permeable to red squirrels. If your application is for grey squirrel control you must do as much as is required for eradication or control.
- <u>Collaboration</u>— Scored high if you can work in partnership with other applicants thus making a
 greater contribution. This is particularly important for habitat management within multi-owner
 strongholds, and is an eligibility requirement in priority areas for grey squirrel control where
 effort is required on a landscape scale.
- <u>Integration</u> May be scored high if you can demonstrate an integrated programme of biodiversity enhancement through two or more options e.g. by creating a joined up network of suitable habitat for red squirrels.
- <u>Multiple Outcomes</u> Scored high if you can demonstrate that your proposal meets more than one regional priority i.e. biodiversity, landscape, climate change, etc.
- <u>Contribution to National Targets</u> Scored high if work is undertaken to bring (or maintain) a
 designated site into favourable condition, or includes proposals for woodland expansion to
 mitigate the effects of climate change. The latter may be useful in creating links between
 fragmented red squirrel habitats.

Group 2: Value for Money

- Additionality Scored high if you can demonstrate a greater contribution to the regional
 priority by improving upon the minimum standards in the options guidance. This could be
 achieved by, for example, putting more resource into trapping, such as extra trapping weeks.
- Added Value Scored high if you can demonstrate your proposals secure or enhance any
 existing activity, e.g. application is a continuation of a previous woodland scheme such as
 WGS or SFGS.
- <u>Long-term Benefit</u> Scored high for any activities whose benefits will last beyond the term of
 the current scheme. This could include any measures for suitable woodland establishment
 that will persist to benefit red squirrels beyond the life of the application.
- <u>Leverage</u> May be scored high if you can demonstrate a contribution from other non-public funding sources to deliver more of the proposed activity in addition to that supported by RDC-RP.

Group 3: Management of Risk

- Meeting Demand Scored high for woodland management to favour red squirrel, as it is a UKBAP species.
- Minimising Impacts Scored high if you can demonstrate you have taken on board any
 advice offered by your Case Officer, other specialist advisors (such as the red squirrel
 projects, see end of this note) or comments made through any consultation process to which
 your proposal was subject. You will need to assess whether there will be any negative
 impacts and, where necessary, mitigate against them.
- <u>Demonstrating Feasibility</u> Scored high if you can provide evidence that the proposal can be successfully completed within the specified timescales, to the agreed standards. Proposals for red squirrel have therefore to be demonstrably deliverable.

For more information please contact:

Forestry Commission Scotland

Web: www.forestry.gov.uk/scotland

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Email: fcscotland@forestry.gsi.gov.uk

Red Squirrels in South Scotland
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Tel: 01750 23446 or 01556 610051

Email: richard@redsquirrels.org.uk or stephanie@redsquirrels.org.uk

Red Squirrels of the Highlands; Feoragan Ruadh na Gaidhealtachd

Web: www.highlandredsquirrel.co.uk

Tel: 01349 860916

Email: juliet.robinson@forestry.gsi.gov.uk

Saving Scotland's Red Squirrels

Web: www.swt.org.uk/campaigns/scotlands-red-squirrels/

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