# Forestry Commission Scotland Guidance Note 30
# Scottish Forestry Grants Scheme Grants for S4 and BAP Priority Species

## Purpose

This Guidance Note sets out the basis for evaluating applications for the Stewardship Grant S4 Improving Woodland Biodiversity and for deciding the rate of grant payable in individual cases.

## Background

The Stewardship Grant S4 is available to applicants to improve the environmental value of *non-native* woods and forests through work related to HAPs, SAPs and LBAPs It is also available for work aiding the conservation of designated sites and species that are protected under the Wildlife and Countryside Act and EU Directives for Habitats and Species and Wild Birds.

Stewardship Grant S4 applies in situations where the woodland is intended to remain predominantly non-native in character. Operations to convert non-native woodlands to native woodlands as well as the management of native woodlands are dealt with under Stewardship Grant S3 and Restocking Grant R2.

## Rates of Grant

As part of the SFGS Review in 2004, FCS have agreed to pay 90% of standard costs for eligible operations where the site is regarded as a priority site for one or more Species Action Plan (SAP) species associated with woodland under the terms of the UK Biodiversity Action Plan. Similar arrangements will apply where the site is regarded as a priority site for one or more non-woodland Habitat Action Plan (HAP) habitats.

The 90% of standard costs will also be available for eligible work related to furthering the conservation of SSSIs and Natura sites (see SFGS Applicants Booklet page 5.12) as well as conservation of EU priority species outside designated sites.

Where the site is not regarded as a priority site on any of these grounds, the rate of grant under Stewardship Grant S4 will remain at the basic 60% of standard costs.

## Identifying priority species and habitats

***Species***. Annex 1A includes all of those species found in Scotland that have Species Action Plans (SAPs) and which have some dependence on woodlands or habitats likely to be present in woodland.

Annex 1B lists the EU priority species, which are relevant to woodlands in Scotland that are not already included as SAPs.

***Habitats.*** Annex 2 lists those non-woodland habitats with Habitat Action Plans (HAPs) which may be found in association with woodland. To be eligible for SFGS, the habitats must form a minor component and the site must still be dominated by woodland.

Information relating to priority species and habitats can be obtained from a variety of readily accessible sources:-

- The UK Biodiversity Action Plan web-site (www.ukbap.org.uk)

  *This provides access to the individual Species Action Plans and Habitat Action Plans, including summary details of distribution, conservation requirements, current actions and Lead Partner contact details.*

- The National Biodiversity Network web-site (www.nbn.org.uk)

  *This provides access to a variety of datasets providing details of the geographical distribution and occurrence of species, including maps.*

- Habitats and Rare Priority and Protected Species (HaRPPS) database

  *This tool has been developed by Forest Research to provide decision-support for woodland managers seeking to take account of the interests of conservation priority species. It draws together a large body of information on species ecological and management requirements from review of the scientific literature. It will soon be made available on-line.*

- Woodland Ecology Advisory and Research Database (WEARD)

  *This tool has been developed by Forestry Commission Scotland to provide a reference point for woodland managers seeking sources of technical information on the ecological management of native woodlands. It will soon be made available on-line via the FCS web-site.*

Fact sheets on capercaillie, red squirrel and juniper (black grouse to be added shortly) with specific information on how SFGS grants apply for these species are given in Annex 3. We envisage that further sheets will be added for other species - if this approach proves useful.

**Deciding upon eligibility for 60 or 90% rates of grant**

An evaluation will be required to decide whether the site is a priority site for the species or habitat involved. In many cases it may be beneficial to contact the UKBAP Lead Partner, and also Scottish Natural Heritage as well as information sources such as those listed above.

The following approach will be adopted:-

***Basic eligibility criteria for 60% rate of grant***

To be eligible for any grant under S4 *all* the following must apply:-

- One or more eligible species or habitat must have been recorded as present within the woodlands (or on an adjacent site from which it is likely to be able to colonise within a reasonable period of time).

- Evidence for presence should be the result of survey work carried out as part of preparing a woodland management plan under SFGS, or other reliable evidence reporting the species' presence during the preceding five years.

- Where a species uses the woodland as part of a range or forage area, there should be sufficient evidence that this usage is more than occasional and that the eligible operations are likely to have some direct benefit for that species.

***Additional eligibility criteria for 90% rate of grant for SAP species and EU priority species***

The woodland should lie within an area of the country where the target species is regularly present There should be evidence that the woodland is of current or potential importance for the status of the target species in that area:

- The species should make regular use of the woodland, or of adjacent woodlands from which it could readily colonise.

- The population of the target species using the woodland should be potentially viable in the medium to long term, taking account of the proposals and the potential to expand to surrounding areas.

This assessment should be based on recent information, including survey work, carried out as part of the preparation of an SFGS grant-aided management plan for the woodland. Where more detailed or specialist survey work is required to establish this, the additional survey work would be eligible for the 90% rate of grant.

***Eligibility for the 90% rate for non-woodland HAPs***

Equivalent criteria to those for species will apply**:**

- The habitat type is considered within its normal range by the lead partner, and
- The particular area(s) of the habitat type in this site makes a significant current or potential contribution to the quality and range of the habitat type in the locality, taking account of the proposals.

**Surveys, management plans and monitoring**

There should be a rationale in the SFGS woodland management plan for the proposed operations and clear indications of their benefit to the target species. The Plan should specify effective monitoring methods to evaluate this benefit.

Management plans should be informed by the guidance laid out in FC Scotland Guidance Note 12 "Management Plans for Semi-Natural Woodlands" and adapted to the circumstances. The plan should include:-

- Baseline survey work identifying conservation priority species/ habitats.
- A statement of the aims of the proposed management operations.
- A five year action plan identifying the eligible operations selected.

- Expected benefits to the target species/habitat such as protection from threats and improvement to habitats.
- A proposed method to monitor the success of those eligible operations.
- Provision for a report to be prepared after five years based on this monitoring and evaluating the success of the work for the species/ habitat.

Preparation of management plans in non-native woodlands will generally be grant-aided under SFGS at 60%. However where more detailed or specialist survey work is required to confirm the presence of a SAP or non-woodland HAP in a case where they are on a potential priority site this work will be eligible for 90% rate of grant. FCS Woodland Officers will assess the need for such additional survey work in individual cases. Such survey work should be carried out by a competent person in the field of ecology relevant to the target species or habitat. The content and methods of survey work must be site-specific. FCS Guidance Note 7 “Native Woodland Condition Surveys” may be helpful as a basis.

The woodland management plan should specify appropriate biodiversity monitoring at the end of the five-year action plan and reporting of the results of that monitoring.

Guidance on the requirements for monitoring are set out in Section 12 of the SFGS Applicant’s Booklet. Where eligible operations within a woodland management plan have been eligible for 90% of standard costs that rate will also apply to approved monitoring.

**Annex 1**

**SPECIES ELIGIBLE FOR FUNDING AT 90% UNDER S4**

**A. SAP species found in Scotland**

| Species (Common name) | Species (Latin name) | Woodland types favoured | UPBAP Lead Partner contact 1 |
|---|---|---|---|
| **Vertebrates** | | | |
| Pipistrelle bat | Pipistrellus pipistrellus | LB, WW, WP, NP, OB, OC | Gillie Sargent, Bat Conservation Trust |
| Water vole | Arvicola terrestris | Riparian | Alastair Driver, Environment Agency |
| Brown hare | Lepus europaeus | OB | Stephen Tapper, Game Conservancy Trust |
| Otter | Lutra lutra | WW | Allison Crofts, Wildlife Trusts |
| Red squirrel | Sciurus vulgaris | UO, MA, NP, OB, OC | Melanie Hardie, JNCC |
| Linnet | Carduelis cannabina | OB, OC | Andy Evans, RSPB |
| Nightjar | Carprimulgus europaeus | OB, OC | Dave Hoccom, RPSB |
| Wryneck | Jynk torquilla | WP, OB | Stuart Benns, RSPB |
| Scottish crossbill | Loxia scotica | NP, OC | Jeremy Wilson, RSPB |
| Common Scoter | Melanitta nigra | Lochs | Baz Hughes, Wildfowl and Wetlands Trust |
| Spotted flycatcher | Muscicapa striata | UO, LB, MA, WW, WP, OB | Andy Evans, RSPB |
| Tree sparrow | Passer montanus | WP, OB | Andy Evans, RSPB |
| Bullfinch | Pyrrhula pyrrhula | OB | Andy Evans, RSPB |
| Turtle dove | Streptopelia turtur | OB, OC | Andy Evans, RSPB |
| Black grouse | Tetrao tetrix | UO, MA, NP, OB,OC | David Baines, Game Conservancy Trust |
| Capercaillie | Tetrao urogallus | NP, OC | Mick Marquiss, CEH |
| Song thrush | Turdus philomelos | UO, LB, MA, WW, WP, OB | Andy Evans, RSPB |
| Natterjack toad | Bufo calamita | Sand dunes/heathland | John Buckley, British Herpetological Society |
| Great crested newt | Triturus cristatus | UO, LB, MA, WW, WP, OB, OC | Mary Swan, British Herpetological Society |
| | | | |
| **Invertebrates** | | | |
| A Cuckoo wasp | Chrysura hirsuta | NP | NO LEAD PARTNER |
| A Mason bee | Osmia inermis | NP/UO/Upland heath | Mike Edwards, Bombus Working Group |
| A Mason bee | Osmia parietina | UO | David Sheppard, English Nature |
| A Mason bee | Osmia uncinata | NP, OC | Andy Amphlett, RSPB |
| Caledonian sac spider | Clubonia subsultans | NP | NO LEAD PARTNER |
| A Leaf beetle | Cryptocephalus decemmaculatus | WW, OB | NO LEAD PARTNER |
| A Leaf beetle | Cryoticephalus sexpunctatus | UO, OB | Steve Compton, University of Leeds |
| A Weevil | Melanopion minimum | WW | Steve Compton, University of Leeds |
| A Weevil | Procas granucollis | UO, OB | Adrian Fowles, Countryside Council for Wales |
| A Jumping weevil | Rhyncaenus testaceus | WW | Steve Compton, University of Leeds |
| Scottish wood ant | Formica aquilonia | NP, OB, OC | Gordon Patterson, Forestry Commission |

| Species (Common name) | Species (Latin name) | Woodland types favoured | UPBAP Lead Partner contact 1 |
|---|---|---|---|
| Narrow-headed ant | Formica exsecta | NP | Paul Gallagher, Scottish Wildlife Trust |
| Hairy wood ant | Formica lugubris | UO, MA, WP, NP, OB, OC | NO LEAD PARTNER |
| Shiny guest ant | Formicoxensus nitidulus | UO, LB, WP, NP, OB | NO LEAD PARTNER |
| A Hover fly | Blera fallax | NP | Andy Amphlett, RSPB |
| Aspen hover fly | Hammerschmidtia ferruginea | WW, NP, OB | Carl Mitchell, RSBP |
| A Crane fly | Lipsothrix ecucullata | WW, OB | Athayde Tonahasca, Scottish Natural Heritage |
| A Crane fly | Lipsothrix errans | WW, OB (Riparian) | NO LEAD PARTNER |
| Northern brown argus butterfly | Aricia artaxerxes | Base-rich grassland | NO LEAD PARTNER |
| Pearl-bordered fritillary butterfly | Boloria euphrosyne | UO, MA, NP , OB | Nigel Bourn, Butterfly Conservation |
| Chequered skipper butterfly | Carterocephalus palaemon | UO, MA, OB | Paul Kirkland, Butterfly Conservation |
| Cousin German moth | Paradiarsia sobrina | NP, OB | NO LEAD PARTNER |
| Argent and sable moth | Rheumaptera hastata | UO, NP, OB, OC | Mark Parsons, Butterfly Conservation |
| Netted mountain moth | Macaria carbonaria | Bearberry heath | Paul Kirkland, Butterfly Conservation |
| Barred tooth-stripe moth | Trichopteryx polycommata | OB | Mark Parsons, Butterfly Conservation |
| Square spotted clay moth | Xestia rhomboidea | UO, LB, OB | Mark Parsons, Butterfly Conservation |
| Slender Scotch burnet moth | Zygaena loti scotica | Isel of Mull: cliff slopes | Paul Kirkland, Butterfly Conservation |
| Freshwater pearl mussel | Margaritifera margaritifera | Freshwater | Martin Gaywood, Scottish Natural Heritage |
| | | | |
| **Vascular plants** | | | |
| Young's helleborine | Epipactis youngiana | OB | Deborah Long, Plantlife |
| Dune gentian | Gentianella uliginosa | Dune slacks | Andy Jones, Countryside Council for Wales |
| Juniper | Juniperus communis | UO, NP, OC | Deborah Long, Plantlife |
| Twinflower | Linnaea borealis | UO, NP, OC | Deborah Long, Plantlife |
| Marsh clubmoss | Lycopodiella inundata | Wet heath (disturbed) | Dominic Price, Plantlife |
| Small cow-wheat | Melampyrum sylvaticum | Uo, MA | Paul Gallagher, Scottish Wildlife Trust |
| Slender naid | Najas flexilis | Locks | Martin Gaywood, Scottish Natural Heritage |
| Woolly willow | Salix lanata | Montane series | Richard Luzmoore, National Trust for Scotland |
| Yellow marsh saxifrage | Saxifraga hirculus | Flushes and mires | Chris Sydes, Scottish Natural Heritage |
| Killarney fern | Trichomanes speciosum | UO, OB Caves/ravines | Fred Rumsey, Natural History Museum |
| | | | |
| **Lower plants** | | | |
| A Lichen | Arthothelium dictysoprum | UO, OB | Brian Coppins, RBGE |
| A Lichen | Arthothelium macounii | OB | Brian Coppins, RBGE |
| A Lichen | Bacidia incompta | WP, OB | Jenny Duckworth, Plantlife |
| A Lichen | Biatoridium monasteriense | OB | Jenny Duckworth, Plantlife |
| Orange-fruited elm lichen | Caloplaca luteoalba | WP | Gillian Stevens, Natural History Museum |
| Tree catapyrenium lichen | Catapyrenium psomoroides | MA, OB | Brian Coppins, RBGE |
| Stump lichen | Cladonian botytes | NP | Brian Coppins, RBGE |
| River jelly lichen | Collema dichotomum | Rivers | Chris Formaggia, Environment Agency |

| Species (Common name) | Species (Latin name) | Woodland types favoured | UPBAP Lead Partner contact 1 |
|---|---|---|---|
| A Lichen | Opegrapha paraxanthodes | Shaded Rocks | NO LEAD PARTNER |
| A Lichen | Pseudocyphellaria norvegica | UO, WW | Brian Coppins, RBGE |
| A Lichen | Schismatomma graphidioides | WP | Brian Coppines, RBGE |
| Warty wax lichen | Thelenella modesta | WP (are siting in Scotland) | Jenny Duckworth, Plantlife |
| Long-leaved thread moss | Bryum neodamense | Dune slacks | Jenny Duckworth, Plantlife |
| Sea bryum moss | Bryum warneum | Dune slacks | Jenny Duckworth, Plantlife |
| Green shield-moss | Buxbaumia viridis | UO, NP | Anna Griffith, Scottish Natural Heritage |
| Silky swan-neck moss | Campylopus setifolius | UO | NO LEAD PARTNER |
| Lead moss | Ditrichum plumbicola | Lead mine spoil | Fred Rumsey, Natural History Museum |
| Blunt-leaved bristle-moss | Orthotrichum obtusifolium | WP, OB | Jenny Duckworth, Plantlife |
| Pale bristle-moss | Orthotrichum pallens | WP, OB | Jenny Duckworth, Plantlife |
| Spruce's bristle-moss | Orthotrichum sprucei | Trees in flood plains | NO LEAD PARTNER |
| Baltic bog-moss | Sphagnum balticum | Bogs | Jenny Duckworth, Plantlife |
| Beaked beardless-moss | Weissia rostellata | OB (Woodland rides) | Jenny Duckworth, Plantlife |
| Wilson's pouchworth liverwort | Acrobolbus wilsonii | UO (wooded ravines) | Gordon Patterson, Forestry Commission |
| Atlantic Lejeunia liverwort | Leujeunea mandonii | UO, OC | Jenny Duckworth, Plantlife |
| Slender stonewort | Nitella gracilis | Shallow water bodies | NO LEAD PARTNER |
| A Poroid fungus (Black Falsebolete) | Boletopsis leucomelaena | NP | NO LEAD PARTNER |
| Tooth fungi (northern group) | Hydnellum spp (14 species) | LB, WP, NP, OB | Jenny Duckworth, Plantlife |
| Bracket fungus (ascomycete) | Hypocreopsis rhododendri | UO, OB | Anna Griffith, Scottish Natural Heritage |
| | | | |
| | | **Habitat Codes** | |
| | | | |
| | | LB Lowland mixed broadleaves | |
| | | WP Wood pasture | |
| | | UO Upland oak (and birchwoods) | |
| | | NP Native pinewoods | |
| | | WW Wet woods | |
| | | MA Upland mixed ashwoods | |
| | | OB Other broadleaves | |
| | | OC Other conifers | |
| | | | |
| | | Based on EN publication 'Making the links' (English Nature, 1999) | |

**B. Other EU priority species which can attract 90% funding**

| Species (Common name) | Species (Latin name) | Woodland types favoured | UKBAP Lead Partner contact 1 |
|---|---|---|---|
| Bats (all other species) | | All woodland types | SNH |
| Wildcat | (Felix sylvestris) | All woodland types | SNH |

**Annex 2**

**Priority Habitats which may be relevant for S4 grants**
**(Native Woodland HAPs are funded under S3)**

| Habitat | UKBAP Lead Partner contact 1 | UKBAP Lead Partner contact 1 | UKBAP Lead Partner contact 1 |
|---|---|---|---|
| Blanket Bog | Andrew Coupar<br>SNH | Andrew.coupar@snh.gov.uk | 01463 712221 |
| Lowland raised bog | Roger Meade<br>English Nature | Roger.meade@english-nature.org.uk | 01733 455565 |
| Upland heathland | Micheal Rebane<br>English Nature | michael.rebane@english-nature.org.uk | 01733 455268 |
| Lowland wood pasture and parklands | Keith Kirby<br>English Nature | Keith.kirby@english-nature.org.uk | 01733 455245 |
| * Purple moor grass and rush pastures | David Stevens, Countryside Council for Wales | d.stevens@ccw.gov.uk | |
| * Upland hay meadows | John Byng<br>DEFRA | john.byng-official@defra.gsi.gov.uk | 020 7238 5756 |
| * Ancient and/or species- rich hedgerows | Ann Davies<br>DEFRA | ann.davies@defra.gsi.gov.uk | 020 723 5756 |
| * Lowland heathland | Isabel Alonso<br>English Nature | Isabel.alonso@english-nature.org.uk | |
| * Lowland meadows | Tim Blackstock<br>Countryside Council for Wales | t.blackstock@ccw.gov.uk | 01248 385687 |
| * Lowland dry acid grassland | Richard Jefferson<br>English Nature | Richard.jefferson@english-nature.org.uk | 01733 455247 |
| * Coastal sand dunes | Stewart Angus<br>SNH | Stewart.angus@snh.gov.uk | 01463 712221 |
| * Fens | Roger Meade<br>English Nature | Roger.meade@english-nature.org.uk | 01733 455565 |
| * Eutrophic standing waters | Simon Leaf<br>Environment Agency | Simon.leaf@environment-agency.gov.uk | |
| * Mesotrophic Lakes | Ian Fozzard<br>SEPA | Ian.fozzard@sepa.org.uk | 0131 449 7296 |
| * Reedbeds | Roger Meade<br>English Nature | Roger.meade@english-nature.org.uk | 01733 455565 |
| * Upland calcareous grassland | Barbara Jones<br>Countryside Council for Wales | Barbara.jones@ccw.gov.uk | 01248 385500 |

| **Habitat** | **UKBAP Lead Partner contact 1** | **UKBAP Lead Partner contact 1** | **UKBAP Lead Partner contact 1** |
|---|---|---|---|
| * Machair grassland | Stewart Angus<br>SNH | Stewart.angus@snh.gov.uk | 01463 712221 |

*Only occasionally relevant in Scottish Woodlands

**SFGS Guidance Note 30** **Annex 3**
**Capercaillie Factsheet**

***Advice in support of applications for the enhanced rate of grant under SFGS Stewardship Grant S4 for actions to promote the conservation of capercaillie in FCS Capercaillie Core Areas.***

## Habitat Requirements

Capercaillie (*Tetrao urugallus*) is one of Scotland's most characteristic bird species. Made extinct by hunting pressure in the late 1700's, the species was reintroduced in the early 1800's. (However, recent genetic analysis of the population has revealed the possibility that the species did not go extinct in Scotland and that a small population may have persisted.) Following the reintroduction, numbers increased, and there were some 20,000 birds in the 1970's. By 1994, the population had declined seriously to about 1,000 birds. A national survey in 2004 found a slight increase to approximately 2000 birds. However, the species remains vulnerable. Action to conserve and increase capercaillie populations is now considered a high priority with the species being the subject of a UKBAP Species Action Plan (SAP).

The habitat supporting the highest densities of the capercaillie in Scotland is native Caledonian pine forest, and remnants of this type of forest in the eastern and central Highlands provide important conservation areas for the species. However, conifer plantations within FCS Capercaillie Core Areascan also provide important areas of habitat if they are managed appropriately. The most suitable plantations are those dominated by older Scots pine with abundant blaeberry. However, plantations of other conifer species – even Lodgepole pine - can be managed for the benefit of capercaillie.

The key habitat requirements of capercaillie include a diverse stand structure, an adequate supply of blaeberry ground cover in summer and a lack of disturbance. These conditions must pertain throughout a sufficiently large area of woodland to support a viable population of capercaillie, including at least one "lekking" site.

## Key Habitat Management Actions

Habitat management for capercaillie in Scotland should be based on free advice from the Capercaillie Project Officer, who is part-funded by FCS.
The major categories of management projects likely to be undertaken under SFGS Stewardship Grant 4 for the benefit of capercaillie include:

- Capercaillie population and habitat survey and monitoring.
- Preparation of management plans (or plan sections) for capercaillie.
- Removal of inappropriate deer fencing in or close to capercaillie areas.
- Marking of retained deer fencing to increase its visibility to capercaillie.
- Group felling and thinning operations aimed to create a more natural age structure and to promote blaeberry cover in the ground vegetation.
- Control of rhododendron, bracken and other invasive species in order to improve habitat quality (e.g. blaeberry cover in the ground vegetation).
- Legal control of pests such as fox and crow where this is relevant .
- Management of recreational access to minimise disturbance of lek sites and brood areas.

**Eligible Conservation Priority Areas**

SFGS Stewardship Grant S4 at the enhanced rate is available only in areas defined as conservation priority areas for the species in question. In the case of capercaillie a scheme of "Capercaillie Core Areas" has already been defined by Forestry Commission Scotland in partnership with Scottish Natural Heritage, the RSPB and other interested bodies. These areas will be regarded as conservation priority areas for the purpose of SFGS, although they will remain subject to revision. Reports of capercaillie in other areas will not create immediate eligibility.

**Eligible Sites and Operations**

Within the Capercaillie Core Areas, eligibility of individual forest sites for the enhanced rate of grant under SFGS Stewardship Grant S4 will be defined by the presence of a viable population of capercaillie within the applicant's woodland or close to it. In most cases, existing survey work will have been conducted that will have established the presence of capercaillie in the area. Where this is not the case, additional survey work will be eligible for the enhanced rate of grant. Sites where capercaillie have only occasionally been recorded, or where records are not recent, will not be eligible until new survey work has re-established its presence. Advice should be sought from the Capercaillie Project Officer.

All types of woodland relevant to SFGS Stewardship Grant S4 are potentially eligible, but it is expected that most applications will be for plantations of Scots pine or other conifer species, which can be managed towards a structure and species composition better suited to the major habitat requirements of capercaillie.

Most of the eligible operations under SFGS S4 will potentially be relevant where these can be shown to be likely to directly benefit capercaillie populations.

The major categories of eligible operations likely to be approved for capercaillie include: management planning and monitoring, vegetation management, mammal control, fencing removal and/ or marking, tree removal and thinning and re-routing of formal access. Under some circumstances small-scale tree planting with associated localised ground preparation and protection work may also be relevant. For example, low density under-planting of open plantations with spruce to provide cover.

It is not anticipated that Stewardship Grant S4 will be available for large-scale vegetation control using chemical methods or erection of new stock or deer fencing.

**Contacts for further information**

The first point of contact for all enquiries relating to applications under the Scottish Forestry Grant Scheme should be to your local FC Scotland Conservancy office, details of which are available from the FCS web-site www.forestry.gov.uk/scotland. Conservancy offices hold detailed maps of the Capercaillie Core Areas.

The UKBAP Lead Partner for capercaillie is the Royal Society for the Protection of Birds. Their principal contact point in relation to capercaillie conservation is the Capercaillie Project Officer, Kenny Kortland, RSPB Scotland, Etive House, Beechwood Park, Inverness IV2 3BW. Tel: 01463 – 715000 E-mail: kenny.kortland@rspb.org.uk. The Capercaillie Project Officer can advise on and help develop SFGS applications.

**SFGS Guidance Note 30** **Annex 3**
**Red Squirrel Factsheet**

***Advice in support of applications for the enhanced rate of grant under SFGS Stewardship Grant S4 for actions to promote the conservation of red squirrel in planted Scots pine and other coniferous woodlands in Scotland.***

## Habitat Requirements

Red squirrel (*Sciurus vulgaris*) is one of Scotland's best known mammals. As the introduced grey squirrel has displaced the native red from much of its former range in southern Britain, Scotland is now the main refuge for the species. While red squirrel populations in the Highlands are relatively robust, many isolated populations in southern and eastern areas of Scotland are under increasing population pressure from the grey squirrel. Sustained action is needed for the conservation of viable populations of red squirrels.

The original habitat of the red squirrel in Scotland was native woodland of all types. But because the grey squirrel is favoured by large-seeded broadleaved trees, the best prospects for long-term survival of red squirrels in most parts of Scotland are the larger areas of conifer-dominated woodland. In the Highlands and parts of Grampian and Galloway there are still no grey squirrels and a wider range of coniferous and broadleaved woodlands will remain viable for red squirrels for as long as greys do not establish.

A series of ***potential priority woodlands for red squirrel conservation*** have been identified throughout Scotland. More information is needed to firm up these areas, but meantime they provide a useful basis for decisions on prioritising grant support.

## Key Habitat Management Actions

Habitat management for red squirrel should be guided by the advice in Forestry Commission Practice Notes No. 5 "Red Squirrel Conservation", and No. 11 "Practical Techniques for Surveying and Monitoring Red Squirrels".

The main activities that can be funded under SFGS Stewardship Grant 4 to benefit red squirrel conservation include:-

- Survey and monitoring of habitat and/or populations of red and grey squirrels, and preparation of management plans
- Group felling and thinning operations aimed to create a more natural age structure and promote production of tree seeds. Rhododendron control.
- Selective small scale felling of large-seeded broadleaved trees where this is likely to reduce the risk of grey squirrel invasion into the wood
- Small-scale planting of native trees and shrubs for red squirrel habitat.
- Trapping grey squirrels to reduce populations in the woodland and vicinity

***Other elements of SFGS can also assist in planting of new woodlands or managing existing native woods in ways to help red squirrels.***

## Areas for 90% funding

The basis for higher rate funding under S4 is set out below. Good evidence for other areas will be considered by FCS, based on criteria published in the Scottish Strategy for Red Squirrel Conservation (Scottish Squirrel Group, 2004).

- Within the current range of grey squirrels: potential priority woodland areas and agreed buffer areas around them;

- Outside the current range of grey squirrels: priority areas plus other areas with good evidence of long-term potential for viable populations
- In areas identified by SNH and FCS for strategic control of greys to stop them reaching new areas.

In native woodlands 90% S3 rate will normally apply. If red squirrel measures would conflict with native woodland conservation objectives, eg removal of native trees or planting non-native species, this would need clear justification in the plan.

**Areas eligible for funding at 60% under S4.**

Other areas outside the categories above will be considered for 60% rate support provided there is evidence to show that:

- A red squirrel population already exists in the woodland or is closely adjacent and readily capable of colonising the wood once the habitat is improved.
- There is some prospect of long term viability, although not sufficient to qualify as a priority area.

Assessment of the viability of a population of red squirrel will take into account:-

- Population size and extent/quality of available habitat suitable for red squirrels: woodlands/groups of linked woods should normally be over 200 ha. to attract grant support.
- The degree of protective physical and habitat isolation or defendability of the applicant's woodlands from potential sources of invasive grey squirrel in an area.
- The presence, numbers and distribution of grey squirrels in the locality.

Where survey is required to establish the presence of red squirrel populations, this may be funded at 60% for woods with moderate potential viability, or 90% for potentially high viability cases.

**Contacts for further information**

The first point of contact for all enquiries relating to applications under the Scottish Forestry Grants Scheme should be to your local FC Scotland Conservancy office, details of which are available from the FCS web-site www.forestry.gov.uk/scotland. Conservancy offices in areas of Scotland with significant red squirrel populations will often have an officer with a specific interest in the species – for example this is the case in the Grampian Conservancy which covers some of the largest populations.

SFGS Guidance Note 30 Annex 3

**Woodland Juniper Factsheet**

***Advice in support of applications for the enhanced rate of grant under SFGS Stewardship Grant S4 for operations to promote the conservation of woodland juniper in planted Scots pine and other coniferous woodlands in Scotland.***

## Habitat Requirements

Woodland juniper (*Juniperus communis*) is one of Scotland's three native coniferous tree species. It occurs both as a component of the shrub and understorey layers in semi-natural Caledonian pine forest and in the form of montane juniper woodland above the tree line. Scattered juniper can persist on upland grazing land long after other native tree species have disappeared through the effects of grazing and burning. However many populations of juniper are currently under threat from a combination of browsing by deer and sheep, burning and excessive shading by maturing conifer plantation forestry which all result in a lack of natural regeneration.

While much juniper is to be found in semi-natural native woodlands that will be eligible for Stewardship Grant S3, open spaces within conifer plantations also provide additional valuable habitat if appropriately maintained and managed throughout the forestry rotation. In Scots pine and larch plantations it is often possible for juniper to develop and persist as an understorey, whereas in more heavily shaded plantations of spruce and fir, juniper will be found mainly in unplanted areas such as deer glades and ride sides.

***The principal habitat requirements of juniper are sites of low to moderate soil fertility with suitable vegetation and lighting conditions for natural regeneration. There must be adequate ongoing control of browsing, especially by deer and sheep.***

## Key Habitat Management Actions

Habitat management for woodland juniper should be guided by the advice in FC Information Note 50 "Growing Juniper: Propagation and Establishment Practices" and Plantlife Scotland's recent advisory booklet "Managing Uplands for Juniper".

The major categories of habitat management projects likely to be undertaken under SFGS Stewardship Grant 4 for the benefit of woodland juniper include:-

- Conduct of woodland juniper and habitat survey and monitoring work.
- Preparation of management plans (or plan sections) for juniper.
- Group felling and thinning operations aimed to create areas within plantation forests with sufficient light levels for juniper to regenerate.
- Control of rhododendron, bracken and other invasive species where these are likely to affect existing juniper and prevent its regeneration.
- Protection of juniper (inc. regeneration) from the effects of excessive livestock grazing by stock fencing specific areas within a woodland.
- Ground preparation and vegetation control to allow juniper regeneration.
- Small-scale planting of native juniper, together with localised ground preparation and protection measures, including temporary stock fencing.

**Eligible Conservation Priority Areas**

SFGS Stewardship Grant S4 at the enhanced rate is available only in areas defined as priority areas for the species in question. In the case of woodland juniper, any area within Scotland where there is a significant local population of juniper within woodlands will effectively be regarded as a priority area. This will cover most of the better wooded parts of the country. In those areas where existing juniper is restricted to marginal populations on open hill land, FCS will assess whether there is any realistic possibility of colonisation taking place.

**Eligible Sites and Operations**

Eligibility of individual forest sites for the enhanced rate of grant under SFGS Stewardship Grant S4 will be defined by the presence of an existing population of juniper within or near to an applicant's woodland which is capable of expansion. In situations where there is no existing juniper within the applicant's woodlands, there will need to be a realistic probability of colonisation from viable populations nearby.

The preferred means of expansion will be by natural regeneration from existing juniper stock on the site, aided by ground preparation, vegetation control and protection operations under SFGS where required. While small-scale planting of juniper within conifer plantations (and associated ground preparation and protection measures) will be eligible for support, this should normally be used to augment an existing semi-natural juniper population on the site. Proposals to establish extensive areas of new juniper woodland should be submitted under SFGS P2 or SFGS R2 (expansion or restoration of native woodland).

The major categories of eligible operations likely to be approved for woodland juniper include:- management planning and monitoring, ground preparation, vegetation management, mammal control, protection by stock fencing, tree removal and thinning. Under some circumstances small-scale native tree planting may also be relevant. Regulated summer cattle grazing may benefit natural juniper regeneration but is not included in the list of SFGS eligible operations at present.

It is not anticipated that Stewardship Grant S4 for woodland juniper should be used to pay the enhance rate of grant for extensive vegetation control by chemical means or for the erection of strategic stock or deer fencing encompassing whole areas of plantation forestry that contain small areas of juniper. Applications for stock fencing to protect defined areas of regenerating or planted juniper will be considered.

**Contacts for further information**

The first point of contact for all enquiries relating to applications under the Scottish Forestry Grants Scheme should be to your local FC Scotland Conservancy office, details of which are available from the FCS web-site www.forestry.gov.uk/scotland. Where appropriate Conservancy offices can draw on advice from Forest Research.

In addition Plantlife Scotland act as the UKBAP Lead Partner for juniper and can be contacted for further conservation-related advice at:-
Dr Deborah Long, Plantlife Scotland, Ballalan House, Allan Park, Stirling FK8 2QG
Tel: 01786 – 478509; E-mail: deborah.long@plantlife.org.uk

**FCS Guidance Note 30** **Annex 3**
**Black Grouse Factsheet**

**Advice in support of applications for the enhanced rate of grant under SFGS Stewardship Grant S4 for actions to promote black grouse conservation. May also be relevant to areas of native woodland, which would be eligible for S3 grant.**

**Habitat Requirements**

Black grouse need a combination of woodland edge and extensive moorland habitats, which ideally should be managed on a landscape scale focussing effort in areas within 1.5km of lek sites. (the lek range). The effectiveness of management within forests is likely to be greater where there are suitable areas of nearby open habitats. These can be either outside the forest within about 500 m, or in large (> 50 ha) clearings within the forest, both permanent openings and clear fell sites. Wherever possible, woodland management should link with, and complement these open habitats.

***Key Habitat Management Actions***

**Management should focus within these Lek range areas upon:**

- ***creating breeding habitat*** to improve field layer vegetation to address limiting factors around nesting/brood areas
- **measures to improve adult survival,** *especially in the south and western areas, where habitats are likely to be more degraded. Advice will be needed to identify the key habitat needs across the 'lek range' in each case, and target the work to address them.*

**Effort outside the Lek Range areas is unlikely to be cost -effective and will not normally be funded through SFGS.**

***Breeding habitat : creation/management of brood and nesting habitat – both for 'Highland' & 'South and Western' regions :***

- Tree removal and ground vegetation management targeted at enhancing invertebrate rich brood habitat (mires, species rich flushes, blaeberry rich areas, riparian areas).
- Tree removal and ground vegetation management targeted at improving nesting habitat (usually tall heather or other dwarf shrubs).
- Tree removal and ground vegetation management targeted at connectivity between brood rearing areas and connectivity between nesting cover and brood rearing areas.
- Tree removal should create a mosaic of canopy cover of ranging from 0–40%.
- Ground vegetation management – swiping or future developments - to create structural diversity in an intimate mosaic throughout brood and nesting areas. To allow chick movement and to produce young heather, blaeberry and cotton grass. Aim to have vegetation heights of between 25–40 cm overall, but with at least some heterogeneity in the area, so that there are areas of relatively short and tall vegetation. Additionally, should ensure adequate stands of tall nesting heather above 40cm are left.
- Ground vegetation management should be to an ongoing rotation to maintain structural diversity and disturbance. This should be defined in the long term Forest Plan.
- Drain blocking to create or enhance brood habitat, in conjunction with the above work.
- Tree removal targeted at achieving varying canopy cover of 0 – 40% on the woodland edge or around clearings in the forest – e.g. riparian zones, forest roads and rides. This should aim to create transitional areas from forest to open ground.
- Removing, chipping or mulching of timber or brash following tree removal to encourage recovery of ground vegetation and to allow chick movement.
- The brood habitat mosaic should be at the required scale (references/minimum ha) unless complemented by contiguous brood habitat outside the woodland.
- Fencing to conform with FCS Guidance Note 11. Marking/removal as required.

***'Adult habitat ' – additional operations within Lek range areas in 'South and Western' regions and in agreed circumstances in 'Highland' areas***

- Tree removal targeted at areas where there is likely recovery of suitable ground vegetation; heather, blaeberry and other adult food requirements.
- Tree removal targeted to achieve maximum connectivity between all management zones.
- Removal, chipping or mulching of timber and brash.
- Small scale low density planting of shrubs: willow, hawthorn, juniper and trees: larch, Scot's Pine, birch and alder as adult food sources if these, or other adult food sources like heather are deficient in the lek range. Priority species should be birch, willow and larch as spring food sources for hens.
- Planting of trees and shrubs should be targeted along internal and external woodland edges especially adjacent to good open ground and brood habitat.
- Retention of stands of Scot's pine and larch.
- Tree removal and/or swiping to maintain an open lek site with all round visibility. If there are alternative lek sites then eviction by growing vegetation is unlikely to be a major factor unless security or forest management indicate retention of the existing location.
- Fencing to conform with FCS Guidance Note 11. Marking/removal as required.

**Areas for 90% funding**

Work will be eligible for 90% enhanced grant rate if it meets ALL of the following criteria:

1. ***It is within the species range indicated on the range map in Figure 1.***
2. ***It is within the 'lek range'*****:** ≤1.5km of an active black grouse male display site with a minimum four displaying males OR within 1.5km of a complex of active leks containing at least four displaying males (the leks can be no more than 2km apart to be eligible);
3. ***It is the appropriate work at the correct scale:*** 'Breeding habitat work ' (field-layer vegetation enhancement)) will be eligible within 'lek ranges' for both 'Highland' and 'South and Western' areas. Adult habitat work will generally be required in the 'South and Western' areas, whilst expert advice should confirm whether this aspect of management to benefit black grouse is necessary in applications from 'Highland' areas.
4. ***Deer fencing conforms with FCS Guidance Note 11:*** removal/marking of fencing as required.
5. ***There is an appropriate management plan for black grouse:*** the plan should include survey data, connect proposed management work to forest and non-forest habitats outside the SFGS application area, and address habitat limiting factors within the 'lek range'. Preparation of the plan can be funded at the 90% rate.

**Areas for 60% funding**

Other areas will still need to meet criteria 1,2,and 4 above, but criteria 3 and 5 would be relaxed to allow adult and breeding habitat work on any lek range area throughout Scotland and set a lower standard of management plan; it would be sufficient to identify that a population exists and specify suitable habitat measures within the area applied for.

**Survey, monitoring & management planning**

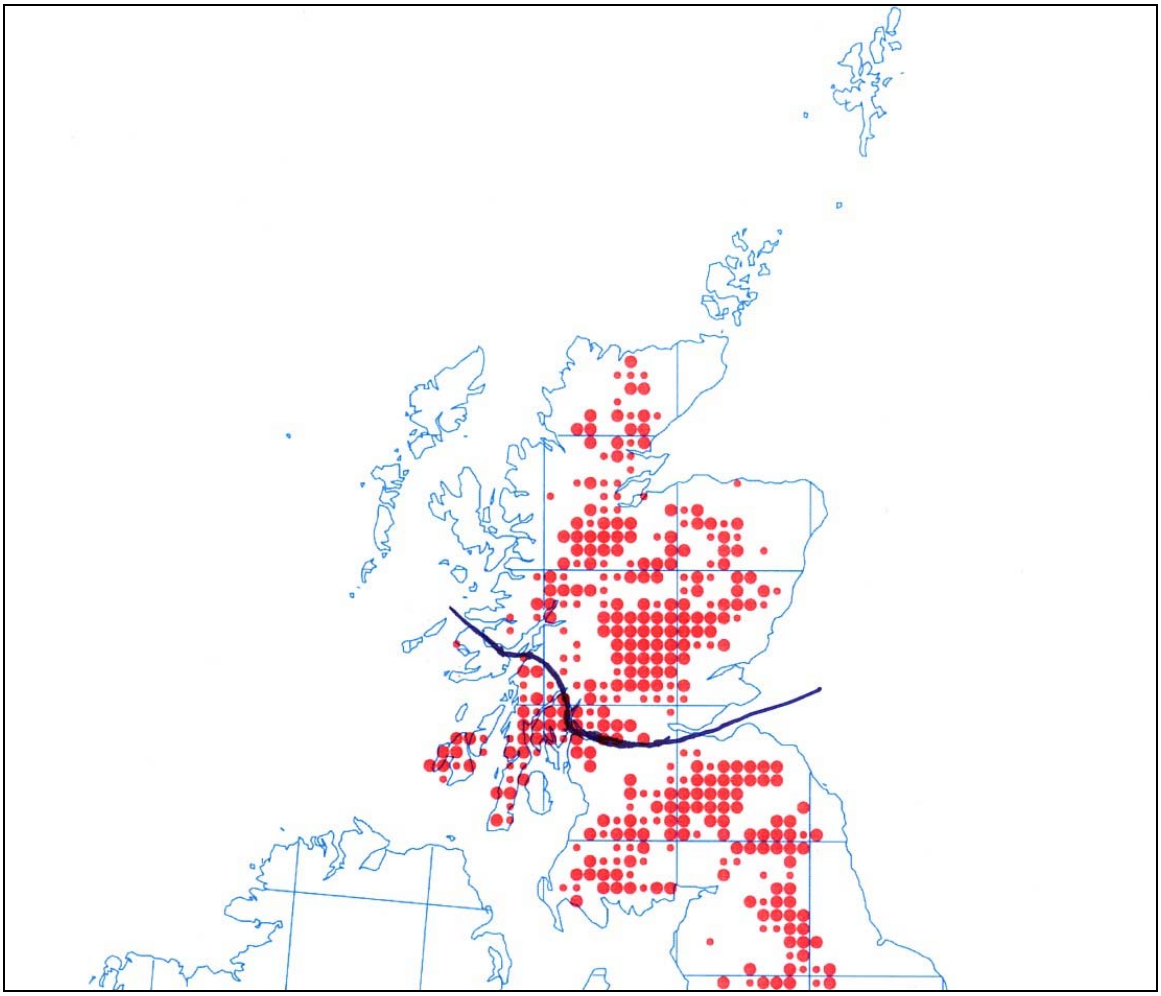
If there is insufficient available information to determine eligibility, initial survey of black grouse and habitat availability may be eligible for SFGS support (at 90%in areas within known lek ranges with over 4 males in recent times, 60% for other/historic lek ranges.) Monitoring of population as well as habitat outcomes will be needed for both 90% and 60% rates.

*Scottish Natural Heritage, RSPB Scotland, The Game Conservancy Trust and other relevant organisations should be able to advise on appropriate survey, monitoring and management planning for black grouse, as well as whether additional 'adult habitat ' management work is required in the 'Highland' areas.*

**Contacts for further information**

The first point of contact for all enquiries relating to applications under the Scottish Forestry Grants Scheme should be to your local FC Scotland Conservancy office, details of which are available from the FCS web-site www.forestry.gov.uk/scotland**.**

***Figure 1: Map of 'Highland' & 'South & Western' areas***



Black grouse areas:

**'Highland'** population areas north and east of Argyll and Bute and the central belt of Scotland.
**'South and Western'** population areas including Argyll and Bute and areas to the south of the central belt of Scotland.

Please note that the map is for indicative purposes only and there will need to be a flexibility of approach along the borders of the lines defining 'Highland' from 'South and Western' areas.

Map reproduced from Gibbons D.W., Reid J.R, Chapman R.A, 1993. The New Atlas of Breeding Birds in Britain and Ireland 1988-91. British Trust for Ornithology, T& A.D Poyser. London.