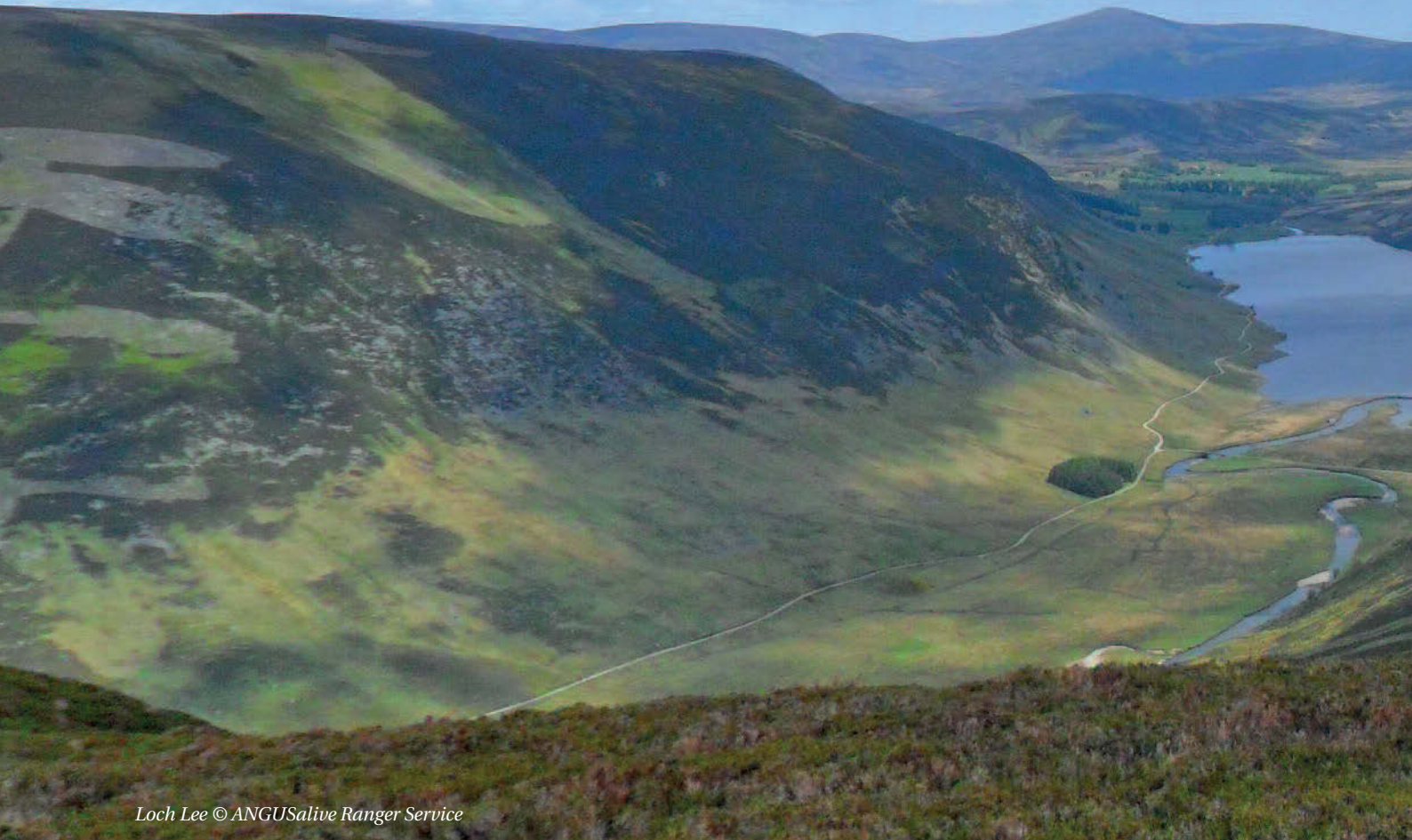


4

Upland Ecosystems



Loch Lee © ANGUSalvie Ranger Service

Background

Tayside is richly blessed with upland habitats straddling as it does the Highland Boundary Fault. The montane habitat encompasses a large area, at least 5% of Tayside – stretching from the entrance to the Cairngorm Plateau through the Angus Glens in the North East and across to Ben Laoigh and Beinn Achaladair in the West. Tayside holds 9% of the total Scottish area of upland heath which occurs in mosaic with peatland, rough grassland and montane habitats. Heather moorland, by far the most extensive single upland habitat in Tayside, represents some 12% of the whole area.

The dwarf shrub heaths which make up Tayside's upland heathland contribute 16% to the total Scottish area of this habitat. As they are largely confined to the UK and the Western seaboard of Europe, they have international conservation significance.

These habitats support an array of flora and fauna including the Mountain hare, Golden eagle and Red grouse. The sub-arctic conditions of the montane habitat host species not found anywhere else in Britain and are very significant percentages



of the world population. Alpine gentian, the evocatively-named Blue dew moss, alongside lichens and other mosses are amongst those UK species found only within the borders of Tayside.

This unique combination of the exceptional and the commonplace makes the Tayside upland habitats very special. Not only do they provide a local asset much enjoyed by the people of Tayside, they are also a national asset and are in no small part responsible for attracting the many visitors who come to enjoy this area's outstanding natural heritage.

Objectives

- 1 Endeavour to reduce the direct pressures on upland biodiversity by implementing projects to enhance ecosystem health.**
- 2 Safeguard upland ecosystems, species and genetic diversity by enhancing connectivity and where possible preventing its decline.**
- 3 Mainstream biodiversity conservation action by raising awareness and the enjoyment of upland ecosystems of local communities.**

Priority Habitats

- Montane
- Upland Heath
- Montane scrub
- Blanket bog



Key Sites (Designated)

Montane (all SSSIs)

Beinn A Ghlo (SAC)
Caenlochan (SAC)
Drumochter Hills (SAC)
Beinn A' Chuallaich
Glas Tulaichean
Ben Chonzie
Ben Vrackie
Meall Ghaordie
Carn Gorm
Meall Garbh
Coire Bhachdaidh
Schiehallion

Blanket Bog

Rannoch Moor
Balnaboth Moor (Glen Prosen)
The Cairnwell, Glenshee
Atholl-Drumochter Hills

Upland Heath

Forest of Clunie (SSSI SPA) and
neighbouring areas
Drumochter Hills (SSSI SPA)

Angus Glens Grouse Moors
Strathbraan, Glenqueich and
Logiealmond Grouse Moors
Kynachan, Strathtummel
Forest of Atholl
Forest of Alyth
Rannoch Moor (SAC)

Montane Scrub

Caenlochan/Corrie Fee
Ben Lawers
Drumochter Hills/
Cama Choire

Key Species

- Upland mammals including Mountain hare and Water vole
- Upland birds, including Golden eagle, Snow bunting and Scoter
- Upland plants, including Oblong woodsia, Mountain Scurvy grass and Snow caloplaca





Woolly willow © SNH

Rare Vascular Plants in Tayside

Tayside is a vitally important area for a number of extremely rare upland species. These include:

- *Astragalus alpinus* (Alpine milk vetch). Of the few sites known in the UK, three of them occur in Tayside. The population is decreasing to a critical stage.
- *Carex norvegica* (Close-headed Alpine-sedge). Nationally rare, most populations occur in Tayside and have fewer than 200 plants. Overgrazing, trampling – and undergrazing – are all threats.
- *Oxytropis campestris* (Yellow Milk-vetch). Three known sites in the UK: two are in Tayside, the other in the Mull of Kintyre.
- *Polygonatum verticillatum* (Whorled Solomon's-seal). In the UK this Nationally Rare plant is restricted to Tayside, but its populations are decreasing because of habitat destruction, erosion and collecting.
- *Lathyrus japonicus subsp. acutifolius* (Sea Pea). Rare in Scotland. The variety occurring in Angus is genetically distinct from the species elsewhere. It is vulnerable to developments and under-grazing.
- *Salix lanata* (Woolly willow.) This montane willow occurs locally in Tayside, but is sparse elsewhere. Climate change and overgrazing is its main threat.
- *Schoenus ferrugineus* (Brown Bog-rush). This species is restricted to four SSSI sites in Perthshire and one site in Selkirkshire. In current good condition, the plant could be vulnerable to disease, a single outbreak potentially wiping out an entire local population.
- *Veronica fruticans* (Rock Speedwell). Tayside is the stronghold for this species. Populations are typically small and the species may be decreasing.
- *Woodsia ilvensis* (oblong woodsia). Endangered in Britain and very rare in Scotland, Glen Clova is one of only three sites known in Scotland.

The National Trust for Scotland has pioneered methods of regenerating montane willows and other rare plants at Ben Lawers. The reserve has the largest abundance of arctic-alpine plants in the UK; these include Snow gentian (unique to Tayside) and Alpine forget-me-not which is restricted to Tayside and Upper Teesdale. It also hosts over 500 lichens which makes it the UK's most important site for lichens. The Vital Habitat Enhancement project at Ben Lawers is focussing on grazing management, habitat restoration and peat restoration. Elsewhere, SNH manages an enclosure at the Corrie Fee National Nature Reserve which is regenerating montane scrub and tall herb vegetation.

Ecosystem Services & Ecosystem Scale Projects

Ecosystem Services

- Carbon storage
- Photosynthesis and oxygen production
- Renewable energy
- Water quality regulation
- Recreation and leisure
- Health and wellbeing
- Tourism
- Woodland and peat
- Protection from floods
- Climate regulation

Ecosystem Scale Projects

- Angus Upland Plant projects – monitoring and restoring Twinflower and Woolly willow populations.
- Linking and Exploring Tayside's Upland Wildlife Sites.
- Controlling invasive upland species – Mink, INNS, etc.
- Upland Tayside butterfly projects – surveying, monitoring and habitat enhancement projects.
- Woodland restoration.
- Grassland projects.
- Peatland projects.
- Tayside mammals projects.

Pressures

Overgrazing by Deer and Sheep

High grazing levels of both deer and sheep have left montane habitats such as dwarf shrub heath, willow scrub, herb-rich vegetation and moss-heath fragmented and seriously degraded. Grazing-tolerant species such as Mat grass have taken over in large areas of montane habitat and this has reduced the species diversity of grass swards.

Trampling damage is becoming a serious threat to blanket bog, plants found in areas of high-altitude, water seepage and sub-alpine calcareous grassland. Trampling of ground-nesting bird nests and chicks by sheep and deer is also an issue.

Fragmentation of Habitat

Mountain willow populations are now so small and dispersed, clinging to inaccessible ledges out of reach of browsing animals, that they are susceptible to landslide or damage from rock-falls. As these plants have male and female flowers on different plants (and female plants are more common), isolated plants can no longer regenerate naturally. Other rare plants within the montane habitat are in a similarly precarious state and need long-term resources and management to safeguard them. Construction routes for windfarms and new or redesigned hill roads have also led to fragmentation.

Muirburn

Poorly-managed muirburn followed by heavy grazing is resulting in the loss of dwarf shrubs and leading to a transition to grassland where

bracken is free to colonise. Erosion and sedimentation of watercourses may also occur.

Increasing Recreational Use

Hill-walkers, climbers and off-piste skiers are increasing in number and can cause damage to fragile vegetation and soils, especially where paths cross wet boggy areas or traverse just below cliffs in which calcareous grassland and tall herb vegetation grow. Path management can ensure erosion does not escalate, especially on the summits.

Visitors and their dogs can cause disturbance to ground nesting birds adjacent to popular montane routes. Dotterel, Golden plover and Dunlin are all vulnerable, leading predators to take eggs or young. There is also risk of direct trampling of eggs or young (especially for Dotterel which often nest on the open summit plateau) where walkers stray from designated pathways.

Climate Change and Pollution

Our montane areas are very vulnerable to the effects of climate change with the mean annual temperature expected to rise between 1.4C and 3C by 2050. Many montane species will be unable to colonise other suitable areas and there will be changes in the distribution and abundance of species, including invertebrates. Changes in vegetation composition and structure may cause the loss of many of our rare alpine plants. Acidification (atmospheric deposition of sulphur and nitrogen compounds) may alter the natural nutrient levels in the soil and affect the composition and structure of vegetation communities.

Unlocking carbon

Destruction, erosion from excessive grazing or development on peatland is very detrimental to the surrounding hydrology, as well as to peatland species.

Drainage of bogs over an extended period has reduced water levels leading to peat drying out and affecting the ability of sphagnum to regenerate the peat. However, it

is peatland's capacity to retain carbon that in its release can contribute to increased atmospheric carbon levels and therefore climate change and increased greenhouse gases.

Lack of Knowledge

There is a lack of information on the management of montane areas in Tayside, and limited basic information on the ecology of many species

associated with such habitats, especially lower plants and invertebrates.

Afforestation

Afforestation with non-native conifers can seriously affect species such as Black grouse and Curlew, although clear-felling and replanting operations can create temporary areas of suitable habitat. Black grouse may use early stage plantations or small, restocked woodland.

Calcareous grassland present in Tayside, should be retained for its floristic value, as well as that of *Osmia inermis* (a very rare mason bee).

Wildlife Crime

There has been an alarming increase in wildlife crime across Scotland in recent years, with incidents involving unauthorised use of snaring, badger baiting, deer and hare coursing and bird poisoning.



Peregrine falcon © SNH

Operation Countrywatch

This initiative began in 2000 as a Tayside Police-led project involving Tayside Raptor Study Group and two Estates. The project expanded in 2004 to include SNH, RSPB and five participating Estates, becoming known as the Operation Countrywatch Partnership. The project enables the police, conservation and estate interests, through improved communication and co-operation, to combat wildlife crime, work for the conservation of heather moorland and its birds, and promote the role and reputation of sporting management.

A fieldworker, employed by RSPB Scotland and part-funded by SNH, works with the Raptor Study Group to carry out surveys. Annual reports for each Estate are produced. These detail the breeding success of the focal species - Hen harrier, Golden eagle, Peregrine and Black grouse, and shorter

accounts of other species such as Merlin. The Police also provide a summary of wildlife crime issues and updates.

Partnership meetings provide a neutral forum in which issues of concern to participating Estates may be discussed. Positive news is publicised to help promote the role and reputation of sporting management on participating Estates; it illustrates a way forward in best practice management for sport shooting estates. Identifying the presence of protected nesting birds of prey as factors in moorland management helps promote professional management. Overall, it is a novel project to promote the conservation value, the economic value and the wise management of heather moorland.

Upland Ecosystems Actions Schedule

Key for timescale Short: 1-3 yrs **Medium:** 4-6 yrs **Long:** 7-10 yrs

Actions will be input into the UK Biodiversity Action System (UKBARS) where Lead Partners will be outlined

Maintaining & Improving Habitats

Action	Action breakdown	Who takes the action	Timescale
1 Restore montane plant species populations and genetic diversity and enhance species connectivity.	<p>Twinflower Survey twinflower annually - use fixed point photography at identified sites to monitor plant number fluctuations.</p> <p>Monitor land use regimes on identified sites encouraging favourable management techniques.</p> <p>Woolly Willow Monitor replanting and plant colonisation.</p> <p>Support new projects which identify additional threatened species.</p> <p>Other Species Support new projects which identify additional threatened species.</p>	<p>Scottish Natural Heritage</p> <p>Cairngorms National Park Authority</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Landowners</p> <p>National Trust For Scotland</p>	Long
2 Promote the sustainable development of the Partnership's upland areas through increased policy integration.	<p>Ensure TAYplan (Strategic Development Plan), Angus Local Development Plan, PKC Development Plan and Indicative Forestry Strategies take into account protecting biodiversity as a component of sustainable development.</p> <p>Annually produce updates for Local Authority Climate Change Declaration reporting.</p> <p>Annually produce updates for Local Authority statutory biodiversity reporting against the 2020 challenge.</p>	<p>Cairngorms National Park Authority</p> <p>Scottish Natural Heritage</p> <p>Forestry Commission Scotland</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Tayside Biodiversity Partnership</p>	Long
3 Reduce the direct pressures on montane and upland heath biodiversity by enhancing ecosystem health.	<p>Tackle littering and invasive non-native species at problem sites focusing particularly on upland catchments.</p> <p>Raise awareness of pollution and the damage caused to upland environments and species.</p> <p>Encourage measures which reverse habitat fragmentation.</p> <p>Encourage and support Muirburn good practice.</p>	<p>Angus Council</p> <p>Perth & Kinross Council</p> <p>River South Esk Catchment Partnership</p> <p>Scottish land & Estates</p> <p>The Moorland Association</p> <p>The Heather Trust</p> <p>Scottish Natural Heritage</p> <p>Tayside Biodiversity Partnership</p> <p>Scottish Gamekeepers' Association</p>	Long

Maintaining & Improving Habitats

Action	Action breakdown	Who takes the action	Timescale
4 Showcase best practice land management techniques.	<p>Maintain species richness within the different upland zones (upper, middle and lower).</p> <p>Identify areas where (a) grazing can be more intense to create a sward attractive to wintering and passage wildfowl and waders; (b) areas suitable for lower grazing pressure to favour breeding waders and ensure flowering and fruiting of key species.</p> <p>Reduce grazing pressure from deer and encourage lower levels of sheep grazing where appropriate.</p> <p>Protect montane areas from inappropriate development, disturbance and damage (including recreation and development).</p> <p>Establish a landscape-scale montane scrub restoration project, taking account of designated sites and features.</p> <p>Promote demonstration sites and advice on good muirburn practices.</p> <p>Encourage sympathetic management of upland heath for wildlife, structural diversity and rich lower plant communities.</p>	<p>Scottish Natural Heritage</p> <p>Cairngorms National Park Authority</p> <p>National Trust Scotland</p> <p>River South Esk Catchment Partnership</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Landowners and Land Managers</p> <p>Royal Society for the Protection of Birds</p> <p>British Trust for Ornithology</p> <p>North East Green Network</p> <p>Scotland's Rural College</p> <p>Deer Management Groups</p>	Long
5 Promote restoration projects and species management programmes.	<p>Explore options for fencing to protect sensitive habitats from disturbance.</p> <p>Encourage collaborative sustainable flood management projects at a catchment scale starting at the headwaters.</p> <p>Explore the setting up of a Green Habitat Network to create stepping stones for key species.</p> <p>Promote and develop new demonstration sites for the restoration of peatland - explore the opportunity to set up Bog Squad projects to tackle ditch blocking and other tasks.</p> <p>Establish a landscape-scale peatland project, taking account of designated sites and features.</p> <p>Promote and support the creation and restoration of montane scrub in suitable areas.</p>	<p>Cairngorms National Park Authority</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Scottish Natural Heritage</p> <p>Tayside Biodiversity Partnership</p> <p>Tay Fisheries Board</p> <p>River South Esk Catchment Partnership</p>	Medium

Maintaining & Improving Habitats

Action	Action breakdown	Who needs to take the action	Timescale
6 Investigate and support projects and policy which create more native woodland and forest cover, where appropriate, in Tayside.	<p>Promote spatial planning tools that help landowners to consider how best they can develop woodland in order to maximise benefits for wildlife through improving habitat connectivity.</p> <p>Promote the findings of the Native Woodland Survey of Scotland (Tayside area).</p> <p>Support catchment led tree planting initiatives that encourage natural flood management and mitigate against the impacts of climate change.</p> <p>Revitalise and expand the areas of Woolly willow scrub.</p>	<p>Forestry Commission Scotland</p> <p>Cairngorms National Park Authority</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Scottish Natural Heritage</p> <p>Tayside Biodiversity Partnership</p> <p>River South Esk Catchment Partnership</p>	
7 Support land management actions for wildcats in the Angus Glens from “the Scottish Wildcat Conservation Action Plan” which will in turn benefit a range of native species.	<p>Promote Scottish wildcat-friendly forestry practice.</p> <p>Promote Scottish wildcat-friendly management on estates, farms and crofts.</p> <p>Ensure adequate protection for Scottish wildcats from development pressures by increasing wildcat awareness amongst developers and planning authorities to ensure adequate survey and mitigation for wildcats prior to approvals.</p> <p>Promote competency of ecological surveys for Scottish wildcat.</p>	<p>Scottish Natural Heritage</p> <p>Forestry Commission Scotland</p> <p>Angus Council</p> <p>Cairngorms National Park Authority</p> <p>Perth & Kinross Council</p> <p>National Farmers Union Scotland</p> <p>Tayside Biodiversity Partnership</p> <p>River South Esk Catchment Partnership</p> <p>Scottish Wildlife Trust</p> <p>Scottish Land & Estates</p> <p>Scottish Gamekeepers' Association</p> <p>Game & Wildlife Conservation Trust</p> <p>Landowners</p>	
8 Encourage collaborative regional working for green networks.	<p>Identify and promote “cross-boundary” opportunities to join up paths and habitats between local authorities, Biodiversity Partnerships and other geographically based organisations.</p> <p>In collaboration with partners, share and promote good practice to other land users.</p> <p>Encourage or co-ordinate regional-scale projects and surveys and advise on funding.</p> <p>Highlight projects being developed and create opportunities of scale, collaboration etc.</p>	<p>John Muir Trust</p> <p>Tayside Biodiversity Partnership</p> <p>Scottish Natural Heritage</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Cairngorms National Park Authority</p> <p>Forestry Commission Scotland</p> <p>River South Esk Catchment Partnership</p> <p>Landowners and land managers</p> <p>Scottish Environment Protection Agency</p> <p>North East Green Network</p>	

Surveying & Monitoring

Action	Action breakdown	Who needs to take the action	Timescale
9 Investigate the effects of climate change on the movement of montane species through regular surveying and monitoring.	<p>Undertake survey to identify remnant areas of near-natural montane communities.</p> <p>Generate records of upland wildlife by facilitating biological surveys at sites around upland Tayside.</p> <p>Raise awareness of upland species and conservation amongst the wider community.</p> <p>Promote the CNPA as a key area for monitoring climate change impacts on montane habitats and species.</p>	<p>John Muir Trust</p> <p>Scottish Natural Heritage</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Scottish Wildlife Trust</p> <p>Butterfly Conservation Scotland</p> <p>North East Scotland Biological Records Centre</p> <p>Tayside Biodiversity Partnership</p> <p>Cairngorms National Park Authority</p>	Long
10 Investigate mammal spatial and temporal distribution patterns in Tayside (e.g. Scottish wildcat, Mountain hare, Pine marten and Water vole.	<p>Investigate expanding the NESBReC Mammal Survey to Tayside.</p> <p>Promote the availability of data and disseminate to relevant organisations.</p> <p>Support ongoing projects such as Scottish Wildcat Action.</p> <p>Support the ANGUSalve Ranger Service in ongoing surveys of Scottish wildcat, Pine marten and Water vole.</p> <p>Facilitate and support training for upland species survey techniques.</p>	<p>Scottish Natural Heritage</p> <p>Scottish Wildlife Trust</p> <p>Forestry Commission Scotland</p> <p>North East Scotland Biological Record Centre</p> <p>Mammal Trust</p> <p>Tayside Biodiversity Partnership</p> <p>Tayside Recorders' Forum</p> <p>Community</p> <p>ANGUSalve Ranger Service</p> <p>Cairngorms National Park Authority</p> <p>River South Esk Catchment Partnership</p>	Long
11 Investigate upland bird spatial and temporal distribution patterns in Tayside.	<p>Support the 'What's Up' and Mountain Bird surveys to increase biological recording in upland habitats to ascertain changes in land use and climate change.</p>	<p>Royal Society for the Protection of Birds</p> <p>British Trust for Ornithology</p>	
12 Support Upland Bird populations and encourage appropriate site management.	<p>Prepare Code of Practice leaflet; feature it on appropriate websites and create a poster for distribution.</p> <p>Review the existing nesting sites for Dotterel and advise on additional safeguarding of the sites, i.e. signage to reduce human and dog disturbance.</p> <p>Create and expand montane and juniper scrub to support Ring ouzel.</p>	<p>Royal Society for the Protection of Birds</p> <p>Angus & Dundee Bird Group</p> <p>Tayside Raptor Study Group</p> <p>British Trust for Ornithology</p> <p>Scottish Natural Heritage</p>	Long

Surveying & Monitoring

Action	Action breakdown	Who needs to take the action	Timescale
13 Survey and monitor threatened upland butterfly and moth populations.	<p>Collect annual survey data in upland areas.</p> <p>Analyse collected, verified data annually and develop adaptive management strategy to develop surveying and monitoring protocol.</p> <p>Investigate the connectivity of upland populations.</p>	<p>Butterfly Conservation Scotland</p> <p>Tayside Biodiversity Partnership</p> <p>ANGUSalive Ranger Service</p> <p>Landowners and land managers</p> <p>Community</p>	Long
14 Survey and monitor breeding upland bird species.	<p>Collect annual survey data via Operation Countrywatch for upland species, e.g. raptors, Black grouse, divers, etc. and bi-annually within the Forest of Clunie SPA.</p> <p>Maintain a minimum level of human disturbance at breeding sites.</p>	<p>Royal Society for the Protection of Birds</p> <p>Angus Council</p>	Long
15 Prepare baseline study of upland Water vole.	<p>Identify further survey effort required, particularly looking at population density etc.</p> <p>Research data available in SSE Wind Farm Ecological Reports and prepare baseline map to show upland population extent.</p> <p>Investigate potential impact of climate change.</p> <p>Consider conservation targets for the species to ensure the survival of populations in Tayside in to the future.</p>	<p>Scottish Natural Heritage</p> <p>Scottish & Southern Electric</p> <p>Landowners and land managers</p> <p>Tayside Biodiversity Partnership</p> <p>Cairngorms National Park Authority</p> <p>ANGUSalive Ranger Service</p>	Long
16 Increase awareness of upland species in Tayside and facilitate community participation in data recording.	<p>Determine current status and distribution, and monitor populations of Mountain hare, Scottish wildcat and Pine Marten in Tayside.</p> <p>Determine current status and distribution of upland birds.</p> <p>Determine current status and distribution of upland butterflies and moths.</p> <p>Promote Citizen Science websites where community sightings can be submitted to a central database.</p> <p>Focus on awareness-raising through local and national press, specialist publications and events.</p> <p>Develop web and social media used by local communities and tourists e.g. VisitScotland, CNPA, and Angus Ahead website.</p>	<p>Cairngorms National Park Authority</p> <p>North East Scotland Biological Records Centre</p> <p>Tayside Biodiversity Partnership</p> <p>Community</p> <p>Butterfly Conservation (Scotland)</p> <p>British Trust for Ornithology</p> <p>River South Esk Catchment Partnership</p> <p>ANGUSalive Ranger Service</p> <p>Royal Society for the Protection of Birds</p> <p>Tayside Raptor Study Group</p> <p>VisitScotland</p>	Long

Education & Awareness Raising

Action	Action breakdown	Who needs to take the action	Timescale
17 Encourage school age participation in projects relating to montane and upland heath issues.	Highlight the Mountains & The People project in the Cairngorms National Park which brings together young people and volunteers to train and address serious path erosion issues.	Cairngorms National Park Authority. Tayside Biodiversity Partnership Angus Council Scottish Wildlife Trust Royal Society for the Protection of Birds Butterfly Conservation Scotland Police Scotland (PAW) Scottish Land & Estates	Long
18 Promote local recorders, clubs and biodiversity open days.	Maintain an up to date database of local recorders and specialist clubs on the TBP website. Utilise the skills of local recorders and clubs to target specific projects. Encourage local open days and promote to the partnership's extended network.	Tayside Biodiversity Partnership Tayside Recorders Forum North East Scotland Biological Records Centre Scottish Wildlife Trust Butterfly Conservation Scotland Scottish Natural Heritage Scottish Land & Estates	Long

Education & Awareness Raising

Action	Action breakdown	Who needs to take the action	Timescale
19 Encourage responsible interactions when encountering montane and upland heath in minimising disturbance potential.	<p>Encourage projects that raise awareness on how best to tackle montane and upland heath disturbance.</p> <p>Collect bi-annual survey data for breeding wader populations.</p> <p>Analyse collected data bi-annually and investigate any changes in trends.</p> <p>Maintain a minimum level of human disturbance at breeding sites.</p>	<p>Cairngorms National Park Authority</p> <p>Scottish Natural Heritage</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Tayside Biodiversity Partnership</p> <p>Scottish Gamekeepers' Association</p> <p>Scottish Land & Estates</p> <p>VisitScotland</p>	Long
20 Raise awareness of montane and upland heath to Local Authorities, Community Planning Partners and the wider stakeholder network.	<p>Report regularly to community planning thematic partnerships on project contributions to local and national Single Outcome Agreement objectives.</p> <p>Regularly provide biodiversity seminars and workshops to local authority staff on relevant legislation and good practice.</p> <p>Use social media and targeted websites to promote montane and upland issues to as wide an audience as possible.</p>	<p>Cairngorms National Park Authority</p> <p>Scottish Natural Heritage</p> <p>Angus Council</p> <p>Perth & Kinross Council</p> <p>Tayside Biodiversity Partnership</p> <p>River South Esk Catchment Partnership</p>	Long
21 Hen Harrier Education Project.	Engage schools through a series of tailored outreach programmes.	Royal Society for the Protection of Birds	Short

Invasive Non-Native Species

Action	Action breakdown	Who needs to take the action	Timescale
<p>22 Reduce the direct pressures on montane and upland heath biodiversity and ecosystem health from invasive non-native species, particularly American mink.</p>	<p>Raise awareness of invasive non-native species and demonstrate the impact that can be achieved by control.</p>	<p>Angus Council Perth & Kinross Council Tayside Biodiversity Partnership Landowners River South Esk Catchment Partnership Scottish Mink Initiative Esk Rivers and Fisheries Trust Scottish Environment Protection Agency</p>	<p>Long</p>