

# Preliminary Management Plan for Invereshie and Inshriach

## PLAN DETAILS

**Start** 01-Apr-2017

**End** 31-Mar-2027

**Sign Off**

## SITE DESCRIPTION

Invereshie & Inshriach National Nature Reserve (NNR) lies within the Cairngorms National Park, 12 kilometres (km) south of Aviemore, on Speyside. The reserve nestles against the western flank of the Cairngorms plateau set in a magnificent landscape where pinewood plantation merges into naturally regenerating Caledonian forest, through moorland and alpine heath, and culminating at the peak of the Munro, Sgor Gaoith.

The naturally regenerating Scots pinewood provides a haven for some of Scotland's most important species, such as capercaillie, red squirrel, Scottish crossbill and twinflower. The forest merges into a lichen-rich moorland mosaic of heath and bog that marks the seasons with its ever-changing hues. The moss heaths of the plateau are host to breeding dotterel, and the many human visitors who come to appreciate the dramatic ice-sculpted scenery.

Nature comes first here, and wildlife continues to flourish largely undisturbed by human intervention. However, people are also welcome and the reserve offers visitors the opportunity to share the 'wild land' experience and enjoy some of Scotland's most precious wildlife in a spectacular setting.

Story Link:

## 1 Our Vision for Invereshie and Inshriach NNR

Invereshie & Inshriach NNR is an upland nature reserve delivering benefits for people and nature as part of a wider landscape of habitat improvements. The reserve is part of the most significant and influential land management partnership in the UK demonstrating what can be achieved at a landscape scale with neighbouring land managers and having an international profile and reputation.

Communities of place and interest have an important role in determining the outcomes delivered by the reserve, and helping secure a bright future for the reserve. The NNR is popular with visitors, who come to sample varied outdoor experiences from low levels through to the mountainous areas. Visitors enjoy their visits and are well informed about the wildlife, ecological and cultural connections and reserve management. Visitors have a wealth of knowledge about the reserve

and surrounding area and are proud of their NNR. Volunteers play an important role in helping us achieve our management objectives.

More people are valuing the landscape; the mosaic of habitats stretching from valley bottom to montane plateau is richer, more diverse and more robust to the impacts of climate change than 40 years ago; woodland habitats are part of the network of connectivity from the Feshie catchment though to Abernethy and exhibit the best examples in NW Europe of a boreal forest. The forest has extended well towards its natural altitudinal limit, including montane scrub which has become well-established across the montane ownership of the partnership. All areas of bog and woodland areas are active carbon stores. Targeted habitat management enhances, extends and improves the composition of these habitats and improving greater ecological connectivity - these provide resilience for species and habitats to withstand the negative effects of climate change. This has been achieved principally by natural regeneration in the presence of grazing animals.

As part of the wider partnership the NNR plays its part as a place for research and investigation to improve our understanding of our upland ecosystems and the role of people in shaping and enjoying Scotland's mountains. The reserve is one of the foremost sites in Scotland for trialling management which seeks to improve the resilience for the nation's populations of high altitude species including innovative techniques such as translocation. A comprehensive record of the NNR and its management has been built up through research, survey, surveillance and monitoring.

The reserve shows best practice in its management, and is used to demonstrate land and visitor management which enhance natural capital and the value of Scotland's natural places especially in partnership with neighbours and communities.

## 2 Natural Heritage Management

### Protected Areas and special features

Invereshie & Inshriach NNR has been designated for its wildlife interest at UK and European level. It forms part of the larger Cairngorms Site of Special Scientific Interest (SSSI), Cairngorms Special Area of Conservation (SAC), River Spey SAC, Cairngorms Special Protection Area (SPA) and Cairngorms Massif Special Protection Area (SPA).

The recognition as a European site of international importance (SPA and SAC) means that Invereshie & Inshriach is part of a Europe-wide suite of areas referred to as Natura sites.

Whilst managing Invereshie & Inshriach NNR we also have to take account of our legal obligations and Government policy to manage the features that are listed as important in a UK and European context. Where an objective may affect one or more of the qualifying interests of the SACs or SPAs, we will carry out an 'appropriate assessment.' We will only proceed with projects that do not adversely affect the

interests. Likewise, we will also take account of obligations to manage features that are valued as important in a UK context, as well as features that are locally important.

Invereshie & Inshriach is one of a suite of nine Cairngorms NNRs lying within, or adjacent to, the Cairngorms National Park. It is therefore also important that the objectives for the Reserve are viewed in the context of the wider landscape of and aims and objectives of the Park. The Cairngorms National Park Plan (2007) recognises this and identifies NNRs as "key places for information transfer and interpretation". In partnership, the suite of Cairngorms NNRs is managed collaboratively so that they may better contribute to the collective achievement of the four aims of the Park.

The Reserve also falls within the Cairngorms National Scenic Area (NSA).

<b>Feature</b>	<b>Protected Area</b>
Capercaillie ( <i>Tetrao urogallus</i> ), breeding	<a href="#">Cairngorms SPA</a>
Dotterel ( <i>Charadrius morinellus</i> ), breeding	<a href="#">Cairngorms SPA</a>
Dotterel ( <i>Charadrius morinellus</i> ), breeding	<a href="#">Cairngorms SSSI</a>
Golden eagle ( <i>Aquila chrysaetos</i> ), breeding	<a href="#">Cairngorms Massif SPA</a>
Golden eagle ( <i>Aquila chrysaetos</i> ), breeding	<a href="#">Cairngorms SPA</a>
Golden eagle ( <i>Aquila chrysaetos</i> ), breeding	<a href="#">Cairngorms SSSI</a>
Merlin ( <i>Falco columbarius</i> ), breeding	<a href="#">Cairngorms SPA</a>
Osprey ( <i>Pandion haliaetus</i> ), breeding	<a href="#">Cairngorms SPA</a>
Peregrine ( <i>Falco peregrinus</i> ), breeding	<a href="#">Cairngorms SPA</a>
Ptarmigan ( <i>Lagopus muta</i> ), breeding	<a href="#">Cairngorms SSSI</a>
Scottish crossbill ( <i>Loxia scotica</i> ), breeding	<a href="#">Cairngorms SPA</a>
Snow bunting ( <i>Plectrophenax nivalis</i> ), breeding	<a href="#">Cairngorms SSSI</a>
Breeding bird assemblage	<a href="#">Cairngorms SSSI</a>
Fluvial Geomorphology of Scotland	<a href="#">Cairngorms SSSI</a>
Mineralogy of Scotland	<a href="#">Cairngorms SSSI</a>
Quaternary of Scotland	<a href="#">Cairngorms SSSI</a>
Atlantic salmon ( <i>Salmo salar</i> )	<a href="#">River Spey SAC</a>
Sea lamprey ( <i>Petromyzon marinus</i> )	<a href="#">River Spey SAC</a>
Acid peat-stained lakes and ponds	<a href="#">Cairngorms SAC</a>
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	<a href="#">Cairngorms SAC</a>

Freshwater pearl mussel ( <i>Margaritifera margaritifera</i> )	<a href="#">River Spey SAC</a>
Invertebrate assemblage	<a href="#">Cairngorms SSSI</a>
Otter ( <i>Lutra lutra</i> )	<a href="#">Cairngorms SAC</a>
Otter ( <i>Lutra lutra</i> )	<a href="#">River Spey SAC</a>
Bryophyte assemblage	<a href="#">Cairngorms SSSI</a>
Green shield-moss ( <i>Buxbaumia viridis</i> )	<a href="#">Cairngorms SAC</a>
Fungi assemblage	<a href="#">Cairngorms SSSI</a>
Lichen assemblage	<a href="#">Cairngorms SSSI</a>
Blanket bog	<a href="#">Cairngorms SAC</a>
Juniper on heaths or calcareous grasslands	<a href="#">Cairngorms SAC</a>
Dry grasslands and scrublands on chalk or limestone	<a href="#">Cairngorms SAC</a>
Species-rich grassland with mat-grass in upland areas	<a href="#">Cairngorms SAC</a>
Dry heaths	<a href="#">Cairngorms SAC</a>
Wet heathland with cross-leaved heath	<a href="#">Cairngorms SAC</a>
Hard-water springs depositing lime	<a href="#">Cairngorms SAC</a>
High-altitude plant communities associated with areas of water seepage	<a href="#">Cairngorms SAC</a>
Very wet mires often identified by an unstable 'quaking' surface	<a href="#">Cairngorms SAC</a>
Acidic scree	<a href="#">Cairngorms SAC</a>
Plants in crevices on acid rocks	<a href="#">Cairngorms SAC</a>
Plants in crevices on base-rich rocks	<a href="#">Cairngorms SAC</a>
Tall herb communities	<a href="#">Cairngorms SAC</a>
Alpine and subalpine heaths	<a href="#">Cairngorms SAC</a>
Montane acid grasslands	<a href="#">Cairngorms SAC</a>
Mountain willow scrub	<a href="#">Cairngorms SAC</a>
Vascular plant assemblage	<a href="#">Cairngorms SSSI</a>
Bog woodland	<a href="#">Cairngorms SAC</a>
Caledonian forest	<a href="#">Cairngorms SAC</a>
Native pinewood	<a href="#">Cairngorms SSSI</a>

**Objective NH1:** *Enhance the mosaic of habitats and species on the reserve through appropriate management, maintaining or increasing their extent and distribution.*

The extent and altitudinal range of the reserve means it contains a diversity of semi natural and natural vegetation types from tundra-like plateau vegetation to loch side

woodland, and a complete transition in between. Much of the interest of Invereshie & Inshriach lies in its diversity of plant communities from native woodland through dwarf shrub heaths, mires and flushes and grasslands to moss-heath and late snow bed vegetation. The focus of our management is on enhancing this mosaic of habitats and species; the more robust these habitats are the more resilient they will be to climate change.

One of the main activities on the reserve is the management of impacts from grazing herbivores. Invereshie & Inshriach does not sit in isolation but is part of a wider ecological area. We therefore work in partnership with our neighbours to restore, enhance and improve habitat and reduce impacts especially from herbivores. Our target is for fewer than 5 deer per hectare; we will revise this as required through the term of the plan.

Controlling deer numbers has a positive effect on the ground conditions. It lowers browsing impacts, allows for regeneration, and reduces trampling in particular for the most sensitive habitats of wet heath and bog.

We will continue to work on encouraging species diversity in the woodland and increasing the overall extent of woodland. Healthy woodlands support the broadest range of species and therefore it is beneficial to have a diversity of tree and shrub species and also ages of trees. The woodland regeneration is steadily moving up the slopes and gaps in the forest are filling. However the rate of regeneration in the Allt Ruadh catchment is still slow - we intend to continue with the programme of intervention through trial management to find the method which can produce an acceptable level of regeneration for this priority habitat. While we are encouraging the spread of woodland across the reserve we are aware that this is resulting in the loss of some of the protected dry heath habitats on the reserve. The case for converting dry heath to woodland has already been approved by Scottish Government in the Cairngorms SAC.

The fragility of habitats increases with altitude. The summit plateau and crag communities are most vulnerable to impacts from a changing environment.

Below the crags on the upper slopes there are areas of montane scrub. This is one of the rarest habitats in Scotland and it is important we enhance this habitat. Methods for establishing a scrub zone with willows and juniper have been trialled in other areas of Scotland, increasing resilience and establish new populations for the rarer species of upland plants through translocation, propagation and planting - we will review options before considering which to take forward here.

### Projects planned to deliver Objective NH1 during life of plan:

NH1.1	<i>Manage deer numbers to less than 5 per hectare as agreed with Deer Management Group to improve overall habitat condition.</i>
NH1.2	<i>Assess deer population and impacts on vegetation across NNR once every five years.</i>
NH1.3	<i>Maintain annual membership to Cairngorm &amp; Speyside Deer</i>

	<i>Management Group and attend biannual meetings.</i>
NH1.4	<i>Continue with the programme of management to enhance regeneration in the Allt Ruadh catchment.</i>
NH1.5	<i>Where appropriate encourage the spread of woodlands and improve species diversity through planting rarer native species including montane scrub.</i>
NH1.6	<i>Produce and implement plan to increase extent and enhancement of montane scrub communities.</i>
NH1.7	<i>Ensure that opportunities for translocations to the reserve of appropriate threatened species using The Scottish Code for Conservation Translocations are investigated and implemented.</i>
NH1.8	<i>Work within our land management partnerships to share information.</i>

**Objective NH2:** *To undertake and facilitate relevant research, survey, surveillance and monitoring on the reserve to inform future management and contribute to national programmes.*

Research & monitoring of the nationally and internationally important habitat features will take priority and be used to inform our management. We will also focus on species and habitats for which the reserve represents an important resource i.e. UK and local Biodiversity Action Plan species and habitats.

We see Invereshie & Inshriach as an important resource for research work due to the long record of work already carried out on the reserve. We will continue to encourage and where possible support students, enthusiasts, universities and colleges in using Invereshie & Inshriach as a location for research.

We will continue to support and encourage volunteers and students to carry out research projects that contribute to our knowledge of the NNR.

### **Projects planned to deliver Objective NH2 during life of plan:**

NH2.1	<i>Review our research, survey and monitoring requirements in 2018 and produce and implement a prioritised programme of essential and desirable research, survey monitoring and surveillance.</i>
NH2.2	<i>Support others wishing to carry out research work on the reserve where this is compatible with the interests of the reserve, and collate all research reports produced.</i>
NH2.3	<i>Publish all SNH commissioned research and make this available online.</i>
NH2.4	<i>Complete species surveys for birds of prey and grouse.</i>
NH2.5	<i>Contribute to national and regional programmes for monitoring and surveillance of species and habitats.</i>

NH2.6	<i>Monitor deer numbers throughout the reserve and report cull figures annually to Deer Management Group.</i>
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## 4 Management for People

**Objective VM1:** *Provide a welcoming, enjoyable and high quality visitor experience by maintaining, reviewing and refreshing visitor facilities.*

National Nature Reserves in general are special places where people are encouraged to visit and experience nature. Invereshie and Inshriach is specifically a long-established place for hillwalking and mountaineering. We provide orientation and information about nature on the reserve at the Allt Ruadh car park and at Drake's Bothy.

We will continue to maintain the path network and associated infrastructure.

We will need to review the interpretation part of the way through this plan and consider options for replacing it if the condition, relevance or presentation has changed. This will also be an opportunity to improve what is provided and look at options for interpretation that can be changed to provide interest for repeat visitors.

We will continue to provide pre-visit information on visiting and exploring the reserve. These will be available online. We will also promote the opportunities on neighbouring land managed for nature conservation as part of our landscape scale partnerships.

We also encourage informal feedback. Invereshie & Inshriach will be included in national visitor satisfaction surveys on a rotation with other reserves across Scotland.

### Projects planned to deliver Objective VM1 during life of plan:

VM1.1	<i>Maintain and replace signs, and interpretive panels as necessary.</i>
VM1.2	<i>Review signage and interpretation across the reserve in 2022-23.</i>
VM1.3	<i>Maintain promoted trails to appropriate standard.</i>
VM1.4	<i>Ensure reserve leaflets are up to date and available digitally.</i>

**Objective VM2:** *Promote awareness and enthusiasm for nature, inspire learning and exploration in ways that help people connect with and value nature more.*

One of the roles for Invereshie & Inshriach is to raise awareness and enthusiasm for nature. Many people will visit and explore the reserve independently and be inspired by this diverse and interesting place. However we also see value in facilitating visits



and sharing our knowledge of the reserve and its interests. We will do this in partnership and collaboration with our neighbours as part of landscape scale promotion of ecological restoration and connections.

We will use social media to promote the reserve and to continue to engage with people hopefully inspiring them to visit here or other reserves in the NNR suite.

The reserve is an important resource in the local area and a focus for many visitors. We will also promote other National Nature Reserves within Badenoch & Strathspey and Lochaber.

### Projects planned to deliver Objective VM2 during life of plan:

VM2.1	<i>Provide guided walks /events each year on a variety of themes.</i>
VM2.2	<i>Facilitate at least one open event per year.</i>
VM2.3	<i>Use social and online media to promote the reserve, inspire people and keep them up to date.</i>
VM2.4	<i>Promote the Reserve through distribution of leaflets in the information point and on-site information.</i>

**Objective VM3:** *To ensure communities, volunteers and educational groups play an increasingly important role in determining the outcomes delivered by the reserve and make significant contributions to the management of the reserve.*

Volunteers are an important and essential part of Invereshie & Inshriach. In partnership with neighbours we will provide volunteering and work experience opportunities to work on the Reserve and surrounding areas.

We will continue to work with local schools and encourage them to use the reserve for outdoor learning. We will also support tertiary education visits.

The closest residential community to Invereshie & Inshriach is KinCraig - we will have regular engagement with activities in the community. Staff attend community council meetings and maintain contact with the community association. Reserve staff will be working to improve links within the area.

The reserve plays host to numerous visits from communities of enthusiasts and specialists who undertake visits for enrichment, survey and appreciation of the natural and cultural heritage. Reserve staff will continue to facilitate these visits and to give added value for our visitors.

All visitors will learn about ecological connections at a landscape scale, how we employ the ecosystem approach to reduce the impacts of climate change and how we are adapting to create more resilience within ecosystems.

### Projects planned to deliver Objective VM3 during life of plan:



VM3.1	<i>Support volunteers on the reserve to ensure they get the most out of their experience.</i>
VM3.2	<i>Support tertiary education group visits to the reserve.</i>
VM3.3	<i>Support local school visits to the reserve.</i>
VM3.4	<i>Work with communities, enthusiasts and specialists to enhance visits.</i>

**Objective VM4:** *To use our work and experience to train, demonstrate to, collaborate with and influence present and future land managers and policy makers.*

Invereshie & Inshriach is used as a site to demonstrate land management in the face of climate change. We can show how we are employing an ecosystem approach to minimise climate change impacts and adapting our management to create more resilience within the ecosystem.

The reserve will continue to provide a base for a number of training events and skills development courses. We will prioritise those with a land management focus. The facilities at Invereshie & Inshriach will allow us to host certified courses on deer, estate and nature conservation management delivered by a number of organisations.

We would look to work with our immediate neighbours especially those who jointly manage the Cairngorm SSSI/SPA/SAC to join up beneficial management and collaborate over our ownership boundaries to enhance public benefits.

We will continue to support these events providing a location, facilities and expertise.

#### **Projects planned to deliver Objective VM4 during life of plan:**

VM4.1	<i>Provide or support at least 2 demonstration events per year with partners, particularly sharing best practice for open habitats, woodland and deer management.</i>
VM4.2	<i>Support training events on practical land management subjects through providing facilities and expertise.</i>
VM4.3	<i>Support training events on nature conservation awareness subjects through providing facilities and expertise.</i>

## **5 Property Management**

**Objective PM1:** *Property management: To manage the Reserve property responsibly following best practice and in collaboration with our neighbours.*

We will manage the reserve and SNH Property responsibly and efficiently following good practice.

We manage the infrastructure and do regular maintenance and health and safety checks. We maintain equipment used on site and ensure it conforms to the appropriate regulations. We review and update our fire plan annually.

The built infrastructure is limited to the promoted trails, the car park at Allt Ruadh and Drake's Bothy.

**Projects planned to deliver Objective PM1 during life of plan:**

PM1.1	<i>Maintain the property infrastructure (trails, car park, and bothy) in good condition.</i>
PM1.2	<i>Carry out quarterly safety and condition assessments of all visitor infrastructure and keep accurate records.</i>
PM1.3	<i>Ensure the property is well managed and conforms with Health &amp; Safety Regulations including risk assessment and fire plan reviews.</i>