

East Schiehallion Mountain Woodland Project

Additional information to support EIA Screening Opinion

1. Possible environmental effects and proposed mitigations
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1. Possible environmental effects and proposed mitigations

Watercourses

Increased woodland coverage on Schiehallion has the ability to positively benefit watercourses in the area, with greater tree cover along burns providing nutrients necessary for suitable riparian habitats. Over-land water flow will also be reduced thanks to canopy cover, limiting the negative effects of heavy rainfall downstream as more water can be retained in upland areas and peak storm flow reduced.

Scotland's River Temperature Monitoring Network's riparian woodland prioritisation maps show that the Allt Mor in Glen Mor scores 13 on the prioritisation index which suggests that establishing woodland here would be of benefit in reducing climate change-related water temperature increases.

Peat / Carbon

There are potentially significant carbon benefits of woodland expansion. In the case of mountain woodland, where growth rates are slower and diverse broadleaf species are predominant, carbon sequestration rates are lower and slower. In the long-term the potential benefits of establishing naturally regenerating mountain woodland where at present there is heath, are likely to be significant.

Planting areas will avoid soils with a substantial peat layer and will be restricted to mineral soils. Initial soil ground truthing in 2021 (see attached soil survey), identified small areas of deep peat on the site and consequently, a thorough peat survey of these areas is planned during summer 2022. All planting will be done by hand to further reduce soil disturbance and associated carbon loss through soil respiration.

Birds

In the medium-term, young woodland and scrub will be a habitat greatly favoured by black grouse, providing shelter and forage for chicks. Other bird species such as ring ouzel should benefit from this habitat once established, with increased invertebrates, food and shelter provided from the trees and scrub.

Initial fence construction will take place after the breeding bird season to minimise disturbance during the summer months.

There is a good population of black grouse in the area, ongoing monitoring during the lekking season will ensure that we know where all current leks are to ensure new fencing is not impacting lek sites.

Deer

Deer movements will unavoidably be affected by fencing on the site. Offset electric fencing has been successfully used by National Trust for Scotland at Ben Lawers and Mar Lodge, where neither estate has reported the fence design impacting deer welfare. A similar fence has been used since 2018 at lower altitudes at East Schiehallion, with no incidences of deer welfare issues. The offset fence design specifically allows any deer inside the fence to easily jump out of the fenced area and we will also install several deer leaps to aid this.

An initial reduction cull to reduce grazing pressure by deer on the site will be required. The success of our culling activity will be determined by the habitat response from our ongoing monitoring plan.

Landscape

East Schiehallion sits on the edge of the Loch Rannoch and Glen Lyon NSA. Increasing woodland cover right up to the treeline zone has additional aesthetic benefits that can be enjoyed by hillwalkers and local community alike. There will be additional benefits to biodiversity within the NSA, linking several nearby areas of young and ancient woodland and providing a seed source for the future.

To achieve these results, however, fencing will have a limited impact on the landscape. To mitigate these impacts, the chosen fence design is only slightly higher than a stock-height fence to reduce this visual impact and we anticipate fencing will be removed once woodland has been established and grazing levels can be controlled at a low level on the estate. Existing fencelines will be used where practicable, to minimise any perceived visual impacts of new fencing.

The fence will be part of our strategy to reduce grazing pressure from sheep and deer on the site. There will also be increased deer control effort and gathering of any sheep that incur from neighbouring ground. A positive benefit of the approval of this plan is that it is a pre-cursor to the formation of a local landscape deer control group with members of the Heart of Scotland Forest Partnership.

Access

Fencing is purposely strategic and will not be a full enclosure. This reduces impacts on walkers using the main path up Schiehallion who will not have to navigate gates/stiles to walk up the mountain.

Visitor interpretation will be necessary to explain the need for fencing on the site and information on our website and at the car park will aim to give visitors as much information ahead of their visit as possible with regards to accessing the site.

Planting / nursery diseases

Planted trees will be sourced from several local tree nurseries using seed of as local a provenance as possible. The biosecurity measures taken by nurseries will be an important part of agreeing a contract for growing trees. We are discussing options with a grower to create

raised beds on site at Schiehallion, where young trees can be hardened-off and stored for a year or longer if necessary. This would also allow visitors to see part of the growing process.

Although we are within a Zone 1 conservation action area for juniper, which are recognised to have 'self- sustaining juniper populations - conservation management beneficial in some places to promote natural regeneration', with only one juniper bush on the site there is good justification to supplementary plant. According to NBN Atlas records, there are only a handful of isolated bushes in neighbouring estates.

In line with Scottish Forestry guidance, to reduce the likelihood of spreading *Phytophthora austrocedri* in planted juniper, the creation of raised beds on site would allow us to keep nursery stock for a growing season to minimise the risk of planting out infected plants. Sites for planting juniper will focus on areas that drain well and away from areas of high footfall to reduce knock-on impacts if plants do become infected (FCS 2013). We would be happy to monitor planted juniper to assess establishment rates and failed plants.

Planting with volunteers

We aim to involve members of the local community, volunteers, youth groups, John Muir Award Groups, schools and local contractors to help with tree planting. Volunteer days will be carefully planned and supervised by John Muir Trust staff to ensure that planting does not accidentally take place on sensitive habitats or peat-rich soils. Detailed planting plans drawn up by Trust staff and thorough volunteer briefings on the day of events will aid this.

2. Stakeholder engagement

As part of our engagement plan for this project we undertook a public consultation of our woodland plan in January-February 2022. Invitations to provide feedback were emailed to neighbouring landowners, members of the Heart of Scotland Forest Partnership, chair of the Breadalbane Deer Management Group, Perth and Kinross Countryside Trust, Scottish Raptor Study Group, Mountaineering Scotland, RSPB, and members of the Mountain Woodland Action Group. Details of the consultation were also shared on the John Muir Trust's social media channels. A press release was sent to local newspapers but it was not picked up.

We received 15 emails in response to our consultation and have attached relevant feedback where consultees were happy to share this with Scottish Forestry. A summary of the main areas of concern and proposed mitigations are outlined below.

Fencing

Several respondents noted the visual impacts of fencing (both the fence itself and the visual impacts of changes in vegetation). This document has outlined our rationale for why a fence is necessary for this project to work. We will mitigate these impacts by correct siting of the fence, its design (being as low a height as possible) and by utilising and upgrading existing fencelines.

New fencing will be necessary on our western boundary in Glen Mor and two respondents noted this would negatively impact on the scenery in this glen. In the short-term, fencing will have a limited landscape impact which we have mitigated as much as possible through its design. The fence will be removed at the end of its lifetime and once surrounding grazing pressures are at a sustainable level. In the medium-term, we hope that the open woodland creation in Glen Mor (where there is a particularly evident lack of existing seed source apart from gorge section of the Allt Mor) will positively benefit the scenery of the glen.

Visible changes in vegetation will develop slowly, we are not planning to plant on the north side of the hill and on the south side low-density planting will avoid areas close to the boundary. The choice of fence route will also mitigate this. Viewpoints of the southern fence will be limited to the Glen Lyon hills.

Designations

Two respondents noted concern that the proposed woodland creation is of a significant size and within a National Scenic Area. They also noted concern about the Schiehallion SSSI, however, permissions have been granted separately from NatureScot to fence our boundary within the SSSI to reduce grazing on the site.

NatureScot suggested a programme of habitat monitoring within the SSSI to ensure that sensitive habitats are monitored every three years. The Trust have agreed to undertake this monitoring and to share the data with NatureScot.

Although fencing will have a short-term visual effect, we believe that the benefits of the habitat created in this project will provide major long term visual and environmental benefits.

Habitat Restoration

The vast majority of respondents were in agreement with our aims to increase native woodland cover in the area and generally accepted that reducing grazing in the area was a necessary pre-requisite for this to happen.

Several were very supportive about aims to showcase mountain woodland habitat and one suggested more could be done to use this project as a key demonstration for other estates across Scotland.

Deer

Negative impacts on deer and deer movement in the area were noted by the Breadalbane Deer Management Group. They voiced concern that the proposed fencing could create a 'trap' for deer. The offset fence design specifically allows deer to jump out of (but not into) enclosures, which has been witnessed in existing offset fencing used at East Schiehallion, so it is unlikely to form a 'trap' for deer. We will incorporate deer leaps into the fence design, which will enable deer to leave the enclosure.

Ongoing deer control will be necessary throughout the fence's lifetime as incursions will be inevitable due to snow, fence damage and the occasional deer straying around the top of either side of the fence.

Two respondents noted concern about possible impacts on deer welfare due to exclusion from East Schiehallion. After fence construction, we will undertake a reduction cull of deer 'hefted' at East Schiehallion, which will mitigate the main welfare concerns. At present, there is very little woodland habitat for deer at East Schiehallion, so any welfare impact in removing deer access to the site will be small. In the long-term once fencing can be removed, the mountain woodland habitat created will vastly increase the amount of good habitat for deer in the area.

A handful of respondents noted inconsistencies in the habitat data given, suggesting that grazing levels were reducing on the site. We have been part of foot and helicopter deer counts through the Breadalbane Deer Management Group up until 2021, the data from which is publicly available.

As counts only provide a snapshot of deer movements on a given day, grazing impacts are monitored on the site more accurately through vegetation surveys. The Trust have monitored this on East Schiehallion since 2008, through marked seedling and dwarf shrub heath monitoring. Marked seedling growth has not changed over this period, apart from in one plot which was fenced in 2018. The heath data shows small growth over the same period from an average height of 25cm in 2008 to 32cm in 2019. Despite modest growth in heath height, this data shows clearly that grazing levels on East Schiehallion are still too high to allow young trees to establish. This overgrazing is caused by both deer and sheep and this is causing a significant impact on vegetation growth.

Access

One respondent noted concern that new fencing limits access rights of walkers. We want to minimise impacts on walkers and cyclists using the area, which is why we have discussed appropriate measures with Mountaineering Scotland to mitigate these.

The proposed fencing is purposely strategic and will not be a full enclosure. There will be no impact on walkers using the main path up Schiehallion as they will not have to navigate any new gates or stiles to walk up the mountain. Crossing points around the boundary of the property will be constructed at regular intervals along fencing, with signage in between to point visitors towards the direction of the nearest crossing point. We will use Strava heatmaps as a basis for identifying informal routes on the mountain to ensure crossing points intersect with these and all formal paths will have a crossing point.

Birds

To reduce negative impacts on bird populations, all construction work and planting for this project is planned outwith the breeding bird season.

We have discussed appropriate mitigations with David Hunt (RSPB) to ensure they are happy with this approach to minimise negative short-term effects on black grouse populations. Lek counts already take place on and around Schiehallion and are reported to the Perthshire Black Grouse Study Group. We already work together with volunteers and staff at Dun Coillich and Kynachan Estate to get a broader picture of black grouse movements. During spring 2022 we will undertake additional black grouse surveys to ensure any unknown leks can be identified and that fencing can be appropriately sited to avoid these.

We have also discussed our plans with Wendy Mattingly (Scottish Raptor Study Group) who did not have any initial concerns about the project's effects on raptor populations in the area so long as fencing construction takes place after nearby raptor nests have fledged.

Planting

We received feedback from one consultee who has managed a nursery for a similar planting project, which we will take into careful consideration for our project. They suggested a full biosecurity assessment in particular for species-specific pathogens such as *Phytophthora austrocedri* for juniper and *Dothistroma septosporum* for Scots pine. As there is only one remnant juniper on East Schiehallion, this is an important species to supplementary plant and advice will be taken before planting to ensure risks from disease transmission are minimised.

Consultation Process

We received feedback from two consultees that we have not adequately consulted with neighbours or the Deer Management Group. We have kept a communications log of formal

and informal correspondence with stakeholders from the concept of this project in early 2020 which we are sharing as part of this EIA screening opinion. Feedback from the public consultation has been shared with respondents and most concerns relevant to the project have been sufficiently considered in this document.

Mountain woodland restoration has been a key aim for the Trust at East Schiehallion, as noted publicly in the site's Woodland Plan approved by Scottish Forestry in 2016. Neighbours and stakeholders were asked to feedback on our last woodland management plan as part of a previous EIA screening opinion.

3. References

Forestry Commission Scotland (2013). *Planting juniper in Scotland*. Available: <https://forestry.gov.scot/publications/83-planting-juniper-in-scotland-reducing-the-risk-from-phytophthora-austrocedrae/viewdocument/83> [accessed on 22 October 2021].