

Friends of the Ochils (FOTO)

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Friends of the Ochils Response to Coulshill Screening Opinion Request Form V5 and Scottish Forestry's Screening Opinion

Introduction

Friends of the Ochils have considered further documents submitted by Scottish Woodlands relating to the Coulshill and Corb planting proposals in the Ochils. Having reviewed this documentation, we do not agree The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017 have been met. There is considerable evidence that the applicant has failed to comply with these statutory requirements. We are also disappointed the applicant has taken limited account of our submission on its Scoping Request V3 (Submitted to Scottish Forestry by email on 24 May 2021). The need for an EIA is essential as we shall demonstrate with reference to the Forestry EIA Regulations.

The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017

The UK Forestry Standard (Standard) recognises the 1992 UN Conference on Environment and Development (the Rio 'Earth Summit') and the legally binding conventions: the UN Framework Convention on Climate Change and the UN Convention on Biological Diversity. These binding agreements have been upgraded at subsequent UN meetings, most recently at Cop26 with greater attention to climate change, conservation and biodiversity.

Current evidence on the continuing rise in global temperatures, continuing losses of species and diminishing biodiversity demonstrate that the EIA approach from 1992 is not working, otherwise we would not be facing these deteriorating circumstances. An example is the Botanaeco report: *Coulshill & the Corb Habitats, vegetation & soils*. This minimises concerns to designated plant communities, rather than including threats to the wider ecology. Ecology maintained our planet in good condition until changed by the Industrial Revolution and what followed. If only designated species are to be saved, an enormous amount of our essential ecology would be lost. Now five years old, The Forestry EIA Regulations, like similar legislation and guidance do not meet current needs.

The 'ecosystem approach' referred to in the Standard includes Cultural Services; Spiritual and Religious, Recreation and Ecotourism, Aesthetic, Educational, Sense of Place and Cultural Heritage. The recent Screening Opinion request is incomplete on the subjects we shall demonstrate.

By writing to the applicant that an EIA is not required, we are denied a report that would address the many crucial missing issues and information that should have been included by the applicant.

The applicant has failed to comply as required by the statutory exact requirements:

Regulation 5, paragraph (2) "direct and indirect significant effects...on the factors specified in paragraph (3) and the interaction between those factors."

Regulation 5 paragraph (3) (b) biodiversity (c) land, soil, water, air and climate (d) cultural heritage and landscape.

Regulation 6 paragraph 3(d) “a description of reasonable alternatives...taking into account the effects of the EIA forestry project on the environment”.

Schedule 1 Thresholds For The Identification Of Projects Likely To Have Significant Effects On The Environment

The area of non-native conifer afforestation is shown as 600.60ha in the Species Design drawing within a site area total of what appears to be 752.22ha; an equivalent of 30 times greater than the threshold of 20ha in paragraph 3 (2) (a). Accordingly, under Regulation 10 of the Forestry EIA Regulations thresholds, the applicant’s proposals will have “significant effects on the environment”.

The request for a Screening Opinion V5 fails to fully assess the terms of Regulation 12, paragraph (2) (ii): a description of the project “with particular regard to the environmental sensitivity of geographical areas likely to be affected.” Similarly, the terms of Regulation 15 paragraph 5 (c) have not been met due to wanting information. Therefore, not requiring an EIA falls short of the Regulations.

Schedule 2 paragraph 1 (b) in relation to “cumulation with other existing forestry projects and/or approved forestry projects” is incomplete in the applicant’s submission, considerably underestimating the scale of impact of the project with existing forestry in the area. Paragraph 1(c) is also inadequate on coverage of water and biodiversity and paragraph 1 (g).

The applicant fails to meet requirements of the Regulations in Schedule 2 (b): “the relative abundance, availability, quality and regenerative capacity of natural resources” that include soil, land, water and biodiversity. Coverage is undervalued, incomplete or absent. Neither has requirements of paragraph (c) (viii) been met in relation to impacts on “landscapes” and sites of “cultural significance”. This also applies to paragraph 3(a) and (g).

The applicant also fails to meet the requirements of Schedule 3, paragraph 2: “a description of the reasonable alternatives”. The following Regulations have been addressed inadequately or not at all: Schedule 3, paragraph 5 (b) the sustainability of natural resources; paragraph 5 (e) cumulative effects with other projects and paragraph (7) on methodology, evidence used in the assessment and potential for uncertainties.

These Regulations apply to any applicant aiming to afforest a large area of land and must demonstrate an understanding of the Regulations. Inadequate responses require an EIA as this application demonstrates.

Coulshill Screening Opinion Request Form V5

Having identified where Regulations have not been met adequately or not at all, we cite these as set out in the Screening Opinion Request.

Site Description

The applicant has provided different figures. There is said to be 655.28ha of planting and 349.03ha unplanted, totaling 1,004.31ha in this description. The Species Design BRN:307419 drawing figures are 641.03ha of planting, that omits 16.64ha of Scots Pine. Open ground is given as 70.75ha and 23.80ha of other land; a total of 752.22ha. Which are the correct figures and where do the 18.60ha of forest roads and quarry fit?

CUMULATIVE EFFECT

Landscape pages 4 and 25

Page 4 is contradictory. The applicant admits “The landscape will undoubtedly change.” Then continues: “the creation of a more extensive area of forestry is unlikely to have a significant

negative cumulative effect... it will create a more natural looking forest, which combined with the existing forests, will eliminate boundary lines and visible straight edges.” We believe that the landscape will undergo significant change, particularly in relation to cumulative impact.

The Species Design drawing is not of a “natural looking forest.” The species mix is mostly non-indigenous conifers that will be planted at close-spacing in tight rows. This is not natural; these are straight lines. The hill tops will be dominated by deer fencing in straight lines. Neither is the following statement plausible: “which combined with existing forests, will eliminate boundary lines and visible straight edges.”

The applicant’s proposal will convert open landscape into another plantation dominated by Sitka Spruce, like adjacent geometrically laid out blocks of forestry dominated by Sitka Spruce or similar blocks within sight of the proposal. These are predominantly monocultures. A future designation like the Tay Forest Park is unlikely, because the area does not have the required diversity of landscape. The enclosed nature of the proposals is all too evident in the visualisations of part 2 of the applicant’s Landscape Review: coulshill-lva-part-2. Views would be hemmed in by planting at lower and upper levels. Paths through planting look like tunnels.

These forest blocks we refer to have been measured using the National Library of Scotland’s mapping facilities; an Ordnance Survey base with Google aerial overlay. They account for 11.325km². Clearfell coupes were not included in the measurement and only contiguous blocks east of the B934 were included.

Cockersfauld Hill, Skymore Hill & Green Hill; 0.640km². Green Hill (Craig Rossie) 0.481km². Blackgoats Hill, Piperstones Hill & Simpleside Hill; 0.704 km². Balquhandy Hill, Greenhill & Blaeberry Hill; 1.056km². Craigbakie Hill 0.331km². Forest blocks south of the Water of May 3.456km². Fanny Hill, Burnt Hill & Black Creich Hill; 3.206km². Myrehaugh Hill & Thornton Hill; 1.451km². Grand total: 11.325km².

In addition to these, the applicant also fails to identify recent forest blocks in the Ochils that have been given consent; sites close to Coulshill, most notably the applicant’s own Keltie & Knowes, the largest of all. Most of these consents include large areas of Sitka Spruce.

Woodland Type	Ha	Location	Grid ref.
Sitka Spruce & Scots Pine	83.79	Frandy	NN928029
Native broadleaves	30.73	Frandy	NN928029
Spruces, Sc. Pine & native broadleaves	19.71	Keltie Estate	NO004124
Conifer	426.49	Keltie & Knowes	NO007107
Norway & Sitka Spruce	9.19	Knowehead	NO034095
Conifer	40.57	Glenearn	NO101148
Sitka Spruce, Larch & native broadleaves	50.00	Wester Gatherleys	NO042117
Sitka Spruce & native broadleaves	97.42	Tillyrie	NO099084
Conifer	62.47	Lower Warroch	NO057048
Norway Spruce & Scots Pine	55.16	White Creich Hill	NN994060
Native broadleaves	12.59	White Creich Hill	NN994060
Sitka Spruce, Sc. Pine & native broadleaves	216.95	Earnieside (Mellock Hill)	NO021058
Sitka Sp., mixed conifers & native broadleaves	142.61	Fossoway (Lendrick) Hill	NO013033
Total planting	1,247.68		

Site	Type	FGS ref.	Conifer Ha	Broadleaves Ha	From Coulshill Km
Fosswell	Woodland Creation	19FGS44863	76.14	0.00	1.10
Gleneagles	Long Term Forest Plan	20FGS53224	Not known, ca. 20 km ²		1.40

There are also known cumulative impacts on the Scottish Forestry Register the applicant fails to identify. The Fosswell Woodland Creation will be visible from the edge of Green Knowes and from the summits of Green Law, Sim's Hill, John's Hill and Corb Law. The extension of the Fosswell site will be a planting of conifers only of unknown species.

The Gleneagles Long Term Forest Plan covers an area of about 20m². This is a huge expansion on existing cover, extending both sides of the A823 to Wether Hill in the west at 503m AOD. On the east side of the A823 the summits of East Bow Hill 476m AOD and the Seat 429m AOD will be visible from the summits of Green Law, Sim's Hill, John's Hill and Corb Law, as will the summit and area surrounding Wether Hill will be visible. Neither of these two sites has been taken into account for their impacts on Coulshill and Corb.

Without doubt there is a clear intention to completely afforest the eastern range of the Ochils, relentless of any other landscape possibility. The Scottish Forestry Strategy 2019-2029 states: "In particular, over the second half of the 20th century, it became clear that the industrial, intensive, single purpose forestry that dominated the 1960s, 1970s and early 1980s was not sustainable, and an approach was required to embrace environmental and wider societal interests. This change of focus for forestry policy resulted in the development of comprehensive standards for forest management in the 1990s, drawing on international initiatives stemming from the first Earth Summit in Rio de Janeiro in 1992."

The "industrial, intensive, single purpose forestry" referred to has continued over recent decades into the present in the Ochils and is equally unsustainable.

The applicant fails to meet the requirements of the Forestry EIA Regulations: Schedule 2 paragraph 1 (b) in relation to "cumulation with other existing forestry projects and/or approved forestry projects". The arguments presented by the applicant are not feasible.

The applicant indicated at the early stages of this application that future planting might continue beyond Coulshill south of Green Law towards Black Creich Hill. The impression given is the applicant failing to evaluate known detrimental impacts in the current application that will affect "open ground" in the future.

The statements on page 25 and following are partly covered under public access. The statement on page 26 that "the sense of relative tranquility will remain intact in large part as the forest develops" has no credibility. The entire nature of the Coulshill/Corb area will be changed beyond recognition.

The applicant has failed to adopt the UK Forestry Standard 'ecosystem approach'. Particularly; Cultural Services, Spiritual, Educational, Sense of place and Cultural heritage. **Accordingly, the following sections of the EIA Forestry Regulations have not been met: Regulation 5, paragraph 3; Schedule 2 (b) the "regenerative capacity of natural resources" and paragraph (c) (viii) impacts on "landscapes and sites of "cultural significance". These are also consistent with the requirements in paragraph 3(a) and (g) of Schedule 2.**

The section on Cultural Heritage in the applicant's Screening Opinion falls short of these requirements. The Ochil Hills have been long cherished for their open aspect. The OS One-inch to the mile, 7th Series, revised between 1954 to 1969, exhibits a landscape little changed in character. Forestry was largely confined to the hillfoots; the Glendevon Forest being the exception on higher ground. From this period onward, forestry made a rapid expansion in the Ochils. Open land has also given way to reservoirs and more recently wind farms. **In this respect, the continued expansion of forestry cannot be considered sustainable.**

The open landscape of the Ochils is a cultural landscape; its occupiers and visitors having a strong affinity over centuries or millennia. The Coulshill area is covered by A.R.B Haldane (Archibald Richard Burdon Haldane, 1900-1982) in his book *The Drove Roads of Scotland*, first

published in 1952. The use of the Ochils for droving cattle from the Highlands increased after 1750, following the decline of the Crieff cattle market and rise in importance of the Falkirk Tryst. “To the east of Gleneagles other tracks offered an easy crossing of the Ochils and the best of upland grazing.”

Haldane refers to local tradition recording the use of a route from Coulshill for droving cattle to Falkirk from the late 18th century into the 19th. He does not mention it by name, but this must be the Cadger’s Yett through Borland Glen to Glendevon. Coal and lime from East Fife came up this route and other goods went southwards. Haldane quotes Sir Patrick Murray of Ochertyre recording tolls between July 1812 and July 1813 at Yetts of Muckhart.

Perth & Kinross District Council asserted two rights of way relating to this route. Auchterarder to Glendevon – Cadger’s Yett, pedestrian status, asserted on 7th September 1983, Route reg. no. 20/27/8. Its continuation: Glendevon to Dollar – Cadgers’ Yett, pedestrian status, asserted 26th October, 1983, route reg. no. 20/27/8. These assertions were based on gathered evidence from users for a period of 20 years or more unchallenged use.

A permissive route was recognised by Perth & Kinross District Council on 26th November 1986: Coulshill, Auchterarder to Corb Bridge, B934, via Corb Glen; route reg. no. 20/27/9. These three routes are also core paths, known respectively as; AUCH/55, AUCH/8 and DNNG/9.

A.R.B. Haldane devotes a whole chapter to Coulshill in his 1944 *The Path By The Water*. His descriptions are very evocative; including places, topography, views, history, flora and the riches of the Coul Burn. These remain at present to enjoy, but will be lost or severely diminished by the afforestation of Coulshill and Corb.

This cultural heritage stretches from the present over several centuries, it is written into the landscape and **not covered by the applicant**. The sense of place the public enjoys exploring these areas will be lost in a plantation totally out of context. An information board will be no substitute. **The UK Forestry Standard and Forestry EIA Regulations have not been met.**

Public Access pages 4, 8 and 20

The applicant claims a positive cumulative effect on public access with little justification and omits important considerations. All of the Coulshill/ Coul application site, except buildings and their surroundings, is currently open to the public to exercise their statutory rights of access under Section 1 of the Land Reform (Scotland) Act 2003. Most of this access land will be lost to tree planting. In effect the taxpayer will pay for loss of statutory rights accompanying a huge negative impact.

In answer to claimed benefits, there are already two car parks for public use nearby off the B934. The off-road connection through the application site from the B934 to Coulshill is already easily accessible to the public and is a popular route.

On page 8, a claim is made that public use of the site has “limited numbers”. This comment is without justification and evidence. On page 20 the only reference is to a desk-based search on two websites. The application lacks a credible visitor survey based on face-to-face interviews.

The main Corb to Coulshill route will remain the most popular route. The current Species Design drawing demonstrates how views will be blocked by stands of maturing Sitka Spruce on steep slopes on both sides: most evident from contour lines on 1:25,000 Ordnance Survey. Forest roads will also be hemmed in by Sitka Spruce and other non-native conifers. They will not encourage public use.

The open ground on the south boundary is very narrow and unlikely to provide a satisfying view to the north or south. The deer fence is a physical and visual obstruction, requiring to stand with back to the fence to avoid seeing it. The view below would be an amphitheatre

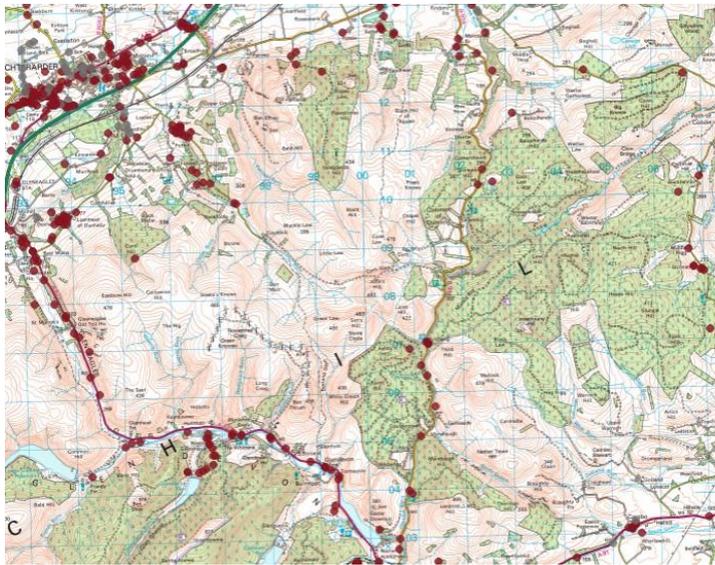
dominated by Sitka Spruce. The high ground on each side of Corb Law following the boundary in both directions would not be accessible as can be seen from the applicant's design.

There is an over emphasis on requirement of paths to facilitate access. The Ochils are valued for their open access and have been used by many over centuries. "The right to roam" as it was known is now incorporated into law. Perth & Kinross Council has a duty to protect core paths, which has diverted its attention from the wider implications of the Land Reform (Scotland) Act 2003. **Scottish Forestry's Screening Opinion of 15th February 2022 is not correct in saying "opportunities for public access will continue in accordance with The Land Reform (Scotland) Act 2003."** This application will remove a huge area of land from public access that is currently provided for in the Act.

BIODIVERSITY

General page 4

The applicant claims Pine Marten (*Martes martes*) and Red Squirrel (*Sciurus vulgaris*) will expand into the new woodland. This might apply to Pine Marten but not Red Squirrel. The following map is taken from Saving Scotland's RED Squirrels website [<https://scottishsquirrels.org.uk/squirrel-sightings/>]. The map provides all sightings in the database, accessed on 13th March 2022. Red Squirrel has not occupied main forest blocks and distribution is marginal at most. These blocks have been present for many years. The main crop is Sitka Spruce, which has smaller seeds than other conifers and are less favourable to Red Squirrel. Harvesting is a source of disturbance for both species.



©Saving Scotland's RED Squirrels and Crown Copyright

Vegetation pages 12, 13 & 27

The applicant claims: "the flora at Coulshill was notable by its lack of floristic diversity." This is far from correct. There are 191 records of vascular plant taxa within the NO90 grid reference for the Coulshill side of the site and 128 for the Coul side of the site within NO00; 14 of which have not been recorded on the Coulshill side. These records are held by the Botanical Society of Britain and Ireland.

On Notable flora The James Hutton Institute /Botanaeco report (p. 19) states "It should be noted that this report is of a habitat & vegetation survey, not a floristic survey focused upon the detection of notable species." Table 4 (p.23) makes reference to the BSBI, the Botanical Society of Britain and Ireland. One of the BSBI vice-county recorders for the area has not been consulted by the reporters in relation to the references. He has commented as follows.

Species	Date	Location	Comment
Spignel <i>Meum athemanticum</i>	04-Aug-59	NN985 087	This record was given a centroid grid ref. Habitat uncertain.
Hairy Stonecrop <i>Sedum villosum</i>	04-Aug-59	NN98 5087	Centroid grid ref. Report comments may be correct.
Hairy Stonecrop <i>Sedum villosum</i>	16-Jun-18	NN994 083	Location of 'Craig mead' is correct, not reporters no. 6.
Hairy Stonecrop <i>Sedum villosum</i>	unknown	NN99971 08442	Reporters' record, no.6, a new site.
Mossy Saxifrage <i>Saxifraga hypnoides</i>	17-6-09 & 18-8-18	NO0031 0832, NO0018 0834, NO0020 0837, NO002 40834.	These are BSBI records, locations are slightly different to the report.
Wilson's Filmy Fern <i>Hymenophyllum wilsonii</i>	unknown	NO00261 08355	Reporters' record, new to this area of Mid-Perthshire.
Spignel <i>Meum athemanticum</i>	04-Aug-59	NO0164 308105	This is a well-known site on the east verge of the B934.

Note: one record of Spignel has not been included in the report. Spignel was reported by R. E. Thomas, former vice-county recorder for Mid-Perthshire at NN980 093 on 1st June, 1999. His comment was: "One large clump left (north-east) of footpath". This is a perfectly accurate record. There is an account of a similar location in A.R. B. Haldane's *The Path By The Water*. He gives local names for this species: "bald mingie" or "St. Baldred's money". The species is in decline within its European range. It may be grazed and appear to disappear, but is able to recover on removing grazing as seen on the Woodland Trust property in Glendevon.

Locations of some species which might be called "non-notable" indicate more basic conditions, such as Common Rock-rose (*Helianthemum nummularium*) at the roadside at the start of Corb Glen, NO0049 0850 at 325m AOD. Lesser Clubmoss (*Selaginella selaginoides*) is similar but grows in springs and flushes and is to be found on John's Hill at NO 0037 0835. There is considerable richness on both sides of Corb Glen.

The remark that the proposals might possibly have a "positive impact on the floral diversity of the area from an increased range of habitats" is made without examination of the facts; the proposal will result in fewer habitats. The plant communities across the site are maintained by grazing, removing the grazing will result in a loss of habitats and biodiversity. Buffers to planting will not maintain these communities.

Friends of the Ochils provided the applicant with a list of mosses and liverworts from some of Scotland's leading bryologists. These records were made in 2017 quite separately from the application. The list comprises 120 species from the Corb Glen vicinity. The applicant was also provided with descriptions of habitats associated with these species; 15 are upland and two montane. All bryophytes are dependent on hydrology; including bogs, flushes, springs, seepages and altitude. **The applicant did not respond to these records and information.**

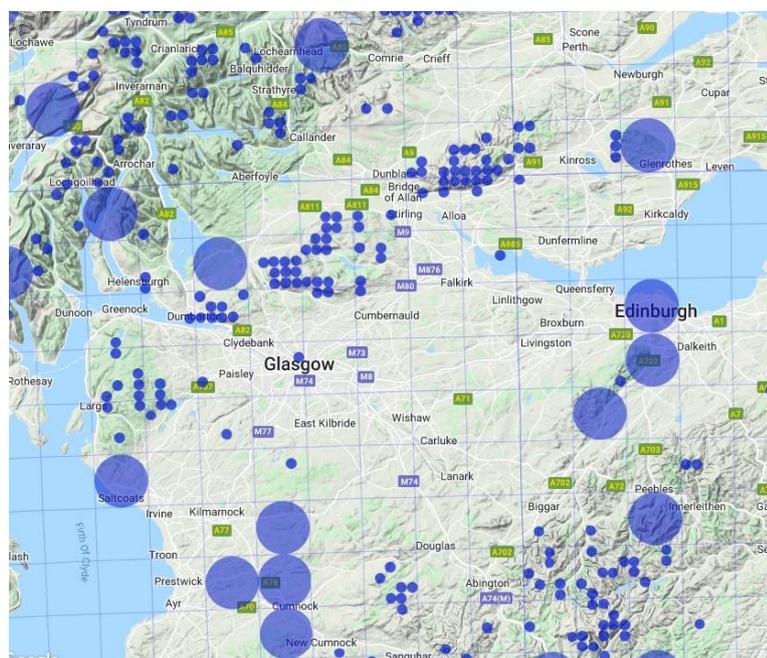
There are species of particular interest in this list as shown in the following table. *Oedipodium griffithianum* was not known in the Ochils until 2017. It is not common and rare outside the Highlands and Southern Uplands. *Jungermannia exsertifolia* has a stronghold in the Ochils

between the Highlands and Southern Uplands. Its distribution is similar to Mossy Saxifrage (*Saxifraga hypnoides*) as shown on the following map. *Grimmia donniana* is similar, but rarer between the Clyde and Tay. *Schistidium strictum* is rarer still. *Solenostoma paroica* was not known in the Ochils until 2017. This is one of very few records for the species between the Highlands and Southern Uplands.

Species	Global distribution	Comment
<i>Oedipodium griffithianum</i>	Oceanic Boreal-montane	Mainly Central Highlands; South Uplands
<i>Jungermannia exsertifolia</i>	European Boreal-montane	Distribution very similar to <i>S. hypnoides</i>
<i>Metzgeria conjugata</i>	European Boreal-montane	Mainly Highlands, not in Central Belt
<i>Grimmia donniana</i>	European Boreo-arctic-montane	One of few sites between Clyde & Tay
<i>Schistidium strictum</i>	Circumpolar Boreo-arctic-montane	Mostly Highlands, also South Uplands, only location between Clyde & Tay
<i>Solenostoma paroica</i>	Oceanic Temperate	Highlands & S. Uplands, not Central Belt

Like bryophytes, there are several vascular plants in the Ochils that are dependent on its upland/sub-montane character. Mossy Saxifrage (*Saxifraga hypnoides*) is an example as shown on the following distribution map. This species is present within the applicant’s site, is on the Scottish Biodiversity List and classified as Vulnerable, because it is a species in decline.

The comment that “the M23 (juncus rush pasture) groundwater dependent areas are of low to moderate species richness and evenness and lack distinctive species which do not pose a constraint to planting” is totally without foundation. There is a M23 community rich in species that forms part of the headwater of the Coul Burn within NN 9908. This is the richer Sharp-flowered Rush (*Juncus acutiflorus*) sub-community and is rich in species. Braided water runs through the community that has been maintained cattle. Planting will destroy this area and open ground will not remain “open” without grazing. This applies to any other “open ground” identified by the applicant. **This is a failure to comply with Schedule 2 (b) of the Forestry EIA Regulations: “regenerative capacity of natural resources.”**



Distribution of *Saxifraga hypnoides* © BSBI & Map data 2022

The report survey by Echoes Ecology for the applicant lists 20 species using the open ground of the site as it stands. Most of these species will be lost from the site as a result of afforestation. Fifteen of these species are said to be “protected under the Tayside Local Biodiversity Action Plan.” The report estimates 252 Skylark territories within the application area, which the applicant describes as 213 in the Screening Opinion request. The latter identifies 95% of the territories will be lost in the long-term. That would be reached at the end of ground preparation, a fairly short period.

The abundance of Skylark territories is an overestimate. *The Gleneagles Woodland Creation Scheme* report for the Frandy planting refers to “the loss of breeding and foraging habitat for meadow pipit and skylark.” The report assumes: “there is alternative in the wider area.” The current application makes the same assumption and fails to take account of the cumulative impacts. The loss of territories at Frandy 114.52ha and those at the applicant’s own Keltie & Knowes of 426.49ha in addition to Coulshill of 711.78ha amounts to a total loss of 12.53km². This is a huge loss for a Red Listed species that is in considerable decline in the UK. The loss also applies to other species of open land.

“Potential significant positive benefits” are claimed for a wider range of species without providing an informed rationale. Snipe prefers wetland in open settings that is contrary to the proposals irrespective of buffer zones. Dipper and Grey Wagtail are also better served by existing habitat. Willow Warbler may benefit from planting, but once tree growth reaches the pole stage any benefit is diminished. The species is also much commoner than ones that would be displaced, as shown on the RSPB website for UK breeding territories. Willow Warbler: 2,400,000; Meadow Pipit 2,000,000 and Skylark 1,500,000.

The applicant has failed to comply with Schedule 2, 2(b) and Schedule 3, 5(e) of the Forestry EIA Regulations relating to resilience potential and cumulative impacts.

Fish page 15

The applicant admits no aquatic surveys have been undertaken to determine species use of the Coul Burn and its tributaries. The advice it received is minimalist, because it relates only to migratory Salmon and Sea Trout with no reference to fish in the Coul Burn. There is no survey to identify risks to Brown Trout, nor invertebrates that contribute to aquatic ecology that also provide food for the likes of Dipper and Grey Wagtail. A.R.B. Haldane recorded Brown Trout in good numbers in these waters. **There is no baseline data on which to judge impacts. The applicant has failed to comply with Schedule 2, 2(b) of the Forestry EIA Regulations.**

Mammals pages 15-17

The applicant claims a beneficial effect of the proposals for Badger. This is extremely unlikely as there are only two records at present from all of the forest blocks between Milnathort and Auchterarder as shown on the NBN atlas Scotland website. There is only one confirmed record for Otter in the same area. Actual bat surveys have not been undertaken. **Many of the applicant’s claims for benefits are speculative, they are not evidence based and misleading.**

Mitigation pages 24 & 25

This refers to “large open ground areas covering the tops” and inter-linked for the benefit of Skylark and Meadow Pipit. The reality for the human species would be quite different as follows, that also contradicts the claims in Landscape in the following section on page 25.

Muckle Law: only the very top of the hill has been included and surrounded by so much planting as to be practically inaccessible.

Little Law: has very little open ground and would be practically inaccessible.

Perk Hill: has good provision but is practically inaccessible.

Corb Law: has good provision but is practically inaccessible.

Green Law: only a small portion of the hill top is included as it will be divided by a deer fence.

Sim's Hill: has slightly more provision, but still constrained by a deer fence.

John's Hill: has the greatest provision.

CULTIVATION PEAT HARVESTING & CLIMATE

Cultivation page 6

The only cultivation map we have received is dated 9th April 2021 and is so poorly produced as to be indecipherable as to what cultivation is being undertaken in the different woodland coupes. There is a lack of definition of slopes as contours are obscured. An OS 1:25,000 map shows how steep these slopes are. The figures for cultivation have changed between 2021 and 2022 without explanation.

Method	Year	Area ha	Year	Area ha
Shallow ploughing	2021	447.86	2022	0
Continuous mounding	2021	128.30	2022	545.59
Excavator mounding	2021	57.59	2022	83.26
Restock mounding	2021	12.44	2022	0
Hand Screening	2021	7.52	2022	12.18
Total		653.71		641.03

A numbered Options Map dated 14th February 2022 was provided with coupes numbered, but we received no documentation relating to this.

Buffer zones of different measures of no planting include contamination through nutrient enrichment, but does not include leaf litter that would enrich the soils. For M10 and M32 springs the measure is 20m. Hydrology would be affected by tree roots. A similar buffer is to be provided around areas of peat >50cm. However, the effect would be contrary to what is claimed. Tree roots would reduce hydrology, leaf litter would eutrophy soils and shading from conifers would reduce light.

The provision of a minimal buffer of 5m for 'notable species' will be totally inadequate. Mossy Saxifrage *Saxifraga hypnoides* on the IUCN Red List as 'Vulnerable' is found in four springs across the north face of John's Hill and would not adapt to this kind of treatment. Hydrology is obtained from the slopes and top above; Sitka Spruce would reduce this hydrology, acidify and eutrophy the soil to the detriment of the plants. The same applies to Wilson's Filmy Fern (*Hymenophyllum wilsonii*) and Lesser Clubmoss (*Selaginella selaginoides*) on the same face.

Many steep slopes are to be ploughed and despite reassurances there is likely to be considerable soil erosion and release of peat. The slopes on Green's Falls already have considerable natural erosion gullies, slopes which are to be planted. Even where shallow ploughing is to be undertaken there is a strong possibility of soil erosion and release of peat, as can be seen on the applicant's Keltie & Knowes site. This is one of several photographs taken on different slopes where erosion of soils with peat have taken place.



Keltie & Knowes 19th January 2020

Peat page 13

The applicant's "peat map" only shows areas of peat greater than 50cm in depth; therefore, it is a selective map of peat, not a "peat map". The applicant has not provided a peat map to reflect all known or likely deposits of peat.

The James Hutton Institute /Botanaeco report (p. 29) covers probing "M19, M20 & U6a vegetation" with "depths of peat up to around 0.8m and a small number up to around 1.0 m." The results are shown in its Map 8. The applicant states from its own probing "that areas of peat >50cm were much more limited in extent" than in the report. This position cannot be justified. What was the response to this from The James Hutton institute /Botanaeco?

On its own map, the applicant fails to identify four areas of peat west of John's Hill on its consultants' map, including areas shown on the *Carbon and Peatland Map 2016*. The applicant also fails to identify nearly all of the peat deposits shown by its consultants east of John's Hill to the Corb Burn and down to the south boundary with the B934 to Littlerig that is to be planted.

The applicant makes no reference to the *Carbon and Peatland Map 2016* on the Scotland's Environment website of the Scottish Government. There is a huge area of peat shown from Muckle Law to Duncan's Hill and southwards to the 400m contour above the Corb to Coulshill off-road. None of this is shown on the "peat map". This area is outlined on the Species Design drawing for planting Sitka Spruce with a forest road going through it.

The *Peatland Map 2016* identifies two substantial areas of peat at the Hodyclach Burn. The lower area is not shown on the "peat map" and only sporadically over the upper area. Encircling Sitka Spruce and native broadleaves will reduce hydrology to plant communities over peat, reduce their viability and release peat. The lower of the two is also likely to succumb in the same way.

The single location of deep peat shown on Green Law is only part of a wider community dominated by Hare's-tail Cottongrass (*Eriophorum vaginatum*) a good indicator of deep peat. There are good indications of peat deposits around the slope at NN9901 0740 shown in the following table.

The Peatland Map 2016 identifies an area of peat on the west side of the Cadger's Yett route, which straddles the march boundary. Sitka Spruce is to be planted above the upper area where Hare's Tail Cottongrass (*Eriophorum vaginatum*) of the M20 community has been recorded. This species is dominant in places. Our notes from a walkover follow.

NN9859 0732	<i>S. capillifolium</i> with <i>P. commune</i> , frequent on lower slope, looks like regen.
NN9859 0732	Top of gully leading down to sole stand of <i>E. vaginatum</i> .
NN9862 0733	3 species of <i>Sphagnum</i> in gully, M20 gives way to M23 lower down.
NN9864 0713	A large number of <i>E. vaginatum</i> tussocks below this point.
NN9873 0726	Below, M20 community gives way to M23, with <i>Juncus acutiflorus</i> .
NN9901 0740	<i>E. vaginatum</i> excluded M23 community at east end.

These notes do not provide a complete description of both sides of the Cadger's Yett route, but are indicative of wider peat deposits. The hydrology of the population at NN9864 0713 would be affected by cultivation below and NN9873 0726 would be affected. Populations NN9859 0732 and NN9862 0733 are in a proposed area of Sitka Spruce planting.

The UK Forestry Standard states: "Avoid establishing new forests on soils with peat exceeding 50 cm in depth and on sites that would compromise the hydrology of adjacent bog or wetland habitats." Account must be taken of the continuity with other plant communities which may not share the same peat depth but have a continuity of peat that contributes to the overall hydrology. The amount of peat soils has been greatly underestimated. **The applicant has failed to consult and refer to the Peatland Map 2016 on the Scottish Government website.**

Harvesting

This is an essential subject that has not been covered. An assessment of this must be made to predict possible damage to biodiversity, especially the use of machinery around 'open ground' and on sensitive ground with peat or other soils retaining water. How restocking will be achieved also needs to be assessed, as to whether ground is to be cleared or new planting is established in the debris of the previous crop. **The assessment is required to meet the Forestry EIA Regulations: "regenerative capacity of natural resources."**

Climate page 20

The applicant does not take into account the release of peat that will arise from ground preparation. This will lead to oxidation and release of carbon dioxide into the atmosphere. Once a molecule is released it will remain active as a greenhouse gas for about 100 years. There is also the possibility of release of methane that is four times more powerful as a greenhouse gas. Loss of peat is also loss of a carbon store. The amount of carbon new planting may lay down will not make up these losses.

Schedule 3 paragraph 4 of the Forestry EIA Regulations requires "a description of the factors specified in regulation 5(3) likely to be significantly affected" including "soil (for example organic matter, erosion)" "climate (for example greenhouse gas emissions)." There is no doubt that ground preparation will lead to loss of organic matter, soil erosion and release of greenhouse gases. **These have not been taken into account; therefore, there is failure to comply with the Regulations.**

Regulation 6 paragraph 3(d) of the Forestry EIA Regulations requires "a description of reasonable alternatives", but the applicant provides none. Accordingly, the applicant fails to meet this Regulation.

An alternative to the dominance of Sitka Spruce, in the planting design has not been considered. There are known problems associated with self-seeding Sitka Spruce, a strong possibility within and outside the application area. The margins of the Green Knowes

Windfarm access road and vegetation beyond have been colonised by hundreds of Sitka Spruce saplings. Their source must be from plantations on one or both sides of Glendevon.

Seed from Sitka Spruce can disperse over short and long distances, some reaching considerable altitudes. Vice-county recorders for the Botanical Society of Britain and Ireland and other botanists have recorded the following.

Site	Grid Ref.	Date	Comment
Schiehallion	NN71765458	08.9.2021	Seedling at 1,035m in gully to south side of ridge
Stob Binnein	NN43322345	24.7.2020	Recorded at 880m AOD
Stuc a' Chroin	NN62841634	04.10.2010	Recorded at 750m AOD

The species has been recorded elsewhere on Stuc a' Chroin and high up on neighbouring Ben Vorlich on 2nd September 2012 during a search for threatened plant species. Glen Ample and Strathyre Forest are likely seed sources for these records.

Concern over the invasive spread of Sitka Spruce in Norway came to a head in 2012. Nygaard and Øyen (2017) investigated several sites to measure the rate of spread. "The maximum established distance measured was 996m". They recommend a 200m buffer zone to avoid colonisation of adjacent vegetation.

Ref: Nygaard, Per Holm & Øyen, Bernt-Håvard 2017. *Spread of the Introduced Sitka Spruce (Picea sitchensis) in Coastal Norway. Forests* **2017**,8,24;doi:10.3390/f8010024 [last accessed 10th March 2022].

In the absence of grazing, "open areas" are likely to be colonised by seed from Sitka Spruce and other species and cannot be guaranteed to remain open. Nygaard and Øyen recommendations on buffer zones are much wider than the applicants'.

Scottish Forestry's Map Viewer Climatic Site Suitability indicates the native habitat for Scots Pine, National Vegetation Classification W18 *Pinus sylvestris-Hylocomium splendens* woodland, would be suitable throughout most of the Coulshill/Corb site and similarly Diverse Conifer Scots Pine. There is very little difference between these two types of woodland, especially NVC 18, and Sitka Spruce on the Viewer.

The applicant's use of Sitka Spruce is based on quick returns from short rotations. These are the makings of unattractive forestry. The growing of Sitka Spruce in Scotland, especially for short rotations and mechanical harvesting, has compromised the wider use of other timber. There may be a reluctance to grow Scots Pine and use its timber, but there are opportunities that can be realised and have been seized on by companies such as Russwood.

A market opportunity study undertaken by Napier University identified five potential uses of Scots Pine; garden equipment, stress-laminated timber bridges, massive wood, external cladding and wood modification. The study also examines Norwegian use of Scots Pine from which lessons can be learned.

Ref: Davies, I. 2008. *Scots Pine Timber Quality in North Scotland: Task 4. Market Development Study Part 4.2 Final Report*. Centre for Timber Engineering (CTE) Napier University, Edinburgh, Scotland.

Paul McLean provides a more detailed assessment that includes the merits of Scots Pine.

Ref: McLean, P. 2019. *Wood properties and uses of Scots pine in Britain*. Forestry Commission Research report.

Dothistroma needle blight (DNB) may be a discouragement to planting Scots Pine, but the disease can be controlled as reported by Katherine Tubby, Principal Investigator for Forest Research [<https://www.forestresearch.gov.uk/tools-and-resources/fthr/pest-and-disease-resources/dothistroma-needle-blight/>]. “However, the focus in the UK is on the use of resistant species and good stand management. This particularly includes thinning of stands of pine trees in accordance with good silvicultural practice”.

Sitka Spruce is not immune to disease. *Phytophthora ramorum* was discovered on Sitka Spruce in south-west Scotland in 2017. Research at the John Hutton Institute, Invergowrie has undertaken considerable research on the effect of diseases on plant monocultures at home and abroad. Monocultures in particular are more susceptible to disease and the growing monoculture of Sitka Spruce in the Ochils is open to risk. **No assessment has been made by the applicant of this possibility.**

Professor Ian Toth, Senior Scientist at the James Hutton Institute, gave a talk to the Perthshire Society of Natural Science on the susceptibility of plant monocultures to disease. He was asked informally during the interval if Sitka Spruce fell into this category and replied that monocultures at large are at risk.

Scots Pine has been grown successfully on Mansfield Estate in the Highfield Plantation at Scone. There are many fine examples of mature and maturing Scots Pine in woodland between Battleby and Pitcairngreen.

There is much interest in conserving our native pine. James Rainey, Senior Ecologist, with Trees for Life sampled the 84 sites of recognised native Scots Pine for the Caledonian Pinewood Recovery Project. Building on this work, Dr. Annika Perry, ecological geneticist, and others from the UK Centre for Ecology & Hydrology have been examining the genetic variations of some of these populations, with experimental trials and investigating potential under climate change.

Our native pine has much to offer in biodiversity and conservation. New Scots Pine woodland would bolster existing native populations in Perthshire. **Sitka Spruce does not fit into any ecological habitat and its closely planted ranks shade out almost all vegetation below, resulting in a sterile environment.**

Woodland Creation Operational Plan

We would also wish to comment on this document. We realize this has a future use, but would like to comment on areas where the applicant should have provided information at this stage in order for us and others to comment.

We refer to page 3: “Sitka Spruce...best meets the objectives of the new woodland proposals in a fast growing and sustainable source of timber”. Fast growing trees do not produce the greatest strength of timber. “Sustainable” has different interpretations. In the sense used it is a series of mostly short-term rotations. Growth is forced by fertilisers, which is a questionably sustainable. The effect on biodiversity is not sustainable, such as the cumulative loss of species like Skylark. The release of carbon dioxide and possibly methane from carbon soils as greenhouse gases must be judged as total losses from all soils, not just from peat of >50cm. This project and other recent afforestation projects are contributing to climate change.

The page 4 reference here and elsewhere refers to “native” woodland. This application is very misleading. What is meant is ‘new woodland planted with native tree species’. Woodland means more than just trees; it includes associated soil mycorrhiza, soil invertebrates, ground flora, epiphytes such as mosses, liverworts and lichens, bark and leaf invertebrates and bird

species like Redstart and Pied Flycatcher. The applicant’s woodland is very unlikely to achieve this level of biodiversity that could be described as “native”.

A good example of native woodland that takes centuries to mature is the nearby Kincardine Castle Wood SSSI [<https://www.nature.scot/search?query=Sitelink>]. This is mapped in the Roy Military Survey of Scotland 1745-55 and James Stobie’s map of the Counties of Perth and Clackmannan 1783.

The description at the end of this first section is more or less verbatim from the applicant’s submission, but as we shall demonstrate later, these comments are far from accurate. We do not have any experience of barriers on the land as it is currently managed. The applicant needs to be specific and not generalise on what and where these barriers are perceived..

Page 6 refers to the Perth & Kinross Woodland Strategy Themes. We refer to claims made by the applicant which are not supported by the Strategy.

Theme 3 on page 7 is not addressed, because the local timber markets have not been identified by location. On theme 4, no village is to be served by the applicant’s proposal. Dunning is the nearest village at 7km from the site and served by excellent woodland from Newton of Pitcairns, of a quality the proposal will not meet.

Our response to theme 5 will not be met, because the proposal is for mostly enclosed space, not “high quality open space.” We will not comment on theme 6 and 7 here as we cover most of these points later under appropriate sections, but we do find neither theme has been met.

We do not find the ground preparation model adequate, or convincing. The only version of a map we have had access to is dated 9th April 2021. The legend and layout do not match on some of the underlays used. We deal with these points later in our submission.

With relation to fence markers we find the applicant’s provision has not been addressed sufficiently. There are other low flying species like Barn Owl, Short-eared Owl, Kestrel, Red Kite Buzzard and Red Kite listed in the bird report provided by the applicant. We have a positive sighting of Short-eared Owl over the site.

The stocking densities listed on page 13 and 14 indicate how cramped the proposal will be compared to the current open space. The following table demonstrates higher densities of planting with less available space within a square metre equivalent than lower densities.

The planting of conifers is dense and would lead to deep shade and narrowness impassible for walkers. Planting of Sessile Oak at the highest density is unnatural and would produce questionable narrow stems and results. The results for Silver Birch would be similar. Broadleaves have the lowest density, but it is still high and the results would also look cramped and provide lower biodiversity opportunities.

Tree type	Min. density per ha	Hectare as m²	m2 per tree
All conifers	2,500	10,000	4
Native broadleaves	1,100	10,000	9
Broadleaf scheme	1,600	10,000	6
Sessile Oak	3,100	10,000	3
Silver Birch	2,500	10,000	4
Other productive br'leaves	1,100	10,000	9

Conclusion

As detailed above, our primary complaint is that Scottish Forestry have confirmed that the proposed work will not require EIA consent. We believe that, for the reasons stated above, a woodland creation development of the size and complexity of the Coulshill proposal does require an EIA and we trust that Scottish Forestry will reconsider its decision on this matter.

Stuart Dean. Chair, Friends of the Ochils