

**Minutes of the Meeting of the Berry Burn Extension
Ecology Workshop**



Project Berry Burn Extension

Meeting Ecology Workshop

Date Saturday 23 November 10:30 – 11:30

Location Forres Town Hall

Attendee Howard Fearn (HF), Avian Ecology

Mícheál Ó Broin (MOB), Statkraft

Linda Henderson (LH), East Nairnshire Community Council

Peter Elford

Introduction

MOB explained that this ecology workshop was held in response to feedback during Community Liaison Group meetings and from local engagement which showed there was particular interest in ecological impacts of the proposal. It was clear from early engagement that many people in the area have a knowledge and interest in local ecology and biodiversity, who could provide a meaningful contribution to the project before it is finalised for submission.

Separate to this ecology workshop, there was at least one experienced ecologist with knowledge of the site in attendance at each of the four exhibition events held between 21 and 23 November to answer any technical questions about the proposed extension and the effect on the ecology of the site. It was agreed that the meeting would be recorded for the benefit of those who couldn't attend the meeting.

Operational Wind Farm and Habitat Management Plan (HMP);

HF explained that as part of the consent for the operational Berry Burn Wind Farm there was a condition imposed requiring the operational wind farm to have a habitat management plan (HMP). The main aims of the HMP of the operational Berry Burn Wind Farm was to create suitable habitat for black grouse and hen harrier. During the ornithological monitoring undertaken prior to the construction of the wind farm it was noted that there were 1 or 2 hen harrier nests on the site.

Regular ornithological surveys are part of the operational HMP and commenced in 2014, when the Berry Burn wind farm commenced generating power. Surveys comprised moorland breeding bird surveys (MBBS), breeding raptor and diver surveys and Vantage Point (VP) surveys.

A total of 72 hours of VP survey (from each of 4 VPs) was completed in the breeding seasons of 2014, 2015 and 2016 when these surveys completed. This is double the number of hours of stipulated in SNH guidance for surveying usually undertaken in preparation for an environmental impact assessment. The results of this operational monitoring have shown that the wind farm has not negatively affected the populations of key bird species on-site; in fact hen harriers have successfully nested within 100m of a wind turbine at Berry Burn.

Breeding raptor and diver surveys have continued annually, and show the continued presence of breeding merlin and red-throated diver, and that black grouse continue to utilise the site. The fire that spread across the site in April 2019 severely damaged the habitat for the breeding birds in the 2019 season, rendering the site unsuitable for most species at the commencement of the breeding season. As such it was agreed with SNH that no breeding bird surveys would be undertaken in 2019 under the operational wind farm HMP and efforts were instead turned to monitoring vegetation recovery and fire damage extent. The HMP for the operational wind farm will remain unchanged, however it is likely to take between 5 and 15 years for the habitats to recover to the same quality as before the fire.

Questions & Answers

- i. Is there any record of collisions with birds and the turbines?

- a. Recording of bird collisions with turbines is not required at Berry Burn Wind Farm, however no collisions have been noted during the monitoring. In fact a pair of hen harriers have nested within very close proximity of a turbine with no collisions noted and there is no evidence of the turbines negatively affecting raptors, divers or black grouse.

Wild Fire

Extent of wild fire

HF explained that in April 2019 a fire spread across the Berry Burn site, both the operational and extension site. The fire covered a large area and spread across the site in an approximate south-westerly to north-easterly direction.

Impact of the wild fire on the Extension Application

HF outlined that all ongoing ecological surveys were halted while the fire spread across the site. Detailed habitat surveys of the wind farm extension site were due to be undertaken during the summer of 2019, along with surveys for protected mammal species. However, this was not possible due to the extensive fire damage to vegetation. Habitats had previously been surveyed as part of the original wind farm application in 2004 and this data was available for the extension application impact assessment. It is considered that the pre-fire habitats were unlikely to have changed significantly since the survey of 2004, with the majority of the areas comprising blanket bog and heath.

After the fires were extinguished, Statkraft and SNH met and discussed the implications of the fire, monitoring of damage and how to carry out the impact assessment for the extension application. It was agreed that Statkraft could use the data from the original application and the operational monitoring to input into the assessment for the extension project, along with relevant data from nearby wind farm projects (Clash Gour and Paul's Hill, where available) and the limited amount of data collected for the extension prior to the fire. Overall it is reasonable to state that there is extensive data available and that extensive knowledge of the ecological baseline of the extension site is available despite the fire.

Peat specialist surveys

Statkraft commissioned a high definition drone survey of the Berry Burn Wind Farm area, (Figure 1). While this showed the extent of the fire within the site it did not contain any information on the severity of the damage to habitats and the underlying blanket bog peat.

Therefore a peat specialist with extensive experience of peatland fires was commissioned to assess the severity of peat damage due to the fire and if the peat was damaged to the extent where the potential for vegetation recovery would be compromised.

HF confirmed that Statkraft had recently received the first draft of the report from the peat specialist, and that the results show that there has already been a good recovery of some vegetation over the first growing season since the fire and that the peat does not appear to be severely burned. As such, there is every reason to assume that there will be natural regeneration of vegetation cover across the site. There is evidence of vegetation recovery from root stock and seed indicates that the

burn was not severe enough to jeopardise the viability of the seed bank. The seedlings, however, are vulnerable to frost and drought and despite the encouraging results so far, the revegetation could stall if the seedlings are stressed. It is likely that the species composition will change from pre-fire conditions as some species are slower to regenerate. Monitoring is set to continue.

Questions & Answers

- i. What started the fire?
 - a. We are not sure how the fire started but understand that an investigation was to take place. The fire started to the south east of the site and spread across the site over a number of days.
- ii. Did the fire expose drains on site?
 - a. Yes, the drainage network has been exposed through the site, this can be clearly seen from the image of the drone footage, Figure 1.
- iii. Were there any small mammal, insect, otter or hare surveys carried out?
 - a. There is no requirement to carry out surveys for these species (aside from otter) as the planning system emphasises protected species surveys. However in recent times there has been a change in focus from looking at individual species to improving habitats and the subsequent benefits to all species. A small mammal survey was not carried out (this is not usually required for wind farms), however as there is continued evidence of a stable hen harrier population on the site before the fire, it is highly likely that there was a healthy population of small mammals. No otter survey was carried out as the fire meant that there was unlikely to be any evidence remaining for a robust survey. It is assumed that otters are at least occasionally present on the site.

Plans for the Extension

HF showed a draft layout of the proposed extension project and explained that Statkraft are now considering a nine-turbine development. Statkraft intend to submit a Section 36 application in early 2020.

At the time of making an application, onshore wind energy projects typically submit an outline habitat management plan which would cover the themes of the HMP for that project rather than specific details. The fires through the site mean that the Berry Burn Extension is an unusual planning application from an ecological point of view. Statkraft will therefore look to include some more specific measures in the habitat management plan which will cover items such as re-wetting sections of the site and implementing fire prevention measures.

The details of the HMP for the extension are being discussed with the landowner and SNH but initial discussions have been productive and show a similar thought process on the future use of the site as part of an HMP for the proposed extension. The ultimate aim of the Berry Burn Wind Farm Extension will be to create a net biodiversity gain across the site. It was explained that the objectives of the operational wind farm remain and are legally binding. As such Statkraft are obliged to continue to deliver these objectives whilst providing additional and separate enhancement measures as part of the extension application.

Questions & Answers

- i. One of the turbines is located near Loch Noir on the site, have red throated divers been considered?
 - a. Yes, the flights of red throated divers were surveyed during the operational monitoring. There were a very low number of red throated diver flights through the wind farm site. The main flight paths are from the lochs on the site to the sea, where they feed, and the locations of the turbines are not considered likely to have an adverse impact on red throated divers.
- ii. How do you re-wet the area?
 - a. The simplest way to re-wet the areas is to block the drainage ditches that drain the soil. This can be done using the soil that will be excavated during the construction of the wind farm extension. These methods have been used extensively as part of moorland regeneration schemes across the UK.
- iii. Could the re-wetting of the land help to stop the infilling of Loch Noir? (the aerial photograph indicates that Loch Noir may be infilling)
 - a. Unfortunately our hydrologist is not present to comment but there is a possibility that by bringing the habitat surrounding the loch back to its natural state, that will see a reduction in the infilling of the loch.
- iv. How would the turbine foundations be built, what measures would be put in place to stop concrete run-off?
 - a. In addition to the HMP, the Section 36 application will have an outline Construction Environmental Management Plan. This would outline the mitigation measures that would be put in place to avoid any concrete run off. A detailed Construction Environmental Management Plan would be agreed with the planning authority and other relevant statutory bodies prior to construction.
- v. Is there a site visit planned?
 - a. There are no plans for a site visit at this stage. The site is an operational wind farm and would need to get any official site visit sanctioned by Statkraft's operational team.

Figure 1: Post-fire Drone Imagery

