The future of snowsports and the environment at Cairn Gorm

Description

If the declaration of a climate emergency by the Scottish Government is to mean anything, we all need to think and act differently. Continuing to look at and treat the natural environment in the same old way, as a commodity to be used and exploited, just won't do. We need to become far cleverer about how we manage land. The ski area at Cairn Gorm encapsulates some of these challenges. Can we continue to provide for snow sports, which provide pleasure so many people and have played such a vital role in the local economy, on a very sensitive and special mountain in the face of global warming and the ecological changes that is creating? The evidence, so far, from the Planning Application for the Beginner's Ski Area at Cairn Gorm (see here) and (here) suggests there is a long way to go before our Public Authorities start to give a real lead on these issues. This post takes a further look at the potential impacts of the proposal.

The assumptions underpinning the planning application

1.1 Terms of Reference

EnviroCentre was commissioned by Cairngorm Mountain (Scotland) to undertake a Phase 1
Protected Species walkover survey on the lower slopes of the Cairngorm ski area to facilitat
some required engineering and ground works within the beginners' ski area. The surveys we
line with informal recommendations from the Cairngorms National Park Authority (CNPA), a
correspondence with Cairngorm Mountain on 24th May 2019:

- *Phase I Habitat survey which includes potential for protected species, focussing on*
  reptiles.
- *As reptiles are likely to be present in low numbers, a survey may not be required an*
  proposal to ensure their protection during groundworks would be fine.
- *There is no requirement for NVC survey of vegetation as much of the site has been*
  impacts on the soil conditions and has led to artificial grass communities developing
  the new track is proposed.
- *Walkover prior to groundworks to check for breeding birds.*
- *Check new drainage proposals for the area at the bottom of the proposed track wh*
  with SEPA agreement.
- *Ecological assessment of the natural looking watercourses in the beginners' area as*
  species rich and could support water vole.

Extract from ecological report lodged on planning portal 7th August

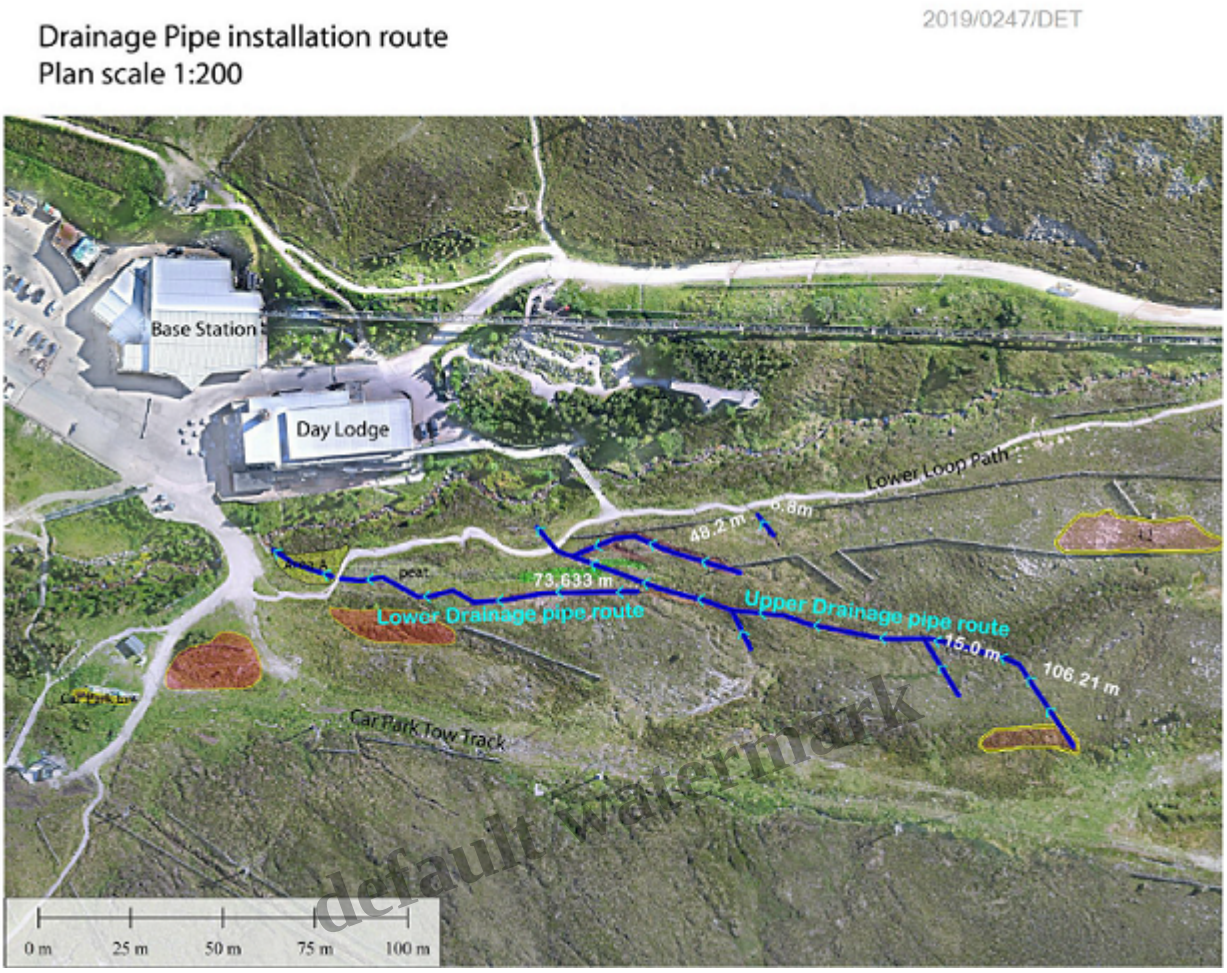
The terms of reference for the Ecological Survey are revealing.

First, they refer to *"required engineering and grounds works within the beginner's ski area".* Who says that these works are "required"? Surely that is the question at issue, which should be informed by the ecological survey? Are the proposed works sensible? Instead of considering this, the consultants have been told to take the *"beginners area"*, which was created as a result of temporary planning permission being granted last season for two snow making machines to be placed by the car park, as given. No room is allowed for the consultants to consider whether the creation of a beginner's area so low down the mountain is sensible. The assumption, as in almost all such surveys under our current planning system, is that the development should just go ahead. The Cairngorms National Park Authority should be insisting that all ecological surveys are "required" to take a far broader and holistic approach.

Second, note the assumption which has come from the Cairngorms National Park Authority that the *"new drainage proposals for the area at the bottom of the proposed track* [which track, there is none in the application?!) *should be fine with SEPA agreement"?* Who has decided this and on the basis of what? Despite the CNPA Board asking Highlands and Islands Enterprise for a masterplan for Cairn Gorm it appears that staff are still processing individual planning applications on the assumption they should go ahead. Scale the drainage proposals up from the 9,300 square metres in the Beginner's Ski area to cover the 220,000 square metres proposed in the SE Group report (see here) and what are the consequences?

Unfortunately, the fundamental starting point behind our planning system, even in our National Parks, still appears to be that development should take place rather than taking a critical look from a wider environmental perspective.

The drainage proposals and their potential consequences



Drainage Plan from Planning Portal – 12th August

Much of the ground in the ski area has been heavily modified by engineering works which go back to the 1960s. This has included flattening some areas, mounding others and the installation of drainage channels. The current application proposes that previous drainage channels dug through the site should be replaced by 450mm plastic culverts and then filled in. The intention behind this is to reduce the amount of artificial snow that is needed to cover the area and reduce the amount that melts as a result of water flowing under it. There is a logic to this but no consideration is given to the consequences.

The creation of culverts will not prevent water, whether from melting artificial snow or otherwise, from flowing down this slope. What the culverts will do is reduce the amount of water flowing onto the slope from ABOVE and channel this water under the new piste. The Planning Application then proposes that this water should be released into silt traps placed on the banks above the Allt Mhor burn.

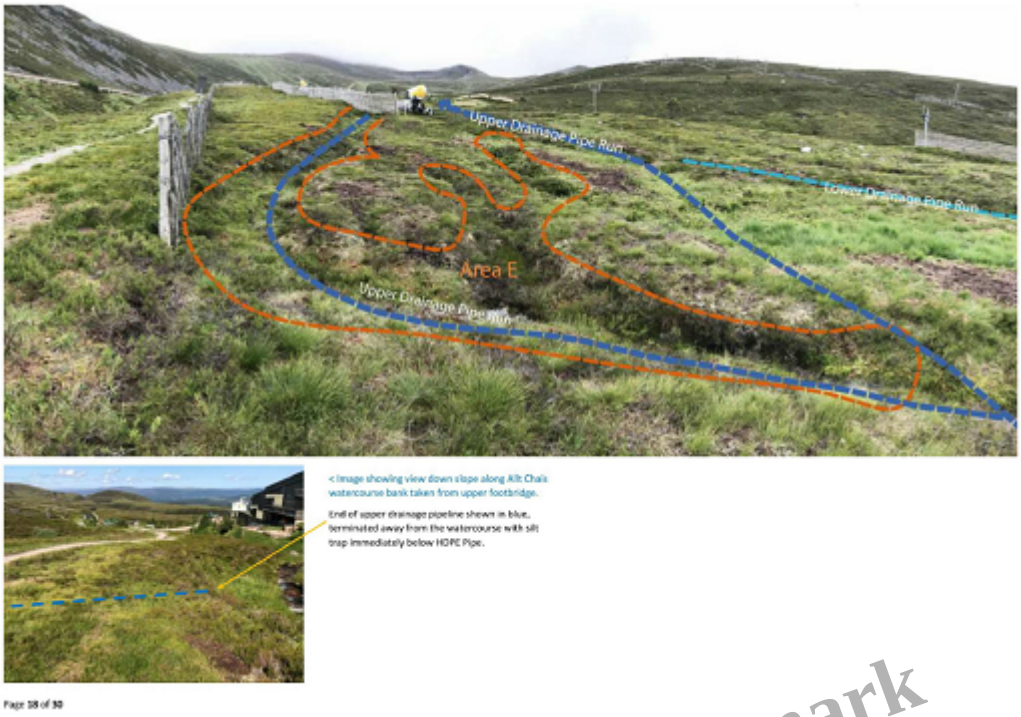
That tells you that these culverts are going to increase the rate at which sediment and soils are to be washed off the mountain – otherwise there would be no need for silt traps. There are two aspects to the issue.

Photo credit Alan Brattey

First, the current drainage ditches have, in the 50 or so years since they were created, re-wilded. They now form sinuous watercourses which have clogged up with vegetation including spaghnum mosses which have gradually turned into peat creating areas of bog. Poor for skiing no doubt but all this helps to hold back the water and has created new habitats. Elsewhere they would be valued precisely because of their water retention properties.

The former drainage ditch now supports a profusion of Bog Asphodel – photo credit Alan Brattey

As an aside, the Supporting Information to the Planning Application claims *"the work required will be minimal to keep the ditch intact".* This defies belief, the ditch is not going to be maintained intact, rather its going to be filled in.



< Image showing view down slope along Allt Chais watercourse bank taken from upper footbridge.

End of upper drainage pipeline shown in blue, terminated away from the watercourse with silt trap immediately below HDPE Pipe.

Page 18 of 30

Photomontage showing the current drainage channels and the course of the proposed culverts. The lower photo shows how water from the culverts will outpour onto the banks above the Allt Mhor

Straightening water courses and channelling water through pipes can only increase the rate at which water flows down the mountain.

The second issue is that creating smooth slopes will simply add to the problem. The Cairngorms National Park Authority should have all the evidence it needs for this from what has happened at the Shieling Rope Tow which is located above the proposed beginners area. The track there has continued to wash out ever since planning permission was granted.


default watermark

The top open culvert on the Shieling Rope tow track which has very recently been cleared of debris.

Following parkswatch's exposure on 13th August of the failure of HIE to meet planning requirements and maintain the culverts on the Shieling track free of debris (see here), Cairngorm Mountain Scotland Ltd appears to have started to clear the culverts. While this has reduced the risk of the loose material on the track below the culvert being washed out from above, that material is still very vulnerable to being washed out by heavy rainfall such as that experienced recently.

All the culverts below are still blocked and the consequences obvious. Photo Credit Alan Brattey.

How much of this eroded material will end up being channelled down into the proposed plastic culverts and then deposited into silt traps above the Allt Mhor? Even if HIE then maintain those silt traps, and theeir record is not good, where are they then going to deposit the silt and grains of granite?

Even if the beginner's area were far better restored than the Shieling tow slope, water still needs to flow somewhere and when it does so it will create new watercourses and new habitats. Eventually these may infill with vegetation and slow the rate of water run off from the mountain but until that

happens, just as with the artificial culverts on the shieling track, the rate of water run off will increase.

The Ecological Assessment implies as much, even if it describes the watercourses created by earlier drainage work as "*un-natural*" and treats the consequent wet heath as undesirable:

> Following creation of the linear ski tows and pistes running straight down the slope, the natural r
> from the hill to create un-natural watercourses, away from the current culverts and natural drain
> paths have succeeded to areas of wet heath, and include several pools on flatter ground. Re-desi
> culverts or drainage to allow for any alteration of the surface landscape is advised to minimise an
> inundation of these areas, as the wet heath habitat appears to be expanding as a result, and this
> quality of any land management for winter sports activity.

The CNPA should be drawing the opposite conclusion from this, that creating a new beginner's ski area on ground that, through natural processes has naturally reverted to bog over time is not sensible and that draining it will have consequences that have not been properly assessed.

Increasing flood risks

The CNPA needs to look at how Increased water run off from Cairn Gorm will then add to what runs down into Glen More. The evidence for the consequences is well documented.

At the end of last year I reported to local Councillor and Highland Council convener, Bill Lobban, the amount of material that had piled up by the road bridge over the Allt Mhor on the way up to the ski area.

Allt Mhor bridge November – viewed from below – note how the left side of the bridge was half block boulders

I am pleased to say that Highland Council cleared the blockage which could have ended up in another disaster:

Allt Mhor flood of August 1978

This relatively recent flood on the Allt Mhor, draining the Cairngorm ski slopes, demonstrates the significant flood hazard represented by mountain streams (McEwen and Werritty, 1988).

The flood on the 4th August was triggered by an intense summer thunderstorm in which 33.5 mm of rainfall fell in 1 hour, equivalent to around 5% of the average annual rainfall of Edinburgh.

The high discharge caused severe erosion of gravel bluffs overlooking the river at the below the Sugar Bowl and mobilised boulders over 0.5 m in diameter. The road bridge was swept away and fragments of tarmac can still be found in the gravel bars below the present bridge.

http://www.landforms.eu/cairngorms/floods.htm

The heavy rainfall late July/August, however, shows the problem has not gone away:

Just above the bridge, the piled up vegetation and boulders gives an idea of the extent and power of the recent floods. Photo Credit Alan Brattey.

Allt Mhor bridge viewed from above. The flooding has created a new bank of bouldersn the opposite side of the bridge to that which was infilled last year. Photo credit Alan Brattey.

Just above the bridge are trees which, if washed against the bridge, could rapidly result in the channel under it blocking and the whole structure being swept away. Photo Credit Alan Brattey.

The proposals to create a beginners ski area – and then at a later stage further new engineered ski slopes – can only add to this flooding. That should be reason enough for the Cairngorms National Park Authority to reject the whole Application as not being thought through.

One might also add, why should Highland Council Roads Dept be footing the bill for HIE's long history of engineering works at Cairn Gorm?

An alternative approach

Female Capercaillie on Scots pine by ski road – 24th August . Photo Credit Alan Brattey.

Instead of engineering Cairn Gorm, our public authorities should be helping it to re-wild. As the mountain warms, making skiing more problematic, trees grow higher up and wildlife moves up the hill. Alan Brattey, to whom I am very grateful for the photos in this post, reported that on 24th August he also saw Merlin fly past the Daylodge at speed, heading down the Coire, a Meadow Pipit in its Talons. The ecological survey reported Ring Ouzel, a bird whose numbers have declined drastically,, feeding their young in the proposed Beginner's Area and suitable habitat for water vole. Cairn Gorm could be one of the best places for people to watch mountain wildlife in Britain but instead HIE is obsessed with developing it further. What's more they are submitting Planning Applications without any regard to the consequences, ecological or otherwise. Iin the long-term that is neither good for snow sports nor the local economy.

HIE has produced NO information to suggest that the creation of a beginner's ski area just above the Coire Cas car park is sustainable in terms of global warming. Instead there is a photo in the application of one day this season when there was lots of snow. That was exceptional. Given current and predicted increases in temperatures in Scotland, on how many days of the year in future is skiing likely to be possible in the proposed beginner's ski area? And how, in terms of uplift, would the area fit into the wider whole? We simply don't know because HIE has produced no masterplan, no proposals for new lifts and no overall assessment of the consequences.

Its about time the CNPA demanded HIE produce what is known as a Strategic Environmental Impact

Assessment instead of submitting Ecological Surveys with carefully designed narrow remits. (That is not the consultant's fault).

It seems to me that in strategic terms any ski area created by artificial snow needs to be either higher up the mountain or in a more sheltered location less exposed to the sun – as proposed by the Save the Ciste Campaign – and in a less boggy location. Trees could help here. A run back down to the Day Lodge created through artificial snow is far more likely to work if its kept as narrow as possible and sheltered by trees. Instead, the Planning Application is proposing to rip up trees and create a broader ski area.

An alternative approach would be to start with re-wilding, look at the potential for the next 50 years within the context of global warming, and then work out how snow sports and other tourist activities would best fit into that. Perhaps its time that the CNPA started to engage with other conservation organisations and recreational organisations about how to do this?

Category

1. Cairngorms

Tags

1. CNPA
2. conservation
3. HIE
4. hill tracks
5. natural environment
6. planning

Date Created
August 27, 2019
Author
nickkempe