The Cairngorms – what to do about a national park plastered in plastic?

Description



Looking south along the A95 towards Grantown – the River Spey is down to the right.

One thing the Cairngorms National Park Authority (CNPA) needs to fix urgently in the new National Park Partnership Plan, which is currently out for consultation, is the plastic tree tube problem (see here)

The case against using plastic in the countryside

I had not driven along the A95 north of Grantown-on-Spey for a number of years but did so a couple of weeks ago and there is now a forest of plastic before you get to Cromdale – all within walking distance

of the Cairngorms National Park headquarters.



Looking north, the A95 is just visible on the right, the River Spey is down to the left

The tree tubes are just above the River Spey which is designated a Special Area of Conservation to protect four species:

Annex II species that are a primary reason for selection of this site

1029 Freshwater pearl mussel Margaritifera margaritifera

The River Spey is a large Scottish east coast river that drains an extensive upland catchment and supports an outstanding freshwater pearl mussel population in its middle to lower reaches. In parts of the River Spey, extremely dense mussel colonies have been recorded (225 m2) and the total population is estimated at several million. As the population also shows evidence of recent recruitment and a high proportion of juveniles, the River Spey is considered to support a pearl mussel population of great international significance.

1095 Sea lamprey Petromyzon marinus

The River Spey represents the sea lamprey Petromyzon marinus in the northern part of its range in the UK. It is absent from rivers north of the Great Glen, and the River Spey is virtually at the northern limit for this species. Recent surveys show that sea lamprey larvae are widely distributed throughout the middle and lower reaches of the river, where the particularly fast-flowing waters of the River Spey provide ideal spawning conditions for this species. In addition, as an unpolluted and relatively little modified system, the River Spey matches the other key habitat requirements of the sea lamprey in terms of good water quality, clean gravels and marginal silts and an unhindered migration route to the sea.

· 1106 Atlantic salmon Salmo salar

The Spey supports one of the largest Atlantic salmon Salmo salar populations in Scotland, with little evidence of modification by non-native stocks. Adults spawn throughout virtually the whole length of the river, and good quality nursery habitat is found in abundance in the main river and numerous tributaries. Salmon in the Spey system and liftle affected by artificial barriers to migration, and the waters in the catchment are largely unpolluted (the river is oligotrophic throughout its length). For a system of its size, the Spey is also relatively free from flow modifications such as abstractions, diversions and impoundments. The salmon population includes fish of all ages including migrating smolts and returning adults, possibly reflecting genetic efault differences within the Spey stock.

1355 Otter Lutra lutra

The Spey represents an important otter Lutra lutra site in Scotland, with good quality freshwater habitat. Surveys have identified high levels of otter presence throughout the Spey catchment. Riverine habitat features which are known to be important to otters are present, such as reedbeds and islands, and populations of important prey species are relatively healthy. The persistence of a strong population of otter on this river indicates that habitat conditions are particularly favourable for the survival of the species.

Mussel, lamprey, salmon and otter, all four species will inevitably be affected by the tree tubes.

It works like this. Whether or not arrangements are in place to remove the plastic tree tubes eventually, they will have started breaking down from the moment they were installed. Research on the levels of plastic in bottled drinking water, for example, has suggested that the very act of adding or removing the bottle top may be what releases tiny plastic particles into the water (see here).

The action of the elements, the wind knocking the tubes against the support stakes or animals brushing against them, will do the same; releasing plastic particles and leaching chemicals into the natural environment. Those chemicals and particles will then make their way down into the River Spey where many will be filtered through the gills of the "outstanding" population of freshwater pearl mussels. And so on through the food chain.....

So why hasn't NatureScot or the CNPA spoken out? As a country, Scotland appears incapable of applying the precautionary principle even in our National Parks.

Plastic tree tubes and woodland expansion

If the aim was to restore woodland, however, rather than collect public subsidy, the use of plastic tree tubes by the Spey below Grantown and all the others that have been used along the major rivers in the Cairngorms National Park (see here) should have been completely unnecessary.



Older and more battered tree tubes above the Spey opposite Newtonmore by the minor road beyond Ralia Lodge. Note the chicken wire mesh fence.

I spotted a perfect example of this a couple of days later, also above the Spey. In one area trees had been planted using tubes when a few hundred metres down the road a small enclosure showed trees growing quite happily without.



The exclosure on the left was not much bigger than you can see in the photo and surrounded by grazing land – note the sheep behind and the new chicken wire mesh fence along the road

The evidence is obvious, reduce the grazing pressure from larger animals like sheep and deer and the woodland will regenerate naturally without any need for plastic tubes. That still leaves a problem, however, because as long as predators are ruthlessly persecuted, the number of smaller herbivores, voles, rabbits and hares, will be artificially high and they are likely to eat most of the natural regeneration. That problem actually becomes worse when lots of trees are planted all in one go: the abundant new food source leads to a boom in the population of small herbivores. This is then used to justify the use of tree tubes.

The chicken wire fencing in the two photos above perfectly illustrates the problem. The Ralia Estate breeds large numbers of pheasants which they wish to protect against pesky predators like stoat. Stoats are prolific breeders, traps alone haven't worked, hence why miles of chicken wire fencing are now being installed. But reduce the number of stoat to very low numbers and that also reduces the rate of natural regeneration to very low levels and risks new woodland planting. So, people resort to plastic tree tubes. A vicious circle of environmental destruction.

The CNPA's National Park Partnership Plan and tree tubes

The draft CNPA National Park Partnership Plan (NPPP) (see here) says nothing directly about tree tubes could offer a way out of this vicious circle. First and most importantly it says that natural regeneration should be the primary means by which woodland should be allowed to expand:

OBJECTIVE

A2. Increase the amount of woodland cover in the National Park to ensure bigger, more natural woodlands, expanding up to a natural treeline, providing connections across river catchments and around the central core of the mountains. The majority of this will be native woodland and will be allowed to regenerate naturally, without the need for planting or fencing.

If implemented, this objective would result in the use of plastic tree tubes to enable woodland expansion in the National Park to be greatly reduced. But it could still allow a considerable number of plastic tree tubes to be used where planting does occur. The objective therefore needs to be strengthened and explicitly state that plastic tree tubes should never be used. Moreover, if the CNPA becomes a regional land-use partnership, as is being proposed, and has responsibility for disbursing rural payments in the Cairngorms, it could stop the funding streams that fuel this disaster.

That would then just leave the question of how to clear up the tens of thousands that are currently polluting the soils and river systems in the National Park. Unfortunately, there is no mention of this issue in the NPPP.

Natural regeneration, predators and the National Park Partnership Plan

The wider problem is that natural regeneration in the National Park will only have limited success while numbers of grazing animals are kept high (see here) and the numbers of predators are kept low. The danger is the CNPA could get rid of plastic tree tubes and woodland expansion stops.

I will come back to deer in another post but two objectives in the draft NPPP could help with restoring predators to their proper place in the food chain. The first is to tackle the huge number of game birds that are currently released into the National Park for shooting and are then "protected" by predator control:

OBJECTIVE

A5. Reduce the intensity of game bird (grouse, pheasant, partridge) management within the National Park. Encourage lower density grouse shooting, as well as the adoption of best practice management techniques and sustainable pheasant and partridge shooting / releases.



Average gamebird bags per unit area.

Numbers of game birds released in the National Park.

Why are we proposing this objective?

The Grouse Moor Management Review ('The Werrity Review', 2020), and Scottish Government's response to it, has indicated a move towards licencing grouse moors in the near future. This package of work will be the cornerstone of moorland management in the National Park.

There are significant releases of non-native gamebirds in the National Park, but information is patchy. There is a need to get a better handle on the data around these releases, to look at the impacts on native wildlife and to ensure a better regulated system.

Raptor Persecution UK commented on this in an excellent blog at the end of September (see here) which mentions parkswatch. While from one perspective RPUK is right, given the landowning interests on the CNPA Board this objective would be a radical step forward for the National Park, looked at in cold blood the target is vague and unambitious and the objective as currently phrased will have no bite.

The revised objective in the CNPA's new NPPP on species is just as vague:

OBJECTIVE

A14. Protect vulnerable species and ensure they get back on a sustainable footing, less reliant on targeted action and recovering within a network of habitats. Where necessary, reinforce existing populations and reintroduce lost species as part of a suite of measures to restore biodiversity in the National Park. Ensure species and habitat management adapts to a changing climate.



Species Recovery Curve.

Why are we proposing this objective?

The number, variety and distribution of species will shift with the changing climate and with the changing landscapes of the National Park, including increased woodlands and restored peatlands. This will mean that different species may thrive in the future and that tough choices about species currently seen in the National Park may have to be taken. There is also a need to ensure that species that have been persecuted in the past are allowed to breed in the National Park across their range.

The current NPPP committed to eliminate the raptor persecution that has plagued the National Park within five years, i.e by now. That has totally failed. But instead of strengthening the objective, the CNPA is effectively proposing to water it down while extending it to "species that have been persecuted in the past" in a vague commitment to "allow" species to breed across their range. This is hopelessly weak: success could be claimed if sporting estates allowed predators to breed but then killed them immediately afterwards!

What should have been an opportunity to ramp up the protection for all predators is in danger of being lost completely.

What needs to happen

Instead of being host to fully functioning natural ecosystems, the web of life in all its glory, the Cairngorms National Park is home to a tangled web of damaging land-management practices. Most of these ultimately derive from how the land is being managed for sporting purposes. Plastic tree tubes are just one part of that, a consequence of a National Park high in deer and low in predators but which in turn cause further environmental damage,

While we need to reform the whole system, one way to force change is simply to ban certain damaging land-management practices. A ban on deer fencing and tree tubes, for example, might force forestry and conservation interests to start speaking out against how sporting estates are managing their land, instead of picking up the tab as they do at present.

The NPPP is an opportunity to take the sort of radical action the climate and environmental crises require. The new Minister for National Parks, the Green MSP Lorna Slater, should be encouraging the CNPA to do just that but it will help if the public pile on the pressure. One way to do so would be to respond to the NPPP consultation supporting a ban or alternatively you could pin a comment on the interactive map (see here) to one of the many places in the National Park blighted by plastic tree tubes.

Category

1. Cairngorms

Tags

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- 2. conservation
- 3. natural environment
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