Driven grouse shooting study
The Potential Damage to Angling.

The most comprehensive study ever conducted on the effects that the muirburn associated with driven grouse shooting (DGS) has on hydrology, aquatic life and water quality is EMBER carried out on 10 watersheds over 5 years by Leeds University. It found that muirburn increased sedimentation, acidity, suspended particles, and possibly exacerbated spates all of which have a negative effect on water quality and aquatic life. As well as having implications for the treatment of water for public supply, flood alleviation and conservation there are ones for our game fishing rivers too. As many flow from the southern uplands and central and eastern highlands a significant part of their watersheds must be in DGS areas and there could be a very serious problem relating to maintaining/enhancing our world famous salmon, sea trout and trout fishing.

Personal efforts to pursue this issue by contacting organisations supposedly protecting the interests of anglers for discussion/information have met with a very limited or non-response. Given that angling in Scotland is of significant economic importance, a major draw for foreign visitors and that representative organisations have had no qualms highlighting the possible effects that natural predation (with little evidence), fish farms, industrial fishing and traditional salmon netting at the mouth of estuaries have had on salmon/sea trout stocks this omission is somewhat inconsistent and perplexing. It is extremely difficult to avoid the conclusion that the intensification of one field sport – DGS – conflicts with the interests of another, and that internal political considerations in that sector have led to the issue being ignored. Enquiries have not led to any authoritative, or in fact any, rebuttal to concerns re muirburn and damage to stocks of game fish. However, personal communication with respected fisheries scientist Mr Ron Greer has confirmed that in his opinion there is cause for concern and investigation. The subject should form a key element of any competent study into the costs/values of DGS.


Fire Risk, DGS and Riparian Woodland.
The proponents of DGS often claim that muirburn is necessary to prevent the build of old heather, which can increase the risk, and severity of wild fires, i.e. DGS is needed to reduce wildfires. This is disingenuous as the fire risk is high in the first instance due to the creation of those very large swathes of uninterrupted, flammable heather to produce unnaturally high populations of red grouse for shooting. Regular muirburn dries out peaty soils and prevents the development of a proper habitat mosaic including scrub, which would help reduce the range and speed of wild fire. Facilitating the development of less fire prone moors, and bypassing the temporary issue of build up of flammable old heather, by targeted tree planting, creating firebreaks etc that would hasten the development of more fire resilient uplands and simultaneously improve their conservation value.

Riparian tree planting along watercourses would be especially valuable in creating wildlife corridors and a true habitat mosaic. Deciduous trees there can provide, via leaf litter deposition, up to 90% of the plant material that underpins invertebrate production, which in turn supports fish and birdlife. Riparian woodland also supports the accumulation of large woody material that is fundamental to habitat structure in streams (including retention of gravels) and eventually in many places will support the translocation/arrival of beavers and their dams. This in turn would also help create wider strips of damp woodland reducing the spread of fire and also increase the production of salmon/trout, improve water quality and lower flood risk downstream to farms, businesses and homes. As public money and the emergency services have better uses than dealing with an unnaturally high fire risk caused by the pursuit of a hobby this subject should also be dealt be with in an economic study. The fire service and police should certainly be consulted.


**Natural Flood Alleviation**

The number of projects experimenting with (or incorporating) natural flood alleviation continues to grow including a new one - the Cornwall Beaver Project - initiated by progressive farmer Chris Jones. The findings from an increasingly long list of such projects including Pickering, Belford, Eddleston, Pontbren and Holnicote involving several techniques including tree planting and the creation of ‘leaky’ dams replicating what beavers do, only corroborate earlier findings that indicate extensive work in our uplands which capture most of our rainfall could significantly reduce the flooding of better quality farmland, homes and businesses downstream. The stage is
quickly being reached where a national plan for a program of natural flood alleviation, especially in the upland areas where much current economic activity is subsidised, needs to be developed. Estimates vary on how much of Scotland is grouse moor, but 10% is the lower end and therefore by any measure they have a significant role to play in reducing flood damage.

From an economic and moral viewpoint it would be a dubious argument that opportunities for natural flood alleviation – i.e. increasing efforts to restore blanket bog and targeted tree planting – should be compromised because they were felt to conflict with raising an unnaturally high population of red grouse for DGS. As grouse moors exist on our uplands but are not especially precipitous they could have a disproportionately high role for providing new habitat for beavers - the benefits of their activity in alleviating flooding is reaching such a level of recognition that even the Forestry Commission wishes to use them in an experimental trial in the Forest of Dean to reduce the flooding of Lydbrook, a local village. Beavers have been implicated in damage to higher quality farmland in the lower Tay basin, but this has not been properly quantified and there are mitigation and management techniques, as yet rarely applied in Scotland, which can reduce these conflicts. As approximately 10% of Scotland is higher quality farmland beavers have a greater role in protecting it by their presence higher in the watershed, which includes grouse moors.

“Meet the latest recruit to the UK flood defence team: the beaver”, The Guardian (16 September 2017)

Glen Tanar - A Model for Diversification?

It is doubtful that increasingly intensive management for DGS, which automatically compromises virtually all other land uses and recreations, is the best economic and cultural path to take when it can only cater for a tiny proportion of the population even if more people wished to participate, more shooters means smaller (too small?) grouse bags. DGS is by no definition a spectator sport either where it takes place or televised and it is extremely unlikely to become so. Glen
Tanar [https://www.glentanar.co.uk/](https://www.glentanar.co.uk/) provides a rare and welcome example of an estate which incorporates grouse shooting within a wider business model including outdoor activities, being a wedding venue and catering for wildlife photography, the estate makes a genuine effort to protect birds of prey and other wildlife. Not only is this a healthy economic diversification it also increases the range of experiences and appeal for more people than rural areas under a DGS monopoly can provide. Estates such as Glen Tanar are significant and need to be examined in the study. Although some DGS estates claim they incorporate eco tourism this requires scrutiny as the parts of the property which are not actually grouse moor may be the main or sole areas in which wildlife watching, photography etc take place – the intensification of management for DGS is essentially incompatible with credible eco tourism.

Do they eat more grouse in Norway without having grouse moors?

According to reports although it has no DGS – in fact no country outside of the UK does – Norwegians shoot and consume more grouse than we do in Scotland. They do this whilst having a generally higher rural population density, more varied economy and scenery with associated wildlife. All of this without the large number of highly contentious issues surrounding DGS including mountain hare culls, bulldozed hill tracks, snares and traps, muirburn and of course wide scale illegal persecution of birds of prey. Tree cover is far higher than in Scotland facilitating a culture that is much more apt to spend time and money in the outdoors with benefits to mental and physical health that Scotland desperately needs to emulate. In Scotland even basic access rights had to be fought for, a culture of ‘countryside for everyone’ is still virtually non-existent in some quarters. Wood fuel provides significant amounts of house heating in Norway, in Scotland even some Highland towns such as Fort William do not have mains gas meaning fuel poverty is particularly severe in areas with the most inclement climate. Woodlots could make at least some contribution to nature conservation whilst making a very big one to fighting high heating bills. Climatically and geographically Norway is in many ways similar to Scotland and therefore provides a good model for comparison down to the fact that it has never been a member of the EU and we are considering leaving it.

REFERENCES:


“A lot to learn from Norway's land use”, Trees for Life (20 July 2015)
Scotland’s ‘Distinctive’ Landscape

There is an argument that Scotland’s hills are distinctive due to their open, treeless nature which makes them attractive to both residents and foreign visitors and that this uniqueness needs to be preserved – mostly claimed by those responsible for that barrenness and DGS proponents are prominent amongst those. This is simply not true. Even within the UK itself Wales, Northern England and Northern Ireland have extensive upland areas with very minimal tree cover and the one country we share a land border with, Eire, does too. Ironically Iceland, one of our very closest neighbouring countries, has also lost the vast majority of its trees and attempts to restore forest for economic and environmental reasons have met political resistance from those who do not wish Iceland to lose its ‘distinctive’ landscape. This perhaps best exposes the parochialism and irrationality of this argument; a lot of countries actually have this ‘unique’ look. It would be hypocritical to decry public ignorance on how their food is produced, whilst accommodating a dangerous ecological ignorance that believes vast tracts of treeless hill or grouse moor are natural and therefore beautiful, they are not, they are comparatively wildlife poor and are prone to soil erosion and exacerbate flooding, and a growing number of people realise this. Scotland could become a world leader in ecological restoration and associated ‘green’ business opportunities and actually market itself as a country where not just forest, but wetlands and real, natural moor land are being brought back with as much of our lost wildlife as possible. Approximately 40% of the Cairngorms National Park is currently comprised of DGS moors, possibly the best opportunity in the whole of the UK to carry out large scale ‘rewilding’ and maximise the educational, recreational and tourist potential it brings. Surely this is a better and brighter future than intensive and extensive management of the land amounting to farming, but for a limited appeal hobby not food?

REFERENCES: Please read page 49 of this report for an interesting discourse on landscape and culture
https://scholar.colorado.edu/cgi/viewcontent.cgi?referer=https://www.google.co.uk/&httpsredir=1&article=2393&context=honr_theses

Recreational Walking in Scotland – Contribution to the rural economy and can that be increased rather than threatened?
According to recent research walking tourism is worth 1.26 billion pounds to the Scottish economy annually\(^1\). It is one of those outdoor activities which if carefully planned could ironically mean far more people visit rural Scotland, benefit from it and contribute to its economy whilst doing far less environmental harm and actually encourage wildlife compared to the current emphasis in many areas on DGS and open hill deer stalking – both require or result in a seriously suppressed ecosystem for the unnaturally high population of one species for sporting purposes. A more natural landscape would do much to enhance the experience for those participating in sensible, recreational use – walkers, wildlife photographers, canoeists etc – whilst simultaneously benefiting wildlife. This also includes some animals such as the red deer, which is actually a woodland species, and that would be considerably less prone to being disturbed by walkers if more tree cover was available on open hills.

However, is the converse actually true and the landscape created by DGS really an attractant? Anecdotal evidence from visitors suggests that this is not the case and in fact the very intensive management for DGS in some parts of Scotland – bulldozed hill tracks, fencing and a patchwork of burnt and un burnt heather with little wildlife – means non shooting recreation is occurring in spite of not because of DGS. This requires urgent investigation. Potentially there are exciting opportunities to encourage more domestic and foreign visitors to rural Scotland where they would have a higher quality experience than they do now. In turn this would help more people to live and work in rural Scotland while simultaneously meaning a healthier, wildlife richer landscape for all. The only parties that would be compromised would be those pursuing particular forms of sport shooting. That includes DGS, which does not occur in any country in the world outside of the UK. Why?

REFERENCES: Visit Scotland report

\(^1\) “Scotland’s tourism bonanza from walking holidays”, The Daily Express (3 August 2017)