

Written evidence submitted by James Stephenson and Peter Snaith (CWR0189)

Impact of Wildfires at Danby, North Yorks Moors

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And

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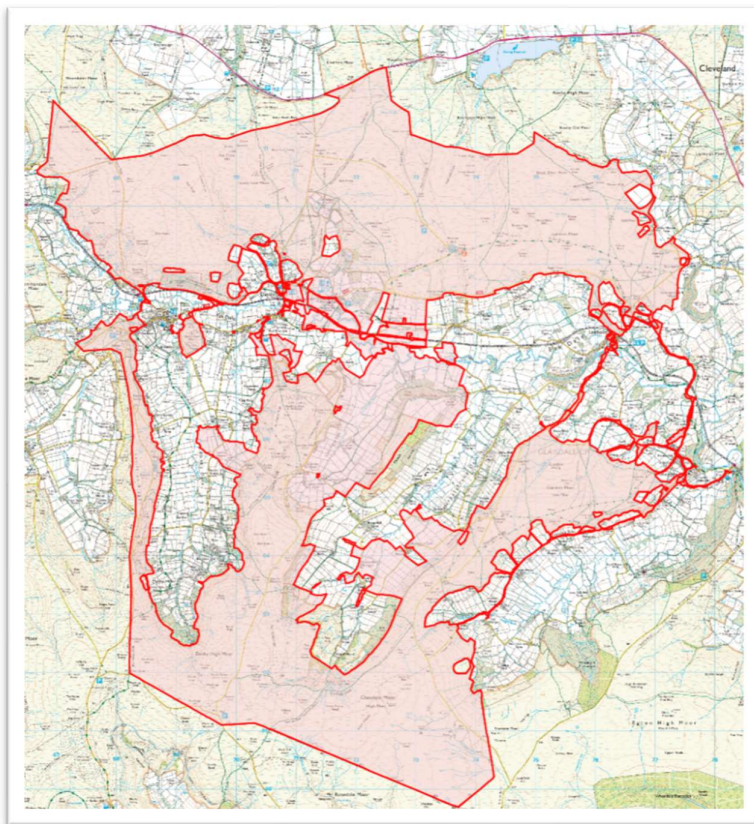
This document has been prepared in in respect of the EFRA Committees call for evidence in the growing threat of Wildfires in the UK.

Summary

Wildfires are an increasing threat in upland areas. The criminalization of traditional management techniques principally the burning of heather on areas classified as deep peat (depths greater that 30cm) in the form of cool burns is the primary reason for this increased threat due to the increased fuel load.

Background

Danby Estate part of the Dawnay Estates and extends to approximately 14,400 acres in the heart of the North Yorks Moors. Danby Estate includes approximately 10,500 acres of predominately heather moorland which is common and as a result provides open access under the CROW Act. It is also in the main designated SAC, SPA and SSSI for a number of reasons including presence of red listed bird species such as Merlin, Lapwing, Curlew and Golden Plover which successfully breed on the moor.



The Estate is in close proximity to the villages of Danby, Commondale, Castleton, Lealholm, Houslyke and Glaisdale. The estates moorland also surrounds the dales Glaisdale, Great Fryup, Little Fryup and Danby dale all containing many farms, private residences, pubs, businesses and schools.

Danby village is also home to Danby Lodge which is the North Yorks Moors National Parks headquarters on the moors and an important visitor centre hosting many visitors each year including school educational visits. The National Park in total has an estimated 9 million visitors per year.

Danby Moors and several other moorland areas are close proximity to larger towns such as Whitby approximately 8 miles and main roads and transport links such as the A171 and the Whitby to Middlesborough railway line which would also likely be affected in the event of wildfire.

The Danby Moors being common are utilised by farmers with grazing rights of which there are 12 active graziers grazing over 2500 sheep. The moor is also shot as a commercial driven grouse moor. Grouse shooting contributes £100 million to the UK economy year and supports 2,500 full time jobs. Both of these uses would also be severely affected by a serious wildfire incident which would affect the area socially and economically.

History of Wildfire on Danby

Danby has unfortunately seen its share of Wildfire in recent history with the most significant event being in the summer of 1976 where a serious wildfire took hold on Danby High Moor which also affected Egton and Wheeldale moors to the east. This fire started in early summer and took several months to fully extinguish and burnt an area of at least 1500 acres. 1976 was an exceptionally hot and dry year leading up to the start of this fire and the reason it became so severe is that it took hold in the deep peat layer which was found in that area. The peats properties allow fire to smolder and burn underground and pass from one area to another meaning that it could not always be seen as it spread across the surface landscape.

Methods used to extinguish this fire included ploughing firebreaks into the moor in a effort to stop the spread, beating the active fires and wetting.

Once the fire was extinguished the damage was clear to see the damage with all vegetation burnt away but the main damage was in that huge quantities of peat where burnt, in parts entirely and down to a clay subsoil. This left the whole area extremely susceptible to erosion and compromised the peats ability to retain water.

The reinstatement on Danby Moors started shortly afterwards with co operation from the NYMNP including some tree planting trials and fencing off livestock from the area. Nature and time were the main tools for reinstatement in this era however in the early 2000's the area was identified as in need of further reinstatement works to bring it up to a more favorable condition.

A 2009 Countryside Stewardship ESS Scheme brought the whole of the moor and its graziers into a more formal management and provided funding for major reinstatement works to take place in the area affected by the 1976 fire. This reinstatement included the following methods of reinstatement:

- Cutting and baling of heather to place in run off channels. With the aim of slowing water flow and trapping sediment on the moor.
- Heather brash was spread onto bare areas of peat/soil amongst lines of small heather bales in an attempt to spread seed and recolonize these areas.
- Other parts of the restoration site were limed and sown with appropriate grass seeds to stabilize the surface and allow colonization by other moorland vegetation species.

A second scheme was entered into in 2020 where further requirement for reinstatement had been identified on a smaller area of the Danby High Moor. Although it was felt that the area had continued to regenerate the works specified for the second major reinstatement project were as follows:

- Heather bales located in run off channels
- Further spreading of heather brash
- Reprofilng of channels to provide less steep edges
- Peat dams
- Stone dams
- Wooden dams
- Sphagnum plugs planted

The dams were all designed to slow the flow of water and hold this back along with sediment, slowing down any erosion and allowing the surface to revegetate along with re wetting of blanket bog areas. Construction of dams were specified depending on factors such as the gradient of the channel they were to block and the steepness of the banks.

Total spend approximately £600,000.

Current Management

Management of vegetation on Danby Moors has followed changes over the years and has followed best practice which currently includes a combination of cutting and burning dependent mainly on soil types. Burning is restricted by the law and only areas with underlying peat of less than 30cm depth are permitted to be burnt.

The benefits of burning are that it can take place anywhere on the moor regardless of steepness and the presence of rocks and other obstacles. The other major benefit when compared to cutting is that while cutting reduces the heathers height it creates a layer of brash which is still a fuel load, burning removes this completely from the equation thereby reducing the risk of fire.

The major factor in preventing wildfires is the management of a fuel load. The principal vegetation on the NYM's is heather which grows vigorously in the area because of the favorable growing conditions including low altitude which can easily result in a particularly high fuel load if vegetation is not managed. It is wrong to classify all moorland areas as having the same characteristics and prescribe management with a one size fits all approach.

The Danby Moors employ 4 full time keepers and vegetation management is one of their main roles. There has been significant investment into this with the following equipment purchased by the Estate.

- 4x leaf blowers which are used in management burning.
- 3x tractor for management burns
- 3x swipes for management burns
- Fogging unit (trailed tank of water with pressurized applicator.
- 2x flails for cutting heather
- Bowsers of water on standby for emergencies

Distribution of management burns in the landscape has changed dramatically over the years with the current management being of burns areas of approximately 1 – 1.5 acres in size which creates a varied habitat with heather at all stages of growth in a relatively small area but most importantly in the context of wildfires it provides a landscape with lowered fuel load and provides an important firebreak effect which would slow the effect of a wildfire and allow time for it to be controlled.

Management burning is only undertaken in winter months when conditions are conducive with the aim of removing the heather layer quickly and cleanly while leaving any mosses and other vegetation. It is important that this operation is conducted while there is sufficient moisture in the ground so that fires can be controlled effectively and so that no vulnerable or breeding wildlife is impacted. Wildfires do not make allowance for these.

Every year however there are incidents to be dealt with by the team of gamekeepers on Danby Moors. These incidents are often caused by visitors with campfires or barbeques lit in high risk areas. Where these are discovered by gamekeepers they will explain the dangers and extinguish fires. One of the most recent examples of this was 16 June 2025 where a group of people lit a campfire on open moorland fueled by logs which they had brought with them. This fire was lit on shallow peaty soil within 3-4 metres of mature heather which at that stage was in drought conditions as shown on the photographs below. Opinion is that if this fire had taken hold of the heather moorland in drought conditions it would have burnt approximately 2000 acres including neighboring a moor and would hopefully have been stopped by grass fields on the edge of the moorland and by the neighboring scaling dam.

Photo 1



Photo 2



Photo 1 – Camp Fire on Open Moorland June 2025

Photo 2 – In daylight the next day. It can be clearly seen that the fire was lit on open moorland being on a burned area from the previous winter.

The two points to be made are that if this had been cut would the brash from cutting set on fire and the second point is the proximity of older heather in drought conditions which would have been extremely flammable.

The other incident in more recent years was in summer 2022 where a fire started on the edge of the moorland close to Danby Beacon which was suspected to have been started deliberately. This fire was quickly spotted by a gamekeeper who rallied the rest of the team into action and supported by local farmers, neighbouring estates and the fire service with the use of the equipment listed above extinguished the fire within several hours restricting its spread to approximately 2 acres. Again this was in the height of summer and without swift action the consequences would have been much worse.

Typically estate gamekeepers will deal with 6 – 10 incidents similar to this each year preventing serious wildfires. Effectively a privately funded fire patrol in these vulnerable areas. During times of drought there is considerable extra pressure and stress put onto gamekeepers who will be constantly on fire watch. Their presence on the frontline and having to deal with irresponsible individuals lighting fires on moorland in times of drought causes a whole extra dimension of stress and pressure for these keepers.

Conclusion

The climate is changing and becoming drier and the North York Moors is already a dry environment being on the east coast and with an average annual rainfall of 635 – 760mm in land. The main issue is not that the threat of wildfires is becoming exponentially worse but that the tools to help prevent and lessen the impact of wildfires are being recklessly removed principally that of management burning. This is ignorant and prejudiced and not based on real life experience.

Rural estates have provided the first line of defense in prevention and fighting of fires with exceptional knowledge and privately funded equipment to deal with potential wildfires before they get out of control.

Other points

It is concerning in your call for evidence that it is stated “More wildfires happen in spring than summer in the UK due to burning vegetation by landowners, dry and dead vegetation left from winter and visitor pressures” we cannot believe that this statement is accurate in respect of landowners causing wildfires and would question the reporting and recording of this.

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&

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