

Scottish Environment LINK Consultation Response

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Environment, Food and Rural Affairs Committee

Call for evidence: Wildfire risk and response

May 2026

Introduction to Scottish Environment LINK

Scottish Environment LINK is the forum for Scotland's voluntary environment community, with over 50 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society.

Its member bodies represent a wide community of environmental interest, sharing the common goal of contributing to a more sustainable society. LINK provides a forum for these organisations, enabling informed debate, assisting co-operation within the voluntary sector, and acting as a strong voice for the environment. Acting at local, national and international levels, LINK aims to ensure that the environmental community participates in the development of policy and legislation affecting Scotland.

LINK works mainly through groups of members working together on topics of mutual interest, exploring the issues and developing advocacy to promote sustainable development, respecting environmental limits.

How can land management techniques be best used at a regional level to prevent and control wildfires whilst balancing the needs of different land users? What evidence-gaps are there and how can they be filled?

1. Given the scale of some of the recent wildfires in Scotland, a regional approach to wildfire preparedness is necessary. This regional approach can be difficult to achieve because of the different priorities of different land managers (which can include farming, sporting management, forestry, conservation, recreation and residential); however, there are potential win-win solutions. An integrated, landscape-planning approach is needed – one that seeks to reduce the wildfire risk whilst also supporting biodiversity conservation and carbon sequestration objectives.
2. In the context of a warming world and increasing wildfire risk, a restored, more natural landscape is a more resilient one. Birdlife Europe (2025) recently published a paper about how to tackle wildfires in Southern Europe and while ecological comparisons with Northern Europe are difficult, the principles of the proposed approach are useful. Birdlife stresses the need to harness the power of natural forests, wetlands and floodplains to store water, sequester carbon, protect ecosystems, and, ultimately, reduce temperatures.
3. Building upon this report, we suggest a tri-part approach to wildfire management at a regional level:

- a. First, attempts to reduce wildfire risk must be focused on **people management**. More than 95% of wildfires in Europe are directly or indirectly caused by human activities. This means that human causes need to be better addressed: from accidental ignitions (barbecues, cigarettes, sparks from agricultural machinery) to improving muirburn practice and preventing arson.
 - b. Second, effective wildfire management requires **landscape-scale planning**. We collectively need to assess wildfire risks and preparedness and reflect on how different forms of land management affect each other and the associated need for mitigation strategies. At its simplest, this might result in the use of management techniques such as firebreaks, which attempt to isolate different management units from each other, reducing the risks of wildfires spreading. These could usefully be created around honeypot sites where the risks of accidental ignition are higher, such as around campsites, car parks and walking routes where members of the public can accidentally start wildfires.
 - c. Finally, **nature-based solutions** should be used to provide win-wins for both fire risk reduction and broader ecological services and biodiversity. Examples include the protection and restoration of hydrologically important ecosystems such as wetlands, peatlands and riparian habitats, and the restoration and expansion of native woodlands.
4. We acknowledge that there are different views on this issue and many perspectives focus on the immediate management of fuel load. While it is logical that a lower fuel load will help reduce the severity of wildfires (although the severity of any particular wildfire will be affected by several factors) and these approaches can have a place (such as in the creation of firebreaks), the management of fuel load is not a silver bullet. Historic and ongoing land management has created a highly fire-prone landscape. Extensive deforestation, grazing, drainage and burning of the uplands has degraded naturally occurring blanket bog vegetation and created large areas of treeless moorland dominated by shrub and grass vegetation, which are far more vulnerable to ignition and spread.
 5. Traditional sporting and farming interests frequently suggest that muirburn should be used to reduce the fuel load and therefore the impact of wildfire; however, this short-term approach establishes a perpetual cycle of burning. Having created a fire-prone landscape, ongoing burning would be required in an attempt to reduce the wildfire risk. While this approach is promoted elsewhere in the world, for example drier habitats in Mediterranean-type zones, we do not believe this is applicable to the temperate maritime systems in the UK uplands. It simply perpetuates the degraded, fire-prone landscapes we see today. More broadly, these approaches do little to support national strategies that seek to reverse the decline of biodiversity in these landscapes, nor do they help to meet our climate goals.
 6. We suggest, therefore, that there needs to be a significant refocus within wildfire management towards the long-term impacts of restoring landscapes so that they become less prone to wildfires.

What role do nature-based solutions, such as improving biodiversity and more resilient landscapes, have in the prevention and control of wildfires?

10. Nature-based solutions, such as peatland restoration and woodland creation, have a fundamental role in preventing and controlling wildfires.
11. A growing evidence base suggests that when peatlands are healthy or restored, with natural to near-natural water tables (close to the surface), they can cope with irregular, low-severity fires (Andersen *et. al.* 2024). The peat beneath the living vegetation is saturated and is therefore not available to burn; only the surface vegetation is affected. Unfortunately, it is estimated that 80% of Scotland's peatlands are degraded as a result of drainage, burning, grazing and development. Degraded peatlands tend to have lower water tables, which results in peat drying out and being more vulnerable to ignition when a wildfire occurs (IUCN Peatland Programme 2024). Rewetting peatlands raises the water table and reduces the risk of peat catching fire and improves the resilience of landscapes, should a fire take place.
12. Arguments for an approach that favours fuel load reduction will point to the need to do so to help prevent fires gaining in intensity and getting into peat, which are very hard to extinguish once alight. However, given the majority of peatlands in Scotland are degraded, it is evident that peatlands must be restored to reduce their initial vulnerability to wildfires.
13. It is imperative that restoring peatlands becomes a pan-UK mission. In addition to helping improve resistance and resilience to wildfires, this would deliver against biodiversity and climate targets.
14. At a broader scale, landscape restoration has the potential to help reduce wildfire risk. Much of the UK's uplands are relatively uniform, being denuded of trees and dominated by dwarf shrub habitats that are highly fire prone. Developing a landscape that is more diverse could help reduce wildfire risk and restore biodiversity at the same time. Different habitats have different fire resistance characteristics and heterogeneity in the landscape could help retard wildfire spread and help fire fighters.
15. Much greater effort needs to be devoted to re-establishing tree cover. In contrast to the open heather moorlands, native woodlands tend to be damp and are much more resistant to wildfires. Similarly, the model of forestry that dominates in the UK uplands which delivers monocultural conifer stands of closely spaced trees can itself be vulnerable to wildfire. Greater heterogeneity in the forestry management model, with a higher proportion of native broadleaved tree species, would help mitigate risks.
16. Appropriate grazing also has a place in wildfire mitigation. Different types of livestock can influence the landscape in different ways. Sheep, for example, are selective in their grazing habits and in some places, extensive sheep grazing has perpetuated flammable vegetation (*Molinia*, which is unpalatable) and increased risks. The right grazing in the right places can help reduce wildfire risks. For example, cattle have been used within Caledonian Pinewoods, to reduce fuel to mitigate fire risk but also to create suitable conditions for Capercaillie. Technology such as 'no

fence collars' are increasingly being used to manage livestock and deliver sensitive vegetation management in remote and challenging landscapes. Co-ordinated use of this technology could form part of a landscape-scale wildfire risk planning approach.

How best can Defra funding schemes be used to support land managers to adapt to the increased risk of wildfires?

17. Given our Scottish focus where budgets are devolved, we refrain from comment on English funding schemes.

What impact does the monitoring of wildfires have on our understanding of the causes and risks of these events in the UK, and how can this be improved? Are there international examples or best practices that can be used in a UK context?

18. At present, our understanding of the causes and risks of wildfires in Scotland is poor, so current monitoring has little impact on practice. Our understanding is that the Scottish Fire and Rescue Service does not investigate the cause of all wildfires, but only those that have posed a risk to property and/or life. This is understandable for capacity reasons, but it does mean that there is limited information about the causes of wildfires.
19. This uncertainty extends towards the relationship between muirburn and wildfires. For example, a NatureScot investigation into muirburn and wildfire noted that there is evidence that muirburn directly causes a proportion of wildfires that occur, yet there is uncertainty about the proportion (Holland *et. al.*, 2022). The limited number of studies on how many wildfires were started by muirburn has produced a range of 15% to 60%, or 24% to 68% if lowland statistics are excluded. This range means that the proportion of wildfires that are started by muirburn remains unknown, resulting in conflicts regarding land management practices.
20. Scotland does not currently have a sufficiently robust wildfire danger assessment and alert system in place. At present, the assessments of wildfire risks are undertaken by Firebreak Services, which feeds the information to the Scottish Fire and Rescue Service. This is then used by the SFRS to raise awareness directly with the public and through partners in the Scottish Wildfire Forum. This suggests that the SFRS does not have control of a wildfire warning system. While Firebreak Services has been providing a valuable service, they have also highlighted the limitations of the approach and attempts have been made to explore how to develop a bespoke Fire Danger Rating System for Scotland (Taylor *et. al.*, 2021). Better information about wildfire risks and the causes of wildfires that become established would inform wildfire preparedness amongst firefighters, land managers and relevant authorities.
21. Questions remain regarding the strength of the structures that currently exist for learning lessons and changing practice on the ground. Conversely, a strong connection between the information and practice on the ground is required to improve wildfire response and management. At present, there are only weak

structures in place with insufficient levers to inform practice. For example, in Scotland, the Scottish Wildfire Forum is an important discussion space where different stakeholders come together to discuss evidence, but it does not have any formal role or power. We suggest that the Committee explores appropriate structures to strengthen wildfire preparedness and response.

What resources and training do emergency services and local authorities need to respond to the increasing number of wildfires, particularly in rural and hard-to-reach areas?

22. We understand that the Scottish Fire and Rescue Service is seeking to enhance its capacity to deal with wildfires in the wider landscape through increased resources and training. These include a tactical burnback team, four new wildfire support units with enhanced equipment and two new interim wildfire units in Lockerbie and Thurso. This is very welcome, but as a network of environmental organisations, we would highlight the necessity that training includes a better understanding of the ecology of upland habitats, e.g. peatlands and biodiversity.
23. The Scottish Fire and Rescue Service is the lead body when it comes to firefighting and it is entirely understandable that it focuses on immediate risks and mitigation strategies. However, as we have highlighted in this response, we are concerned that this could lead to a short-term focus on fuel load and a decreased focus on longer-term strategies that have the potential to reduce wildfire risk at the same time as meeting biodiversity and climate targets. A narrow focus on fuel load in inappropriate contexts could result in harmful actions that ignore and de-prioritise biodiversity and climate concerns. There are opportunities to develop strategies that allow for both wildfire and biodiversity concerns to be addressed concurrently. Greater ecological awareness would inform discussions about possible responses, including their short and long-term impacts. This awareness is important as the Scottish Fire & Rescue Service is a public body and therefore must further the conservation of biodiversity as part of its responsibilities under the Nature Conservation (Scotland) Act 2004.
24. At the local level, land managers are the biggest resource to draw upon in wildfire response and management. Many land managers are well-prepared, trained and experienced and the emergency services depend on this support. Better responses may be achieved by improving the Community Asset Register and this work is already underway (Scottish Government 2026). In Scotland, the new licensing system for muirburn will also require those that undertake burning to undergo some training, which may also be useful in this context.
25. More broadly, there is a significant need for greater ecological literacy within public bodies to help them adapt to and deliver in the context of the nature and climate crises.

What are the most effective activities for tackling the human causes of wildfire ignition, for example public engagement and campaigns? How can the UK Government best support the delivery of these activities at both a local and national scale?

26. Many of our members are landowning organisations and deal with wildfire risks on a daily basis. We find that having rangers in the landscape engaging with members of the public leads to the best outcomes. These rangers inform the public and also act as a deterrent. This is, however, costly and requires ongoing funding.
27. In some parts of Scotland, new byelaws have been introduced to prohibit certain behaviours and this could provide a way forward more generally. In the Cairngorms National Park, for example, new byelaws prohibit lighting fires and barbecues between 1 April and 30 September, unless they are wholly contained within the curtilage of a private dwellinghouse, private property or a licensed caravan site (although it is worth noting that this does not apply to muirburn).
28. The UK government could work with Devolved Governments to explore the possibility of introducing a ban on disposable BBQs or a ban on the use of disposable BBQs in certain places, such as the open countryside.

This Scottish Environment LINK consultation response is supported by:

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References:

Andersen, R., Fernandez-Garcia, P., Martin-Walker, A., Klein, D., Marshall, C., Large, D.J., Hughes, R. and Hancock, M.H., (2024). Blanket bog vegetation response to wildfire and drainage suggests resilience to low severity, infrequent burning. *Fire Ecology*, 20(1), p.26. <https://doi.org/10.1186/s42408-024-00256-0>

Birdlife Europe, 2025, Severe Wildfires In Southern Europe: Prevention and management through an integrated landscape-planning approach, <https://www.birdlife.org/wp-content/uploads/2025/07/FINAL-Wildfire-prevention-paper.pdf>

Holland, J.P., Pollock, M., Buckingham, S., Glendinning, J. & McCracken, D. 2022. Reviewing, assessing and critiquing the evidence base on the impacts of muirburn on wildfire prevention, carbon storage and biodiversity. NatureScot Research Report 1302. <https://www.nature.scot/doc/naturescot-research-report-1302-reviewing-assessing-and-critiquing-evidence-base-impacts-muirburn#2.+Main+findings>

IUCN Peatland Programme, 2024, Wildfire resilience: why rewetting peatlands must play a key role, <https://live-twt-d8-iucn.pantheonsite.io/sites/default/files/2025-06/Wildfire%20Resilience%20%281%29.pdf>

Scottish Government, 2026, Strategic Action Plan on Wildfires, <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2026/03/strategic-action-plan-wildfires/documents/strategic-action-plan-wildfires/strategic-action-plan-wildfires/govscot%3Adocument/strategic-action-plan-wildfires.pdf>

Taylor AFS, Bruce M, Britton AJ, Owen IJ, Gagkas Z, Pohle I, Fielding D, Hadden R, 2021: Scottish Fire Danger Rating System (FDRS) Report, <https://www.hutton.ac.uk/sites/default/files/files/publications/SFDRS-Research-Report-Final-15-2-2022.pdf>