



Sensitive sheep grazing as a tool for wildfire risk management

Background

- For much of the 20th century, policy frameworks such as headage payments incentivised high stocking densities, often contributing to overgrazing in sensitive upland areas of the UK. This led to degraded vegetation structure, soil erosion and reduced biodiversity in places.
- Subsequent reforms, particularly the shift toward area-based payments and agri-environment schemes, encouraged lower stocking rates and shorter grazing periods in the uplands.
- While these changes delivered environmental benefits, they also introduced new challenges. In some areas, reduced grazing pressure has allowed the accumulation of rank, unmanaged vegetation, including heather, coarse grasses and scrub.
- This build-up of dry, lignified plant material can significantly increase fuel loads, creating conditions conducive to fast-moving and high-intensity wildfires.
- Recent wildfire events across the UK uplands have highlighted the risks posed by unmanaged vegetation, especially under prolonged dry conditions. Land managers are now faced with the dual challenge of restoring ecological balance while mitigating fire risk in a changing climate.

NSA believes

Sensitive, well-managed sheep grazing tailored to local conditions is an essential and often underutilised tool in reducing wildfire risk in upland and marginal landscapes while helping achieve other land management objectives.

Some areas would benefit from shepherding, hefting and rotational grazing, but justifying the time and resources is challenging in a sector facing economic pressure. Government support could be targeted towards getting hill farmers to graze upland vegetation more strategically.

Importantly, sensitive grazing must be supported by adaptive management frameworks, bespoke to the specific hill. Stocking rates, timing and grazing patterns should reflect

seasonal conditions, vegetation types and conservation priorities. Ultimately, there has been an overcorrection to headage payments and overstocking.

Appropriately managed sheep systems can:

- Maintain vegetation in a green, actively growing state, reducing the prevalence of dry, combustible material.
- Limit the accumulation of lignified biomass, including old heather stems and coarse grasses, that acts as fuel for wildfires. In some landscapes this takes place alongside controlled cool burns.
- Create varied vegetation structures, breaking up continuous fuel loads and slowing fire spread.
- Provide a low-cost, nature-based management solution that uses farmers to deliver value for money.

Reasoning

Evidence from upland management and fire ecology demonstrates that grazing plays a critical role in influencing fuel dynamics. Areas with complete grazing removal often experience a rapid increase in standing dead biomass and litter layers. These materials dry quickly in periods of low rainfall and can ignite easily, leading to more severe and less controllable fires.

Conversely, appropriately stocked grazing systems:

- Reduce fuel continuity by keeping vegetation shorter and more fragmented.
- Encourage younger, more nutritious plant growth, which retains higher moisture content and is less flammable.
- Help manage species composition, preventing dominance by highly flammable species such as mature heather or Molinia grass.
- In southern EU, targeted grazing to mitigate fire risk is often referred to as fuel load management through herbivory.
- Furthermore, sheep are uniquely suited to UK upland environments, accessing difficult terrain where mechanical management is impractical or cost prohibitive.

Future

The role of sheep grazing in wildfire management is set to become increasingly important. Climate projections indicate that the UK is likely to experience hotter, drier summers, increasing both the frequency and intensity of wildfire events

Fire crew cuts could amount to 1,500 firefighters. Since 2010 we have already lost 20-25% of our fire crew (11,000-12,000).

The National Fire Chiefs Council has warned that funding changes could lead to £102 million real-term cuts.

Collaboration between farmers, conservation bodies, and fire authorities will be key to maximising outcomes. Farming communities boast decades of experience, which can be used to good effect.