

Consultation draft - guidance - muirburn code

This is a consultation draft of the revised Muirburn Code (2025).

About this document

The Muirburn Code outlines how to make muirburn safely and appropriately.

This consultation draft has been prepared in collaboration with stakeholders (the Muirburn Code Working Group).

If you would like to submit feedback, send to the licensing team by 5 May 2025.

Email: <u>licensing@nature.scot</u>

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Introduction

Moorlands are globally scarce, valued habitats. They are valued for their biodiversity and for their capacity to store carbon and reduce flood risk. Moorlands have intrinsic value and can help support rural economies and communities.

We are in a nature and climate emergency. All land management activities have a role to play in helping to address this. This includes managing our moorlands. Moorlands can include substantial areas of sensitive habitat, such as peatland and can provide habitat for ground nesting birds, such as curlew, golden plover and merlin.

Status of the Code

This version of the Muirburn Code was introduced by section 18 of the Wildlife Management and Muirburn (Scotland) Act 2024. It plays a key role in muirburn licensing. A licence holder 'must have regard' to the Muirburn Code. Non-adherence to the requirements set out in the Code can result in a licensing sanction.

The licensing approach will be delivered in line with the Scottish regulators' strategic code of practice and the Principles of Better Regulation, which underpin processes for habitat and environmental management licensing.

Purpose of the Code

This Muirburn Code sets out how to make muirburn safely and appropriately. The Wildlife Management and Muirburn (Scotland) Act 2024 states the Code may 'include provision as to a) how the thickness of a layer of peat is to be determined, b) the times of day muirburn may be made, c) safety requirements when making muirburn'.

The Code categorises actions according to whether they **must** be undertaken, either to avoid risk of criminal prosecution or to comply with the conditions of a muirburn licence. It also sets out actions that **should** be undertaken because they demonstrate best practice in moorland management.

Where and who does the Code apply to?

The Muirburn Code applies to all land managers and individuals who are involved in making muirburn on land they own or manage. It applies to all land over which muirburn is used as a management tool. It may also be of interest to those who wish to understand more about muirburn.

What is muirburn?

The definition of muirburn, as set out in Section 22 of the Wildlife Management and Muirburn (Scotland) Act 2024, is 'the making of muirburn include references to the setting of fire to, or the burning of, any heath or muir'. Muir is the Scottish word for moor and refers to habitats that are predominantly open and characterised by heather species and moorland grasses, for example, purple moor grass or mat grass. 'Muir' in the Scottish context can occur at the summit of our highest Munros and right down to sea level in some areas.

When is the muirburn season?

The muirburn season runs from 15th September until 31st March the following year. During the season all the licensable purposes set out in the section on legal requirements are permissible. The muirburn season aims to help protect ground nesting birds during their breeding season.

Out of season licences may be granted for specific purposes (see the section on legal purposes for further details). It is not permissible to burn for the management of moorland game or to improve grazing for livestock out of season.

Other methods to manage vegetation on moorlands

Muirburn is used as a tool to help manage vegetation, including heather, for a range of purposes, in a range of circumstances and by a range of people. Other techniques can also be used. These include:

- grazing
- cutting
- habitat restoration, for example re-wetting

A range of factors, including habitat condition and time of year need to be considered to identify which is the most appropriate technique in any given situation.

How will compliance be monitored?

All those who make muirburn must have regard to the Muirburn Code. In considering whether to grant a licence, NatureScot must also have regard to an applicant's compliance with the Muirburn Code. Compliance monitoring is a key aspect of any licensing approach. Compliance monitoring will consist of:

Desk-top checks

The licence holder will be required to provide details on how they have complied with the Muirburn Code as a condition of the licence. Desk top checks will assess the information supplied (inclusive additional details on return data) in relation to whether and how the Muirburn Code has been complied

On-site visits

Visits to the licensed land can be carried out to determine compliance with certain aspects of the Muirburn Code – the triggers for carrying out on-site checks can include follow up to specific, credible complaints, a police investigation or as part of a randomised spot-checking process.

Accreditation schemes

Compliance monitoring may also be incorporated into approved accreditation schemes which have institutional and multi-stakeholder support, such as 'Wildlife Estate Scotland' (WES).

Summary of legal requirements

This section sets out the legal and licensing requirements that you **must** comply with when carrying out muirburn. The principal legislation is set out in the Wildlife Management and Muirburn (Scotland) Act 2024. This legislation covers the setting of fire to, or the burning of, any heath or muir.

The primary legal requirement is that you must have a valid muirburn licence in place before you carry out any muirburn. More information can be found on the purposes for which you can apply for a licence in the section below.

This section summarises the key legal requirements relating to:

- safety requirements
- protected areas and species

The safety requirements, broadly speaking, relate to *how* to carry out muirburn and the requirements related to protected species and areas relate, broadly to *where* it is and is not appropriate to carry out muirburn.

Safety requirements

The primary safety requirement, as part of a muirburn licence, is that anyone making muirburn **must** have completed an approved training course. Other requirements are set out below:

You must:

- have sufficient people and equipment available to control the fire properly
- inform the landowner and any occupiers* within 1km of the proposed site (unless they have indicated in writing that they do not want to receive notification) the notification must be given after the end of the previous muirburn season, but not later than 7 days before starting muirburn it must be in writing (including text or email) or a local newspaper circulating in the area if 10 or more people need to be notified
- provide, if requested, additional information about dates, location and extent of the proposed muirburn to landowners and occupiers within 1km of the proposed muirburn, no later than the end of the day before burning
- comply with relevant Health & Safety regulations

*Occupiers should include those who manage or maintain infrastructure which is within 1km of the burn site e.g. wayleaves for electric lines.

You **must not**:

- burn between one hour after sunset and one hour before sunrise
- burn within 30m of a public road in such a way that it damages the road or endangers traffic on it
- cause damage to any neighbours' property or a scheduled monument
- fell (intentionally kill a tree) unless it is exempt (as set out in The Forestry (Exemptions) (Scotland)
 Amendment Regulations 2021)
- undertake burning which leads to deforestation

Protected areas and species

The following sections set out the legal requirements which **must** be followed when carrying out muirburn in relation to protected areas and species.

Protected areas are Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), and Special Protection Areas (SPA).

You must:

 obtain consent from NatureScot before carrying out any burning on SSSIs (if burning is listed as an 'Operation Requiring Consent (ORC)'

You must not:

- intentionally or recklessly damage the natural features of a Protected Area (SSSI, SAC, SPA, Ramsar)
- damage scheduled monuments, which are archaeological sites and monuments of national importance

Protected animal and bird species are all bird species and some animals which are protected under the Wildlife and Countryside Act 1981.

Wild birds

You must not intentionally or recklessly:

- kill, injure or take any wild bird
 - take, damage, destroy or otherwise interfere with the nest of any wild bird while that nest is in use or being built
 - at any time take, damage, destroy or otherwise interfere with any nest habitually used by any wild bird included in Schedule A1 of the Wildlife and Countryside Act 1981 (i.e. nest protection is all year round)
 - obstruct or prevent any wild bird from using its nest
 - disturb any Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young, or disturb the dependent young of such a bird, or while lekking
 - harass any bird listed in Schedule 1A of the Wildlife and Countryside Act 1981

Schedule 1A birds

- Golden Eagle (Aquila chrysaetos)
- Hen Harrier (Circus cyaneus)
- Red Kite (Milvus milvus)
- White-tailed Eagle (Haliaeetus albicilla)

Schedule A1 birds

- Golden Eagle (Aquila chrysaetos)
- White-tailed Eagle (Haliaeetus albicilla)

Wild Animals

You **must not** intentionally or recklessly:

- kill or injure protected reptiles or amphibians adder, lizard, slow-worm, great crested newt
 - kill, injure or take protected invertebrates such as marsh fritillary
 - kill, injure or take protected mammals, such as: badger, wildcat, red squirrel, mountain hare, otter, bats, pine marten or water vole (for water vole, protection is limited to disturbance within the burrow, and protection for their place of shelter)
 - damage destroy or obstruct access to the place of shelter or protection of a protected mammal (all the above species)
 - disturb a protected mammal when it is occupying its place of shelter or protection

The following additional actions will help ensure that you do not cause an offence:

- Survey the area for protected species and habitats prior to burning. This will identify if avoidance action is required, for example, areas within 1km of nesting golden eagles should be avoided, until breeding is complete.
- Identify if you need a species licence by checking details on the NatureScot species licensing webpages. The kind of actions which may require a species licence include burning within 30m of an otter holt (non-breeding), a badger sett or a pine marten den, within 200m of a wildcat den or otter breeding holt, or within 10m of a water vole burrow, or within habitat used by reptiles or marsh fritillary.

Wild plants

You must not intentionally or recklessly

 uproot or destroy any plants, fungi and lichens included in Schedule 8 of the Wildlife and Countryside Act 1981.

View a table of all of Scotland's Protected Species (this can be filtered by species).

How to carry out muirburn appropriately

Licensing purposes

All muirburn must be carried out under licence.

Failure to have a valid licence in place will constitute an offence. Licences can only be granted on the basis that muirburn meets one or more of the licensable purposes as set out in s13(2) of the Wildlife Management and Muirburn (Scotland) Act 2024.

There are 10 licensable purposes, 6 on non-peatland and 4 on peatland. In the context of the muirburn licences, peatland is defined as areas of peat with a depth of 40cm or more. See Annex 1 for details on how to measure the thickness of peat. As per the Act, muirburn for non-peatland purposes will be assessed to ensure it is 'appropriate' and muirburn on peatland will be assessed to ensure it is 'necessary'.

Out of season licences may be granted for conserving, restoring, enhancing or managing the natural environment, preventing or reducing the risk of wildfires causing damage to habitats and property and harm to people and for research. It is not permissible to burn for the management of moorland game or to improve grazing for livestock out of season.

For applications to burn on peatland there must be no other method of vegetation control which is practicable and the making of muirburn must be necessary for the specified purpose.

Licensable purposes	
Purpose	Description

Purpose	Description
Managing the habitats of moorland game or wildlife (non-peatland only)	This purpose allows the use of muirburn as a tool to maintain and manage habitats to support moorland game such as red grouse or other moorland wildlife.
Improving the grazing potential of moorland for livestock (non-peatland only)	This purpose allows burning as a tool to help improve moorland plants to support grazing for livestock.
Conserving, restoring, enhancing or managing the natural environment (non-peatland only)	 This purpose allows the use of muirburn as a tool to help achieve benefits to the natural environment through: conserving: protecting the natural environment from harm of destruction. restoring: bringing the natural environment back to its original or former condition, position, or state or assisting the recovery of an ecosystem. enhancing: improving the quality, value, or extent of the natural environment. managing: taking action to help support the natural environment.
Restoring the natural environment (peatland only)	This can involve the use of muirburn as a tool to restore natural environments by bringing the natural environment back to its original or former condition or state or assisting the recovery an ecosystem.
Preventing, or reducing the risk of, wildfires causing damage to habitats (peatland / non-peatland)	This purpose allows the use of muirburn as a tool to prevent or reduce the risk of wildfire to habitats.
Preventing, or reducing the risk of, wildfires causing harm to people or damage to property (peatland / non-peatland)	This purpose allows the use of muirburn to prevent or reduce the risks of wildfire to property such as forestry or buildings and to people, for example by protecting built up areas, roads or occupied buildings.
Research (peatland / non- peatland)	This purpose allows the use of muirburn to develop understanding on a specific area/topic within a research project.

Protecting species, sensitive habitats and soils

This section sets out how to carry out muirburn appropriately. It sets out actions which **must** be followed to comply with licence conditions and reduce risk of damage to the environment and actions which **should** be carried out as best practice.

Protected species

Protected species include all bird species and some animals and wild plants which are protected under the Wildlife and Countryside Act 1981. Some animals are also protected by the Conservation (natural Habitats, &c.) Regulations 1994 and the Protection of Badgers Act 1992.

Some bird species are specially protected, including Golden Eagle, White-tailed Eagle, Hen Harrier and Red Kite.

During the muirburn season upland birds may be nesting on the ground, crags or trees, and protected mammals may have young which are vulnerable to disturbance, which are not mobile and cannot be easily moved by the adult to another place of shelter or protection if their natal den is under threat from fire.

Reptiles, such as adder, may need time and a safe route to get away from fire and into undisturbed habitat.

Details of what you must do and what you must avoid doing are in the 'Summary of legal requirements' section of this Code.

Soils and landforms

Soils play a crucial role in the delivery of a wide range of ecosystem services, such as food provision, water regulation, and biodiversity. Scotland's soils hold over 300Mt C which is over 95% of all terrestrial carbon. The need to protect soils is recognised across a wide range of policy areas and is set out in the 2009 Scottish Soil Framework, the Scottish Climate Adaptation Plan and the Scottish Biodiversity Strategy. Landforms include mountains, slopes, cliff faces and other topographical features.

Steep slopes, exposure to wind and rain, low temperature, freeze/thaw process can have negative impacts on soil stability. These factors can be exacerbated by any damage to and loss of vegetation cover or other physical disturbance.

Steep hillsides and gullies

Actions which must be followed

- Do not burn on slopes steeper than 1 in 1 (>45 degrees).
- Only burn on a slope greater than 1 in 2 (>27 degrees) if you are experienced and use appropriate techniques and equipment. A minimum of two trained persons must always be present and due consideration must be given to safety and the stability of the slope.
- Do not burn where vegetation is kept short by high winds (wind clipped) and where burning risks removing vegetation cover, leading to erosion. This includes summits (the highest point of a hill or mountain) or ridges.
- Do not burn in gullies they can act like chimneys, drawing air upwards and increasing fire intensity. A gully can be defined as a deep, narrow ravine formed by water with steep sides with a slope greater than 1 in 1 (>45 degrees).
- Do not burn in scree slopes to avoid damaging lichen and destabilising the scree.

Best practice - Actions which should be followed

 Only burn on a slope steeper than 1 in 3 (>18 degrees) if you are an experienced practitioner and use appropriate techniques and equipment.

Protecting Peatlands

Peatlands in good health are valuable carbon stores and have many benefits for people and nature. They are important in tackling climate change and play a role in flood regulation, water quality and support nationally and internationally important biodiversity. Further details on how to measure the thickness of peat to identify peatlands for the purposes of muirburn are summarised at Annex 1, including our peat depth measuring guide.

Areas with peat

Actions which must be followed

- Do not burn within 30m of peat hags, bare peat or areas of eroded peat.
- Do not burn areas which have been restored through Peatland ACTION.

Best practice – Actions which should be followed

• You should not burn on peatland areas within 30m of an artificial drain (grip). Drains can usually be clearly visible as a set of regularly spaced linear features on the ground or from aerial images.

Fire-free areas

Within the area you wish to burn it is best practice to leave some areas which are not burnt. These are referred to as fire-free areas.

Actions which must be followed

- Do not burn in an area identified as fire-free in an agreement such as:
 - SSSI consents
 - as part of publicly and/or privately funded schemes and agreements such as: agri-environment schemes, areas restored through Peatland ACTION, management agreements with NatureScot or Historic Environment Scotland

Best practice - Actions which should be followed

 Identify a network of patches that are not burnt. Some of these will be features identified in the sections above. For example: waterbody buffers, steep slopes, peat hags and historical features.
 There should be fire-free areas in all parts of the landscape.

Native Woodland

Moorlands and heaths are characterised as open habitats, but they can include areas of native woodlands and trees e.g. along river edges or on steep slopes. Areas of native woodlands or native trees and shrubs need to be considered when carrying out muirburn.

Woodland, woodland edges and native trees and shrubs

Actions which must be followed

 Do not burn native woodland and shrubs including juniper bushes as they are part of an Annex 1 habitat.

Best practice - Actions which should be followed

Leave a protective buffer of at least 10m around native woodland trees and shrubs.

Other vegetation

Best practice - Actions which should be followed

 Do not burn areas where bracken is present in other vegetation as burning is likely to promote bracken expansion. Dense stands can be burnt in combination with other measures as part of a restoration strategy.

Special types of heath

Actions which must be followed

 Do not burn Scottish Liverwort heath, which is mainly found in the west of Scotland. It is a rare habitat, rich in fire-sensitive liverworts.

Waterbodies (rivers, burns, lochs and lochans)

Moorlands and heaths often encompass one or more waterbodies. It is important to take them into account when carrying out muirburn.

Edge of waterbodies

Best practice - Actions which should be followed

Establish fire-free buffer zones as detailed in this table:

Water courses and fire-free buffer zones		
Type of water course	Water courses <2m wide	Lochs, lochans and water courses >2m wide
Size of fire-free buffer zone	2m	5m

Do not use watercourses as primary firebreaks. In an emergency they can be considered as a back-up to cover the failure of a primary firebreak. Wetter vegetation or dips in the ground beside watercourses may be suitable as firebreaks.

Flooding and water resources

Actions which must be followed

Ensure that muirburn does not cause pollution of watercourses.

Best practice - Actions which should be followed

Consider where there are areas which are acid-sensitive, used for drinking water (see
 <u>Drinking Water Protected Areas</u>
) or where there is a high flood risk whether you need to take
 additional precautions or restrictions. If this is the case, you should contact SEPA or Scottish
 Water.

Existing management

Best practice - Actions which should be followed

Take into consideration that areas subject to heavy grazing and browsing are unlikely to be suitable for burning. A combination of heavy grazing and muirburn is likely to lead to grasses becoming dominant, resulting in the loss of heather and species diversity.

Burn size, firebreaks and frequency of burning

Size of burn area

The size of individual fires should be dictated by the conditions, interaction with other management (especially grazing) and the management objectives for the area.

- Fires must not be bigger than can be controlled by the available people and equipment.
- Fires which are not adequately controlled can burn indiscriminately.
- Large fires are less likely to create the mosaic of habitats and vegetation ages that provide forage through the year and increase the biodiversity value.

Firebreaks

Firebreaks are a critical control measure when conducting muirburn. They should be planned and or be created prior to lighting fires. The type and size of firebreak will depend on the conditions on the day.

Frequency

The minimum recommended muirburn frequency in grassland ranges from 4 to 10 years, depending on growing conditions, the type of grassland and the purpose for which muirburn is undertaken. In heather-dominated vegetation, muirburn frequency should be determined by the rate of growth of the heather. In the most productive situations, this could be 10 years and it may take much longer in other areas.

How to carry out muirburn safely

Muirburn training

Section 12 of the Wildlife Management and Muirburn (Scotland) Act 2024 states that a 'person intending to make muirburn on land to which the licence relates **must** complete a training course approved under section 13A before making muirburn'.

Approved course details and training providers are available on the NatureScot website.

Summary of safety requirements

Fire Control Equipment

You **must** have suitable and appropriate equipment for a safe and successful burn. All equipment should be in good working order and checked prior to use. All persons making muirburn should have a fire beater appropriate to the vegetation type – note that different types of beaters are best suited to different vegetation. Water can be applied by knapsack sprayers, water tank and pump combinations and fire fogging units. It is important to ensure adequate supplies of water are available. Cutting equipment (tractor-mounted flail or brushcutter) and commercial leaf blowers can also be useful. It is important that before using any fire control equipment that the practitioner completes all relevant training.

Examples of fire control equipment includes:

- Drip torches/gas burners
- Beaters
- Fogging units
- Hand tools
- Brush cutters
- Leaf blowers
- Tractors (ensuring completion of tractor-on -slopes course)
- Swipe or flail mower

Personal Protective Equipment

Personal Protective Equipment (PPE) **must** be worn by all persons making muirburn regardless of the role they are to fulfil. The PPE should include:

- Spark proof boiler suit or jacket and trousers minimum safety standard EN ISO 11612 and EN ISO 11611
- Boots (not steel toe capped)
- Gloves (chain saw or similar)
- Eye protection (either face visor or goggles)
- Ear defenders (if operating machinery)
- Face mask, coverings or hoods (of appropriate grade)
- Carbon wipes

All PPE should be maintained in good condition and fit the wearer correctly.

How to plan muirburn

A robust burning plan allows some control over the threats that can be posed by burning. A plensures that all considerations are covered and that everyone who will be involved knows whow to locate the key information. There are two types of plan:

- 1. **Ahead of the burning** a plan which identifies the aim of the burning, how this will be achieved and what has been considered to ensure it is appropriate.
- 2. **On the day of the burn** a plan which sets out the factors which need to be considered on the day of the burn this plan should be closely aligned to a risk assessment to ensure that the burn is carried out safely.

Ahead of the burning – what do you want the muirburn to achieve?

The plan should include:

Objectives of burning

This needs to fit with a licensable purpose. It should describe what the objectives are e.g. to increase grazing potential for livestock and identify which licensable purpose it relates to.

Choosing where to burn

Consider whether the area is peatland or non-peatland and any other topographical or biodiversity factors such as presence of breeding birds or scree slopes.

Choosing when to burn

Consider the muirburn season, weather and vegetation conditions as well as rotation periods.

Planning how you are going to burn

Consider safety requirements, size of burn/s and the location of any natural firebreaks.

How to reduce risks

Identify risks to health and safety as well as to habitats and species and set out how these risks will be mitigated. These details should be set out in a risk assessment.

Equipment

This should include a list of all the PPE and other equipment which will be made available and used on the day. Details of this are included in the training course and summarised in the section above on safety requirements.

The table below sets out details which should be considered ahead of burning. It can be used as a checklist to ensure that all aspects have been thought of ahead of burning.

Checklist ahead of burn		_
Action	Detail	

Action	Detail
Consult your burning plan	This should identify where, when and how to burn, and the constraints on burning.
Obtain consents and a muirburn licence/s	Ensure a valid licence is in place. Obtain consents if required from government agencies, to ensure that the proposed muirburn will comply with all relevant legislation.
Inform the landowner and occupiers within 1km of the proposed muirburn site	Notification must be given in writing after the end of the previous muirburn season, but not later than seven days before starting muirburn. For full details, see the 'Legal requirements' section of this code.
Prepare equipment	Preparations should be completed before each burning season, so that burning can take place as soon as conditions are suitable.
People preparations	Identify sufficient people to carry out the muirburn. Consider first aid training and requirements.
Warning notices	If burning is planned close to popular areas for public access, consider preparing warning / interpretation signs.
Liaison with the Scottish Fire & Rescue Service	Inform the appropriate Control Centre.
Emergency plan	Prepare an emergency plan and identify back-up help that can be mobilised by VHF radio (where a network exists) or by mobile phone (check the mobile phone coverage in the area).
Insurance	Check that there is adequate third party and employer's liability insurance cover in place for burning operations.
Risk Assessment	Prepare a Health & Safety Risk Assessment.

On the day of the burn

This section focuses on the day of undertaking the muirburn and the factors and risks which need to be considered. The table below sets out the key actions which should be taken and factors which should be considered.

Checklist for the day of the burn		
Action	Detail	
		_

Action	Detail
Fire & Rescue Service	Notify the appropriate Control Centre before and on completion of burning each day.
Warning signs	Erect warning signs if burning close to popular areas for public access.
Weather conditions	Obtain a weather forecast.
	Is the weather suitable for burning now and is it expected to change during the day? What is the wind speed and direction? Has a threat of wildfire been identified through the Fire Danger Rating system?
	Is the condition of the vegetation suitable for burning safely?
	Decide where to burn in the expected weather conditions. If conditions change, re-assess.
Briefing	Carefully brief sufficient people to carry out the planned burning safely. At least 1 person should know the area well.
Risk assessment	Review the risk assessment and confirm it is acceptable to proceed.
Equipment	Make sure all equipment required for safe burning is available and fully serviceable.
Persons making muirburn	Check that all persons making muirburn are properly dressed and equipped. Confirm that extra people are on call to assist, if necessary.
Firebreaks	Prepare firebreaks before lighting fires – the firebreaks to be used or created will depend on the conditions on the day.
Test fire	Choose a safe place for a test fire to check fire behaviour and control methods. Alter methods and review the risk assessment. Only burn if the risks are acceptable.
Welfare	First aid kits should be carried and drinks should be available.

Further guidance and information

Moorland Management Best Practice (MMBP)

This section signposts to best practice guidance on moorland management available on the Moorland Management Best Practice website - Moorland Management Best Practice Guidance

A suite of Moorland Management Best Practice Guides is currently under development. Published guides are available via the link above. More will be added as and when guides are finalised. The guides are structured under different headings, with those most relevant to muirburn described below (N.B. some of the categories do not yet have any published guides sitting under them).

Carbon and peatlands

Moorland management can play an important role in carbon storage, soil condition and peatland restoration and management. It is helpful to consider moorland activities such as muirburn, grazing and vegetation cutting in terms of their impacts (positive and negative) on the overall, long-term carbon budget and whether they are appropriate.

Biodiversity

All moorland management, including muirburn, can play an important role in supporting biodiversity objectives. This can include taking into account habitat management and species management and protection for promotion of wider biodiversity and ecosystems recovery. The impacts on moorland species, like waders, should be considered when managing land as should the potential impact on reptiles, small mammals and invertebrates. Flora should also be considered when carrying out management.

Muirburn

This will include revised versions of the supplementary information which sat alongside the previous version of the Muirburn Code. The current guidance covers topics such as: safe working distances, fire behaviour, planning for burning, planning for cutting, offences and legal requirements, muirburn for grazing management and grouse moor management. Other topics can be considered including other methods of vegetation control.

Glossary

Climate and nature emergency – The Scottish Government declared a climate emergency in April 2019. The Climate Change (Scotland) Act 2009 sets out the legal framework for climate action in Scotland. The risks of increasing global temperatures are far reaching. Alongside the climate emergency there has been a significant decline in nature with large numbers of species increunder threat.

Landforms - Landforms are features of the surface of the Earth. They can include mountains, slopes, cliff faces and other topographical features.

Moorland management – Mountains, moors, hills and heaths cover more than 50% of our land area. They extend from near sea level in the north and west to our highest mountain tops. All these different habitats are managed in various ways for a range of objectives. This can include objectives to achieve woodland targets, for sporting interests, agriculture, peatland restoration and many more.

Muirburn – According to the Wildlife Management & Muirburn (Scotland) Act 2024: 'references to making muirburn include references to the setting of fire to, or the burning of, any heath or muir'.

Net zero targets – Scotland has a target to reach net zero emissions by 2045.

Peatlands - More than 20% of Scotland is covered by peat. There are four main natural peatland habitat types in Scotland: blanket bog, raised bog, fen and bog woodland. Peatlands hold most of Scotland's carbon store (they are estimated to hold the equivalent of 140 years' worth of Scotland's total annual greenhouse gas emissions), and so are vital in helping us to tackle climate change. Healthy peatlands provide many benefits to us all. It is estimated that 80% of Scotland's peatlands are damaged. Emissions from peatlands are one of the biggest single sources of greenhouse gas emissions in Scotland. Because so much of Scotland is covered in peatlands and so much of that is damaged, reducing peatland emissions are a particularly important part of efforts to get to net zero in Scotland (in distinction to the rest of the UK).

Wildfire - A wildfire is any uncontrolled vegetation fire.

Further references, resources and contacts

- Wildlife Management & Muirburn (Scotland) Act 2024 (legislation.gov.uk)
- Moorland Management Best Practice Guides (moorlandmanagement.co.uk)
- Scottish Forestry (forestry.gov.scot)
- NatureScot Peatland Standard
- NatureScot Licensing
- NatureScot Protected Species

Annex 1: How to measure peat depths

Identifying areas of peatland and non-peatland is fundamental to applying for a muirburn licence. This is because the licensable purposes are determined by whether an area is or is not peatland. Peatland is defined in Section 22 of the Wildlife Management and Muirburn (Scotland) Act 2024 as 'land where the soil has a layer of peat with a thickness of more than 40 centimetres'.

There are 3 key steps to measuring the thickness of peat.

Step 1

Use the Muirburn Peatland Map (spatialdata.gov.scot) to check if the area you wish to license is likely to be peatland or not.

The map is based on existing soil map and modelled data from the James Hutton Institute. It indicates 3 categories of land:

- peatland (peat layers of 50cm or more present)
- non-peatland (no peat layers present)
- uncertain (peat layers less than 50cm present)

Step 2

To be licensed for a non-peatland purpose, you must carry out 2 types of survey:

- 1. a walkover of non-peatland areas
- 2. a full survey of uncertain areas (at 100m intervals)

If you apply for an uncertain area without survey data, it will be treated as peatland.

We have published guidance which describes what you need to do and how to record the information. It also explains how to use a peat probe to measure peat depths.

Read our peat depth survey guidance.

Step 3

Use this information to identify where you want to burn and for what purpose, remembering that there are different licensable purposes depending on whether the area is peatland or non-peatland. If it is peatland, alternative methods must be considered.









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