

Supporting guidance for Bracken Management

This is an old version of the page

Date published: 21 January, 2022

Date superseded: 7 November, 2023

For recent changes to this guidance, please see the [bottom of the page](#).

Introduction

Bracken is a native plant with conservation benefits and is a natural component of many woodlands and open-ground habitats. Stands of bracken can provide a valuable habitat for wildlife, especially where the bracken canopy is relatively open.

However, bracken is a successful coloniser and can spread into grassland, moorland and heathland. When bracken encroaches on these habitats, it needs to be controlled.

Why control bracken?

This option aims to prevent the loss of heathland, moorland and grassland of conservation value, and to restore, enhance or maintain their open nature. Restoring a more open structure to the existing vegetation will encourage characteristic native plants to thrive and provide breeding and feeding grounds for associated wildlife. Priority species that may benefit include juniper, pearl-bordered fritillary, northern brown argus, slender scotch burnet, black grouse and skylark.

How best to control bracken on your land

When considering bracken control, you need to think carefully about why you are doing it and what you would like to achieve. Consider whether control is required and, if so, whether the objective is to manage existing populations, or to eradicate them. Identify any sensitive areas and non-target species that might be adversely affected by bracken management.

Bracken is a native plant, and you will not always want to eradicate it; sometimes you will want to maintain a patchy cover to benefit species associated with bracken. Consider what vegetation will replace bracken, and how to manage this vegetation recovery in the longer term. If you decide to take no action, monitor the spread of bracken.

Your control programme should consist of an initial treatment and repeated follow-up treatments. **This applies to all forms of bracken treatment: manual, mechanised or chemical.** Control measures can include manual (hand cutting, hand pulling), mechanical (cutting / rolling) and / or chemical control, as well as the use of livestock.

Where you have already claimed primary treatment and follow up bracken treatment through AECS, you can only include follow up treatment over a much reduced area in any new application and no more than two follow up treatments can be included. We would not expect to fund another aerial treatment unless it is to a new area of land, therefore any follow up must be ground based treatments.

A control programme should cover a five-year period and several different control measures might be required. You need to consider the slope and accessibility of the site when choosing a control treatment. The use of ground vehicles will not be appropriate in some areas due to steep slopes and difficult access.

Cutting

If you have opted for Primary treatment of bracken – manual, then you should cut bracken at least twice in the first year (in May / June and again in July / August) as the fronds start to unfurl. More frequent cuts than this are beneficial in the early years, to prevent the plant photosynthesising. This results in the plant taking energy from the root system, weakening it over time.

Claim the total hectareage of bracken you plan to treat. So, for example, if you have a 10ha field with 5ha of bracken, then claim 5ha in year one (you don't claim for each cut).

This capital item also covers any follow up treatment and you will need to cut at least twice every year for the next five years, for control to be effective. Further detail on how to claim this is below.

Rolling

Rolling crushes young bracken fronds that emerge in the spring and weakens the plant by bruising the stems and causing them to bleed. Rolling should be carried out again later on in summer, and should be repeated over a number of years to be effective.

Where stands are particularly dense and vigorous, you may need to cut / flail / roll three times per year. Where ground-nesting birds are present, mechanical control should be avoided during May–July.

Herbicide application

This relates to Asulam. Ground treatment with Asulam is now only permitted on designated sites and land covered by an agri-environment scheme.

AECS does not fund general Glyphosate use for bracken control, as it will kill all vegetation. The only exception, is where a weed wipe can be used for dense stands of bracken. However where you are considering glyphosate applied by weed wiper in your bracken control regime you must identify the areas where control would be made using a weed wiper in your approved bracken control plan, this would generally not be eligible for AECS payments as the land is not BPS eligible. Please refer to Bracken control best practice guidance listed in the further guidance section below.

Aerial spraying

Aerial spraying is often suitable for large areas of dense bracken that are not easily accessible to a ground vehicle. Asulam, the only selective herbicide to control bracken which can be applied from the air, has been taken off the market. An Emergency Authorisation (EA) covering a time limit has been given in previous years. Each year an EA is applied for, but in future, if you want to use Asulam there may be a requirement to provide survey data for impacts on mammals and non-target plants before and after treatment, which you will have to commit to delivering. If you use Asulam you also have a responsibility to submit a record to the Bracken Control Group following application. The [Bracken Control Group](#) provides regular updates on developments in bracken control and emergency authorisations so please consult to their website.

It can be difficult to get an aerial spraying contractor, so you must provide evidence at application stage, that you have contacted a contractor and they have confirmed that they can do the work on your site. An email response is acceptable.

Due to the issues around ongoing use of Asulam, we advise that where you can adopt manual/mechanised control you do so and **only** include areas of bracken you can treat within the lifetime of the contract.

It may not be possible to vary contracts in future to move capital funding to the next year, so for this reason, plan bracken control according to what you are able to deliver.

Overwinter grazing

After primary treatment, livestock can be used to help break up the bracken litter and expose the underground rhizomes to frost damage through poaching. Livestock grazing can be used as part of a non-chemical control strategy, complementing cutting or rolling over spring / summer.

Pigs have been used as bracken grazers successfully in the past, with results showing that they specifically target bracken over other species, uprooting the rhizomes which are then desiccated and die.

There is a risk of bracken poisoning and proliferation of ticks in bracken stands can adversely affect animal welfare so you need to check animals regularly. You will also need to be careful that livestock grazing does not lead to soil erosion.

Hand pulling

Hand pulling is rarely used as part of a bracken control strategy, because it is labour intensive. Nevertheless, hand pulling can be an effective control strategy for smaller patches of bracken and should not be completely discounted.

Do you require consent?

If you are proposing to use chemical control, you may need to consult the appropriate bodies. These include the Scottish Environment Protection Agency, NatureScot, your local water authority, and your local authority environmental services. Depending on the circumstances, this may take place as part of the Scottish Rural Development Programme application process, or as a separate application. It is your responsibility to determine who you legally need to contact.

If spraying within one metre of the top of the bank of a watercourse, you, or your spray operator must have Scottish Environment Protection Agency authorisation.

For aerial spraying, your spray operator must obtain a permit from the Chemicals Regulation Directorate before spraying takes place. Scottish Water and the relevant local authority will be consulted when you apply for a permit.

If you plan to use chemicals, it is essential that you confirm which products are approved for bracken control. You must adhere to the statutory conditions of use on the product label.

After the initial control work

You may burn bracken litter where deep bracken litter prevents recovery of other vegetation. Do so as a follow-up to aid rehabilitation of a site after you have removed a dense stand of bracken. Measures to establish desired vegetation should be put in place to prevent colonisation by ruderal species, like rosebay willowherb. Any burning you carry out should follow the muirburn code.

Bracken is persistent and invasive, so you need to monitor its growth to prevent re-infestation. Land use will affect the likelihood of bracken becoming dominant again in the future. Future grazing should be carefully managed in order to reduce the risk of bracken regaining dominance.

Follow up treatment

You must apply for follow-up treatment as part of your application.

For manual treatment, you must estimate the area you think will require follow-up treatment, however, you must only claim for the actual area you treat in subsequent years.

The Primary Treatment of Bracken - manual capital item covers primary treatment and any follow up. This item can be claimed annually.

Estimate the area you think will require follow up each year. You may need to treat a similar area in the first three years, with the claim area reducing in years four and five. When it comes to submitting a claim for follow up treatment, you must only claim the area that was treated on the ground.

Follow up treatment of bracken for mechanised or chemical methods

Claim the same hectareage as you did for Primary Treatment, as the payment rate is reduced for follow-up, however, you can only claim follow up a maximum of twice during the five years of the contract.

Two years must be left between phases of spraying in order to allow dormant buds on the surviving bracken rhizomes to emerge. Therefore, for chemical treatment, follow up treatment in years three and five is recommended if the primary treatment is in year one. If the primary treatment is in year two, then only one follow up in year four should be claimed.

As initial mechanised control is often followed up with chemical control, you should aim to leave two years between chemical applications.

If you opt for entirely mechanised control, you are likely to have to undertake annual mechanised follow up. However, you can only claim the follow up payment twice over the five years. The rate is such, that two follow up claims are likely to cover the costs of mechanised control.

How to plan the work

Describe your programme of treatment and follow-up actions (where applicable) in a bracken management plan.

You must submit a completed Bracken Control Plan following the template below.



[Bracken Control Plan \(MS Word, Size: 136.4 kB\)](#)

doc_external_url: <https://www.ruralpaymentsandservices.org/media/resources/Bracken-Control-Plan-AECS-April-2015.docx> [Plan template]

Your plan should include a 1:10,000 map (or 1:2,500) and describe the following:

- the habitat(s) of conservation value which will benefit from bracken management – stated in hectares and shown on your map
- the area of bracken to be actively managed – stated in hectares and shown on your map. Note that stands of dense bracken, classed as ineligible for the Basic Payment Scheme, can be treated, but the Agri-Environment Climate Scheme will not fund this treatment as it is classed as non-agricultural land. Therefore, please ensure you do not claim for these areas
- the extent of bracken – stated in hectares and shown on your map
- the density of the bracken cover – see descriptions in published guidance (see [Further information](#) section)
- the type of management you propose across the area (eradication or control or no action) and the treatments you propose to use to achieve this, including any follow-up action. You should choose an appropriate method of control in accordance with published guidance
- where you propose to eradicate or control bracken you should describe the type of vegetation you expect will replace it
- any sensitive areas / buffer zones where there should be no bracken control should be shown on your map
- how you propose to monitor the success of your control work

Your plan should identify the locations of sensitive areas and appropriate buffer zones, including the following:

- where plant or animal species of conservation value are present and are likely to be damaged by the control method, e.g. ferns damaged by spraying, or nesting birds damaged by mechanical control
- gullies or steep slopes where regeneration of more desirable vegetation will be difficult or impossible to achieve and soil erosion may result
- close to ponds, lochs or watercourses, if chemical control is proposed
- where there is a well-developed woodland flora, e.g. bluebells, under the bracken canopy
- archaeological features which might be damaged by mechanical control

Further information

- [SEARS – Bracken Control: A Guide to Best Practice](#) – 2008
- [Muirburn code](#)

Recent changes

Section	Change
Cutting	More information added.
Follow-up treatment	Clarification as to when Follow up treatment can be claimed.
How best to control bracken on your land	Additional information provided.

Previous versions

[Previous versions of this page](#)

Download guidance

Click 'Download this page' to create a printer-friendly version of this guidance that you can save or print out.