

Local Wildlife Sites – South East Wales Project

The following information outlines the best practice guidelines for managing the habitat type listed below in a manner that is sympathetic to wildlife. It is part of a series relating to various habitat types and management issues that have been produced by your local Wildlife Trusts.

No.12 Bracken Control

What is Bracken?

- Bracken is one of the commonest ferns in Europe and the only one that is found in large stands.
- The fronds are typically 3ft high but can grow 6ft+ in the right conditions and it often grows in extensive, closed communities.
- It prefers a well-drained soil and is often found growing on the sides of hills.
- Bracken is a native species and as such is an important and natural part of our landscape. It can be important for many forms of wildlife including birds such as the Nightjar and Whinchat as well as supporting rare fritillary butterflies which depend on the violets that grow in its shade. Bracken can also provide the necessary shade for the flourishing of extensive swathes of Bluebells.
- It was originally a woodland species, however it is often a vigorous and aggressive competitor and now occurs in a wide range of habitats in the UK. It poses a significant threat to many species-rich grasslands and heaths and can quickly spread across these areas, particularly if the areas are neglected.



Bracken in winter



Bracken fronds



Dense Bracken where unmanaged,
scattered small plants where managed

Why does Bracken need to be controlled?

- “Bracken” whilst a valuable habitat in its own right, particularly where it forms a mosaic with other habitats, can if present in abundance in the “wrong” location severely reduce the ecological value of grassland/heathland habitat as other species are crowded/shaded out.
- It can reduce the area available for grazing livestock.
- It can be toxic and carcinogenic to stock and have a negative impact on human health.

Management Recommendations

Prevention

- Prevention is better than cure. It is far better not to give opportunity for undesired levels of Bracken to gain a foothold in the first place.
- To do this the aim is to ensure appropriate levels of cutting/grazing. It is however recognised that the generally low intensity levels of grazing necessary to manage grassland sympathetically for wildlife can lead to some Bracken development. This should be monitored and if levels of Bracken become greater than desired they should be dealt with before dense stands form which are more difficult to deal with.

Control

Is Bracken control necessary or desirable?

Before taking action to control Bracken its conservation value should be assessed together with that of the habitat it is encroaching upon. The following should be considered when assessing the ecological value of Bracken:

- **Bracken of Higher Conservation Value**
 - ❖ Providing shade to species normally found in woodland i.e. swathes of Bluebells, Wood Anemones & violets.
 - ❖ Stand is not too tall or dense and allows other flora to flourish.
 - ❖ Is present as part of a mosaic of other habitats, typically areas of open grassland and scattered scrub (Fridd habitat).
 - ❖ Supports important wildlife such as breeding birds and fritillary butterflies.
- **Bracken of Low Conservation Value**
 - ❖ Extensive tall, dense Bracken stands that have limited flora beneath them.
 - ❖ Thick build-up of dead Bracken material coating ground suppressing other growth.
 - ❖ Not in a mosaic with other habitat types i.e. scattered scrub, areas of open grassland.
 - ❖ No breeding birds in Bracken stands.
 - ❖ No known breeding colonies of fritillary butterflies.

Advice and surveys can be provided to assist with this.

As a general rule you would only be wishing to clear Bracken if it is of lower conservation value and encroaching on high conservation value grassland/heathland. Higher conservation value Bracken would generally be left although some control may be necessary to strike a balance with other high value habitats in the area.

Should it be deemed necessary to control Bracken then the following is recommended, although techniques depend upon the extent of the bracken and the habitat that you're trying to protect/restore:

- The trampling action of livestock can go a long way to help keep bracken in check and is an important part of long term control.
- However where bracken is extensive or no livestock are available other measures will need to be considered.
- A variety of both mechanical and chemical bracken control methods exist, depending upon the extent of the bracken, topography and money available (see below).
- It is also key to consider the proximity to water courses, the presence of nesting birds and the presence of other ferns that are of interest.

Mechanical Treatment - Cutting/crushing/bruising.

- To be effective it is necessary to cut/roll/flail the bracken twice in the first year, in May/June and again in July/August, followed by one cut each year for the next few years.
- This should not be undertaken if ground nesting birds are present and health & safety guidelines should be followed (bracken is thought to produce carcinogenic spores from July to September).
- For large areas bracken ploughing and burning techniques are also sometimes used.
- To complement this, the treading action of livestock is also useful and winter feeding can be used to attract stock onto the site. This will help damage bracken buds or fronds that are close to the surface and mean the litter is disturbed and broken up encouraging frost penetration to rhizomes.

Chemical Treatment

- Spraying bracken, using herbicides is sometimes advocated.
- Asulam (Asulox) is a selective herbicide and has relatively little permanent effect on underlying vegetation, but it will kill other ferns.
- Spraying should be done after the bracken fronds have fully expanded to ensure maximum absorption of the chemical. This usually occurs between late July and late September. A variety of application methods are available depending upon the extent of the bracken and site topography.
- For large, dense stands a tractor/ATV can be used to tow a roller with wiping gear (weedwipe) and on smaller, patchy stands, knapsack sprays can be used for the targeted treatment of fronds.

- A combination of mechanical and herbicide application is often the most effective strategy.
- It should be noted that these treatments are unlikely (or indeed is it desirable) to totally eradicate the Bracken, but should keep it under control.
- However it is crucial that monitoring and follow up treatments, together with grazing management is employed to ensure a long term strategy to retain control.

Should you require any further advice regarding the management of your Local Wildlife Site please do not hesitate to contact your local Wildlife Trust:

Gwent Wildlife Trust

Tel: 01600 740600

e-mail: info@gwentwildlife.org

Wildlife Trust of South & West Wales

Tel: 01656 724100

e-mail: info@welshwildlife.org

Other toolkits available are:

No.1 Neutral Grassland (Hay Meadows)

No.2 Neutral Grassland (Pasture)

No.3 Acid Grassland

No.4 Calcareous Grassland

No.5 Marshy Grassland

No.6 Marsh Grassland (with Marsh Fritillary)

No.7 Heath

No.8 Hedgerows

No.9 Saltmarsh & Coastal Grazing Marsh

No.10 Ponds & Lakes

No.11 Scrub control

No.13 Invasive weed control (natives – thistle, dock etc.)

No.14 Invasive weed control (aliens – Japanese Knotweed, Himalayan Balsam etc.)

Further useful documents include:

- ❖ *Bracken management & control – Natural*
England: www.publications.naturalengland.org.uk/publication/35013
- ❖ *Bracken management in the uplands - RSPB:*
www.rspb.org.uk/ourwork/farming/advice/details.aspx?id=204253

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