



Original thinking... applied



## Bracken Control Case Studies

# Bruising



This is a summary of the information that has been kindly provided by people with current experience of controlling bracken using hand pulling and whipping in different parts of the UK. It provides some real-world experience to supplement the preliminary guidance about each control method.

The detail is limited by the amount of information available. More case study

information is welcomed to allow us to add to the guidance. Please email details to: **Bracken@naturalengland.org.uk**

Where contributors have given their permission to share the information they provided, this can be accessed via the link at the end of the document.

## Highlights

- Bruising reduces bracken density.
  - For the best results treatment should take place at least twice per year, in mid-June and again in late July - mid-August. This should be repeated for three or more years.
  - There are legal restrictions to protect breeding birds if present, which may limit the period that mechanical bracken management can take place in some areas. To avoid disturbance, work may need to be delayed until later in the season once wild birds have finished nesting.
  - An ATV drawn bruiser has been used successfully to provide rides in dense bracken to draw livestock into bracken areas and to facilitate gathering.
  - On one upland farm, keeping the bruiser on the back of the quad allowed a "little and often" approach to control. This achieved about a 30% reduction in density in the first year and as much as 75% after two years.
  - Deep bracken litter reduces the rate of progress to a more diverse habitat. If bruising is followed up by cattle or pony grazing, bracken litter is dispersed faster. Dispersal by sheep takes longer.
  - On some sites, brambles will encroach after the bracken is removed and will need to be managed.
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## Case Studies

### Carnog Working Horses

Extensive experience has been gained using a horse drawn bruiser to control bracken, normally once a year, on a wide range of sites, from a base in Powys. Three sites, a parkland/wood pasture, a steep and awkward 'pasture' and a sandy heathland) are compared and the benefits of following bruising with livestock grazing are highlighted. The sites responded at different rates to bracken control, in part determined by the vegetation available for regrowth and follow-up treatments.

### Botton Head Farm Forest of Bowland

The case study provides a history of bracken control on the farm. Currently, the favoured method is to carry out initial control using a 3-gang bracken bruiser and to follow this with cattle grazing.

### Historic England

Field trials in Northumberland and Devon from 2013 until 2020 compared cutting once, using a tractor or quad towed topper or brushcutter in late July, with bruising of bracken.

For the bruising a quad-towed bruiser was used in late July for one treatment and in some areas double bruising was undertaken. This comprised of a first treatment in mid-June and a follow-up treatment when the regrowth was tall enough to bruise (September at the latest) on the historic sites.

Cutting was found to be more effective than bruising and reduced bracken density by c80% after 8 years in Northumberland and 30% after 3 years in Devon, with improved understorey cover.

In relation to the historic environment, cutting, (double) bruising and cattle caused disturbance and displacement of the part-buried features of interest.

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## Case Studies

### Cairnsmore of Fleet NNR Dumfries & Galloway

Deer and wild goats are the only grazers on the reserve. To control the encroachment of bracken, both tractor mounted and ATV bruising equipment has been used.

### RSPB Wood of Cree Reserve Dumfries & Galloway

Annual treatment in early autumn with an ATV drawn bruiser has reduced bracken height and density.

### Mid and West Wales Fire and Rescue Service

A bruising attachment was fitted to remote-controlled cutter to control bracken and reduce wildfire risk.

### Farmer, Inverness-shire

Land is being restored after being redundant for 70yrs. At the start the bracken was over 6 feet tall on parts of the farm. A bracken bruiser has been used to reduce the density and height of the bracken; this has encouraged the sheep to spread out and further control the bracken. After an initial attack on the bracken, the bruiser remained hitched to the quad-bike so that a 'little and often' approach could be used to expand the area controlled.

## Further Information

Click on the link(s) below for the original source of information and further details.

- [Carnog Working Horses Case Study Link](#)
  - [Botton Head Farm, Forest of Bowland Case Study Link](#)
  - [Historic England Link](#)
  - [Cairnsmore of Fleet NNR, Dumfries & Galloway Case Study Link](#)
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