

Bracken control including grazing Extracts from Nibblers online discussion group

Dear all

This request for advice comes from Steven Rogers in Gwent and I thought it would make for some good nibblers fodder. We don't hear much about Wiltshires in conservation grazing circles despite the obvious advantages of them not having a fleece. Nor have we had much discussion about bracken control recently. For starters I would suggest liming as a way of restricting its spread; I think it's also been found to help in meadow restoration projects.

Best wishes

Bill

Hello Bill

The problem relates to serious bracken and bramble encroachment in a SE sloping 5 acre field on our Springdale Farm Reserve near Usk. The soil is thin, flushed in places, slightly acidic and based on clay. The surrounding meadows are all excellent MG5, but if the bracken is not controlled it will no doubt begin to invade these beautiful hay meadows. We do not seem to be able to organise ourselves well enough to crush the bracken on a regular basis - staff shortages, lack of funding, etc. The trust also has no grazing animals of its own.

So my partner Sue and myself, who live on the edge of the reserve and are both voluntary wardens, have offered to attempt to control the bracken using a combination of crushing with a quad bike and bracken crusher and grazing. We are happy to invest in a small flock of sheep and are considering Wiltshire Horn because of their hardy nature, low risk susceptibility to fly strike, no need for dagging or sheering. We will attempt to build up the flock so that it can be used to graze other areas of the farm over the winter months when cattle have been removed because of poaching. Does this sound sensible, or should we consider another another option?

Regards

Steve

This is good timing as I am after how to control bracken without the use of chemicals and preferably by the use of animals only, but would like a discussion / response on nibblers. The extent of my knowledge is that you have to cut it / crush it as the fronds have just fully unfurled, and depleted the rhizome of energy. Then let it regrow until just before it starts to die off and puts energy back into the rhizome. Then cut it or bruise it at this point and it will not be able to divert the energy from the fronds to the rhizome. Over a period of 5 years this will deplete the rhizome and reduce the amount of bracken to hopefully close to nil. I guess then the area would need to be grazed by cattle or ponies as sheep do not have the weight in their hooves to crush the bracken and rhizomes. Any examples of successful bracken control this way or by animals only would be welcome.

Yours
Charles

PONT, GAP Cymru (Cynlluniau Pori Lleol) Cydlynnydd
PONT, GAP Cymru (Local Grazing Schemes) Coordinator

By coincidence I was looking at a site yesterday where the bracken bed has been disturbed by Exmoor ponies that now live on the site all year round. During the winter months they seemed to dig around in the old litter and disturb the roots with the effect being a severe weakening of the regrowth, the surrounding bracken is still head height at the moment, early days yet but we are hoping they will eventually work their way into this. The main problem for your site maybe it is not big enough to support ponies, (currently there are five on approx 100 acres) and they are in short supply.

I don't know anything about wiltshires but given the main problems with sheep in my experience are wool related issues and lameness, you may be onto a winner.

The only other options for bracken control that I am aware of are crushing that you have mentioned (make sure the stems are big enough so that they are damaged ie not small and rubbery) or chemical control in July / August so that the chemical is translocated to the roots when it senesces in the autumn, some seem to believe this gives quicker results but all need to be followed up for a number of years.

Hope this helps
Stephen

Stephen Comber
North East Grazing Co-ordinator

Charles

In the Lake District ESA Conservation Plans to control bracken by mechanical means has shown that regular cutting, initially at least twice in the first two years, has worked. But it can be laborious and expensive when, because of rough terrain, it has to be cut by hand (e.g. using a strimmer). Some folks think that there is a risk of inhaling sap from the cut material that could be carcinogenic.

We have found that grazing livestock, generally, do not eat bracken of any measure, although we observe sheep nibbling at young growth in June. Farmers refer to the risk of cumulative poisoning of stock, particularly cattle and equines; however, it is rarely mentioned probably because these days not many cattle utilise bracken infested rough grazing during summer. Regarding using stock to control bracken, there is a trampling effect but I would imagine that in order to make progress, areas would need to be heavily stocked to an extent that there would not be enough grass available resulting in the need for supplementary feeding. This is a strategy that some farmers use in winter, i.e. supplementary feeding on bracken banks that are not sufficiently accessible for wheeled machinery.

Mervyn

RDS Farm Advice Unit

I was once told that it is better to bruise it rather than cut it as it then bleeds more and weakens it, due to this.- I cannot prove this.

Richard M

have a look at gap news just come out wiltshire wildlife trust workshop report for wiltshire horn x soay flock

bracken...from beacon hill gap / leics co co / lr wildlife trust workshop this summer: Bracken control on Beacon Hill

- Have sprayed (Asulox), cut, bruised and rolled; the latter proved the most effective when carried out in mid-July, but as the site has become more open, more ground nesting birds have come in, so rolling date is now too late to be as effective. Therefore spraying is preferred....a recent paper suggest that this can be done on old stands and that the growth does not have to be succulent and soft for herbicide to be effective
- Operator technique is important.....two rolls at 1800 is far more effective than two at 900 (the former physically crimps and crushes the Bracken far more effectively)
- Cattle grazing should help with Bracken control, and they also take tree and scrub seedlings, disturb the soil, redistribute seeds across the site and push through taller vegetation
- Cattle aren't taking Bramble which is doing well in light, fertile situations (again a soil fertility issue)
- Bracken is a soil and climate issue, i.e. it likes more fertile soils and milder winter temperatures (the turf stripped area had very little if any Bracken); Bramble and other woody plants, trees and scrub will be the same
- Need to exclude livestock for 14 days after spraying to reduce risk of stock eating dead Bracken
- Rolling also helped prevent scrub encroachment
- NB: it is crucial not to clear secondary woodland and scrub if you don't have follow up management (grazing) in place otherwise you will just end up with more trees!
- NB: need to be persistent....takes 15 – 20 years of consistent effort to achieve favourable condition!
- NB: Historically sites like this were used for a wide range of products, for example firewood, turfs, Bracken for bedding etc, (hence grazing is not the only management technique needed in restoration)....and peoples lives depended on them....they were heavily exploited
- Bracken poisoning...some individual animals seem to become addicted to it; also if other forage is short animals are more likely to eat it and suffer chronic poisoning (the sheep flock on site have been affected in this way, and NT at Calke Abbey lost 6 cattle one year)

References:

http://www.sepa.org.uk/pdf/publications/leaflets/bracken/bracken_leaflet.pdf

http://www.defra.gov.uk/rds/publications/technical/tan_23.pdf

regards

Jim Swanson

When pruning fruit trees if we wanted to control vigorous growth we always cracked and broke down the branches so they still grew slowly and weakened the growth within the tree.

Cutting them out completely was used as a way of encouraging more vigorous young growth. I couldn't say if the same would apply to bracken but given the volume of root/rhizome it has (the same as a mature tree has a large mass of root growth) logic would indicate it may be the case.

Stephen Comber

This may have been mentioned before on Nibblers, but I heard some time ago that pigs were supposed to be good at controlling bracken. Whether this is because they dig up and eat the rhizomes I don't know. It was suggested as an idea for a research project in relation to organic farming, but it never got off (or into!) the ground, as far as I know.

Francis

There is loads of work/research on bracken management going back over 20 or more years. Here is a short summary if you follow the link for some of <http://www.liv.ac.uk/researchintelligence/issue24/pdf/ri24p7.pdf>, but there are numerous conference reports, and other guidance - see the Upland and Heathland Management handbooks, some of the AAB reports over the last 10 years or so, Rob Marrs has done lots - Liverpool University. Put bracken control into Google.

Kind regards,
Penny

The Heather Trust have good info on Bracken control and hold an annual bracken Management Event. I went this year and found it very useful.

Basically the only realistic way to eradicate bracken is to spray/weed/wipe with asulox or glyphosate. If you just want to weaken it then cutting and bruising work well. At the event the clever Dr. Bracken man said that bruising still allows the rhizome to replenish its energy through photosynthesis and also that if you cut the bracken and then remove it then you are breaking the nutrient cycle and so also weakening it that way. But we find both methods work on the Malverns.

We find cattle grazing better than sheep as they are heavier and do more damage to the bracken. Even better if you have sheep and cattle together.

Rob.

Pigs are good at controlling bracken. Get the stocking rate right (2 to 4 weaners to an acre) and they will clear an area more or less completely. The problem is the disturbance caused to the entire area, which may lead to invasion by 'undesirable' plant species or possibly loss of more desirable ones.

Pigs were used on Mull to clear an area of bracken some 20 years or more ago, but I suspect this was followed up by cultivation and reseeded to create agricultural pasture.

Cathy

It was, they are, and they do. Pigs have a powerful impact because they change the underlying condition of the area - ie, if you spray bracken, it kills it. If pigs root, they disturb/weaken/kill the bracken, break up the mat, disturb the ground to expose seed bed and dormant seed, and make a free delivery of fertiliser during the process. They don't eat all the rhizomes as the dead ones can be seen for months afterwards; I am not even sure if they eat some, although another pig keeper told me she thought it was every tenth root

because she heard the crunch - but could not work out what was different about the ones selected. Myself I think it is the worm life they are after.

I have a sight which has been pigged on and off for four years which is now rich in heather, willow, birch, rowan and weak in bracken in comparison to its former existence and unpigged adjacent areas. Very gratifying all round, and better than the "miracle cure" of spraying. I have also enjoyed rather a lot of really good pork over the last four years.

Chloe

And since you have mentioned Rob Marrs, Penny, here is some info about the International Bracken Group

I have been asked by some members to confirm details of the IBG website and the Bracken-news listerver

(1) WEBSITE

The IBG website can be accessed in two ways:

(1) using the url <http://www.ibg.org.uk> -this takes you to a holding page where you click to get to the IBG site.

(2) Via my website <http://www.appliedvegetationdynamics.co.uk/>.

It is a bit dates at the moment but I will upgrade shortly.

(2) LISTERV

This is effectively a glorified email list but it allows information to flow to IBG members (or others who have joined the LISTSERV) to contact all subscribers to the list using a single email address. Thus, if ANYONE sends an email to BRACKEN-NEWS@liverpool.ac.uk it automatically goes to everyone on the list. All IBG members with an email account have been added to the list automatically. The LISTSERV can take small attached files, but not very large ones.

This message has been sent via the LISTSERV.

Both are operated for the moment out of my lab.

Best wishes

Rob

The bracken bruiser salesman told us that bruising the bracken along its stem causes more energy to seep out compared to a single cut which grows over quickly. He also claims that bruising is more effective at bracken control than cutting. However at Cavenham Heath NNR and Brettenham Heath NNR we found that bruising made little difference to bracken and we have returned to two or three cuts per year.

Nick Sibbett
Conservation Manager
