UplandsManagementGroup

Bracken Control Guidance

This guidance aims to highlight the current issues about bracken control and provide links to further information.

This guidance was produced on behalf of the Bracken Control Group. The author, Simon Thorp, coordinates the activity of the Bracken Control Group and currently this includes liaising with the authorities to obtain an Emergency Authorisation to allow Asulam, the main chemical agent, to be available to control bracken.

1 Introduction

It is claimed that bracken has changed little since the time of the dinosaurs. It is present on all continents, except Antarctica.

The ability of bracken to dominate other vegetation often puts it at odds with other rural interests, as a monoculture of bracken is of little value to anything other than bracken.

Sheep ticks *Ixodes Ricinus* thrive in bracken litter and the population and range of ticks is thought to be increasing, along with the impact ticks can have on humans, livestock and wildlife through the range of tick-borne diseases.

The Bracken Control Group promotes the control of bracken by any means and it has responsibility for maintaining the regulatory framework that permits the use of Asulam, the main chemical control agent.

2 Bracken Control Techniques

Techniques range from physical treatments - such as trampling by stock, hand pulling, bruising, crushing, cutting - to chemical control by hand-held equipment or by helicopter.

All techniques have an impact and the choice will depend on the nature of the ground, the size of the problem and the aspirations of the owners and managers of the land.

It is important to recognise that most of the activity of the plant takes place below ground in the rhizomes[1], and the target for any treatment is the buds on the rhizomes that will form the bracken plants in following years.

Chemical treatment achieves an attack on the rhizomes by using systemic pesticide that is translocated into the rhizomes.

As a result of the structure of the plant, it is not possible to achieve total clearance after one application of pesticide. Some of the buds on the rhizomes will survive initial treatment and appear in following years. To maintain a high level of clearance it is essential that follow-up treatment of areas of regeneration takes place after primary treatment.

To achieve maximum impact, the timing of the control treatment, is important. The best time to apply a chemical treatment is in the period between full extension of the bracken crosiers and the start of senescence, when the bracken starts to turn yellow.

To have any effect on the rhizomes and achieve a level of control, physical treatments of the bracken will need to be carried out at least three times each season for up to five years.

Physical treatments work by breaking the supply of nutrients from the above ground plant back into the rhizomes. As a result of repeated treatments, the vigour of the rhizomes is reduced until eventually they die.

[1] A rhizome is the 'root' of the bracken plant. It is a continuously growing horizontal underground stem which puts out lateral shoots and adventitious roots at intervals.

3 Asulam

Asulam has two key features: it offers selective control of bracken with little or no impact on non-target species, and it is authorised for aerial application.

Aerial application is the most effective technique for controlling large areas of bracken and the only technique where the access by ground-based equipment is difficult or impossible, such as on steep hillsides or on broken ground.

In 2011, a decision was made by the EU that the information available to demonstrate the safe use of Asulam, was insufficient to justify registration under the latest EU regulations.

Following the EU decision, a use-up period was allowed for 2012, and from 2013, the availability of Asulam has been maintained by annual Emergency Authorisations.

4 Registration of Asulam

The initial application for the registration of Asulam under the latest EU regulations was submitted in 2013, but this is a slow process. A decision about registration is unlikely to be made until later in 2020, at the earliest.

As the UK will adopt all the EU regulations relating to the use of pesticide, in the short term, there is unlikely to be any change to the regulations that affect the use of Asulam from leaving the EU.

Asulam is the active ingredient, and if the application is successful, it will apply to Asulam only. A further application is required to register the product that uses the active ingredient, in this case, Asulox. This could take a further two years.

5 Tick-borne Diseases

As ticks thrive in beds of bracken litter and are able to use the bracken plant as a ladder to reach hosts for a blood meal, there is a strong link between bracken and the increasing threat from Tick-Borne Diseases.

Recently, Tick-Borne Encephalitis (TBE) has been identified in the UK; humans can be badly affected by Lyme Disease, and the number of people infected is rising, but TBE can have a much higher impact on human health.

See the Bracken Briefings – No 5 & 6

6 Current Situation

The draft Emergency Authorisation approval for 2020 includes some additional restrictions:

- The approval will cover application by helicopter only, and therefore it will not be possible to use hand-held or ground-based equipment to apply Asulam,
- The buffer zone against surface water bodies will be increased from 50m to 90m, and
- Requirements to provide more records of use.

The Bracken Control Group has contacted landowners and managers throughout the UK to inform them of the new restrictions and to enquire if responders share the BCG's concerns about these restrictions. See the Briefing and Questionnaire that has been circulated.

7 Conclusions

There is little doubt that the threat from bracken, and the associated impact of tick-borne diseases, is increasing.

There is a need for investment to develop new, more effective & safer bracken control techniques, but there is a risk that investment will not be forthcoming while uncertainty remains about the availability of Asulam.

It is important that the bracken control industry works closely with governments and public health organisations.

8 Further Guidance

It is possible that the regime for the use of Asulam may change. Information will be placed on the Bracken Control Group's website, there is a Newsletter sign up option on the Updates page, and anyone responding to the Briefing & Questionnaire will be offered the opportunity to sign up to receive updates from the BCG.

A series of short briefings is being developed to provide more detail about the current situation in bite-sized chunks. See the Bracken Briefings page on the website.