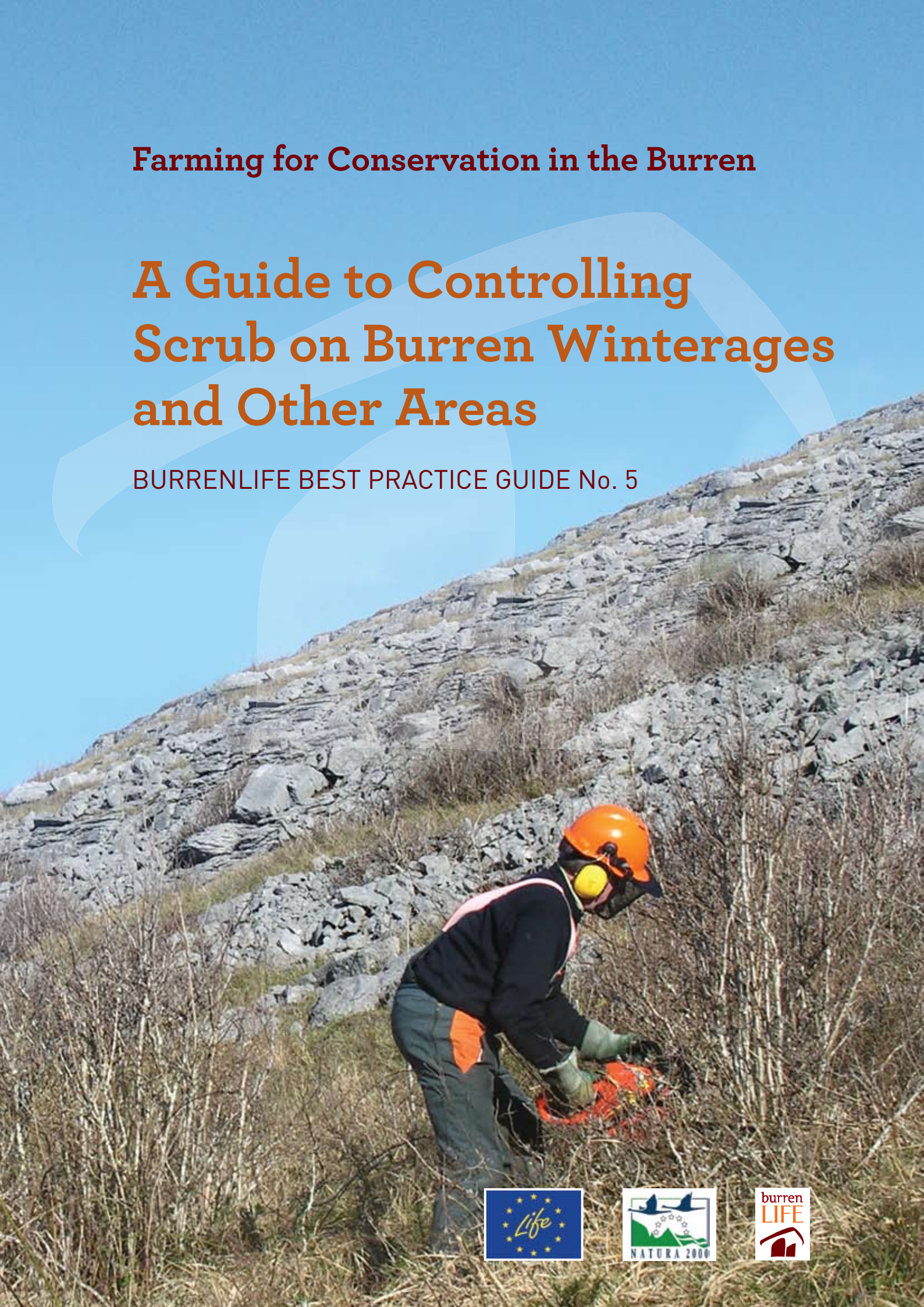


**Farming for Conservation in the Burren**

# **A Guide to Controlling Scrub on Burren Winterages and Other Areas**

**BURRENLIFE BEST PRACTICE GUIDE No. 5**



The BurrenLIFE Project

The Burren, also known as *An Bhoireann* - the ‘place of stone’- and described by Cistercian monks as the ‘fertile rock’, is a unique and very special place. It is one of Ireland’s most outstanding landscapes: a place of great beauty and fascination, steeped in history, teeming with wildlife and blessed with a rich culture and strong sense of community.

For some the Burren is a home, for others a place to visit, to study or simply to enjoy. But the importance of the Burren extends far beyond its borders – its heritage is of outstanding universal value. This value has been recognized at European level by the designation of much of the area as Natura 2000 Sites, or Special Areas of Conservation (SACs), under the EU Habitats Directive. As such we are obliged to manage the Burren in such a way that future generations from near and far can continue to benefit from it.

To look after the Burren properly we must appreciate that the Burren has been shaped, not just by natural forces, but by countless generations of farmers as well. The BurrenLIFE Project has worked closely with Burren farmers and other experts to create a blueprint for farming in the Burren, through which farmers can earn a decent living from the land and continue their longstanding role as producers of quality food and custodians of a magnificent heritage and landscape.

The information contained in these guides is based on five years of applied research which took place on 20 farms across the Burren. The practical, locally-targeted solutions contained herein have been tried and tested by Burren farmers on their land and closely monitored by the project team.

The BurrenLIFE Project was co-ordinated by the National Parks and Wildlife Service (NPWS) of the Department of the Environment, Heritage and Local Government. It was a close partnership between the NPWS, Teagasc and the Burren IFA. The Project was part funded by the EU LIFE Nature Fund. NPWS wishes to acknowledge the strong support provided by Teagasc, the Burren IFA and the Burren farmers for this Project.

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CONTROLLING SCRUB

Scrub control is difficult, time-consuming and expensive; it should not be undertaken lightly. The aim of this booklet is to provide you with the information needed to decide how best to go about controlling scrub on your farm, particularly in Special Areas of Conservation (SACs). The booklet is based on the practical experience gained during the BurrenLIFE Project, it:

- Outlines some of the things you need to consider when planning your scrub control programme.
- Provides information on a variety of methods for controlling scrub and regrowth.
- Gives details of the rules and regulations relating to scrub control, what permissions you may need and who to you need to contact for authorisation.

# SCRUB IN THE BURREN

Hazel-dominated scrub is part of the Burren landscape. In the past, it served the people of the area well, providing fuel and building materials. Today, many see it only as a problem - taking over the flower-rich pastures that are the Burren’s winter grazing land, making it harder to manage livestock and damaging archaeology. To some, it as a good thing; a wonderful, natural habitat in a country that has so little native woodland, a potential source of bio-fuel and shelter for out-wintered livestock. As is so often the case, the truth lies somewhere in between and we must approach the issue of scrub in a balanced manner.

Scrub, particularly hazel and to a lesser extent blackthorn, is spreading at an unprecedented rate. We have gone from the situation where scrub was very scarce in the mid 1800s, to one where 14% of the ‘High’ Burren was covered by relatively dense scrub at the beginning of the 21st century. More worryingly, it is estimated that at least another 5-10% of this area has a scattered but increasing level of scrub cover.

There is no one simple, explanation for the spread of scrub. Instead, a multitude of factors are involved including changes in farming practices, climate and above all the huge reduction in human use, particularly for fuel. Whatever the reasons, allowing the spread to continue unchecked contravenes both our legal obligations under the EU Habitats Directive and our moral obligation to future generations who are entitled to inherit, at the very least, a living Burren that retains the rich natural and cultural heritage that exists today.

Adopting the sustainable grazing and concentrate based winter feeding systems outlined in Best Practice Guides 2 and 3 will help to slow the spread of scrub but it will not stop it. As a result, many farmers will need to carry out a planned programme of scrub control.



# PLANNING YOUR SCRUB CONTROL PROGRAMME

Every farm in the Burren is different and this applies to the issue of scrub too. You, the farmer, are best placed to decide on a plan of action for your farm that will be of benefit to you and the environment.

The need for control will be obvious where scrub is a major problem but farms where it is not yet an issue should also consider starting a scrub control programme as a way of preventing future problems.

## REMEMBER:

- **Scrub control is difficult: time consuming, labour intensive and expensive.**
- **Scrub control should not be seen as a ‘once off, quick fix’ – this approach will cost you time and money but get you nowhere in the end.**
- **You should think of scrub control as an ongoing part of your farm management, no less important than looking after your livestock.**
- **Successful scrub control requires planning and commitment.**
- **Before you embark on any scrub control work, you need to sit down and plan both the initial removal work and the retreatment programme. There is little point in removing scrub if there are not enough resources available in future years to retreat it.**
- **You do not need to do all the work in one go. Your scrub control program will be more successful if it is carried out in phases over a number of years.**
- **Organic farmers must consider the significant time and labour needed to cut the annual regrowth. The initial amount of scrub removed should be limited to an area that can be recut each year. More can be removed as the levels of regrowth decrease.**

## SOME OTHER THINGS TO CONSIDER ARE:

- Can I do the work myself and if so, how much help will I need? Should I contract some or all of it out?
- What removal methods are best suited to my land and the work I want to do?
- How much will it cost and what can I afford?  
It may be better to decide what your budget is and do the work accordingly rather than remove large areas of scrub and then struggle to pay for it. As a guide, you should factor in the cost of retreatment at about 33% of the original cost of removal but be aware that it may be higher.
- How long will it take?
- What will I need to do to meet my legal and cross-compliance obligations and who do I need to speak to?
- What do I do with the cut scrub?

WHEN PLANNING YOUR SCRUB CONTROL PROGRAMME, THE FIRST THING YOU NEED TO DECIDE IS WHAT AREAS TO TARGET.

## 1 OPENING PATHS

This is the first option to consider. Stock that can move around easily will make the most of the available grazing. Good access makes herding much easier.  
  
Concentrate on keeping existing paths open. Widen them to 2 – 4m. If cutting new paths, make sure they are on ground that the stock will be happy to cross.

## 2 CONTROLLING INVADING SCRUB BEFORE IT BECOMES A PROBLEM

Your next priority should be to remove small, scattered bushes and patches of immature scrub. While this type of scrub may not seem to be a problem, it will be in the future if you do nothing. Tackling invading scrub early is cheaper, easier and minimises the loss of grazing.

## 3 DENSE, MATURE SCRUB

Removing dense stands of mature hazel may seem an attractive option but this is rarely the case. The original grassland plants will have long since disappeared and the grazing gained will be scant and of poor quality. It takes years for good winterage grassland to develop on areas that were covered by dense scrub. These meagre gains do not justify the expense that is involved.  
  
The mature hazel scrub we have here in the Burren is a very rare and special habitat known as ‘Atlantic hazel woodland’, which is rich in plant and animal life. Because of this, permission is unlikely to be granted for the removal of established hazel scrub in SACs but cutting paths may be allowed. Permission may be given for the removal of dense blackthorn.

SCRUB CONTROL METHODS

There is no single ‘right’ way to control scrub in the Burren. For the best results, you may need to use several of the methods outlined below.


You MUST ensure that you comply with the laws and rules governing scrub removal and have the relevant permissions/licences in place before you begin work. Failure to do so may render you liable to prosecution and will put your Single Farm and agri-environment payments at risk. You are advised to read section F ‘Compliance and legal requirements’ in full as it provides details of the various regulations and who you need to contact for permission.

The following are some of the methods used during the BurrenLIFE Project:

1 Cutting with Chainsaws, Strimmers, Brush-cutters or Other Hand Tools	
What are these suitable for?	Hazel and Blackthorn on all terrains, of most sizes and age.
What permission do I need?	For felling licence - see No.2, page 17. If in an SAC - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
When can I do the work?	From 1st September to 1st March i.e. outside bird nesting season. It may be possible to cut small, scattered bushes during the summer but only with permission from the National Parks and Wildlife Service (NPWS).
What do I do?	<div></div> <div>Use a chainsaw for bushes where most of the trunks/poles are at least 2.5cm (1 inch) thick. Use a strimmer or brush-cutter fitted with a cutting blade or disk for low bushes with thinner stems. Cut as close to the ground as possible but beware of hidden rock. If in doubt, cut high and then cut again when you can see more clearly. The lower you cut the better the kill rate if the stumps are treated with a herbicide. Where stumps are to be treated with a herbicide to control regrowth this should be done immediately after cutting as long as the weather is dry. In wet weather, cut stems higher and then re-cut when the weather is dry and treat the cut surface immediately. For more details see No.3 ‘Treating stumps with a herbicide’, page 11.</div>
Advantages:	Vehicle access not essential. Suitable for rough terrain. Can do the work yourself.
Disadvantages:	Relatively slow. Need to have at least 2 people for safety reasons. Creates large amount of cut material, which must be collected and disposed of. Need follow-up treatment to control regrowth.




Controlling invading blackthorn: before and after cutting with a tractor-mounted brush-cutter.

2 Machine-mounted Flail, Brush-cutter or Topper	
What are these suitable for?	Scrub on areas accessible by machinery where the ground is relatively level and not too rocky.  MACHINE-MOUNTED BRUSH-CUTTER: particularly useful for dense blackthorn. TOPPER: for small, scattered bushes only.
What permission do I need?	For felling licence - see No.2, page 17. If in an SAC - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
When can I do the work?	From 1st September to 1st March i.e. outside bird nesting season. It may be possible to cut small, scattered bushes during the summer but only with permission from the NPWS.
What do I do?	<div></div> <div>If using a contractor, make sure that they are fully aware of any conditions attached to the relevant permissions e.g. extent of area permitted to cut, use of rubber-tracked rather than metal-tracked machine. Supervise or check the work regularly. Where stumps are to be treated to control regrowth this must be done at the time of cutting. See No.3 ‘Treating stumps with a herbicide’, page 11. Due to the speed of cutting, several people will be needed to carry out the stump treatment; how many will depend on the area cut.</div>
Advantages:	Relatively fast. Cut material need not be collected but raking dense ‘chippings’ into piles will help grass growth.
Disadvantages:	Requires vehicle access. Not suitable for rough, rocky terrain. Need follow-up treatment to control regrowth. ‘Chippings’ can become colonised by undesirable ‘weeds’ e.g. briars.

### 3 Pulling with Machine

<i>What is this suitable for?</i>	Scrub on deeper soils that are accessible by machine. Particularly suitable for dense blackthorn.
<i>What permission do I need?</i>	For felling licence - see No.2, page 17. If in an SAC - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
<i>When can I do the work?</i>	From 1st September to 1st March. i.e. outside bird nesting season.
<i>What do I do?</i>	Make sure that the machine operator is fully aware of any conditions attached to the relevant permissions e.g. extent of area permitted to pull, and the location of any monuments. Supervise or check the work regularly.  This method attempts to remove the whole bush including the roots. However, root removal may not be complete especially with blackthorn so any regrowth will need to be controlled (see No.1 'Strimming and topping', page 10 or No.4 'Wiping with herbicide', page 13).  Gather pulled scrub into a few large piles, not lots of small ones.
<i>Advantages:</i>	Root removal reduces regrowth. Lower labour requirement.
<i>Disadvantages:</i>	Requires vehicle access. Not suitable for rough, rocky terrain. Needs skilled machine operators. Creates large amount of material, which must be collected and disposed of.

### 4 Pulling or Cutting Seedlings

<i>What are these suitable for?</i>	Hazel seedlings and small saplings. Not as effective for blackthorn due to extensive root system.
<i>What permission do I need?</i>	For felling licence (only if cutting seedlings) - see No.2, page 16. If in an SAC (only if spot treating cut stems) - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
<i>When can I do the work?</i>	All year round but it is easier to see the seedlings when in leaf and before the grass has grown too long.
<i>What do I do?</i> 	Seedlings can be pulled by hand or using a weed-puller.  Pulling is easier when the ground is wet.  The roots can be well developed after one year. If the seedling cannot be pulled with the root, cut close to the ground using secateurs and spot-treat the stem with a 10% glyphosate solution (dry weather only). See No.2 'Using Herbicides - Good Practice', page 10, for advice on herbicide use.
<i>Advantages:</i>	Low cost. Hits the problem early so: cheaper, less labour intensive, minimal impact and herbicide usage compared to that for bigger bushes. No regrowth if the roots are removed. Effective all year round.
<i>Disadvantages:</i>	Slow. Only suitable for small seedlings and saplings.



Controlling invading hazel: before and after cutting with chainsaws.



Improving access: before and after widening path.



5 Wiping with a Herbicide using a Hand-held Wiper e.g. Microwipe	
<i>What is this suitable for?</i>	Only farms that are not certified organic. Small, scattered bushes where most are less than 1 m tall. Regrowth.
<i>What permission do I need?</i>	If in an SAC - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
<i>When can I do the work?</i>	Should be carried out when the bush is actively growing i.e. when the leaves are fully open and before they begin to die. Exact timing will vary according to the onset of the seasons.  HAZEL: June to end of August. BLACKTHORN: Early May to early August.
<i>What do I do?</i>	See No.4 'Wiping with herbicide', page 13 .
<i>Advantages:</i>	Very good kill rate when carried out correctly. No drift. Best way to kill small, early encroaching scrub – more successful than stump treating where poles are less than 2.5cm (1 inch) thick especially good for blackthorn. Limited impact on surrounding vegetation compared to spraying. As herbicide is applied to the leaves in a thin film, there is little or no run-off. No need to cut and pile - the dead bushes can be left standing to break down naturally over time.
<i>Disadvantages:</i>	Relatively slow. Cannot carry out when rain is expected. Efficacy reduced significantly if carried out in hot weather. Dead bushes can look unsightly.



6 Stem Injection ('cut & squirt')	
<i>What is this suitable for?</i>	Only farms that are not certified organic. Hazel and Blackthorn with stems 2.5cm (1 inch) in diameter or larger (Bushes with narrower stems are usually small enough to wipe instead). Killing bushes without having to cut them down.
<i>What permission do I need?</i>	If in an SAC - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
<i>When can I do the work?</i>	Due to the limited trial work carried out using this method, the best time for treating hazel and blackthorn has not yet been established. It appears to be effective all year round but is probably more so in the summer when the bushes are actively growing, or in autumn when the sap is going down. It will be less effective in spring when the sap is rising.
<i>What do I do?</i>	With a sharp hand axe or chainsaw, make 2 or more horizontal, downward angled cuts into as many of the stems you can reach to leave a hinged notch. The cuts should be as low as possible on each stem (below 1m).  Using a hand-held sprayer set to 'jet', wet the exposed wood in the notches with a <b>glyphosate-based herbicide*</b> diluted <b>1 part herbicide to 4 parts water</b> (20%) so that the notch is filled but not overflowing. This should be done immediately after making the notch (see No.2, page 10, and No.3, page 11, for advice on herbicide use).
<i>Advantages:</i>	Kill rate seems better than cutting followed by stump treatment. Appears that little or no retreatment is needed. Little or no impact on surrounding vegetation or the environment. Dead bushes can be left to rot so no need to cut or gather brashings. Can be carried out during showery weather (but not in heavy rain). Minimal equipment needed.
<i>Disadvantages:</i>	Dead bushes can look unsightly. Not suitable for dense stands of small stemmed bushes. Can be difficult to get to the plant stems.

\* e.g. Roundup Biactive or Pro-Biactive, Barclay Gallup Biograde 360

CONTROLLING REGROWTH


Cutting, whether by hand or machine, will not kill woody species such as blackthorn and hazel. When spring arrives, new growth will appear on the stumps and from the roots. This will need to be controlled if the hard work and money you invested in removing the scrub in the first place is to be of any value to you, your farm and the conservation of the Burren’s winterages.

Regrowth can be reduced by treating the stumps with a herbicide at the time of cutting. As this will not be 100% effective you will need to carry out follow-up treatments. Organic farms and those who do not want to use herbicides will need to carry out regular cutting of the regrowth.

You should apply for permissions relating to retreatment at the same time as those for the original scrub removal.

Retreatment programs will take several years to achieve the best kill rates even when using herbicides.

1 Strimming and Topping	
<i>Do I need Permission?</i>	If in an SAC - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
<i>What can I use?</i>	Hand-held strimmer or brush-cutter fitted with a cutting blade, disk or reciprocal-cutter.  Tractor mounted topper or hedge cutter if terrain is suitable.
<i>When can I do the work and how often?</i>	Cutting at least once a year from mid-summer on will slowly weaken the bushes. Cutting 2 to 3 times a year will eventually kill them.

2 Using Herbicides - Good Practice	
<p>Anyone using herbicides must do so in a responsible manner with due regard for the safety of themselves, others and the environment. Particular note should be paid to the following:</p> <ul style="list-style-type: none"><li>• Farmers and contractors MUST follow the advice given on the product label as to the correct use, safe handling and disposal of the herbicide. Protective clothing should be worn as indicated.</li><li>• Measures should be taken to avoid herbicide spillage. If painting stumps, use a broad, flat-bottomed container containing a small amount of the diluted herbicide.</li><li>• Store the main herbicide supply in a waterproof, plastic container with cap securely screwed in place.</li></ul> <p>Make sure that you have the relevant permissions in place and that you meet the requirements of cross compliance with regard to record keeping, correct use and storage of herbicides (see No.3 ‘Notifiable Actions’ and No.4 ‘Recorded Monuments and Archaeological Areas’, page 18, No.6 ‘Single Farm Payment &amp; Cross-compliance, No.7 ‘Agri-environmental schemes &amp; Organics’ and No.8 Health &amp; Safety’, page 20.</p>	

3 Treating stumps with a herbicide to reduce regrowth

<i>Do I need Permission?</i>	If in an SAC - see No.3, page 18.
<i>When can I do this?</i>	During the cutting period from 1st September to 1st March. It will be most effective from October to mid-February when the sap is going down or the bushes are dormant but this will vary depending on the seasons. If spring is early and the sap is rising, do not stump treat as wiping the regrowth later in the year will give a better kill rate.
<i>What size should the stumps be?</i>	Only stump treat if the majority are at least 2.5 cm (1 inch) in diameter. The kill rate improves as the diameter increases. Narrow stumps are difficult and time consuming to treat and, as they do not absorb enough herbicide to kill the roots, they are more likely to regrow.
<i>How soon after cutting should I treat the stumps?</i>	Stumps should be treated immediately after cutting as freshly cut surfaces absorb the herbicide almost right away and are rain-fast within 10 minutes. Delaying treatment by as little as one hour will reduce the kill rate. Treating at the time of cutting reduces the chance of stumps going untreated. The shattered stumps left behind after using a tractor-mounted flail, brush-cutter or topper should be treated as soon as possible, preferably within 1 hour.
<i>What if it is raining?</i>	Do not stump treat in wet weather (follow instructions in No.1 ‘Cutting with Chainsaws, Strimmers, Brush-cutters or Other Hand Tools’, page 2).
<i>Which herbicide?</i>	Use a <b>glyphosate-based herbicide</b> containing 360g/l glyphosate (the concentration will be on the label) or, if different, the herbicide stipulated in your permission for a notifiable action.  Newer glyphosate products with improved, safer formulations are recommended e.g. Roundup Biactive or Pro-Biactive, Barclay Gallup Biograde 360. Avoid using formulations containing ethoxylated amines as the surfactant because they are more toxic.
<i>What dilution should I use?</i>	Dilute the herbicide with clean water as per the label instruction for stump treatment. The dilution is usually <b>1 part herbicide to 4 parts water</b> (a 20% solution) but you should check.
<i>How do I apply it?</i>	<div></div> <p>Apply the herbicide using a paintbrush or hand-held sprayer The whole of the cut surface should be well soaked but NOT to the extent that the herbicide runs off. Pay particular attention to the living tissue layer, which forms a ring between the bark and the inner wood.</p> <p>HAND-HELD SPRAYER: Set the nozzle to jet or coarse spray. DO NOT set it to a fine spray! Pump the applicator to a low pressure, if it is too high the herbicide will splash off the stumps. Keep the spray nozzle close to the stump.</p> <p>PAINTBRUSH: Use a brush that is a similar width to the stumps you are treating. Avoid dripping herbicide on to the surrounding vegetation by keeping the herbicide container close to the stumps.</p> <p>If you do not follow these instructions your stump treatment will be inefficient, more expensive and you risk damaging the surrounding vegetation.</p>
<i>Marking the treated stumps:</i>	Adding a dye to the herbicide will show which stumps have been treated and ensure that none are missed. Dyes such as ‘Marksman’ spray pattern indicator can be ordered through your local agricultural supplier.



Cut stumps should be treated with a glyphosate based herbicide containing a marker dye immediately after cutting.

Wiping with herbicide – regrowth & small bushes	
<i>Do I need Permission?</i>	If in an SAC - see No.3, page 18. If on or around Recorded Monuments or an Archaeological Area - see No.4, page 18.
<i>When can I do this?</i>	Should be carried out when the bush is actively growing i.e. when the leaves are fully open and before they begin to die. Exact timing will vary according to the onset of the seasons.  HAZEL: June to end of August.  BLACKTHORN: Early May to early August.
<i>How long should I leave regrowth before treating?</i>	A better kill rate will be achieved if the regrowth is allowed to reach 50cm (1.5 ft) before wiping as more leaf surface means more herbicide is absorbed to kill the roots. The time this takes will vary.  As a general guide most regrowth should be left to grow for a minimum of 1 year before wiping. However, if regrowth is quick it can be treated the first summer after it was cut.
<i>Which herbicide?</i>	Use a <b>glyphosate-based herbicide</b> containing 360g/l glyphosate (the concentration will be on the label) or, if different, the herbicide stipulated in your permission for a notifiable action.  Newer glyphosate products with improved, safer formulations are recommended e.g. Roundup Biactive or Pro-Biactive, Barclay Gallup Biograde 360. Avoid using formulations containing ethoxylated amines as the surfactant because they are more toxic.
<i>What dilution should I use?</i>	Dilute the herbicide with clean water as per the label instruction for stump treatment. The dilution is usually <b>1 part herbicide to 2 parts water</b> (a 33% solution) but you should check.
<i>What if it is raining or very hot?</i>	You are advised not to wipe if rain is forecast in next 6 hours as the herbicide will be washed off.  Do not wipe in hot weather - the leaves will scorch and die but roots will not be killed so the bushes will regrow.
<i>How do I apply the herbicide?</i>	Use a hand-held wiper e.g. Microwipe. These can be ordered through your local agricultural supplier.
<i>How do I get the best results?</i>	Follow the instructions that came with your wiper.  Check that the herbicide is flowing sufficiently to keep the rope wick wet at all times but not so fast that there is excess dripping.  Sweep the rope-wick on the wiper backwards and forwards across the leaves of the bush in order to get herbicide on both sides. Ensure that the herbicide is applied to as much of the bush/regrowth as possible.  Once wiped the herbicide should be visible as a slight sheen on the leaves; it should not be applied so heavily that it begins to run off.  Avoid contact between the rope wick and the surrounding vegetation i.e. grass and flowers, or these will be killed too.  Place the head of the wiper in a bucket or turn the wiper upside down to prevent dripping when moving between bushes and when temporarily not in use.
<i>How often should I retreat?</i>	How often you have to retreat will depend on your success rate. It is normal to miss some bushes when wiping and for others not to be fully wiped. Your retreatment program will need to be carried out over 3 – 4 years. After the first year the amount that needs retreating will reduce markedly.

BRASHINGS - DEALING WITH THE CUT MATERIAL

Scrub control can generate large amounts of cut material known as brashings. Gathering and disposing of the brashings efficiently can be as difficult as cutting the scrub in the first place and this is particularly so in the Burren with its difficult terrain and poor vehicular access. You should think about how the brashings are best managed BEFORE you begin cutting.

<i>Do the brashings have any economic value?</i>	Larger logs may be of use as firewood but the small size and low quality means that most of the timber is currently of little value, even if it can be removed from the site easily. This may change as the use of wood chip/pellet technology develops.
<i>So what should I do with the Brashings?</i>	Currently, the most cost-effective way of dealing with them is to burn them or gather them and leave them to rot.
<i>Why do I need to gather the brashings?</i>	If you do not collect the brashings into piles your cattle will not be able to get at the grass under them and will not graze the area properly. This will encourage briars and new scrub growth. It is particularly important to gather blackthorn brashings as stock will not graze near the thorns.
<i>Where should I pile the brashings for burning?</i>	<p>If you have vehicle access, load them into a trailer as you cut, or pile them and move them later using a front loader. If possible, move the brashings off the SAC but when this is not practical, move them to an area suitable for burning e.g. an old feed site, disturbed area or pockets of coarse grass or bracken on deeper soils. This way you can limit it to one fire site.</p> <p>If you do not have vehicle access, gather the brashings into neat piles – try to lay the branches so they are all in one direction. Try to group multiple piles near suitable burning areas to limit the number of fire sites.</p>
<i>Do I need Permission?</i>	See No.5 ‘Burning Cut Scrub’, page 19.
<i>Are there places that I should avoid when burning?</i>	<p>It is an offence to start a fire within 16 m (50 feet) of a public road.</p> <p>Do not burn on limestone pavement, on thin peaty soils, near dense heather or close to woods and trees.</p> <p>Use your common sense.</p>
<i>Can I leave the brashings to rot rather than burn them?</i>	<p>Yes but you should try to limit the number of piles and locate them where they will have the least impact on the grazing and habitats e.g. pile them along the edge of denser stands of scrub that you are not removing.</p> <p>When cutting paths, the brashings can be pushed into the scrub either side of the path without piling. Do not stand them upright along the path as they will be blown down and block the route.</p>
<i>What about the ‘chippings’ from flailing?</i>	Where the scrub was light, these can be left to rot down without gathering. However, if denser scrub was flailed, the chippings can form a dense carpet. The chippings in the worst areas should be raked in to piles.





From top L-R: **Broad-leaved helliborine; Hazel wood; Hazel gloves - a very rare fungus of the Burren's hazel woods, Mature Hazel Woodland - an integral part of the Burren landscape.**

## COMPLIANCE AND LEGAL REQUIREMENTS

At first sight, the rules and regulations surrounding scrub control may seem to be insurmountable obstacles. However, they are not the outright bans that many think they are. In most cases, the relevant bodies will grant permission to carry out scrub removal work when it relates to opening paths to improve cattle movement and grazing, and to remove invading scrub.

The following outlines the main regulations and restrictions relevant to scrub control and gives advice as to who you should contact for more information and to seek permission.

Please note that these rules and regulations are correctat the time of publication (2010) but they may be subject to change and new ones may come into force.

1 Bird Nesting Season	
<i>Relevant Act or Measure:</i>	Wildlife Act (1976), Section 46. CROSS-COMPLIANCE: SMR* 1 ‘Conservation of Wild Birds’.
<i>Restriction:</i>	The cutting, pulling, bulldozing or killing of scrub is NOT permitted from the 1st March to the 31st August i.e. during the ‘bird nesting season’.
<i>For further information or permission:</i>	Contact your local NPWS Conservation Ranger if you want to use a herbicide to wipe low, scattered scrub or to cut small, scattered bushes during this period.  The Cross-compliance Section, Dept. of Agriculture & Food, Tel (057) 8674400 is able to advise on cross-compliance matters.

\*SMR = Statutory Management Requirement. See No.6, page 20.

2 Felling Licence	
<i>Relevant Act or Measure:</i>	Forestry Act, 1946. (A new Act was in preparation at the time of writing so the information below may have been superseded. You should check with a competent person e.g. a member of the forestry service or local NPWS Conservation Ranger’)
<i>Restriction:</i>	It is illegal to uproot any tree over 10 years of age or cut down any tree of any age*, unless the landowner or a person nominated by him/her, has completed a Felling Notice. *The limited exceptions do not apply to scrub control in the Burren.
<i>For further information or permission:</i>	Fill out the form for a ‘Limited Felling Licence’ and lodge it at the Garda Station nearest to the site from which the scrub is to be removed.  You should include a 6-inch map showing the location of the scrub to be removed and a letter from the NPWS giving permission for the removal.  Application forms can be obtained from any Garda Station or the Dept. of Agriculture, Fisheries & Food website <a href="http://www.agriculture.gov.ie/forests-service/tree-felling/tree-felling/">www.agriculture.gov.ie/forests-service/tree-felling/tree-felling/</a>  Contact The Felling Section, Dept. of Agriculture, Fisheries & Food, Johnstown Castle Estate, Co. Wexford.

### 3 SAC ‘Notifiable Actions’

<i>Relevant Act or Measure:</i>	European Communities (Natural Habitats) Regulations 1997. CROSS-COMPLIANCE: SMR 5 ‘Conservation of Natural Habitats and of Wild Flora & Fauna’ CROSS-COMPLIANCE: GAEC 6 ‘Retention of Landscape Features and Avoiding Deterioration of Habitats’
<i>Restriction:</i>	Permission is needed from NPWS before you carry out any of the following actions relating to scrub control on land within an SAC: <ul style="list-style-type: none"><li>• Cut scrub with a chainsaw, strimmer or brush-cutter if it is not specifically mentioned in your approved agri-environmental plan e.g. REPS. (If it is mentioned in your plan you should still check with your local Ranger).</li><li>• Use any machine e.g. tractor-mounted brush-cutter, flail or digger to remove scrub.</li><li>• Use a herbicide to kill scrub e.g. stump treatment, wiping small bushes and/or regrowth, notching.</li><li>• Burn cut scrub.</li></ul>
<i>For further information or permission:</i>	Contact your local NPWS Conservation Ranger before carrying out any of the above actions.  The Cross-compliance Section, Dept. of Agriculture & Food, Tel (057) 8674400 is able to advise on cross-compliance matters.

### 4 Recorded Monuments & Archaeological Areas

<i>Relevant Act or Measure:</i>	National Monuments and Amendment Acts 1930 to 2004. GAEC 6 ‘Retention of Landscape Features and Avoiding Deterioration of Habitats’
<i>Restriction:</i>	You CANNOT cut, pull, wipe or otherwise kill, scrub on a Recorded Monument or within an Archaeological Area before informing the National Monuments Service in writing two months before starting the work.  Scrub on or within a monument can ONLY be removed using hand-tools or by wiping with a herbicide.  Advice should be sought before removing scrub from potential monuments that do not appear on the maps.
<i>For further information or permission:</i>	Maps of Recorded Monuments and Places are available at local libraries. Write to the National Monuments Service* two months before starting any work stating your name, address, townland where the work is to be carried out, proposed work and, if possible, the Monument’s identifying number or type.  * Dept. of Environment, Heritage & Local Government, Dún Scéine, Harcourt Lane, Dublin 2  Archaeological monuments on the Burren can cover large areas so they are often difficult to identify on maps. The Burren also has many types of monuments that are difficult to identify e.g. low grassy mounds and old walls, so it is not always easy to decide if the scrub you intend to remove is on or in, recorded monuments. It is always best to check this by asking for advice from your local National Monuments advisor at the National Monuments Service, 3rd Floor, Plaza Offices, Headford Road, Galway. Tel 091 704204  The Cross-compliance Section, Dept. of Agriculture & Food, Tel: (057) 8674400 is able to advise on cross-compliance matters.

### 5 Burning Cut Scrub (Brashings)

<i>Relevant Act or Measure:</i>	Waste Management (Prohibition of Waste Disposal by Burning Regulations) 2009  Waste Management Act 1996 & 2008, Air Pollution Act 1987. European Communities (Natural Habitats) Regulations 1997. Wildlife Act 1976.  CROSS-COMPLIANCE: SMR 5 ‘Conservation of Natural Habitats and of Wild Flora & Fauna’  National Monuments and Amendment Acts 1930 to 2004.
<i>Restriction:</i>	Until 2014, you can, on completion of a Statutory Declaration, burn the brashings created during your scrub control programme providing there are no other practicable or cost-effective means of disposing of them e.g. use as fuel, shredding for compost or wood chippings. You cannot use any accelerants (e.g. petrol) during burning and must ensure you will not endanger human health or damage adjacent habitats.  You need to inform the relevant Local Authority or their nominee before burning.  It is illegal to burn any living vegetation between 1st March and 31st August (bird nesting season).  It is illegal to burn within 30 m (50 feet) of a public road.  You need permission to burn cut scrub within an SAC.  If you are burning within one mile of a woodland or Nature Reserve you must inform the Gardaí and woodland owner at least one week in advance.  No burning of any material is permitted on or around a Recorded Monument. Permission is needed in an Archaeological Area.
<i>For further information or permission:</i>	Local NPWS Conservation Ranger.  Local National Monuments advisor at National Monuments Service, 3rd Floor, Plaza Offices, Headford Road, Galway. Tel 091 704204  <b>Local Authority: Clare</b> At the time of publication (2010), Clare County Council required you to contact ‘The Fire Brigade Control Centre’ on 061 316165 or the 999 system at least one day before you propose to burn and give the location, time and expected duration. This may have been replaced by the requirement to submit a ‘Statutory Declaration - application form for burning waste’. Get the up-to-date requirements by contacting The Environment Section, Clare County Council, Tel 065 6846331  <b>Local Authority: Galway</b> Galway County Council require you to submit an advanced notice using the ‘Statutory Declaration - application form for burning waste’ Forms can be obtained from The Environment Section, Galway County Council Tel 091 476402 or <a href="http://www.galway.ie/en/Services/Environment/WasteManagementRecycling">www.galway.ie/en/Services/Environment/WasteManagementRecycling</a>

# 6 Single Farm Payment & Cross Compliance Requirements

In addition to those already mentioned above, the following Statutory Management and GAEC requirements should be adhered to when removing scrub. For full information on these refer to the booklets ‘Single Payment Scheme – Guide to Cross Compliance March 2005’ and ‘SPS – Guide to Cross Compliance Requirements to be Implemented in 2006 and 2007’.

**SMR 2**  
**PROTECTION OF GROUNDWATER AGAINST POLLUTION**

You must not discharge any herbicides directly into the groundwater.

**SMR 9**  
**AUTHORISATION, PLACING ON THE MARKET, USE AND CONTROL**  
**OF PLANT PROTECTION PRODUCTS**

Only approved herbicides may be used e.g. you cannot use things such as diesel to kill scrub. Herbicides must be stored, handled and used as specified on the product label or data sheet. Farmers must keep records of all herbicide bought or acquired, how and where they were used etc. See Annex 2 - Pesticide checklist in booklet indicated\* above for a full list of the information to be recorded.

Herbicides must be used in accordance with good plant protection practice (for information see [www.pcs.agriculture.gov.ie](http://www.pcs.agriculture.gov.ie)).

**GAEC 7**  
**AVOIDING THE ENCROACHMENT OF UNWANTED VEGETATION ON AGRICULTURAL LAND**

You must not allow scrub to become established on forage areas. This can be achieved through grazing programmes, active removal of encroaching scrub or a combination of these.

For further information:  
Contact the Cross-compliance Section, Dept. of Agriculture & Food, Tel (057) 8674400.

# 7 Agri-environmental Schemes & Organics

Make sure that you are not in contravention of any requirements stipulated in your agri-environmental plan e.g. REPS or organic certification. Consult you planner or advisor for clarification if needed.

# 8 Health & Safety

Under the Safety, Health and Welfare at Work Act, all work places, including farms, MUST have a safety statement. Make sure that scrub removal activities e.g. use of chainsaws and herbicides are covered in your statement before you undertake any work. Refer to the booklets ‘Guidelines on the Preparation of a Safety Statement for a Farm’ and ‘Farm Safety Code of Practice – Risk Assessment Document’ by the Health and Safety Authority to help you to do this.

The statement should cover things such as:

- Correct use of any scrub cutting equipment that is used on your farm e.g. chainsaws, strimmers.
- Protective clothing requirements.
- Storage and handling of chemicals and pesticides.

If you are employing contractors to carry out the work you should make sure that they are competent, have any necessary and relevant training for the work, are adequately insured and have their own Health and Safety Statement.





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