

Scrub management

(creating, restoring and maintaining scrub for wildlife)

This leaflet contains guidelines for managing farmland scrub species. Hawthorn is the most widespread species while blackthorn dominates on deeper, more fertile soils, and willows on damp ground. Gorse favours acidic, tree-draining soils.

Taking account of existing habitats and landscape features when you are managing scrub will help avoid damaging them, eg consider the impact of your work on species-rich grasslands and archaeological sites.

Scrub is an important wildlife habitat, whether it is a few isolated shrubs or young trees, or a dense thicket. It is a natural part of other habitats, such as grassland and woodland, and an important component of the landscape.

Scrub regenerating naturally into field margins. Inset: scrub provides nesting sites for birds like the yellowhammer.

BENEFITS FOR WILDLIFE

GUIDELINES OVERLEAF

Well-managed scrub and its margins support a range of wildlife. Scrub provides nectar, seeds, fruits, shelter and nest sites for invertebrates, birds and mammals. It also offers suitable habitat for many flowering plants.

Diverse scrub is the most valuable to wildlife. Scrub of varied age, species and structure supports the widest range of wildlife, as some species depend on specific growth stages of certain plants. Some species require particular shrubs and others a range of habitats in a landscape.

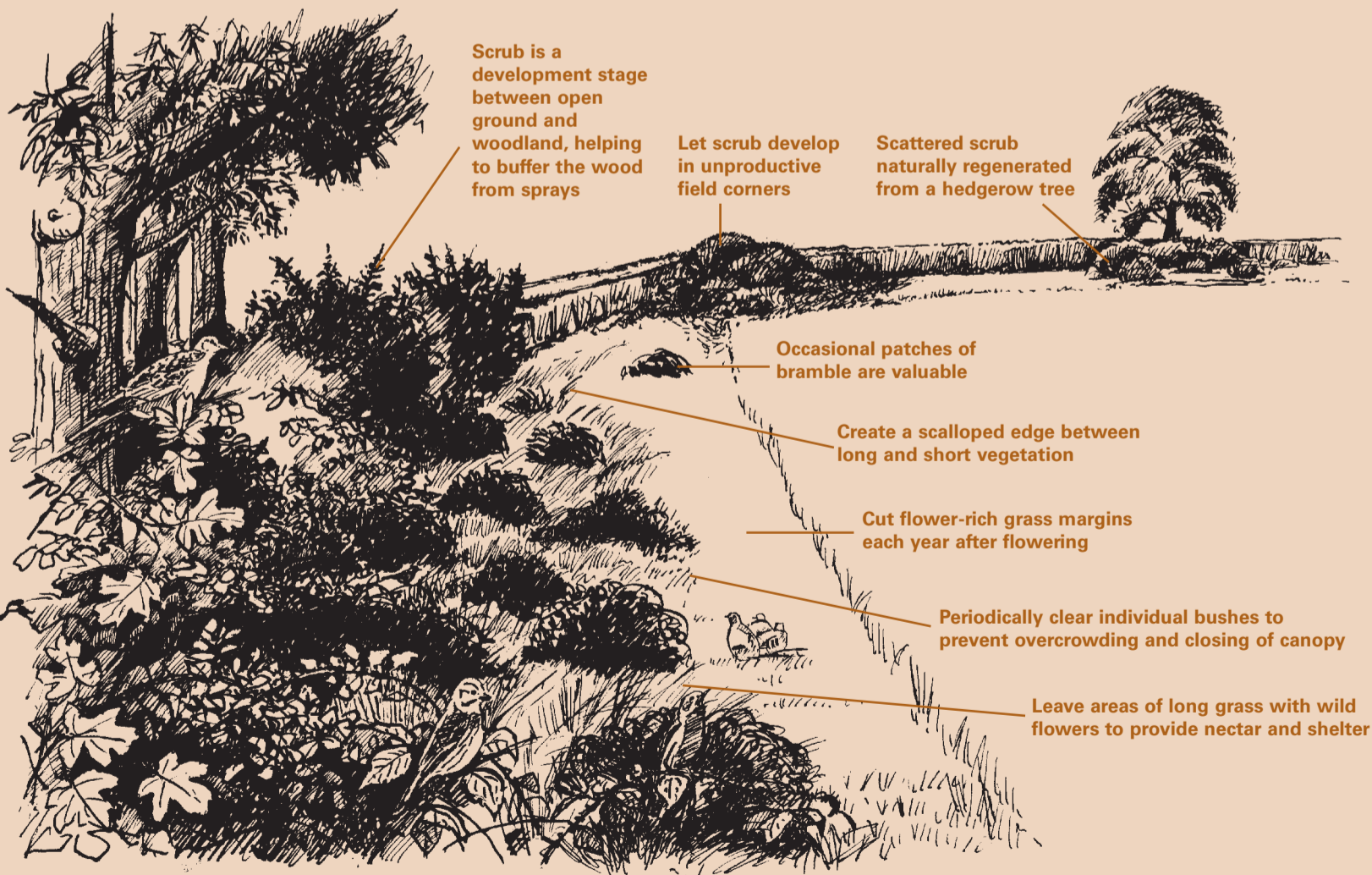
Small patch of scrub. It is important to maintain all growth stages, from bare ground through young and old growth to decaying wood.

Scrub edges are an important habitat. Birds nest in a range of scrub types. Yellowhammers, linnets, grasshopper warblers and whitethroats favour young, scattered scrub. Dunnocks and willow warblers use low-growing, closed canopy scrub. Song thrushes and bullfinches use older, mature stands of scrub.

Scrub structure is important for birds. Birds nest in a range of scrub types. Yellowhammers, linnets, grasshopper warblers and whitethroats favour young, scattered scrub. Dunnocks and willow warblers use low-growing, closed canopy scrub. Song thrushes and bullfinches use older, mature stands of scrub.



OPPORTUNITIES FOR SCRUB CREATION FOR FARMLAND



Dan Powell

KEY POINTS

- Scrub management for wildlife should create and maintain a range of features; a diversity of shrub species, age and structure is essential.
- Before you begin work, consider the potential impact on the landscape, existing wildlife and archaeological features, and decide on your objectives.
- Choose techniques that are most suited to achieving these objectives on your site.
- Consult specialist organisations where appropriate.

See also the RSPB Scotland advisory sheets on:

- Managing wet scrub.

For answers to all of your farm wildlife enquiries, visit www.farmwildlife.info

RSPB Scotland is part of the RSPB, the UK charity that speaks out for birds and wildlife, tackling the problems that threaten our environment. Nature is amazing – help us keep it that way.

You can get further information on this and other ways of managing your farm for wildlife from:



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WHY DOES SCRUB NEED TO BE MANAGED?

Left unmanaged, scrub will develop into woodland. It requires periodic maintenance to retain its character and value to wildlife. It may also need managing to prevent it from threatening other wildlife, archaeological or landscape interests. You can manage scrub using one, or several, of the following measures:

- **Creation or development**
Increasing the extent of existing scrub, or creating new areas, is beneficial where there is little or no scrub. You can achieve this through natural regeneration or planting.
- **Restoration and maintenance**
Where scrub has been neglected, you can increase its structural and species diversity through restoration. Periodic management is then required to maintain diversity.
- **Control or eradication**
Scrub encroachment needs to be prevented where it compromises farming, conservation, landscape or archaeological interests. Follow-up management and maintenance will be required.

HOW CAN I MANAGE SCRUB?

There is a wide range of techniques for managing scrub to meet different objectives. These are summarised in the following table:

Summary of techniques for managing scrub

Technique	Objectives		
	Create	Restore	Maintain
Natural regeneration	✓		
Planting	✓		
Helping plants to establish	✓	✓	✓
Protection from browsing	✓	✓	✓
Grazing and browsing		✓	✓
Cutting scrub		✓	✓
Mowing and flailing		✓	✓
Stump removal and grubbing out		✓	
Herbicide application	✓	✓	✓

SCRUB ESTABLISHMENT

Natural regeneration

- Scrub develops naturally if allowed to do so. It can spread from hedges or woodlands into field corners and edges that are awkward to manage.
- Scrub that develops along a wood edge is valuable as it creates a rare transition between wood and open ground.
- Larger stands can be created in field corners where two or more hedges intersect.
- Scrub can help to buffer farm woods and ditches from sprays.
- Excluding grazing or stopping cultivation is often all that is needed to encourage regeneration. The scrub will probably develop slowly and, as it does so, will attract a variety of wildlife.

Planting

- Planting should only be necessary where there is no natural source of regeneration or where a rapid result is required.
- Planting between November and March ensures the maximum establishment of new plantings.
- Only use stock with a local provenance, either from locally-collected seeds or bare-rooted whips (nursery-grown saplings).
- Try not to plant in rows, as this creates wind tunnels. Scallop the edges of stands, mix species randomly to create diversity or plant in clumps to create a natural appearance. Leave unplanted gaps, which will infill naturally.

Helping plants to establish

- Scarification of compact ground will help species with light seeds to establish.
- Weeding when seedlings or whips are establishing will remove competing vegetation.
- Using wood chips or straw to mulch about a metre around each plant will suppress weeds and help to retain soil moisture.
- Use herbicides only if there are no alternative methods of control. Spraying up to a one-metre radius around each plant will suppress weed competition. Avoid spraying wild flowers as they are important for nectar-feeding insects. Instead, consider using a herbicide that only controls grasses. It is a legal requirement to follow all product use labels and comply with all statutory regulations.

Protection from browsing

- Shrubs are vulnerable to browsing by livestock, deer and rabbits during establishment.
- You can protect small numbers with spiral guards or tubes.
- Larger areas will need fencing to protect them from rabbits and/or deer as required.



Scrub regeneration adjacent to a farm wood creates important transitional habitat

RESTORATION AND MAINTENANCE OF EXISTING SCRUB

Aim to create or enhance the following features:

- sunny, sheltered edges, which offer a hot microclimate that is important for insects
- scalloped edges that increase the length of edge and provide shelter
- rides through scrub that provide sheltered edges – avoid openings that face the prevailing wind
- patchworks of scrub and glades that provide a lot of edge
- bramble, which is valuable for nesting and feeding birds and for nectar-feeding insects
- dead wood – which is valuable to fungi and invertebrates – leave dead trees or shrubs standing and retain small stacks of cut wood in dappled shade to rot slowly
- bare ground – which is valuable for insects and scarce plants – you can create it if scrub is being uprooted, or with a digger, but avoid creating it in areas of archaeological importance.

Grazing and browsing

- Light grazing helps to maintain the scrub edge and glades by suppressing rank grasses.
- Browsing improves structural diversity, but can damage palatable species. Remember that different species can be edible at different times of year.
- Browsing behaviour differs between species and within breeds. Most cattle don't browse, but can open paths through scrub by trampling. Sheep will browse on succulent young scrub growth. Ponies will strip buds and bark in winter or early spring. Goats will browse scrub in preference to other forage.
- Try to achieve a balance between diversifying the scrub stand and its margins, and causing damage. Start with a low stocking rate (c. 0.25 LU/ha) and increase it until the desired balance is achieved.

Cutting scrub

- Cutting most species of scrub encourages re-growth, and is useful for maintenance and restoration.
- Cut areas of scrub in a rotation, aiming to retain all ages. Scrub typically matures in 15 years, so cut 1/15th every year or 3/15ths every third year, for example.
- Cutting small patches will diversify scrub structure. Avoid cutting adjacent patches sequentially, as this reduces the foliage available for invertebrates to feed on.
- Plan your cutting programme to take account of existing interests and constraints (archaeology, landscape and species) and to create the desired patch layout.
- Try to cut between September and February, to avoid the bird breeding season.
- If you leave berry-bearing scrub cutting until after December, birds and mammals can eat the berries.
- Use tools according to the size of the task and access/resource limitations. Suitable tools range from hand tools – such as bow saws, mattocks, chainsaws and brush cutters – to tractor-mounted flails.
- Avoid creating access routes and burning cut material on or near sites of wildlife or archaeological importance.
- You can also cut to reduce or eradicate scrub. Follow-up treatment will be required to ensure eradication – for example, repeated cutting, mowing, continued browsing of re-growth, removal of stumps or herbicide treatment. Use herbicide application to treat stumps or re-growth where there are no alternatives and the risks do not outweigh the benefits.
- Old gorse rarely regenerates when cut however a large bank of seeds is usually in the soil beneath. Gorse can be cut and burned with loose litter in small fires across the restoration area to encourage seed germination. Extreme care and preparation must be taken when burning gorse.

Edge management by mowing or flailing

- Occasional mowing or flailing will maintain rides, glades and scrub edges.
- Annual mowing will keep the grassy scrub edges open and encourage flowering herbs.
- You can avoid destroying seeding herbs by mowing once in late summer/autumn.

Stump removal

- Stumps are important for wildlife, so should be retained where possible.
- Do not remove stumps in areas of archaeological importance.
- Remember that stump removal prevents the regeneration of most shrub species.
- However, removal may be necessary during ride or glade creation to allow access for mowing.