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for people
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Arable field margins



Peter Thompson (GCT)

The least productive areas of arable fields can be turned into important wildlife habitats

Field margins are generally the least productive areas of a field and just a 1-metre grass strip between the outer edge of the hedge and the crop edge can benefit wildlife in many ways. Wider margins are funded by the Countryside Stewardship Scheme or created using set-aside (see our sheet 'Non-rotational set-aside'). The management depends on the wildlife; different management types may be used around the farm.

BENEFITS FOR WILDLIFE

Grass margins can provide nest sites for ground-nesting birds

A tussocky grass strip against a short, thick hedge provides an ideal habitat for ground-nesting bird species such as grey partridges, whitethroats and yellowhammers. Corn buntings may use the same kind of strip alongside hedgeless field boundaries.

Grass margins boost numbers of beneficial insects and spiders on arable farmland

Tussocky grass margins provide essential over-wintering habitat for many welcome insects and spiders, which will feed on crop pests in the spring. They are also used by grasshoppers, sawflies and other insects that provide chick food for birds. Wild flower strips attract nectar-feeding insects, such as bumble bees, and hoverflies, which lay their eggs where there

is an abundant supply of aphids for the larvae to feed on.

Grass margins provide habitat for small mammals

Small mammal populations, such as voles and harvest mice, are able to build up in wide grass margins, providing ideal hunting habitat for barn owls and kestrels. Wide margins away from roadsides can reduce the risk of barn owls being killed by road traffic.

Cultivated margins can help conserve rare arable plant species

Many rare plants are now confined to the edges of arable fields. Careful management of these margins can help them without creating a significant weed burden at the edge of the crop. Cultivated margins on light soils with low fertility can provide seeds for farmland birds. Check sites carefully to prevent infestations of noxious weeds.

GUIDELINES OVERLEAF

HOW CAN I CREATE AND MANAGE ARABLE FIELD MARGINS?

CREATING GRASS MARGINS

- Autumn (August/September) is the best time to establish grass margins; use a higher seed rate if sowing in spring. Leave an area to regenerate naturally if a perennial grass sward will develop; otherwise drill a native seed mix.
- Spray a heavy weed burden with glyphosate or glufosinate before cultivation.
- Cut the sward when it is 10 cm tall in the first summer to control weeds and encourage grasses to tiller; this may require three cuts. Swaths of cut grass lying on top of the sward may suppress perennial grasses.
- Avoid herbicides and fertiliser drifting into the margin as these will benefit competitive weeds over perennial grasses. Insecticide drift harms any beneficial insects supported by the field margin.
- Treat barren brome in the grass margin selectively with an application of fluazifop-P-butyl in November (most perennial grasses will recover from this treatment).
- Retain the grass margins and apply no fertiliser when a grass ley forms part of the arable rotation. Ideally avoid grazing the margins from March to August.

TYPES OF GRASS MARGIN

- The tussocky type helps ground-nesting birds; and the wild flower type attracts nectar-feeding insects (see below).
- You may prefer to leave a sterile strip around

the crop edge to control weeds, although if you establish a perennial grass margin between a hedge base and the crop this should not be necessary. Where you use such strips, however, they should be positioned between the grass margin and the crop.

TUSOCKY GRASS MARGINS FOR NESTING BIRDS AND OVER-WINTERING INSECTS

- One- or two-metre margins, next to short, thick hedges, or boundaries with no hedge at all, provide nesting cover.
- Up to 30% of cocksfoot or timothy grass in the mix will create a tussocky sward ideal for nesting cover and protection for over-wintering insects. The mix should also include fine grasses such as fescues and bents.
- Cut these margins once every three years after the first year, and only in the autumn. Avoid cutting all margins during the same year. For 6-metre margins, cut the 3 metres abutting the crop edge annually, but only cut the hedgeside margin every three years; this will create a useful mix of grassland structure.

WILD FLOWER MARGINS TO ATTRACT NECTAR-FEEDING INSECTS

- Create wild flower strips within a 6-metre margin in a sunny area. Well-used farm tracks and footpaths are good sites as these areas are disturbed too often to make them suitable for the tussocky margins that suit nesting birds.

- Use a mix of fine grasses, such as fescues and bents. Wild flower seed should comprise between 5% and 20% of the mix by weight and include native plants such as yarrow, knapweed and ox-eye daisy.
- Where possible, use a local seed source. Seek advice to find out if there is local seed available.
- Drill the grass seed and broadcast the wild flower seed before rolling.
- Cut annually in the autumn.

CULTIVATED MARGINS FOR RARE ARABLE PLANTS

- This type of management is ideal for those sites with rare arable plant species or communities. Grass margins on these sites will suppress the germination of these dwindling populations. These types of plant need cultivation, and protection from herbicides and fertilisers.
- Cultivate the margin annually and leave it to regenerate without broad-spectrum herbicides or fertiliser. The germination time of the key plant species present will dictate the cultivation time (seek specific advice from one of the advisory bodies below).
- This type of management can give farmland birds a summer seed source on sites where any resultant weeds will not compromise the adjacent crop (such as on light, low nutrient soils).

KEY POINTS

Grass margins act as a barrier to weeds – stopping them from spreading beyond the hedge base and into the crop margin – and encourage predatory insects, which help to control crop pests.

Wide margins act as ‘buffer strips’, reducing the drift of pesticides into watercourses, and so help farmers comply with pesticide label requirements.

The Countryside Stewardship Scheme and some Environmentally Sensitive Areas can fund many forms of field margin management.

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Payment for some of this management may be available as part of a wider package of work under the Countryside Stewardship Scheme and some Environmentally Sensitive Areas. You can get further information on this and other ways of managing your farm for wildlife from:



Agricultural Adviser, The RSPB, UK Headquarters, The Lodge, Sandy, Bedfordshire SG19 2DL. Tel: 01767 680551



Farming and Wildlife Advisory Group, NAC, Stoneleigh, Kenilworth, Warwickshire CV8 2RX. Tel: 024 7669 6699



The Game Conservancy Trust, Fordingbridge, Hampshire SP6 1EF. Tel: 01425 652381