Field margins are generally the least productive areas of a field. By leaving a one-metre grass strip between the field boundary and the crop edge, you can give many benefits to wildlife. Field margins wider than this can be funded in Rural Development Contracts. The most appropriate way of managing the field margins will depend on the wildlife in the area. It may be best to manage the field margins in different ways across the farm.

**Grass margins can provide nest sites for ground-nesting birds**

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

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

Tussocky grass margins provide a winter home for insects and spiders that are beneficial to crops. They can then move into the crop in spring to feed on crop pests. Wildflower strips attract nectar-feeding insects, such as bumblebees, and species such as hoverflies, which will lay their eggs in nearby areas where there is an abundant supply of aphids for their larvae to feed on.

**Cultivated margins can help conserve rare arable plants**

Some of Scotland's rare plants are now confined to the edges of arable fields. Where these plants occur, it is best not to establish wide grass margins as these plants need regular cultivation to germinate. Carefully managing cultivated margins can help protect rare species without creating a significant weed burden at the edge of the crop. On light soils with low fertility, cultivated margins can help less competitive weeds to germinate, providing seeds for farmland birds to feed on. Choose sites carefully so that you don’t get an infestation of noxious weeds.

**Grass margins provide habitat for small mammals**

Wide grass margins are also ideal for small mammals, such as mice and voles, which are eaten by barn owls and kestrels. Positioning these margins away from roadsides reduces the risk of barn owls being killed by traffic.

*Above: The least productive areas of arable fields can be turned into important wildlife habitats.*
HOW CAN I CREATE AND MANAGE ARABLE FIELD MARGINS?

Creating grass margins

- Create grass margins where they will be most beneficial eg by hedges and watercourses.
- Establish grass margins by sowing a native grass seed mix preferably in August or September. You can start growing grass margins in spring but a higher seed rate is advisable. Grass margins can regenerate naturally if competitive weeds don’t take over.
- Apply glyphosate or glufosinate before cultivation where there is a heavy weed burden.
- Three cuts may be necessary in the first summer (when the sward is 10 cm high) to control weeds and encourage grasses to tiller. Removing the cuttings helps to reduce fertility and encourages a greater diversity of plants and fewer weeds.
- Prevent herbicides and fertiliser from drifting into the margin, as they benefit competitive weeds over perennial grasses. Accurate fertiliser application, using pneumatic applicators or properly fitted deflector plates on spinning disc applicators, will enhance the control of crop-margin weeds by field margins. Insecticide drift harms beneficial insects supported by the field margin. You can have your pesticide sprayer tested under the National Sprayer Testing Scheme to help reduce insecticide drift (see www.voluntaryinitiative.org.uk).
- Where a grass ley forms part of the arable rotation, its grass margins should be retained and no fertiliser applied. Avoid grazing the margins from March to August where possible.

Types of grass margin

- There are three kinds of grass margin: tussocky grass suits ground-nesting birds, wildflower margins attract nectar-feeding insects and cultivated margins benefit rare arable plants.
- A sterile strip around the crop edge can be used to control weeds, although if you establish a grass margin between a hedge base and the crop this should not be necessary. If you use a sterile strip, position it between the grass margins and the crop so that birds, such as yellowhammers, can nest in longer grasses at the base of hedges and more easily access insects in the margins.

Wild flower margins

- A six-metre margin in a sunny spot is best for wild flowers. Margins alongside well-used farm tracks and footpaths are good sites too as they are often too disturbed to be suitable for tussocky grass margins for nesting birds.
- Use a mix of fine grasses, such as fescues and bents, with the wild flower seed comprising between 5 and 20% of the mix by weight. Suitable plants include yarrow, knapweed and ox-eye daisy. Use all native species.
- Good establishment can be achieved by drilling the grass seed and broadcasting the wildflower seed, followed by rolling. After the first year, cut the margins annually, in autumn, after plants flower and seed. Remove cuttings.

Tussocky grass margins

- Margins 1–2 m wide can provide nesting cover for many farmland birds. Locate these next to short, thick hedges, or boundaries with no hedge at all.
- Up to 30% of cocksfoot or Scots timothy in the seed mix will give a tussocky sward, ideal for nesting cover and protection for insects in winter. The mix can also include fescues and bents. Include up to 10% of perennial rye grass to help speed up establishment.
- After the first year, cut these margins once every three years, and only in the autumn, after plants have set seed. Avoid cutting all margins in the same year. If you have six-metre margins, cut the three metres at the crop edge annually, in the autumn, but the hedgeside margin only every three years. This will create a useful mix of grassland structure. Some farmland birds, notably corn buntings, can still have young in the nest in late summer. Delaying cutting until after mid-September gives these late broods the best chance of fledging.

Cultivated margins

- This type of margin is ideal for sites with rare arable plants. The margin should be cultivated annually and left to regenerate, without applying broad spectrum herbicides or fertilisers. The best time for cultivation will depend on the germination times of the key plant species present.
- These margins are a summer seed source for farmland birds where weed growth will not compete strongly with the adjacent crop (such as on light soils with low nutrient status).

KEY POINTS

- Grass margins stop weeds spreading from the base of hedges to the crops. They also encourage predatory insects, which help to control crop pests.
- Wide margins act as ‘buffer strips’, reducing the run-off of pesticides, nutrients and silt into watercourses.

See also the RSPB Scotland advisory sheets on:

- Corn bunting
- Grey partridge
- Yellowhammer

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.