Supporting guidance for Beetlebanks

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Beetle banks are tussocky grass strips running across the middle of large arable fields.

They benefit a wide range of open farmland wildlife and are a good way of improving habitat in intensive arable areas.

They are especially important as overwintering habitat for predatory insects and spiders which prey on crop pests such as aphids and slugs.

Wildlife benefits

Intensively managed, narrow field boundaries around large arable fields are poor habitat for predatory insects such as ladybird, hoverfly, lacewing and ground beetle.

Using beetlebanks to provide the habitat requirements of these beneficial species can significantly boost their populations.

Many predatory insects cannot fly so they are slow to colonise crops.

Grass margins and beetlebanks provide a place for these insects to over-winter, build-up populations quickly in spring and move out into establishing crops. Using beetlebanks will allow quicker colonisation across larger fields.

Beetlebanks can provide food and shelter for other insect pollinator species. For example, bumblebees will often nest in holes made by voles and mice in grass swards.

They can benefit birds such as corn bunting, grey partridge and skylark by providing nesting habitat and insect food in open farmland away from field boundaries. Beetlebanks also provide hunting ground for barn owls and kestrels.

Beetlebanks also provide good habitat for small mammals such as hare and voles, as well as feeding, cover and a dispersal route for amphibians.

Which fields to choose

This option is best suited to arable fields greater than 400m x 400m (16 hectares) in size. Ideally, beetlebanks should be part of a wider mosaic of wildlife habitats including hedges, grass margins and buffer strips.

A beetlebank running across a slope is a good way of controlling soil erosion.

What needs to be done

Beetlebanks should run through the middle of fields and run parallel to a field boundary. Aim to create a two metre-wide beetlebank.

The beetlebank can be wider than this but you will only be paid for two metres in width.

Create your beetlebank by establishing a low (20–40 centimetres) raised bank in the middle of the field. This is best achieved during normal cultivation by careful two directional ploughing to create a low ridge.

If you don't want to create a raised bank then you can apply for the Grass Strips in Arable Fields option instead.

The beetlebank does not have to run the entire length of the field and a gap can be left between the edge of the field and the beetlebank.

Sow the beetlebanks with a mixture of perennial grasses such as cocksfoot, timothy and red fescue at a rate of 30kg per hectare. A small proportion of tall-growing wildflowers such as knapweed, ox-eye daisy and yarrow can be added to the seed mixture.

This will significantly enhance the value of the beetlebank to pollinating insects. Top the beetle bank after 1 August in the first year of establishment to encourage establishment of grasses and control annual weeds.

Leave the beetle bank uncut after the first year allowing the formation of grass tussocks and the build-up of large numbers of beneficial insects.

It will take a number of years for the insect population to develop, but numbers of predatory insects and spiders can reach 1,000 per square metre.

It is important to prevent spray drift from the adjacent crop as this could affect the diversity of the sward and insect populations.

Two metre beetlebanks located across fields are vulnerable to pesticide drift because of their short width. Where possible, avoid broad spectrum insecticides near beetlebanks, and create spray buffer zones on each side of the bank (at least six metres).

Alternatively, on lighter soils, establish conservation headlands both sides alongside beetlebanks and these should provide good nesting and feeding habitat for grey partridges. Wild bird seed mix established adjacent to beetlebanks should benefit birds too.

Weeds can be a problem. Dockens and thistles should be controlled by herbicide spot treatment. This is permitted but requires prior permission.

Further information

Further information on the benefits of beetlebanks and how to establish is available:

- Managing Arable Farmland for Wildlife (SNH)
- Guidance on beetle banks (GWCT)
- Beetle banks (RSPB)
- Summary of insect families (Royal Entomological Society)