

Vision for Essex Arable Field Margins

An actively farmed countryside that benefits biodiversity and the farming community. The uptake and implementation of Environmental Stewardship is widespread and successful.

Land use is sustainable and rich in wildlife with an increase in habitat diversity and species.

Linear habitats are encouraged and sympathetically managed as biodiversity corridors between fields of crops and alongside roads, drains, rivers and other features.

Arable fields and crops themselves are managed with techniques to reduce the use of pesticides and other chemicals.



Arable Field margins

National Description

Arable field margins are herbaceous strips or blocks around arable fields that are managed

specifically to provide benefits for wildlife. The arable field must be in a crop rotation which includes an arable crop, even if in certain years the field is in temporary grass, set-aside or fallow. Arable field margins are usually sited on the outer 2-12m margin of the arable field, although when planted as blocks they occasionally extend further into the field centre.

In general terms, the physical limits of the arable field margin priority habitat are defined by the extent of any management undertaken specifically to benefit wildlife. Single payment cross-compliance margins are considered as part of the boundary habitat and are not part of the arable field margin habitat.

The outer edge refers to the edge closest to the field boundary. Where there is a living field boundary (hedgerow or line of trees), any herbaceous vegetation within 2m from the centre of the living boundary is considered to be part of the living boundary habitat. The arable field margin outer boundary starts at the edge of this boundary habitat. Where the boundary is a ditch or other water body, any herbaceous vegetation within 2m from the centre of the water body (or one metre from the edge of the water body if this extends further into the field) is considered to be part of the boundary habitat. The arable field margin outer boundary starts at the edge of this boundary habitat. Where the boundary is non-living (e.g. a fence or wall), the outer edge is defined by the extent of any management undertaken specifically to benefit wildlife. Where the habitat comprises a block of, for example, wild bird seed mixture, it has only an outer edge. The inner edge refers to the edge closest to the centre of the field. In all cases, the inner edge is defined by the extent of any management undertaken specifically to benefit wildlife.

The following margin types are included:

□ Cultivated, low-input margins. These are areas within arable fields that are cultivated periodically, usually annually or biennially, but are not sprayed with spring/summer insecticides and not normally sprayed with herbicides (except for the control of injurious weeds or problem grasses such as creeping thistle, black grass, sterile brome or wild oat). Cultivated, low-input margins include conservation headlands and land managed specifically to create habitat for annual arable plants.

□ Margins sown to provide seed for wild birds. These are margins or blocks sown with plants that are allowed to set seed and which remain in place over the winter. They may be sown with cereals and/or small-seeded broad-leaved plants or grasses but areas sown with maize are excluded as they are of lower value for wild birds.

□ Margins sown with wild flowers or agricultural legumes and managed to allow flowering to provide pollen and nectar resources for invertebrates.

□ Margins providing permanent, grass strips with mixtures of tussocky and fine-leaved grasses.

Areas of grass established as cross compliance requirements (see below) are excluded from this definition, but all other strips of grassland created by sowing or natural regeneration, such as field margins or beetle banks, are included. Separate targets will be set for each margin-type, reflecting the varying priorities for conservation action.

The following margin types are excluded:

□ Although set-aside, biomass and organic crops can have incidental benefits for wildlife in arable fields, these areas are not managed specifically for wildlife and are therefore excluded from the definition.

□ Margins established as cross compliance requirements under the Single Payment Scheme (in England and Scotland) or as mandatory requirements of an Entry-Level Agri-environment Scheme (in Wales and likely in Northern Ireland) are excluded. These margins, where present, would be included as part of the priority hedgerow habitat, where put in place to protect the hedgerow.

□ Whole-field options such as over-wintered stubbles (with or without a fallow) and in-field options such as skylark plots are currently excluded from the definition of priority habitat, although their value for wildlife is acknowledged and their status will be reviewed in due course.

STATUS IN ESSEX

Arable Field Margins

Using the 12ha average for field size, this suggests about 8,342km of arable field edge in Essex, with some 5000ha of land brought into sensitive management in the county adopting a 6m margin.

1.1 Definition: For the purposes of this Action Plan the term “Cereal field margin” refers to strips of land lying between cereal crops and the field boundary and extending for a limited distance into the crop, which are deliberately managed to create conditions which benefit key farmland species. They can take a variety of forms, the principal types being:

i) A ‘Wildlife Strip’ 6m wide adjacent to a cereal crop, together with a 1m ‘Sterile Strip’ between the wildlife strip and the crop. The wildlife strip is cultivated once a year, but not cropped; the Sterile Strip is maintained so as to prevent aggressive arable spreading into the adjacent cereal crop.

ii) A ‘Conservation Headland’ either 6m or 12m wide forming the outer margin of the crop and separated from an adjacent field boundary or other vegetation by a 1m sterile strip. The Conservation Headland is cropped with cereals, but is managed with reduced inputs of pesticides so as to favour wild arable plants and invertebrates.

iii) A combined Wildlife Strip and Conservation Headland, separated by a Sterile Strip and managed as described above.

iv) Game crops, stubble or grassland fallows lying between annually cropped land and the field boundary.

1.2 In Essex there is a dominance of cereals among arable crops. Cereals account for 51% of the total area of arable land in the UK and approximately 65% of total area in Essex. Other crop margins have not yet been studied in a way which would enable reliable estimates of wildlife benefits and farming costs to be made. However, it is hoped that margins will be added to other crop types in Essex and the results forwarded to help national research. Arable field margins currently occur in all districts in Essex.

1.3 The margins of cereal fields can be managed in ways which will benefit wildlife, without having serious detrimental effects on the remaining cropped area. Estimating average field size to be 12 ha suggests that there are about 8342 km of cereal field edge in Essex. If all such boundaries included a 6m managed margin, some 5000 ha of land would be brought into sensitive management in Essex alone.

1.4 Cereal field margins as described in this plan could provide nesting and feeding sites for game birds and passerines. Many species of butterfly, grasshopper and plant bugs are associated with such sites. Many polyphagous invertebrates breed in crops, spending the winter in grassy banks at the interface of crops, hedges and other features. Also dependent on cereal field margins are rare arable flowers, many of which have undergone serious declines in recent years.

Targets

National Targets	Arable field margins	target date
1	No nett loss of existing resource of 105,216ha	ongoing
2	Expand the area of low input cultivated arable field margins to 16,300ha	ongoing
3	Expand the area of permanent grass arable field margins to 27,000ha	ongoing
4	Expand the area of flower rich arable field margins to 12,000ha	ongoing
5	Expand the area of wild bird seed arable field margins to 20,800ha	ongoing

East of England Targets	Arable field margins	target date
1	No specific East of England region targets	2015

Essex Targets	Arable field margins	target date
1	No nett loss of existing resource of est 5005ha (8342km x 6m)	
2	Expand the area of (low input cultivated; permanent grass; flower rich and wild bird seed) arable field margins by 5% = 250ha	2020