

Arable Field Margins

Our objective for this habitat is:

Increase the amount of cereal field margins and winter stubble, in order to consolidate then increase populations of local priority species.



Introduction

The farmed countryside is important for wildlife, but the fortunes of some species have changed with changes in farming practices. Many species, particularly annual arable plants and farmland birds, have declined nationally with changes to traditional farming methods and as a consequence are UK BAP priority species.

The decline in biodiversity has largely been due to production-orientated agricultural policies and technological advances since 1945. For example, the change in arable cropping patterns which has led to a switch from spring sown to autumn sown crops, resulting in a loss of winter stubble, has had adverse effects on some wildlife. Changes in the farming sector have been driven by national and European policies, such as the Common Agricultural Policy with which British farmers have been forced to comply.

However, many farmers do manage their land for wildlife as well as for crop production. Over the last few years, chemical use on farmland has fallen and it has become more targeted. Agri-environment schemes have further benefited wildlife in recent years. The Countryside Stewardship Scheme (CSS), which was funded by the Department of Environment, Food and Rural Affairs (Defra), was replaced in 2005 by the Environmental Stewardship Scheme (ESS) which has two tiers - an Entry Level Scheme (ELS) which is open to all farmers and a Higher Level Scheme (HLS) which is a competitive scheme, concentrated on sites rich in wildlife. Both tiers contain options which relate to arable farming. HLS is primarily targeted, in relation to this habitat, on sites supporting declining bird species to the east of the district.

Cereal field margins encourage wildlife on arable farms and this artificial habitat has become a UK BAP priority. Field margin creation includes 2m and 6m arable grass margins and beetle banks. Field margins alongside watercourses are a requirement for farmers to receive the Single Farm Payment ('cross compliance') and wider margins can help farmers to comply with regulations on buffer zones associated with certain pesticides.

Set-aside was used to remove land from cultivation to limit over-production. Species such as Brown Hare, Skylark and Lapwing take advantage of set-aside land for breeding. Brown Argus butterfly has recently spread into the district, apparently using geranium species on set aside as a larval foodplant. However, the phasing out of set-aside is a conservation concern.

Stubble is the remains of a cereal crop after harvest. The agri-environment schemes can pay farmers for the retention of stubble until February through the arable options package, with further financial incentives if this is followed by a period of fallow or low input crop. Wildlife seed mixtures and pollen and nectar mixes are also part of the arable options menu.

The aim of this action plan is to increase the amount of field margins and winter stubbles and it is assumed that in doing so, the target species will benefit. Additional actions, such as winter bird feeding, will be pursued. National BAP priority arable weeds are not known to grow in the district and no specific actions aimed at re-introducing them are proposed at this stage.

National status

Cereals cover about 51 per cent of Great Britain and 63 per cent of England. Information on stubble has never been collected.

Regional status

The regional audit (Selman) gives figures on lengths of Arable field margins in the CSS, for North Yorkshire (excluding the National Parks), which gives 72.7km of 'uncropped arable margins' and 207km of '2m grass margins and beetle banks'. This gives a total of 279.7km of the UK BAP priority habitat arable field margins.

Local status

Phase 1 Habitat Survey results give a total for cultivated land (including disturbed) of 40,700 ha or 31 per cent of the total land area.

Local priority species:

- Tree sparrow
- Grey partridge
- Starling
- Yellowhammer
- Skylark
- Brown hare
- Corn bunting
- Turtle dove
- House sparrow
- Linnet
- Red kite
- Brown argus butterfly

Status of priority species

The British trust for Ornithology (BTO) researches changes in the population of wild birds through national recording schemes and has published the following national declines for the period 1970 - 1999:

Starling	71 per cent decline
House sparrow	62 per cent decline

Tree sparrow - the UK population of the tree sparrow declined by 95 per cent between 1970 and 1998. This is probably because fewer seed and insect food sources are available to them on farmland. Tree sparrows nest in holes, traditionally in old trees, hedges or farm buildings. Protecting these nest sites is vital.

Corn bunting - within the district, mainly confined to the vale of York. The UK population of corn buntings fell by 85 per cent between 1970 and 1998. This is mainly because fewer seed and insect food sources are available to them on farmland. Also, because corn buntings are a late nesting species, their nests can be destroyed during harvesting or cutting. Corn buntings benefit from the provision of wild bird cover, conservation headlands and beetle banks.

Grey partridge - the UK grey partridge population fell by 82 per cent between 1970 and 1998*. This has been mainly caused by the loss of insect food sources on farmland. The loss of seed sources, loss of nesting habitat and predation have also contributed.

Turtle dove. Now very scarce in the district. The UK population of turtle doves fell by 77 per cent between 1970 and 2001; this was probably because fewer seed sources were available to them on farmland.

Yellowhammer - the UK yellowhammer population fell by 54 per cent between 1970 and 1998. This is probably because fewer seed food sources are available to them on farmland, which can be rectified by the provision of wild bird cover. The yellowhammer needs thick hedges with ditches or wide grass margins for nesting, lots of seeds throughout the year and insects and spiders in the spring and summer

Linnet - the UK population of linnets fell by 54 per cent between 1970 and 1998*. This is largely the result of loss of seed sources on farmland. Linnets can be helped through the provision of wild bird cover and leaving verges and waste ground uncut and unsprayed through the summer to provide seed food. Retain areas of scrub, bramble and gorse as both nesting cover and a food source.

Skylark - the UK skylark population fell by 54 per cent between 1970 and 2001. This decline was largely caused by the move from spring to winter cereals, as well as by intensified grassland management. Skylarks can be helped by the provision of suitable nesting habitat on arable farms using set-aside, spring cereals or skylark plots in winter cereals. Skylarks can nest successfully in late-cut hay meadows, or silage fields that are not cut before late May and subsequent cuts are at least seven weeks apart.

Red kite - successfully spreading out from the re-introduction site at Harewood, especially along the Wharfe valley.

The Brown hare (a UK BAP species) occurs on farmland as well as Upland heathland and Moorland edge.

Brown argus butterfly - has recently been recorded widely in the district, primarily on set-aside land where the caterpillar is thought to feed mainly on geranium or cranesbill species.

Yellow wagtail - only known breeding site in Harrogate district now is on arable farmland along the Ure Valley near Sharow, east of Ripon, although they may also use similar areas elsewhere in the district, especially in river valleys and near to former areas of wet grassland (BW).

Requirements

- A wide diversity of habitats on the farm, including the retention of any semi-natural habitat.
- Retention of grass tussocks within field margins.
- Use of targeted pesticides.
- Planting of low input crops or summer fallow following winter stubble.
- Game shooting only where the farm is positively managed for game and wildlife.
- Winter-feeding and nestbox schemes benefit some species of bird.
- Retention of gorse for breeding Linnets.
- None spraying of set-aside during the breeding season.

Threats

- Field management is greatly influenced by the European Union through the Common Agriculture Policy. Farmers are therefore directed in how they can work their land.
- Imported varieties of fodder species, such as Red clover and Bird's-foot trefoil, which are of no benefit to the rarer, long-tongued bumble bees.

Current local action

- Options are available in agri-environmental schemes.
- Set aside can be used to create/improve field margins and replace winter stubbles.
- Conservation advice and training for farmers and agronomists through FWAG and other agencies.
- FWAG/Yorkshire Agricultural Society Demonstration Farms at Hopewell House, Knaresborough.
- A number of farmers are farming organically.
- Wildlife benefits from work undertaken by many farmers not in agri-environmental schemes.
- The RSPB has piloted the Volunteer and Farmer Alliance scheme, to survey breeding birds on farmland.
- Advice on the management of farmland can be sought from FWAG, NFU, and Natural England.

- Care and maintenance visits undertaken by NE staff to farms with CSS or ESS agreements.
- The Claro Beagle's Brown Hare Conservation Group promotes the conservation of this species.
- The Harrogate and district Naturalists' Society manage land in the district and could set up nest box or bird feeding projects.

LINKS WITH OTHER HDBAP PLANS:

Farmland Guidance Note.

**UKSAP for: Skylark, Linnet, Corn bunting,
Tree sparrow, Grey partridge, Turtle dove.**

http://jncc.defra.gov.uk/_speciespages

See also 'Farmland Guidance Note'

The 2007 BAP Review has renamed the 'Cereal field margins' HAP as 'Arable field margins'.

UK HAP definition <http://jncc.defra.gov.uk/page-5706>

