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FARMING FOR WILDLIFE

Arable crops on livestock farms



Mark Hancock (RSPB)

Arable crops provide important food for seed-eating birds.

One of the major agricultural changes affecting farmland birds in Britain has been the loss of mixed farming. Livestock farming predominates in north and west Britain, where there has been a decline in the area of arable crops. In such areas, seed-rich habitats such as weedy brassica and root fodder crops and spring cereals can be especially important for declining bird species, particularly seed-eating birds such as buntings, finches and larks. Arable crops can also provide a safe nesting habitat for ground-nesting birds.

BENEFITS FOR WILDLIFE

Stubble fields provide valuable winter food for seed-eating birds

The stubbles that follow cereals can provide spilt grain and weed seeds that help seed-eaters such as yellowhammers and tree sparrows to survive the winter.

Fodder brassica and root crops can provide valuable weed seeds for winter food

Fodder brassica and root crops, where weeds are allowed to persist in the crop and set seed, provide an important habitat for the many small, seed-eating bird species, particularly linnets and twites, that depend on the seeds of weeds.

Arable crops provide a good nesting habitat for several farmland bird species

Arable crops can provide a suitable breeding habitat for grey partridges, skylarks and buntings. Spring cropping provides opportunities for lapwings to nest.

GUIDELINES OVERLEAF

ELS

OELS

HLS

HOW CAN I INTRODUCE AND MANAGE ARABLE CROPS?

Rotation

- Arable crops in a rotation with grassland are best fitted between short- or medium-term leys to keep the arable weed seed bank alive. Depending on the size of the arable weed seed bank, the majority of beneficial weeds are likely to become unviable within ten years, so need regular opportunities to germinate.
- Arable crops should not be grown on fields with a high risk of soil erosion and runoff, or created by ploughing grasslands that have environmental or historical interest.

ELS OELS HLS Cereal crops

- Insects associated with broad-leaved weeds within the crop are important food for the chicks of many farmland birds. Ripening cereal grains and those spilled at harvest provide food for seed-eating birds. Birds also eat the seeds of weeds that germinate during crop establishment and after harvesting. Stubbles offer food for seed-eating birds until the ground is turned over or seed is depleted.
- Crop management that controls the most damaging weeds, pests and diseases, but leaves as many of the less competitive weeds and non-target insects as possible, will provide significant benefits to farmland wildlife.
- Spring cereal crops offer the best wildlife benefits as they can normally be grown with no insecticide sprays and many of the spring-germinating weeds are very beneficial for birds and insects. Spring cereals have a crop structure that is suitable for a number of ground-nesting birds.

- The ELS and OELS options for arable land, such as over-wintered stubbles and conservation headlands can add to the benefits of these crops. There are also Higher Level Stewardship (HLS) options, such as reduced-herbicide cereal crops and unharvested conservation headlands.
- Although the harvesting of **whole crop silage** before grain has fully ripened reduces the amount of spilt grain at harvest, whole-crop silage stubbles can still be a source of weed seeds for birds. There is a wide range of cereal-based silage crops, including mixes of cereals with pulses or brassicas. All will provide benefits to farmland wildlife, although the early harvest can be detrimental to corn buntings, which nest late in the summer.
- **Undersown cereals** are rich in insects, particularly if clover is included. Birds may find seeds in the winter stubbles of undersown cereals difficult to access due to dense vegetation, so provide alternative seed-rich habitats through the winter, such as wild bird seed mixtures.

ELS OELS HLS Fodder brassicas and root crops

- Turnips, swedes, kale and other fodder crops with high weed populations are particularly important for wintering farmland birds. Broad-leaved weeds grow along with the crop and birds take their seeds from within the crop and from the soil surface after the crop is grazed or harvested. Important weeds include

fat hens, redshanks, charlocks and chickweeds.

- While it may be necessary to control weeds in some crops during establishment, if you can tolerate weeds that germinate with the crop and leave them to set seed, this will be of great benefit to birds. Once established, brassica crops are good competitors with weeds.

Maize

- Maize is not generally useful to birds as it requires relatively weed-free conditions during its establishment. Its structure makes it unsuitable for most ground-nesting birds.
- Lapwings can nest on the bare ground created during preparation of the seedbed. Field operations in the spring should be concentrated into as short a time as possible, ideally within a week, so that any failed pairs can nest again.

ELS OELS HLS Wild bird seed mixture

- Wild bird seed mixtures are particularly beneficial on livestock farms with no arable crops. You can grow these in field corners and margins. A mix of crops is generally established in spring and maintained for one or two years.

KEY POINTS

- Arable crops can provide essential food sources for seed-eating birds in predominantly grassland systems.
- Where there is no scope to incorporate any form of arable crop into the farming system, small plots sown with wild bird seed mixtures will be very beneficial.

KEY

ELS	=	Entry Level Stewardship
OELS	=	Organic Entry Level Stewardship
HLS	=	Higher Level Stewardship

For full details, refer to Defra scheme handbooks.

See also the RSPB advisory sheets on:

- Brassica and root fodder crops
- Low-input cereals
- Wild bird seed mixture
- Over-wintered stubbles
- Conservation headlands

For answers to all of your farm wildlife enquiries, visit www.farmwildlife.info

You can get further information on this and other ways of managing your farm for wildlife from:



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