# Conservation management advice for your arable business





Championing the Farmed
Environment (CFE) is encouraging
farmers and land managers
across England to protect and
enhance the environmental
value of farmland, through
environmental measures that sit
alongside productive agriculture.

CFE helps farmers and land managers choose the right environmental measures, put them in the right place and manage them in the right way – to protect soil, water and air quality and benefit wildlife.

CFE is a partnership approach, supported by many organisations engaged in agriculture and the environment. All recognise the importance of managing the farmed environment. By working with the CFE, voluntary industry-led initiatives (Greenhouse Gas Action Plan, Tried & Tested and The Voluntary Initiative) demonstrate how the industry collectively takes responsibility for addressing environmental issues alongside profitable farming.



## **Environmental land management:** 8 simple steps for arable farmers

Choosing the **right measures**, putting them in the **right place**, and managing them in the **right way** will make all the difference to your farm environment. The general principles given here should be considered in conjunction with local priorities for soil and water protection, and wildlife conservation. This approach complements best practice in soil, crop, fertiliser and pesticide management.

A farm environment can be improved by good management that maintains, buffers or creates high quality habitats on some 4% of your arable land. The actual area you need will depend on factors such as the area of vulnerable soils and length of watercourses.

If you need further advice then consult an environmental adviser.

#### What you can do

It is important to create a balance of environmental measures that contribute to each of the relevant points below to achieve improved environmental benefits.

#### 1. Look after established wildlife habitats

Start by assessing what you already have on farm! Maintaining, or where necessary restoring, existing wildlife habitats such as woodland, ponds, flower-rich grassland and field margins is critical to the survivals of much of the wildlife on your farm and may count towards some of the following measures without the need to create new habitats. Unproductive land can be used to create new habitats that complement what you already have.

## 2. Maximise the value of your field boundaries.

Hedgerow management and ditch management on a 2-3 year rotation boosts flowers, fruit and refuges for wildlife. This is most suited to hedges dominated by hawthorn and blackthorn, and ditches where rotational management will not compromise drainage. Plant new hedgerow trees to maintain or restore former numbers within the landscape.





#### 3. Create a network of grass margins

The highest priority is to buffer watercourses, ideally with buffer strips at least 5m wide. Grass margins can also boost beneficial insects and small mammals, as well as buffer hedges, ponds and other environmental features. Beetle banks can reduce soil erosion and run-off on slopes greater than 1:20 as well as boosting beneficial insects in fields greater than 20 ha.

#### 4. Establish flower rich habitats

Flower-rich margins on at least 1% of arable land will help support beneficial insects and a wealth of wildlife that feeds on insects. Assess if this is best done by allowing arable plants in the seed bank to germinate, establishing perennial margins with a grass and wildflower mix, or using nectar flower mixtures. Improving the linkages between these features on your farm will also help wildlife move across the landscape.

#### 5. Provide winter food for birds

Provision of seed for wildlife is best achieved by leaving over-wintered stubbles unsprayed and uncultivated until at least mid-February on at least 5% of arable land, or growing seed-rich crops such as wild bird cover on 2% of arable land.

## 6.Use of spring cropping or in-field measures to help ground-nesting birds

Spring crops provide better habitat for a range of plants, insects and birds such as lapwings and

skylarks. Use rotational fallows, skylark plots in winter cereals or (if breeding lapwings occur) fallow plots to support ground-nesting birds where spring cropping forms less than 25% of the arable area. Do not create fallow plots on land liable to runoff or erosion. Evidence suggests that at least 20 skylark plots or a 1ha fallow plot per 100 ha would support groundnesting birds.

#### 7. Use winter cover crops to protect water.

Consider if a winter cover crop (e.g. mustard) is necessary to capture residual nitrogen on cultivated land left fallow through the winter. This is not necessary if stubble is retained until at least mid-February and forms a green cover.

## 8. Establish in-field grass areas to reduce soil erosion and run-off

Land liable to act as channels for soil erosion or run-off (e.g. steep slopes or field corners) should be converted to in-field grass areas.

### Remember:

- Right measures
- Right place
- Right management

#### Working in partnership

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CFE is a partnership approach supported by many organisations engaged in agriculture and the environment.

All recognise the importance of managing the farmed environment. By working together with CFE, a number of voluntary, industry-led initiatives demonstrate how the industry is stepping up to promote and support good environmental management on farm.

Web: www.cfeonline.org.uk

Twitter: @cfeonline



#### Promoting responsible pesticide use

The Voluntary Initiative (VI) promotes responsible pesticide use by encouraging operator training through NRoSO, sprayer testing via NSTS and careful management of pesticides using an integrated approach supported by BASIS registered advice.

www.voluntaryinitiative.org.uk



Tried & Tested, (created by the industry for the industry), provides tools and resources designed to assist farmers and their advisers in improving farm nutrient management in an environmentally friendly, cost effective and practical way.

www.nutrientmanagement.org



The industry-wide Greenhouse Gas Action Plan (GHGAP) for agriculture focuses on improving resource use efficiency in order to enhance business performance whilst reducing GHG emissions from farming.



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Measures you can choose:	What to do	Measures you can choose:	What to do
1. Grass buffer strips next to a watercourse or pond	<b>Aim:</b> to provide a grassy buffer so that soil, run-off, pesticides and fertiliser cannot pollute water.	13. Unsprayed and/ or unfertilised cereal headlands 14. Cultivated margins	Aim: provide an area for arable plants and insects to flourish, where birds can feed.
2. In-field grass strips to avoid erosion	<b>Aim:</b> to slow the pathway of run-off and trap sediment; including soil, nutrients and pesticides. Also provides habitat for wildlife.		Aim: allow rare arable plants to germinate annually on lighter soils, and to encourage insects.
3. Management of maize to avoid erosion	Aim: to minimise soil erosion, improve soil structure and reduce the risk of run-off.	15. Over wintered stubbles	Aim: provide food and cover over winter for birds and other wildlife, with options for increasing benefits for wildlife in the previous crop and the succeeding spring and summer.
4. Watercourse fencing	<b>Aim:</b> to keep stock out of watercourses and off banks adjacent to watercourses thus avoiding bank erosion and contamination of water with soil and faeces.		
5. Winter cover crops	Aim: to avoid soil erosion and nitrate leaching over winter on vulnerable (generally	16. Supplementary winter feeding for farmland birds	Aim: feed wild farmland birds (not gamebirds) during the "hungry gap" of January to March and beyond.
	light) soils. This can also improve soil fertility depending on the crop established.	17. Field corners	Aim: create wildlife habitat, buffer features and avoid run-off and erosion.
6. Wildflower mix	<b>Aim:</b> to encourage natural or sown areas of wildflowers in grass margins, buffers and field corners for farm wildlife, particularly insects.	18. Beetle banks	<b>Aim:</b> create dry in-field habitat in place of hedges or ditches, providing wildlife corridors as well as breeding and feeding habitat for insects, birds and other wildlife.
7. Pollen & nectar mix	Aim: to provide food for nectar feeding insects, including bumble bees, butterflies and	19. Fertiliser-free	
	beneficials, over as long a season as possible.		Aim: increase wildflowers, insects and small mammals in permanent pasture, and protect soil and water.  Aim: establish grass areas, particularly in arable landscapes, that provide habitat and foraging areas for insects and other wildlife, and to protect archaeology.
8. Legume and herb rich temporary grass	Aim: to provide enhanced food supplies and habitat for invertebrates in temporary grassland, whilst improving soil structure and providing high quality animal feed.	permanent pasture	
9. Ryegrass seed for birds	Aim: to provide a winter seed source for birds from temporary grassland.	20. Arable land reverted to grass	
10. Wild bird cover	Aim: to feed wild farmland birds over winter.	21. Selective use of spring herbicides	<b>Aim:</b> reduce herbicide use on land, in order to allow a diverse range of non-competitive weeds in the crop to benefit insects, birds and other wildlife.
11. Skylark plots	Aim: provide landing and feeding areas for skylarks, safe from predators, in winter cereals.		
12. Lapwing plots	<b>Aim:</b> provide sparsely vegetated nesting sites for lapwing and other ground-nesting birds in large arable fields.	22. Brassica fodder crops	<b>Aim:</b> allow weeds to set seed in the crop to benefit insects and seed-eating birds over winter.

Guidance on creating and managing each of these measures can be found online at www.cfeonline.org.uk/advice-training When considering your farm pick the options that best suit your soils and farm type and that benefit the wildlife you know is there.

## Do you have water courses or ponds?



Ensure all are buffered to protect them from farming operations; this helps:

- Compliance with NVZ and LERAP requirements
- Deliver better water quality
- Provide habitat for water voles, newts, toads and dragonflies

Are there awkward corners and difficult boundaries to cultivate on your farm?



production to work for wildlife. This could:

- Make field work more efficient;
- Provide buffers to important habitats;
- Provide habitat for butterflies, bees and bats
- Provide linking corridors between habitats on your farm

Do you provide winter food and shelter for wildlife?



Winter food and shelter is vital for a range of farm wildlife. You can achieve this from:

- Areas of wild seed mix to provide both food and shelter for birds
- Over winter stubbles provide a source of food for birds and mammals, e.g. brown hare
- Tussocky grass margins provide shelter for mammals and a range of insects

Do you provide summer food for wildlife?



provided from a range of habitats. You can help by providing:

• Areas of pollon & postar mixes which

- Areas of pollen & nectar mixes which benefit pollinating insects and birds.
  Grass margins that offer food sources
- for small mammals

  These areas support important

pollinators for your crops

Do you provide enough breeding habitat for wildlife?



All wildlife need safe areas to breed. You can help by providing:

- Areas of spring cropping suited to a range of species including brown hare, lapwing and skylarks.
- Beetle banks offer fantastic refuges for beneficial insects and a breeding ground for harvest and field mice.

## **Championing the Farmed Environment**

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