Conservation management advice for your livestock 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:

7 simple steps for lowland livestock farmers

the right options
in the right place with
the right management
will make all the difference to your farm's environment

Start with

• Identifying the important habitats on your farm

And then look at how you can:

- Enhance water and soil quality
- Provide a year-round food supply for wildlife.

On any farm, the steps below complement best practice in soil management, nutrient management (fertilisers and manures) and pesticide use to improve the environment, and most are supported by agrienvironment schemes. There is no 'blueprint' for how to deliver improved environmental management on lowland livestock farms. It needs a tailored approach based on your own soils, landscape and environmental features. Addressing local environmental priorities can improve the benefits of these measures further, e.g. focussing on local populations of declining species or checking if you are within a priority water catchment.

Generally, wildlife benefits from livestock systems that provide a diverse range of habitats with a variety of vegetation and heights through the season. The ideal includes a mix of long-term permanent grassland and arable crops rotated with temporary grass leys.

What you can do

1. Look after established wildlife habitats

Start by assessing what important wildlife habitats are on your farm. Look for features, such as established grassland of wildlife or historic importance, rivers, ditches, ponds, veteran trees and woodland, or just ungrazed areas.

Give priority to grassland that has not been heavily improved, for example through re-seeding or nutrient inputs. Under the right management, such grassland can benefit wildlife, provide carbon storage and protect water. Flower-rich grassland or wet grassland are a very high priority and can be supported by agri-environment funding – seek advice from an environmental adviser.

2. Maximise the value of field boundaries

Hedges, ditches and walls are important for wildlife. Making the most of these features is a simple way to help wildlife without affecting your farming business. Trimming hedges (within permitted dates) and managing ditches on a 2-3 year rotation boosts flowers, fruit and refuges for wildlife. This approach is most suited to thorn-dominated hedges and ditches where rotational management will not compromise field drainage. Plant a wide range of hedgerow trees to maintain or restore former numbers in the landscape.

A wide diversity of grasses and flowers is often found in ditches and beside hedges. Avoid inputs drifting into field boundaries and keep an uncultivated buffer strip if the field is re-seeded or cropped. Fence off hedgerows to allow a dense base to develop. Rather than tightly following the curves of a hedge, consider fencing longer straight runs. This uses fewer posts and allows some rough grass to grow where the fence is further from the hedge.*

* If placing a fence beyond 3 metres of the centre of the hedge, please refer to the current BPS guidance, which explains the impact on field boundaries and your SPS claim

3. Create small areas of rough grassland at the edges and corners of fields

Areas of rough grass offer a range of benefits. They can be used to buffer important features, and offer habitats for small mammals and beneficial insects. If located correctly they can also help slow down erosion and run-off from fields. Create strips of rough grass where they can deliver multiple benefits (e.g. along a watercourse). Establishing rough grass where surface water channels through fields or creating strips across long unbroken slopes also helps. Simply leaving the back-swath or awkward corners uncut when mowing will provide some taller vegetation for wildlife.

4. Create flower rich habitats

Flowering plants are essential for many beneficial insects and a wealth of wildlife. Priority should be given to any older grassland with a range of native flowers.

Consider increasing plant diversity sown in grass leys on areas such as headlands or where there will be short runs when mowing. Legumes, such as clovers, can reduce use of inorganic fertiliser, boost protein and mineral supply for livestock and benefit soil structure. Some flowering herbs, such as plantains and chicory, can be productive in grass leys.

Alternatively, establish small flower-rich areas. This may include encouraging native plants on less fertile grassland areas or cultivating margins to stimulate germination of arable plants in the seed bank.



5. Create a varied sward on some of your grassland

Grazing practices have a big effect on wildlife. Variation in vegetation structure (short to tall; sparse to tussocky) offers greater wildlife benefits than short swards. Grazing is vital to maintain diversity of structure. Any grassland management practice that allows plants to flower and seed, even if only for a short period, will be beneficial. Grazing a taller average sward height (9-12cm), deferred grazing systems, or leaving small areas uncut in mown or topped fields will greatly boost wildlife opportunities and improve water infiltration into soil. Target this approach on less productive grassland areas (either whole fields or to awkward corners, wet areas and buffer strips). Ground nesting birds (e.g. skylark) benefit from at least six weeks between stock turnout and mowing.

6. Use a mix of forage crops to help wildlife

Mixed arable and livestock farms generally benefit wildlife (more than specialist enterprises) and can improve nutrient use efficiency and soil structure. Mixed farms can offer increased diversity of plants, insects and mobile species such as birds. Crops and management affect wildlife value. Grain and weed seeds are essential winter food for many farmland birds. Growing cereals for wholecrop (silage) or crimping provides valuable alternative forage for livestock and an entry into grass.

7. Avoid soil erosion from forage crops

Crops that provide little ground cover in autumn and winter make land vulnerable to soil erosion, as well as nutrient and pesticide leaching. To reduce these risks, identify land liable to soil erosion (e.g. steep areas) or pathways for run-off (e.g. valley bottoms,) and maintain these as grassland. Maize stubbles, grazed roots and brassica crops pose particular risks:

- Maize stubble use rough cultivation to improve water infiltration or sow a green cover to protect soil and capture residual nitrogen after harvest.
- Grazed brassica/root crops maintain wide buffer strips next to watercourses, provide run-back areas and strip grazing down the slope.

Working in partnership

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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



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Promoting responsible pesticide use
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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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Farming for wildlife

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Championing the Farmed Environment helps you make the most of the environmental features on your farm

> For illustrative purposes only, to help you choose the best options and the most suitable locations.

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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	Aim: to provide a grassy buffer so that soil, run-off, pesticides and fertiliser cannot pollute water.	13. Unsprayed and/ or unfertilised cereal headlands14. 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	Aim: 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
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	encourage insects. 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	Aim: 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	Aim: to encourage natural or sown areas of wildflowers in grass margins, buffers and field corners for farm wildlife, particularly insects.	18. Beetle banks	 Aim: 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. Aim: increase wildflowers, insects and small mammals in permanent pasture, and protect soil and water.
7. Pollen & nectar mix	Aim: to provide food for nectar feeding insects, including bumble bees, butterflies and beneficials, over as long a season as possible.		
8. Legume and herb rich	Aim: to provide enhanced food supplies and habitat for invertebrates in temporary	19. Fertiliser-free permanent pasture	
temporary grass	grassland, whilst improving soil structure and providing high quality animal feed.	20. Arable land reverted	Aim: establish grass areas, particularly in arable landscapes, that provide habitat and
9. Ryegrass seed for birds	Aim: to provide a winter seed source for birds from temporary grassland.	to grass	foraging areas for insects and other wildlife, and to protect archaeology.
10. Wild bird cover	Aim: to feed wild farmland birds over winter.	21. Selective use of spring herbicides	Aim: 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	Aim: provide sparsely vegetated nesting sites for lapwing and other ground-nesting birds in large arable fields.	22. Brassica fodder crops	Aim: allow weeds to set seed in the crop to benefit insects and seed-eating birds over winter.

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		19. Fertiliser-free	Aim: increase wildflowers, insects and small mammals in permanent pasture, and protect soil and water.
8. Legume and herb rich temporary grass		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	Aim: establish grass areas, particularly in arable landscapes, that provide habitat and foraging areas for insects and other wildlife, and to protect archaeology.
10. Wild bird cover	Aim: to feed wild farmland birds over winter.		Aim: 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.
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Guidance on creating and managing each of these measures can be found online at www.cfeonline.org.uk/advice-training

When considering your farm, maintaining or restoring your areas of natural grassland is likely to be the highest priority conservation action.

Do you have areas such as water courses, ponds and hedges?



Use buffers areas to protect habitats from farming operations such as spraying and spreading fertiliser, muck or slurry. Restricting livestock access helps:

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

Do you have less productive grassland areas?



Areas such as banks, wet areas and awkward corners can deliver more for wildlife.

- Create taller grassland rich in insects by leaving areas unmown or untopped or by grazing lightly.
- Establish rough grass areas where water channels run through fields or beside water courses and ponds.

Do you have any grassland of high wildlife value?



This type of grassland provides essential breeding and feeding areas for wildlife and supports important flora.

- Wet grasslands are essential for wetland birds.
- Flower rich grasslands are crucial for a range of insects.
- Rough pasture, used by ground nesting birds, is also important for mammals.

Do you provide winter food and shelter for wildlife?



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

- Provide winter seed food from cereal stubbles and wild seed mix that gives birds food and shelter.
- Cut hedges on rotation and establish berry producing trees.
- Establish areas of rough grass to give shelter for mammals and a range of insects.
- Avoid 'overly neat and tidy' areas. It is not great for nature.

Do you provide flower rich habitats?



Grassland management is vital to protect wildlife habitats and provide summer food from a range of habitats. How you can help:

- Value permanent pastures with flowers and native grasses.
- Include legumes and other herbs in your reseeds.
- Create flower rich buffer strips.

Championing the Farmed Environment

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