



## Standards and Farm Conservation Plan for Beef and Sheep Production

### Contents

<b>Standards and Farm Conservation Plan for Beef and Sheep Production</b> .....	1
<b>Introduction</b> .....	2
Rare and Endangered Wildlife .....	3
Pasture Fed .....	3
Farmland Wildlife and Regenerative Grazing .....	4
Farm Conservation Plan .....	4
Standards for the future .....	5
<b>Understanding Farm Wilder Standards</b> .....	5
<b>Grassland Habitat Management</b> .....	6
Farm Wilder Requirements .....	6
Farm Wilder Farm Conservation Plan .....	6
<b>Boundary Habitat Management and Woodland Creation</b> .....	7
<b>Soils and Nutrient Management and Feed Prescriptions</b> .....	10
Farm Wilder Requirement .....	10
Record Keeping .....	10
<b>Annex</b> .....	11
Target Species Habitat .....	11
<b>Marsh Fritillary Butterfly Habitat Management</b> .....	11
Habitat .....	11
Condition assessment .....	12
<b>Cuckoo Habitat Management</b> .....	12
Habitat .....	12
Management .....	13
Condition assessment criteria .....	13
<b>Other Priority Habitats</b> .....	13

<b>Lowland Calcareous Grassland</b> .....	14
Condition assessment .....	14
<b>Lowland Meadows</b> .....	14
Condition assessment .....	15
<b>Purple Moor Grass and Rush Pasture</b> .....	15
Condition assessment .....	15
<b>Upland calcareous grassland</b> .....	15
Condition assessment .....	16
<b>Lowland Heath</b> .....	16
Condition assessment .....	16
<b>Lowland Fens</b> .....	16
Condition assessment .....	17
<b>Wood pasture</b> .....	17
Condition assessment criteria .....	17
<b>Habitat for Breeding Waders</b> .....	17
Condition assessment .....	18
<b>Habitat for Breeding Cuckoos</b> .....	18
Condition assessment criteria .....	18
<b>Other Key Habitat Features</b> .....	18
<b>Hedgerows</b> .....	18
Condition assessment criteria .....	19
<b>Ponds</b> .....	19
Condition assessment criteria .....	19
<b>Woodland</b> .....	19
Condition assessment criteria .....	19
<b>Planting woodland</b> .....	19
<b>Upland heath and rough grassland</b> .....	20
Condition assessment criteria .....	20
<b>Wet grassland of conservation importance</b> .....	21
Condition assessment criteria .....	21

## Introduction

The Farm Wilder approach to beef and sheep production looks to reassert the value of grazing ruminant livestock in harmony with their environment, for the benefit of the

animals, farmers, consumers, wildlife and the natural world. It recognises the crucial role of these animals in maintaining and restoring important habitats for wildlife, regenerating soils and providing nutrient dense food for human consumption. In doing so, Farm Wilder provides a trusted means of identifying this produce throughout the supply chain to the point of sale.

Farm Wilder take a collaborative approach to assuring the environmental credentials of its produce, working with farmers, conservation groups and existing assurance schemes to create balanced standards that can be adapted to the management needs of different habitats and farm businesses.

### Rare and Endangered Wildlife

All Farm Wilder produce is raised on farms that are managing priority farmland habitats, such as species rich grasslands, wood pasture or wildlife rich heathland, which offer crucial nesting resources for rare and endangered wildlife such as cuckoos and marsh fritillary butterflies. These are habitats which that rely on grazing animals for their conservation; in the past wild ungulates such as bison, aurochs and wild horses would have provided this service, but in the modern agricultural landscape of the UK it is predominately cattle and sheep which fill the role.

As agricultural production has intensified, a polarization of land use often occurs, with more productive land being improved through drainage, cultivation and fertiliser use, while the low productivity of many important habitats has often led to them being abandoned entirely. The result of this abandonment is rapid succession by dominant grass species and woodland, leading to a less diverse habitat overall, and the decline of many rare wildlife species.

Farm Wilder works with conservation organisations to identify these habitats and target species. We then collaborate with the farmers who are managing them to ensure that the habitats are maintained, improved and/or expanded.

### Pasture Fed and additional certification

Our standards require that all ruminant livestock sold to Farm Wilder are produced on a 100% pasture fed diet across their entire lifecycle. This means that beef cattle and sheep receive only vegetation that forms their natural diet, predominantly grasses and herbs, and not the grains and other concentrate feeds which increasingly dominate livestock production but come at high cost to the environment, quality of the produce and animal welfare.

To classify what we do and do not consider as pasture, we have used the standards of partner organisations of [Pasture for Life \(PFLA\)](#) and [A Greener World Certified Grassfed](#), who share a broadly similar definition of 100% pasture fed. This permits grasses, forbs, legumes, leaf browse from shrubs and trees, and brassicas and wholecrop cereals harvested in the vegetative stage when produced in rotation with grass crops.

To monitor this aspect of production robustly, we request that in addition to Farm Wilder certification all our suppliers are certified by at least one of the following three additional environmental assurance schemes: Organic (SA or OF&G), PFLA, A Greener World Certified Regenerative or A Greener World Certified Grassfed. Where farms are not certified by one the above, we request that the farm become so within three years of starting to sell to Farm Wilder.

### Farmland Wildlife and Regenerative Grazing

Modern livestock husbandry often manages grassland exclusively for high calorific forage production, which requires heavy supplementation with concentrate feed to make up for the nutritional shortfall from the grass.

By contrast, a pasture fed diet demands that the nutritional balance required by livestock must be met through a diverse range of plant species, including grasses, legumes, herbs and tree fodder. This in turn supports a wealth of environmental benefits; below ground, the deeper rooting plant species provide the soil with the organic carbon and macronutrients that support abundant microbiological life and help combat climate change. Above ground, the plants provide habitat for the invertebrates and pollinators that underpin the food chain, as well as the varied sward structure which provides shelter for foraging birds, small mammals and amphibians.

But healthy ecosystems and abundant farm wildlife demands not just diversity in plant species, but diversity in management too, producing a mosaic of trees, hedges, scrub, rough, tussocky grasses and more tightly grazed swards. To ensure these needs are met across all Farm Wilder farms, we have WHAT. For example, farmers are asked to plant a certain number of trees for each hectare of the holding to help sink carbon and provide benefits to soil and wildlife. They are also asked to leave wide margins in hay and silage fields, enhance hedgerow management for habitat provision, and manage a proportion of the farm to increase pollen and nectar availability. To reduce nitrogen fertiliser use, we ask that all new leys include a minimum amount of nitrogen sinking legumes.

We use a condition assessment approach to key farm habitats such as hedgerows, ponds and species rich grassland, as well as the priority habitats for the Farm Wilder target species (e.g. marsh fritillaries and cuckoos). This ensures that these key habitats are, at a minimum, maintained in their current condition and where possible improved and expanded.

### Farm Conservation Plan

The Farm Wilder standards are built on the premise that abundant farm wildlife can and should be an integral element of profitable and productive farms, rather than confined to their perimeters. The standards have been developed to reflect this approach, but in some ways are a poor means of addressing the complex and variable realities of farm businesses and the ecosystems they are built upon.

Furthermore, many of the farmers we work with have expressed a desire to avoid an onerous, administrative approach to the accreditation and auditing process. They also suggested that an annual visit from a farm conservation adviser would be highly valued in supporting farmers in managing habitats and integrating Farm Wilder standards into their businesses.

To this end, Farm Wilder is partnering with the Farming and Wildlife Advisory Group South West (FWAG SW) to combine the annual farm audit with targeted conservation advice and the development of a Farm Conservation Plan. Each farmer will receive a day's advisory services that will include a farm visit and the development of a detailed plan to highlight important habitats and their condition, and provide suggestions for management. The plan will look at means of integrating natural processes into farm management, including through grazing strategies, soil husbandry and water management, alongside specific practices such as silvopasture and diverse leys.

We also ask that farmers keep a grazing management plan. This is a useful tool for developing grazing strategies that maximise the use of more productive pastures while conserving priority habitats and reducing traffic on areas at risk of poaching and erosion. It can also help in reducing farm costs through forage budgeting and matching stock numbers to year round forage availability.

#### Standards for the future

Over the coming years, as the Farm Wilder market grows and agricultural policy changes, these standards will be revisited periodically to ensure that they continue to provide the highest level of assurance for wildlife friendly beef and lamb production.

## Understanding Farm Wilder Standards

The standards have been presented in a table form, followed by an annex providing more detail where necessary. The table makes a distinction between the Farm Wilder management and conservation plan requirements in order to reflect the approach described above, in which certain fixed requests are made of farmers while other requirements are tailored to individual farms and managed under the conservation plan. We also include a number of recommendations, which are advised upon as part of the conservation plan.

Where appropriate, specific Farm Wilder standards can be overridden on a farm by farm basis in the Farm Conservation Plan. For example, if a farm has significant amounts of woodland and limited grazing space, we could grant a full or partial exemption on the tree planting requirement.

An important element of the Farm Conservation Plan is the condition assessment of key farm habitats, as described in more detail in the Annex. The baseline for this condition assessment will be set on the initial farm visit from a FWAG SW adviser, who will survey farm habitats and assess their conditions under the model described in the Annex. This assessment will then be used as the basis for future management requirements.

<b>Grassland Habitat Management</b>		
	Farm Wilder Requirements	Farm Wilder Farm Conservation Plan
1	<p>“Priority habitats” – e.g. calcareous grassland or purple moor grass and rush pasture, as listed in Annex – must be assessed for their condition and be managed to maintain or enhance their biodiversity. Details on each category of priority habitat are available in the Annex.</p>	<ul style="list-style-type: none"> <li>- Condition assessment of all semi natural grasslands, unimproved grasslands and species rich meadows in in-bye. Criteria detailed in annex, with farmers required to maintain or restore habitat depending on score.</li> <li>- All such grasslands recorded in Farm Conservation Plan, along with broad habitat type, key indicator species and condition. Management of these pastures to be considered as part of Grazing Management Plan</li> </ul>
2	<p>Farms must provide a diversity of wildlife habitats, focusing on the core provisions of shelter, pollen and nectar and wild bird seed. As a minimum, condition of existing ‘key’ habitats on farms must be maintained, but where possible habitats should be enhanced and regenerated to truly integrate vibrant wildlife populations into the farming system.</p>	<ul style="list-style-type: none"> <li>- Key farm habitats must be recorded in FCP. These are covered in the Annex, and include hedgerows, woodland, wood pastures and ponds.</li> <li>- Plans for management and enhancements of habitats to be recorded in FCP</li> </ul>
3	<p>Stocking rates and pasture management should encourage botanical and structural diversity in swards.</p>	<ul style="list-style-type: none"> <li>- Pasture/grazing management for diversity to be recorded in FCP.</li> </ul>
4	<p>New leys must include a minimum of 20% legumes and 10% forbs such as yarrow, plantain or chicory.</p> <p>Minimum of 60% of improved in-bye grassland needs to be managed with very low fertiliser use, set at the level prescribed under CS Mid Tier option <a href="#">GS2: Permanent Grassland with Very Low Inputs</a></p> <p>25% of low-input improved grassland needs to have either: A minimum of 7 weeks continuous rest period between 1<sup>st</sup> May and 31<sup>st</sup> July OR Be grazed lightly during the growing season to maintain a sward:</p> <ul style="list-style-type: none"> <li>- that has an average height of 7cm to 13cm</li> </ul>	<ul style="list-style-type: none"> <li>- Composition and timing of new leys recorded in FCP</li> <li>- 7 week break and/or lenient grazing parcels to be identified in FCP</li> <li>- Late cut hay meadows recorded in FCP</li> </ul>

	<ul style="list-style-type: none"> <li>- where at least 20% is shorter than 10cm</li> <li>- where at least 20% is over 10cm tall.</li> </ul> <p>Priority should be given to parcels with high botanical diversity and/or ground nesting birds</p> <p>Where possible, least some fields to be cut for a crop of hay or silage should not be cut before mid-July.</p>	
5	<p>A minimum of 4% of the total area of all cutting fields need to be left uncut, either as margins or in awkward field corners. These areas must be excluded from grass or arable reseeds. The areas can be grazed along with the aftermath sward. Where possible, margins should remain in the same locations year after year. Note: 4% of a parcel equates to a 4m margin along a 200m boundary of a 2ha field.</p>	<ul style="list-style-type: none"> <li>- Margins recorded in Farm Conservation Plan.</li> <li>- When choosing locations for margins, priority should be given to fields with ground nesting birds and/or the highest level of botanical diversity. Margins should be placed along watercourses, mature lines of trees or woodland edges wherever possible.</li> </ul>
6	<p>Recommended: Rough grassland at the edges and corners of grazing fields should be created and/or maintained.</p>	<ul style="list-style-type: none"> <li>- Rough grassland at edges and corners of fields to be recorded in Farm Conservation Plan</li> </ul>
7	<p>In fields with ground nesting birds, care must be taken to minimise disturbance through the nesting and fledging period. Cultivation, topping and conserving forage should be avoided or carried out with caution through this period.</p>	<ul style="list-style-type: none"> <li>- Fields with ground nesting birds to be recorded in Farm Conservation Plan, along with cutting schedule.</li> <li>Grazing plan for fields with ground nesting birds should manage cutting regime, stock rotation and/or stocking rate to accommodate breeding birds</li> </ul>
8	<p>In meadows with breeding waders, field margins, rough corners and damp hollows must be left uncut to provide shelter and feed for unfledged chicks.</p>	<ul style="list-style-type: none"> <li>- Margins, corners and damp hollows for breeding wader habitat to be recorded in Farm Conservation Plan</li> </ul>
9	<p>Where required, rush cutting must not occur between 15<sup>th</sup> March and 15<sup>th</sup> July, and ideally be carried out between September and November.</p>	<p>Rush cutting to be recorded in Farm Conservation Plan</p>
<p><b>Boundary Habitat Management and Woodland Creation</b></p>		

10	<p>Rotational cutting, coppicing or laying required on a minimum of 2500m of hedgerow per 100ha of enclosed farmland, with no more than 50% of cut in any one year and cutting occurring either:</p> <ul style="list-style-type: none"> <li>- every other year between 1<sup>st</sup> January and 28<sup>th</sup> February</li> <li>- once every three years or more between 1<sup>st</sup> September and 28<sup>th</sup> February</li> <li>- Where possible, hedgerows should but cut so as to increase height and width of the hedge by at least 10cm each time.</li> </ul> <p>Ditch management must be carried out on a rotation of two or more years, with no more than 50% of ditches cut in any one year, between 1<sup>st</sup> September and 28<sup>th</sup> February.</p>	Hedgerow marked for rotational cutting recorded in Farm Conservation Plan
11	<p>Recommended: Lines of mature trees should be given a 4m grass margin either side which is left out of cutting and or reseeding regimes, and receives no fertiliser or herbicides. Fallen deadwood should be left in the margin.</p> <p>Shrub layers underneath lines of trees should be managed so as to encourage bushy growth, either through rotational trimming every 2 or 3 years, or through laying/coppicing on rotation.</p>	Lines of mature trees to be recorded in Farm Conservation Plan
12	Recommended: Where appropriate a wide range of new hedgerow trees should be established to maintain or restore former numbers within the landscape.	<ul style="list-style-type: none"> <li>- Potential for new hedgerow trees recorded in Farm Conservation Plan</li> </ul> <p>Where appropriate, a range of hedgerow tree species should be established, include fruiting trees such as hawthorn, rowan and crab apple.</p>
13	<p>Where and when funding for tree planting is available, landowners are required to either:</p> <p>Establish 7 trees for every hectare* of enclosed, in-bye grassland under the producer's ownership within the first 3 years* of their membership of Farm Wilder. These can be calculated across the holding: e.g. a 50 ha holding would need to plant 350 trees.</p>	

	<ul style="list-style-type: none"> <li>- Trees can be planted in blocks, small copses, shelter belts, in field rows and/or introduced into existing hedges.</li> <li>- New hedgerows can be introduced in place of tree planting at the level of 45m of hedge for every hectare on farm.*</li> <li>- Trees can be planted in silvopasture systems, with animals given access to graze the underlying sward and the trees themselves, or in closed canopy blocks.</li> <li>- Tree species must be native, broadleaf species.</li> <li>- Planting design must be agreed in the Farm Conservation Plan</li> </ul> <p>OR</p> <p>Allow for natural regeneration of trees on 4% of the total area of the holding* Grazing animals must be excluded from the area for a minimum of 5 years</p> <ul style="list-style-type: none"> <li>- Block set aside for natural regeneration must be no less than 0.5ha in size.</li> <li>- Efforts should be made to disturb the sward in order to increase chances of trees establishing.</li> <li>- Cutting and clearing of scrub in the area is prevented, unless otherwise advised in the farm conservation plan.</li> <li>- Placing and management of these areas is to be considered as part of farm conservation plan.</li> </ul> <p>*see Annex for more details</p>	
14	<p>Recommended: Historic maps should be consulted signpost landowners to opportunities for landscape feature and habitat restoration.</p>	
15	<p>Grazing and pasture management should be the primary method of controlling internal parasites and ivermectins avoided unless absolutely necessary.</p>	<p>All Farm Wilder farms must have an Animal Health Plan</p>

Soils and Nutrient Management and Feed Prescriptions		
	Farm Wilder Requirement	Record Keeping
1	Soils must be managed to build and conserve health and fertility, including soil organic matter and microbiology.	- A baseline soil husbandry assessment to be included in FCP, identifying risks including compaction, erosion and depletion. A broad plan for soil regeneration must be laid out and goals and milestones identified.
2	Pasture and grazing must be managed to minimise risk of compaction, poaching and soil erosion.	- Risks and mitigation strategies to be considered in FCP
3	Risks caused by farm activities to water quality and flooding must be assessed and ameliorated.	- Risks to water quality from run-off, including from farm building and yards, tracks/roads and fields, to be included in FCP, and a nutrient management plan must be followed to minimize losses and leaching into the water environment.
4	Where feed is imported onto the farm, strategies must be in place to avoid risk of nutrient overloading	- A nutrient budget should be included in the nutrient management plan and strategies laid out to address any imbalance

## Annex

Certain habitat features on farms are to be assessed for condition, being graded A, B, or C against a number of criteria and with management requirements dependent on score.

Number of missed/ failed criteria	Condition assessment category	Probable management level
0	A	Maintain
1	B	Maintain or restore
2 or more	C	Restore

## Target Species Habitat

### Marsh Fritillary Butterfly Habitat Management

In order for farmers to be eligible for Farm Wilder Fritillary Butterfly Beef production, they must have either:

- At least 4ha of habitat for marsh fritillary butterflies and records from a recognised wildlife conservation organisation\* of marsh fritillary butterflies breeding on the farm within the last 5 years.
- Be restoring a minimum of 8ha purple moor grass and rush pasture into a condition that is suitable to attract nearby populations of marsh fritillaries under the supervision of an recognised wildlife conservation organisation

On Farm Habitats for marsh fritillaries must be monitored annually either by a recognised partner conservation organisation, or where that is not possible by Farm Wilder under the condition assessment criteria outlined below.

*\*Conservation organisations recognised by Farm Wilder include Butterfly Conservation Trust, The Farming and Wildlife Advisory Group South West, Wildlife Trusts, Natural England.*

### Habitat

Marsh fritillaries breed in open grassy habitats where their larval food plant devil's bit scabious can be found. In Devon and Cornwall, they are found in purple moor grass and rush pastures, dominated by purple moor grass and jointed rush. These are species-rich, semi-natural grasslands with abundant purple moor-grass and/or jointed rushes (sharp-flowered rush, jointed rush or blunt-flowered rush) on poorly drained neutral and acidic soils of the lowlands and upland fringe.

Purple Moor Grass and Rush pasture is often associated with springs, seepage lines and slopes surrounding waterlogged depressions and hollows. The habitats can occur on the upland fringes and above the moorland line, but should not be confused with species-poor, rush-dominated flushes and semi-improved pastures (where soft rush is often the most abundant rush), or species-poor, purple moor-grass wet acid grassland, which lacks most of the wildflower indicator species.

Typical grasses include: creeping bent, crested dog's-tail, purple moor-grass, quaking-grass, red fescue, sweet vernal grass, tufted hair-grass, velvet bent and Yorkshire-fog. Typical wildflowers

include: bog asphodel, bugle, common meadow-rue, greater bird's-foot-trefoil, marsh cinquefoil, marsh valerian, meadow thistle, meadowsweet and water mint.

### Condition assessment

1. Pastures should be grazed with cattle or ponies to create an uneven patchwork of vegetation, broadly between 8 and 25cm.
2. A high density of devils bit scabious is present.
3. Cover of undesirable species (creeping thistle, spear thistle, curled dock, broad-leaved dock, common ragwort, common nettle, cow parsley, marsh thistle and marsh ragwort) less than 10%.
4. Cover of large sedge species less than 30%, and cover of large grasses such as tufted hair-grass and reeds, less than 20%.
5. Cover of invasive trees and shrubs less than **20%**.
6. Cover of non-jointed rushes (soft, hard and compact) less than 50%.
7. At least two indicator species are frequent and two occasional (see table 5 in **Key 2b** of [Higher Level Stewardship FEP Manual](#)).

Where pastures are within a Countryside Stewardship Scheme, management of marsh fritillary habitats must meet the prescriptions of the scheme. Any failure to do so will result in an assessment of the farm to supply Farm Wilder.

### Cuckoo Habitat Management

In order for farmers to be eligible for Farm Wilder Cuckoo Beef or Cuckoo Lamb production, they must graze cattle or sheep on land that both:

- Has records of breeding cuckoos from a recognised conservation organisation\* or monitoring agency within the last five years.
- Is being managed to maintain or enhance habitats for breeding cuckoos, as per guidelines below.

#### Habitat

Cuckoos parasitise a range of song bird species, which act as hosts for their chicks. Different host species are used in different environments – for example, dunnocks are regularly used in the lowlands of south England, while meadow pipits are most commonly used in the uplands. This means that the cuckoo's habitat requirements are closely dependent on those of the host species for their chicks, and conservation management must be focused on ensuring suitable nesting habitat for the host as well as feeding and perching resources for cuckoos.

Farm Wilder Cuckoo Beef and Lamb production is focused entirely in the uplands of Dartmoor, with all cuckoos using meadow pipits as hosts. Meadow pipits breed widely on unenclosed rough grass and heather moorland, with a preference for a mosaic of grassland dominated by purple moor grass, cotton grasses and fescues, heather and boggy areas. Meadow pipits nest on the ground and favour rough, tussocky grassland with an abundance of invertebrates.

The main requirements of cuckoos in these areas is the existence of healthy populations of large invertebrates, particularly moths and butterfly larvae, which form the main food source for their chicks. Cuckoos also rely on scattered trees within unenclosed grassland, with a preference for trees up to around 6m tall, or mature shrub trees such as hawthorn or rowan.

## Management

Cuckoo breeding habitat on Dartmoor is now restricted to commons and newtakes, which offer the unenclosed, rough grazed habitat described above. These areas are generally managed under Countryside Stewardship prescriptions, which look to retain heather and grassland mosaics in good condition through requirements around stocking densities and stock movements. Commons meanwhile are generally grazed by a number of farmers, and management decisions are made collectively, often with the input of conservation and agricultural organisations. The involvement of a number of stakeholders on this land tends to ensure that the areas are managed with conservation as a priority, but in doing so limits the requirements that Farm Wilder can, and needs, to make. While not all commons can be judged as being in 'good condition, the existence of breeding cuckoos acts as an important indicator that they are being managed appropriately for a wide range of wildlife, with a mosaic of grass, heather, bog and tree cover.

## Condition assessment criteria

1. Pastures should be grazed with cattle, ponies and/or sheep to create an uneven mosaic of grass, heather and bogs.
2. There should be a mosaic of grassland and heath dominated by purple moor grass, cotton grasses and fescues, heather and boggy areas
3. Trees should be retained and protected, with efforts made to allow saplings to reach maturity. Where possible, and where tree cover is limited, new broadleaved trees should be introduced, with species matched to those native to the environment.
4. No signs of burning of 'sensitive areas'. Sensitive areas comprise: thin soils (less than 5 cm deep); steep slopes (greater than a gradient of one in two); pools, wet hollows, hags and erosion gullies; areas close to watercourses (within 5 m); areas with noticeably uneven structure at a small scale (c.1 m or less, particularly very old heather stands); and severely wind-clipped vegetation (usually forming a mat less than 10 cm thick).
5. There should be a range of age classes of heather present, with cover of young (pioneer stage) heather between 10% and 15% and cover of old (late-mature/degenerate stages) between 10% and 30% .

Where pastures are within a Countryside Stewardship Scheme, management of cuckoo habitats must meet the prescriptions of the scheme. Any failure to do so will result in an assessment of the farm to supply Farm Wilder.

## Other Priority Habitats

All farms supplying Farm Wilder must manage at least one type of exceptional grassland or wood pasture habitat. These habitats must be either recorded under the [UK Biodiversity Action Plan \(BAP\) Priority Habitat Inventory](#), or meet the criteria described for the relevant habitat type as covered below. In the latter case, an up to date survey must be provided listing species types and abundance.

Eligible habitat types include:

- Lowland calcareous grassland
- Lowland meadows
- Purple moor-grass and rush pastures
- Upland calcareous grassland
- Lowland heath
- Lowland Fens
- Wood pasture and parkland
- Successional wood pasture
- Lowland habitat for breeding waders
- Habitat for breeding cuckoos

Where habitats are within a Countryside Stewardship or Environmental Stewardship Agreement, habitat must meet the prescriptions of the scheme. Any failure to do so will result in an assessment of the farm's eligibility to supply Farm Wilder.

The below prescriptions for each habitat are adapted from the [Higher Level Stewardship FEP Manual](#).

### Lowland Calcareous Grassland

- This is species-rich, semi-natural grassland on chalk and limestone in the lowlands and upland fringe, generally below 300 m in altitude.
- This grassland is managed primarily by grazing.
- Typical grasses include blue moor-grass, cock's-foot, common bent, crested hair-grass, downy oat-grass, meadow oat-grass, quaking grass, sheep's fescue, tor-grass, upright brome and yellow oat-grass.
- Typical wildflowers include common bird's-foot-trefoil, common rock-rose, cowslip, eyebright, greater knapweed, lady's bedstraw, milkworts, small scabious and wild thyme.

### Condition assessment

1. At least two indicator species are frequent, and three occasional (see table 2 in [Key 2b in Higher Level Stewardship FEP Manual](#)).
2. Cover of undesirable species (creeping thistle, spear thistle, curled dock, broad-leaved dock, common ragwort and common nettle) less than 5%.
3. Cover of wildflowers and sedges throughout the sward (excluding the undesirable species listed above and creeping buttercup and white clover) more than 30%.
4. Cover of bare ground (including localised areas, for example, rabbit warrens) should be less than 10%.
5. Cover of invasive trees and shrubs less than 5%.

### Lowland Meadows

- Lowland meadows are species-rich, semi-natural grassland on free-draining, neutral soils in the lowlands and upland fringes, including species-rich flood plain grassland.
- They are managed by cutting and/or grazing.
- Typical grasses include: cock's-foot, common bent, crested dog's tail, red fescue, meadow fescue, sweet vernal grass, yellow oatgrass and Yorkshire-fog.

- Typical wildflowers include: common knapweed, common bird's foot- trefoil, common meadow-rue, marsh valerian, meadow vetchling, meadowsweet, narrow-leaved water-dropwort and ragged robin.

#### Condition assessment

1. Cover of undesirable species (creeping thistle, spear thistle, curled dock, broad-leaved dock, common ragwort, common nettle, marsh ragwort, cow parsley and bracken) less than 5%.
2. Cover of wildflowers and sedges throughout the sward (excluding the undesirable species listed above and creeping buttercup and white clover) more than 20%.
3. Cover of bare ground (including localised areas, for example, rabbit warrens) less than 10%.
4. Cover of invasive trees and shrubs less than 5%, and indicators of water logging (such as large sedges, rushes, reeds) less than 30%.
5. At least two indicator species are frequent and two occasional (see table 4 in **Key 2b** of [Higher Level Stewardship FEP Manual](#)).
6. See also 'General information on condition assessment of grassland BAP habitats' above.

#### Purple Moor Grass and Rush Pasture

- This refers to species-rich, semi-natural grassland with abundant purple moor-grass and/or jointed rushes (sharp-flowered rush, jointed rush or blunt-flowered rush) on poorly drained neutral and acidic soils of the lowlands and upland fringe.
- The habitat is often associated with springs, seepage lines and slopes surrounding waterlogged depressions and hollows.
- Purple moor-grass and rush pasture can occur on the upland fringes and above the Moorland Line, but should not be confused with species-poor, rush-dominated flushes and semi-improved pastures (where soft rush is often the most abundant rush), or species-poor, purple moor-grass wet acid grassland, which lacks most of the wildflower indicator species.
- Typical grasses include creeping bent, crested dog's-tail, purple moor-grass, quaking-grass, red fescue, sweet vernal grass, tufted hair-grass, velvet bent and Yorkshire-fog.
- Typical wildflowers include bog asphodel, bugle, common meadow-rue, greater bird's-foot-trefoil, marsh cinquefoil, marsh valerian, meadow thistle, meadowsweet and water mint.

#### Condition assessment

1. Pastures should be grazed with cattle or ponies to create an uneven patchwork of vegetation, broadly between 8 and 25cm.
2. At least two indicator species are frequent and two occasional (see table 5 in **Key 2b** of [Higher Level Stewardship FEP Manual](#)).
3. Cover of undesirable species (creeping thistle, spear thistle, curled dock, broad-leaved dock, common ragwort, common nettle, cow parsley, marsh thistle and marsh ragwort) less than 10%.
4. Cover of large sedge species less than 30%, and cover of large grasses such as tufted hair-grass and reeds, less than 20%.
5. Cover of invasive trees and shrubs less than **20%**.
6. Cover of non-jointed rushes (soft, hard and compact) less than 50%.

#### Upland calcareous grassland

- This grassland is generally species-rich, semi-natural grassland, usually dominated by fine-leaved grasses, on calcareous soils over Carboniferous limestone in upland areas.

- It is managed primarily by grazing.
- It often occurs in parts of large-scale enclosures with other less species-rich grassland types.
- Typical grasses include blue moor-grass, common bent, crested hair-grass, meadow oat-grass, red fescue, sheep's fescue, sweet vernal grass and quaking-grass.
- Typical wildflowers include common bird's-foot-trefoil, common rock-rose, eyebrights, fairy flax, harebell, horseshoe vetch and wild thyme.

#### Condition assessment

1. At least one indicator species is frequent and three are occasional (see table 6 in **Key 2b** of [Higher Level Stewardship FEP Manual](#)).
2. Cover of bare ground (including localised areas, for example, rabbit warrens) less than 10%.
3. Cover of undesirable species (creeping thistle, spear thistle, curled dock, broad-leaved dock, common ragwort, common nettle and false oat-grass) less than 10%.
4. Cover of wildflowers and sedges throughout the sward (excluding the undesirable species listed above and creeping buttercup and white clover) more than 20%.
5. Cover of herbs indicative of nutrient enrichment (daisy and creeping buttercup) less than 25%.

#### Lowland Heath

- Lowland heath includes dry heath, dune heath, wet heath and valley mire communities, usually below an altitude of 250 m and outside any area included in both the Severely Disadvantaged Area and Moorland Line, on acidic soils and shallow peat.
- It typically comprises heathers, gorses, fine grasses, wildflowers and lichens in a complex mosaic.
- There is usually at least 25% cover of heathers and other dwarf shrubs.

#### Condition assessment

1. Cover of dwarf shrubs should be between 25% and 95%, with at least two species frequent.
2. There should be a range of age classes of heather present, with cover of young (pioneer stage) heather between 10% and 15% and cover of old (late-mature/degenerate stages) between 10% and 30% .
3. Cover of undesirable species (bracken, injurious weeds and invasive non-native plants) should be less than 10%.

#### Lowland Fens

- The soil under fens is waterlogged, with the water table close to or above the surface for most of the year.
- They are found on flood plains, on the fringes of open water, in valleys, in basin-like depressions, and also around springs and flushes.
- They differ from blanket bogs and lowland raised bogs in that they are fed by ground water and surface water in addition to direct rainfall.
- Fens encompass a wide range of wetland plant communities on both peat and mineral soils, but typically you should find some of the following species: Bogbean Marsh pennywort, Bog-mosses, Marsh valerian, Branched bur-reed, Meadowsweet, Cottongrass, Purple-loosestrife, Common butterwort, Ragged robin, Common skullcap, Reed canary-grass, Common reed,

Reedmace, Common valerian, Reed sweet-grass, Gypsywort, Sedges, Hemp-agrimony, Water forget-me-not, Lesser spearwort, Water horsetail, Marsh arrowgrass, Water mint, Marsh/fen bedstraw, Wild angelica, Marsh cinquefoil, Yellow flag, Marsh-marigold, Yellow loosestrife

- Fen often occurs in association with other semi-natural habitats, especially lowland raised bog, wet woodland, wet grassland (including purple moor-grass and rush pasture), lowland heath and open water.

### Condition assessment

1. The water level and its management should result in either surface water, or the ground being wet enough for a 6-inch nail to be easily pushed in throughout the year.
2. Cover of undesirable species (common nettle, docks, creeping/ spear thistles, common ragwort and Indian (Himalayan) balsam) should be less than 10%.
3. Cover of scrub should be less than 10%.
4. Cover of bare ground should be less than 10%.
5. No more than 25% of the fen area should have a continuous cover of litter (ie dead vegetation).

### Wood pasture

*(The below definition differs from the HLS FEP definition in a number of important ways. Habitat registered in the Priority Habitat Inventory as Wood Pasture and Parkland will only be considered as such by Farm Wilder if the below conditions are met.)*

- Wood pasture is a vegetation structure rather than a particular plant community.
- This structure consists of large, open-grown native trees at various densities alongside younger trees and saplings, in a matrix of grazed grassland, heathland and/or woodland floras.
- The habitat is grazed by sheep, ponies and/or cattle, with an uneven sward present throughout the year.
- The grassland is classified as permanent pasture or in reversion to permanent pasture.

### Condition assessment criteria

1. There should be evidence of natural regeneration with young native trees and saplings present.
2. The balance between the trees, scrub and grassland should be typical of wood pasture in the local area.
3. There should be minimal bare earth and minimal evidence of poaching by livestock.
4. Standing and fallen dead trees of over 20 centimetres diameter are present, where they do not create a risk to health and safety.
5. There should be structural diversity in the sward, with areas of tussocky grass, herbs and shrubs.

### Habitat for Breeding Waders

- This feature will normally occur on open fields (normally greater than 2 ha) in coastal and flood plain grazing marshes where water levels are maintained at high levels through the spring and early summer.

- At least one of the following wading bird species regularly breeds or nests in the field: curlew, redshank, snipe, lapwing and oystercatcher.

#### Condition assessment

1. Cover of rushes should be less than 40% and on the remainder the cover of grass or sedge tussocks should be between 5% and 60%. (A tussock is a single plant or a clump of plants at least 15 cm wide that is more than 3 cm taller than the surrounding vegetation.)
2. The average sward height during April and May should be between 5 cm and 15 cm, unless the land has been shut for hay. (The sward should consist of patches of taller and shorter vegetation.)
3. The ground is wet between March and May (so that either: water lies continually on the surface of more than 5% of the field; or a 6-inch nail can easily be pushed into the ground on more than 10% of the field).

#### Habitat for Breeding Cuckoos

- This feature is usually found in open wood pasture or on the moorland fringe where scattered trees are found in unenclosed rough grass and heather moorland.
- Records of breeding cuckoos within the last five years within the last five years must be available.

#### Condition assessment criteria

6. Pastures should be grazed to create an uneven patchwork of vegetation, with a sward height of between 10 and 40cm through the April, May and June.
7. On moorland, there should be a mosaic of grassland and heath dominated by purple moor grass, cotton grasses and fescues, heather and boggy areas
8. Trees should be retained and protected, with efforts made to allow saplings to reach maturity. Where possible, and where tree cover is limited, new broadleaved trees should be introduced, with species matched to those native to the environment.
9. No signs of burning of 'sensitive areas'. Sensitive areas comprise: thin soils (less than 5 cm deep); steep slopes (greater than a gradient of one in two); pools, wet hollows, hags and erosion gullies; areas close to watercourses (within 5 m); areas with noticeably uneven structure at a small scale (c.1 m or less, particularly very old heather stands); and severely wind-clipped vegetation (usually forming a mat less than 10 cm thick).
10. There should be a range of age classes of heather present, with cover of young (pioneer stage) heather between 10% and 15% and cover of old (late-mature/degenerate stages) between 10% and 30% .

## Other Key Habitat Features

### Hedgerows

Broad condition assessment for farm hedgerows, excluding those that have been planted, laid or coppiced within the last five years. Hedges should be assessed broadly and as a whole, rather than individually, and a description of the character of hedges provided, including details on species categories and hedgerow structure. Length of hedge that have been laid or coppiced in preceding 12 months should be recorded.

### Condition assessment criteria

1. Height: At least 80% of hedgerows must meet a minimum threshold of 2m in height. Assess the height of the woody component of the hedgerow from the base of the stems to the top of the shoots of the woody species. This should be assessed along the whole length of the hedgerow and the most common height used. Gaps are not included, nor are hedgerow trees. Where a bank is present, the height of the bank must be excluded.
2. Width: At least 80% of hedgerows must roughly meet a minimum threshold of 1.5 m in width. Assess the width of the woody component between the shoot tips at the widest point. This should be assessed along the whole length of the hedgerow and the most common width used. Gaps are not included.
3. Gappiness: Assess the horizontal gappiness of the woody component. Gaps are defined as either complete breaks in the woody canopy of the hedgerow, or open spaces of more than one metre diameter between the bank and the canopy on trimmed hedgerows. No more than a total of 10% of the hedgerow lengths across the farm should be occupied by gaps and no one 'complete' gap should be greater than 5 m wide (this excludes access points and gates).

## Ponds

### Condition assessment criteria

1. There should be no obvious sign of pollution or of inappropriate quality of the water supply.
2. There should be an absence of damaging non-native plant or animal species. (Damaging plants include water fern, Australian swamp stonecrop, parrot's feather, floating pennywort and Japanese knotweed (on the bank). Damaging animals include non-native crayfish, reptiles and amphibians.)
3. The pond should not be stocked with fish or support damaging numbers of wildfowl.
4. It should experience only natural fluctuations in water levels.
5. Trees and scrub on southern bank should be controlled to allow sunlight to reach the pond

## Woodland

Woodlands include areas of ancient woodland, mixed woodland, native semi-natural woodlands, shelter belts and new plantations of broadleaf trees.

### Condition assessment criteria

1. The woodland must be free from damage by stock.
2. There should be no evidence of machinery damage or other mismanagement

Recommended:

1. Woodland should be managed to maintain a diverse height and age structure
2. Standing and fallen dead trees of over 20 centimetres diameter should be present, where they do not create a risk to health and safety.

## Planting woodland

Farm Wilder requires that landowners plant trees or allow for natural regeneration across a part of the holding, as part of a process to mitigate climate change, restore habitats and provide benefits to

livestock, soils and water. Financial support through Countryside Stewardship or other schemes may be available and can be advised upon as part of the Farm Conservation Plan.

Landowners are required to either:

- Plant a minimum of 7\* trees for every hectare of improved in-bye land\* held in-hand within the first 3 years of their membership of Farm Wilder. These can be calculated across the holding: e.g. a 50 ha holding would need to plant 350 trees.
  - o Trees can be planted in blocks, shelter belts, in field rows and/or introduced into existing hedges.
  - o New hedgerows can be introduced in place of tree planting at the level of 45m of hedge for every hectare on farm.\*
  - o Trees can be planted in silvopasture systems, with animals given access to graze the underlying sward and the trees themselves once established, or in closed canopy blocks.
  - o Tree species must be native, broadleaf species.
  - o Planting design must be agreed in the Farm Conservation Plan
- Allow for natural regeneration of trees on 4%\* of the total area of improved in-bye land
  - o Grazing animals must be excluded from the area for a minimum of 5 years
  - o Block set aside for natural regeneration must be no less than 0.5ha in size.
  - o Efforts should be made to disturb the sward in order to increase chances of trees establishing.
  - o Cutting and clearing of scrub in the area is prevented, unless otherwise advised in the farm conservation plan.
  - o Placing and management of these areas is to be considered as part of farm conservation plan.

\*The introduction of trees onto farms is one farm management tool for mitigating climate change, alongside others such as rotational or 'holistic' grazing, pasture fed diets, hedgerow improvements and input reduction. The figure of 7trees/ha is calculated to equal the level of tree cover needed to offset methane emissions from cattle over the course of one year. The IPCC calculate that methane emissions from ruminant production equal 1.39t Co<sub>2</sub>eq/ha per year as an average, though this number varies in different production systems. As we advise that a range of tree types are planted, including smaller shrubby species such as willow and hawthorn, we quote 5 trees per ton of Co<sub>2</sub>, or 7 trees to match annual methane emissions from ruminants.

\* Improved in-bye land includes all grassland and crop land with the exception of rough pasture, newtakes and heath.

\* Hedgerows have been estimated to sequester 3.05t Co<sub>2</sub> per 100m of 3.5m tall and 2m wide hedge <https://www.sciencedirect.com/science/article/abs/pii/S0167880917303584>

\* Areas of natural regeneration can be 'traded' for trees – e.g. if 2% of the total area of the farm was set aside for natural regeneration then only 3.5trees per hectare would need to be planted.

## **Upland heath and rough grassland**

### Condition assessment criteria

1. Pastures should be grazed with cattle alone or cattle and sheep to create an uneven mosaic of grass, heather and bogs.

2. Trees should be retained and protected, with efforts made to allow saplings to reach maturity. Where possible, and where tree cover is limited, new broadleaved trees should be introduced, with species matched to those native to the environment.
3. No signs of burning of 'sensitive areas'. Sensitive areas comprise: thin soils (less than 5 cm deep); steep slopes (greater than a gradient of one in two); pools, wet hollows, hags and erosion gullies; areas close to watercourses (within 5 m); areas with noticeably uneven structure at a small scale (c.1 m or less, particularly very old heather stands); and severely wind-clipped vegetation (usually forming a mat less than 10 cm thick).
4. In areas of dry heath in a burning rotation (that is, excluding sensitive areas and other no-burn or unburnt areas), a range of age classes of heather present, with the proportion of young (pioneer stage) heather between 10% and 50% and of old (late-mature/degenerate stage) heather at least 10% (see Figure 6).
5. No more than 33% of heather shoots should be grazed (when assessed between February and April), or flowering heather plants are at least frequent in autumn.

### **Wet grassland of conservation importance**

#### Condition assessment criteria

1. Pastures should be grazed with cattle or ponies to create an uneven patchwork of vegetation, broadly between 8 and 25cm.
2. Cover of undesirable species (creeping thistle, spear thistle, curled dock, broad-leaved dock, common nettle, cow parsley, marsh thistle) less than 10%.
3. Cover of large sedge species less than 30%, and cover of large grasses such as tufted hair-grass and reeds, less than 20%.
4. Cover of invasive trees and shrubs less than **25%**.
5. Cover of non-jointed rushes (soft, hard and compact) less than 50%.