

# Wildflower Grasslands in the Weald

of Kent, Sussex  
and Surrey



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## The High Weald Area of Outstanding Natural Beauty (AONB)

The High Weald is a historic landscape of rolling hills draped with small irregular fields, abundant woods and hedges, scattered farmsteads and sunken lanes. It was designated as an Area of Outstanding Natural Beauty (AONB) in 1983 to aid its protection and management. It covers 563 square miles of countryside at the heart of the South East England. Wildflower grasslands are a valued feature of the High Weald AONB.

## The High and Low Weald Area



A guide to  
a nationally  
valued habitat  
and its wildlife

## For further information

### Please contact:

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East Sussex, TN15 7PR  
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web: www.highweald.org

Understanding wildflower grasslands is the key to their conservation, restoration and creation.

## Vanishing Wildflower Grasslands

- **Unimproved grasslands**

can contain 50 or more different plant species including rare or scarce species.

- **'Semi-improved' grasslands**

may have been ploughed once or twice many years ago, or had some fertiliser applied in the past, but they still retain a valuable number of wild grass and flower species, typically between ten and twenty five.

- **Improved grasslands**

contain few wild grasses and only a few vigorous wildflower species such as buttercups, and are of little conservation value.

Unimproved grasslands are glorious places in summer alive with colourful flowers and butterflies and literally buzzing with the activity of bees, grasshoppers and other creatures.



These grasslands of the Weald, which occur on the area's neutral and acid soils, represent an irreplaceable and vanishing aspect of the Weald countryside and heritage.

Species-rich grasslands have evolved from ancient origins and been maintained by a continuity of traditional low-intensity grazing (pastures) or hay making (meadows) by generations of farmers. *Sadly the economic reality of agricultural intensification has meant that nationally less than 3% of grasslands remain unimproved.*

**Nowadays the few remaining species-rich grasslands are still being lost as a result of:**

- conversion to arable
- ploughing and re-seeding (with a high yielding grass mix)
- use of inorganic fertilisers, slurry, herbicides or excessive lime
- silage-making replacing the hay cut
- lower water levels through drainage and abstraction
- overgrazing
- undergrazing
- lack of or inappropriate management
- planting trees

The greatest threat is thought to be where landowners are not fully aware of the value of their site and make inappropriate management decisions.



*Buttercups often occur in profusion in flower-rich meadows but also persist in fertilised and sprayed fields. Buttercups therefore, although attractive, do not alone indicate a valuable grassland.*

## How do I know if a meadow or pasture is valuable for wildlife?

The richest grasslands are those that have been managed in the traditional way for many decades without agricultural improvement.

The presence of certain plants can indicate grassland of considerable wildlife value: Yellow Rattle, Ox-eye Daisy, Devil's-bit Scabious, Common Knapweed, Ragged Robin, Dyer's Greenweed, Orchids and fine-leaved grasses. Ant-hills and ridge and furrow can also be valuable indicators.



To discover what flowers are present in a pasture which has always been grazed short without the use of fertilisers or herbicides, a small area can easily be fenced off for the summer. You may be surprised at what flowers grow up!

Alternatively if a grassland has become overgrown but still not had fertilisers or herbicides applied, mowing small patches and keeping them short for a year or two will indicate whether other more delicate plants will come back from seed. A restoration cut, ensuring that all cuttings are removed, may then be desirable, unless breeding Barn Owls are using the field for hunting, or ant-hills are present.

**If you have or think you have a flower-rich grassland, or perhaps you know of one elsewhere, please contact the Weald Meadows Initiative for further help and advice.**



*Yellow Rattle*

## How should traditional meadows and pastures be cared for?

• **Meadows** are managed by mowing for hay. They support mainly spring and early-summer flowering perennials and also annuals which drop their seed before the hay-cut. Unimproved hay meadows are now our rarest grassland type.

• **Pastures** are managed by grazing with sheep or cattle.

They support mainly summer-flowering perennials. Pastures can also provide excellent habitat for insects because unlike hay meadows there is a continuity of vegetation throughout the year.



Adders  
Tongue

Grassland needs to be managed! Past management is important when considering future management and consistency will ensure species continuity. Old grasslands were traditionally managed in two main ways resulting in two equally important types of wildflower community: meadows and pastures.

**Meadow management** comprises the cutting and removal of a hay crop in mid-late July, and grazing of the aftermath until the following spring when the fields are shut up again for hay. *No fertilisers should be used* but a light application of well-rotted organic manure in the autumn every three years or so is traditional. A small amount of *light* poaching can provide useful germination sites for annuals and Ox-eye Daisy etc. in spring.

**Pasture management** is where grazing alone is carried out year after year. Stock numbers should be regulated to allow a variety of sward heights to develop (from short to slightly tussocky) and some flowering and seed-setting to occur. This is particularly important for insects. Some over-wintering grass seed-heads at least around the margins of the field are essential for the over-wintering stages of many butterflies, beetles and other invertebrates such as spiders. *No fertilisers should be used.*

**Undergrazing and overgrazing** should be avoided: *Undergrazing* leads to the dominance of coarse grasses at the expense of less robust species, followed by the invasion of bracken, bramble and ultimately scrub.



*Overgrazing* can lead to poaching and the creation of bare ground in which weeds such as Thistles, Ragwort and Docks can become established.



**Restoration** of neglected or inappropriately managed sites to their former glory is possible, but specialist advice should be sought.

**Grants** are available for grassland restoration, maintaining or introducing traditional management, creating new species-rich grassland to extend or buffer existing areas, and the restoration of associated hedges, trees and ponds to benefit wildlife and enhance the landscape.

### The wildflower seed harvester

To assist the Weald Meadows Initiative, government bodies have purchased a wildflower seed harvesting machine to generate supplies of seed from Weald grasslands. The sale of Weald Native Origin grass and wildflower seed is seen as a way of generating much needed income to support traditional management of hay meadows. In addition the use of Weald Native Origin seed in habitat creation or enhancement schemes is essential to meet our national obligation to maintain local biodiversity as published in 'Biodiversity the UK Action Plan' in 1994.

## If grassland has limited wildlife interest how can it be enhanced?

To enhance *species-poor grassland* and encourage wildlife the most appropriate option will depend on soil fertility, the type of grasses present, any perennial weeds such as thistles and docks, and existing wildlife. An important prerequisite is to reinstate traditional meadow or pasture management.

**Enhancement.** It is possible to introduce wildflowers into species-poor grassland containing only a few *wild* grasses. The grass may need to be cut or grazed short and even harrowed before broadcasting Weald Native Origin seed or planting in plant plugs or both. The growth is then kept short for at least a year before adopting a traditional management regime.

**Creation.** To reseed improved grassland or arable land a weed-free seed-bed with a fine tilth is essential. Naturally shallow and poor soils, and fields with slopes or poorly drained areas are *particularly suitable*. Preparations need to be started well in advance. Weald Native Origin grass and wildflower seed should be broadcast in late summer and the growth then kept short for at least a year. This approach is more expensive but can give particularly good results in the longer term.

## If I wish to enhance species-poor grassland what expectations should I have?

**Native and Local Provenance Seed**  
Many grassland wildflowers are now scarce and the use of British native and local provenance seed (such as Weald Native Origin Seed) ensures that genetic strains already well adapted to the local conditions are not affected by non-regional stock or imported seed. This approach is now promoted by Natural England who recognise the High and Low Wealds joint character areas are distinctive in terms of both their ecology and landscape.

The enhancement of species-poor grassland and the creation of wildflower grasslands from scratch can be very rewarding – however you should not expect to replicate an ancient unimproved meadow! Technical advice may be helpful to avoid disappointment. The Weald Meadows Initiative aims to provide both advice and a source of Weald Native Origin seed and plant plugs.

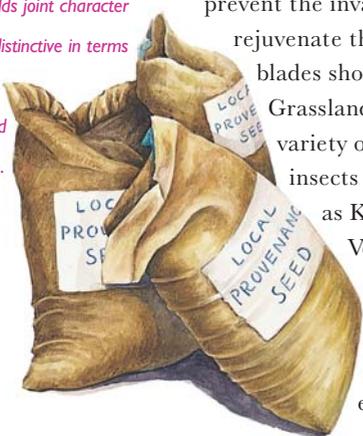
**Barn Owls.** An alternative enhancement approach, appropriate only for species-poor grassland, could be to allow the grass to develop a tussocky structure with overwintering grass seed-heads and perhaps a few scattered native shrubs. This will encourage voles and exciting predators such as Kestrels and Barn Owls, but few flowers.

Tussocky grassland should be cut or lightly grazed every second or third year at the end of summer to prevent the invasion of brambles and

rejuvenate the sward. When mowing, the cutting blades should be set to a height of 4 inches.

Grassland managed in this way can also support a variety of butterflies, grasshoppers, bees and other insects if a few more ‘robust’ wildflowers such as Knapweed, Common Sorrel and Tufted Vetch are present, or planted in.

This option may also be combined with the enhancement or creation options, by allowing a wide margin around the edge of the field to become tussocky.



### Local seed

The Weald Meadows Initiative is developing a network of sites for Weald Native Origin Seed supply. If you are interested in using a seed harvester or would like to purchase seed or plant plugs from Weald grassland please contact the Initiative.

### Further Reading:

#### Managing Wildflower

#### Grassland

– A guide for Landowners.

by A.J.L. Fraser

published by Worcestershire Nature

Conservation Trust Ltd., Lower Smite

Farm, Hindlip, Worcester WR3 8SZ

#### Flowers in the Grass

– Creating and managing

grasslands with wild flowers

by H.J. Ash, R. Bennett and R. Scott

published by English Nature,

Northminster House, Northminster

Road, Peterborough, PE1 1UA

## The Weald Meadows Initiative (WMI)

The production of this leaflet is part of a wider initiative developed in response to global concern about the loss of biodiversity and considerable local desire to reverse the loss of wildflower grasslands characteristic of the High and Low Weald.

The WMI enables the traditional management of unimproved meadows and the successful establishment of new species-rich grasslands. Recognising the need for wildflower management and creation to be financially viable it proactively develops and markets added value grassland products.

The Initiative:

- offers a grassland advisory service
- runs a range of specialist grassland events
- facilitates networking between landowners, contractors and other advisors
- harvests Weald Native Origin Wildflower and Grass Seed (WNOS) and
- provides other support to landowners as required.



The Initiative is a unique public private partnership between the High Weald Area of Outstanding Natural Beauty (AONB) Unit, the Farming & Wildlife Advisory Group (FWAG) and Agrifactors Ltd. The Weald Meadows Initiative has been developed and funded as a partnership between regional and local government and conservation organisations. It operates in the High and Low Weald areas of Sussex, Kent and Surrey.

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# A future for Wildflower Grasslands in the Weald

Improved fertilised grasslands support few wildflowers. If planting trees these areas should be selected to avoid damaging flower-rich sites.

Unmanaged old grassland can soon lose its botanical interest as coarse grasses swamp delicate flowers.

New meadows can be sown with local provenance grass and wildflower seed.

Specialised seed-harvesting machinery collects hay meadow seed for local supply.

Sheep and cattle lightly graze pasture, preventing encroachment of scrub and coarse grass.

Hay meadows are traditionally mown in late July producing quality herb-rich hay.

Wet flushes support special plants such as Ragged Robin.

Ant-hills support delicate plants such as Trailing St. John's-wort and attract Green Woodpeckers.

Rabbits graze some areas short benefiting plants such as Birds-foot Trefoil.

Plants and insects of unimproved grassland. The presence of these plants can indicate grassland of considerable wildlife value.



Ragged Robin

Common Knapweed

Devil's-Bit Scabiosa

Common Blue Butterfly

Small Copper Butterfly

Birds-foot Trefoil

Common Sorrel

Burnet Moths

Bumble Bee

Meadow Grasshoppers

Small Quaking Grass

Sweet Vernal Grass

Crested Dog's Tail

Meadow Barley

Dingy Skipper

Green-Winged Orchid

Ox-eye Daisy