

LAND MANAGEMENT TOOLKIT



Local Wildlife Sites – South East Wales Project

The following information outlines the best practice guidelines for managing the habitat type listed below in a manner that is sympathetic to wildlife. It is part of a series relating to various habitat types and management issues that have been produced by your local Wildlife Trusts.

No.1 Neutral Grassland (Hay Meadows)

What is Neutral Grassland (also known as Hay Meadows)?

Neutral Grassland can range from species poor, "Improved" grassland, typically dominated by species such as Perennial Ryegrass and White Clover that has received much chemical input (and may have been ploughed and seeded), to species-rich, Unimproved Neutral Grassland. As this toolkit relates to the management of Local Wildlife Sites it will focus on the more species rich end of the spectrum. These grasslands can occur both as Hay Meadows (the focus of this Toolkit) and grazed pasture (Toolkit No.2).



Yellow Rattle



Hay Meadow



Ox-eye Daisy

What wildlife does it support?

Species-rich Neutral Grassland (Hay Meadows) is, as its name implies, rich in floral diversity and often has a very "flowery" appearance. Typical flowers include Yellow Rattle, Ox-eye Daisy, Common Knapweed, Birds-foot Trefoil and some orchid species. The Hay Meadows are frequently alive with insects during the spring and summer and have birds such as Swallows feeding on this abundance of food.



Ringlet



Swallow



Small Skipper

Why preserve/enhance it?

Species-rich Hay Meadows, which you can justifiably feel proud to own, are a superb resource for wildlife as well as being of great visual appeal. Sadly species-rich neutral grassland is an increasingly rare habitat with a shocking 97% lost in the UK between 1930-1984 with losses still ongoing. It is therefore of great importance that this decline is halted and we would very much like to assist you in achieving this goal by both highlighting the threats to this habitat and providing management recommendations.

Threats

The following can all lead to the loss/degradation of this habitat:

- Development i.e. building of roads, housing etc.
- Agricultural improvement drainage, ploughing, reseeding, fertiliser or herbicide treatment, slurry application, conversion to arable, change from haymaking to silage production.
- Change from haymaking to grazing with inappropriate levels of grazing, typically too intensive not giving wild flowers chance to flourish.
- Lack of an annual cut and removal of cuttings Invasion by coarse grasses and scrub.
- Inappropriate cutting regimes Cutting to early not allowing flowers to set seed.
- Abandonment and neglect Encroachment by bracken.
- Tree planting.

Management Recommendations

The following is recommended to ensure the valuable Hay Meadow habitat is managed sympathetically for wildlife and is thus preserved and enhanced:

Preservation/Enhancement of Hay Meadows

If your grassland is already species-rich there may be no need to alter the current regime.

If alterations are required then the best-practice guidelines for cutting (and perhaps aftermath grazing are (exact timings will vary from site to site):

- January-February Light grazing on any new growth (optional) and if land not too wet.
- **Early March** Remove grazing before annuals germinate in the first mild conditions. Harrow if necessary.
- April-mid July The fields are "Shut up", i.e. no grazing, to allow growth for hay production.
- Mid July Mid August Meadows support mainly spring and early summer flowering perennials and also annuals that drop their seed prior to the hay cut. Take the hay cut once the annual wildflowers have seeded (mid-July/August). If possible it is advisable to leave some areas at the edge un-cut (perhaps a 2m strip) to allow some later flowering plants to flourish and retain a nectar source for late-flying insects. The un-cut areas should ideally vary from year to year to prevent any areas becoming scrubbed over and rank over time. A later cut in some areas can also be beneficial and if you have a number of fields one field could be left for later cut (September) on a 5 yearly rotational basis.
- Mid August Mid September Allow fields to rest and perhaps allow a second flush of flowering from later flowering plants.
- Late September-end December The main grazing period with a moderate stock density. Aftermath grazing (grazing after the hay cut) helps to keep coarse, palatable grasses in check and light trampling creates pockets of bare soil for seed germination. However stock should be removed if conditions become wet and unfavourable. Remove before December if a wet Autumn is experienced to avoid excessive poaching.

No fertilisers should be used, which will increase soil fertility and encourage the out competition of wildflowers by vigorous coarse grasses and weedy species.

There may be further issues that are reducing/threatening the ecological value of your Hay Meadow such as:

- Bracken For best results, roll/flail/cut bracken twice a year in May/June and again in July/August. Leave bracken on steep slopes or gullies. Consideration however needs to be given to potential for breeding birds that may limit/preclude work in May/June, if this is the case then control bracken by cutting or spraying after the bird-breeding season in late July/early August. A noticeable reduction will be achieved in 5 years. Refer to separate Toolkit No. 12 Bracken Control for more detail.
- Invading Scrub Remove any invading scrub between October to March (avoiding the bird-breeding season also) by either hand pulling or cutting otherwise this will shade out and out compete traditional meadow species. Stumps should be spot treated with a suitable herbicide to prevent regrowth. Refer to separate Toolkit No. 11 Scrub Control for more detail.
- **Invasive weeds** Control the spread of highly invasive weeds such as ragwort, thistles, nettles and docks, as well as alien species such as Himalayan Balsam, and Japanese Knotweed. These can be controlled with minimum harm to wildlife.
 - Ragwort can be hand pulled (wear suitable gloves) in May before it sets seed.
 - Thistles, nettles, and docks can be controlled by mowing them to a height of about 15cms before they flower and set seed.
 - Himalayan Balsam can also be controlled by hand-pulling before it sets seed.
 - ❖ Japanese Knotweed will require spot treatment with a suitable herbicide.

Refer to separate Toolkits – No. 13 & 14 Invasive Weed Control for more detail.

• Hedgerows – Hedgerows are an important feature of the countryside and border many fields providing stock-proofing as well as valuable ecological habitat and connectivity. Hedgerows can however shade the grassland, particularly if hedges lie on the southern edge of species rich grassland. Furthermore, certain species such as Blackthorn can sucker and spread out of the hedgerow into the grassland. Hedgerows therefore need to be managed by cutting and/or laying to preserve the quality of the species rich grassland. This cutting will also prevent them from becoming leggy and therefore maintain their stock-proofing and shelter properties. Refer to separate Toolkit – No. 8 Hedgerows for more detail.

Restoration of Neutral Grassland

There may also be areas of grassland within your land that are not currently of particularly high ecological value but measures can be taken to restore these if desired.

This can be achieved by converting species poor "semi-improved" grassland (species poor, probably formerly quite intensively farmed with applications of chemicals) to more species-rich "semi-improved" grassland by ceasing applications of fertilisers and possibly reducing stocking levels for aftermath grazing to reduce nutrient enrichment from droppings.

Creation of Neutral Grassland

Additionally there may be some areas within your land that do not have any discernible wildlife value but measures can be taken to create habitat of higher ecological value if desired. The detail of this work is beyond the scope of this document but your Local Wildlife Trust would be delighted to advise you further.

Should you require any further advice regarding the management of your Local Wildlife Site please do not hesitate to contact your local Wildlife Trust:

Gwent Wildlife Trust

Tel: 01600 740600

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Wildlife Trust of South & West Wales

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Other toolkits available are:

No.2 Neutral Grassland (Pasture)

No.3 Acid Grassland

No.4 Calcareous Grassland

No.5 Marshy Grassland

No.6 Marsh Grassland (with Marsh Fritillary)

No.7 Heath

No.8 Hedgerows

No.9 Salt Marsh & Coastal Grazing Marsh

No.10 Ponds & Lakes

No.11 Scrub control

No.12 Bracken control

No.13 Invasive weed control (natives - thistle,

dock etc.)

No.14 Invasive weed control (aliens – Japanese

Knotweed, Himalayan Balsam etc.)

Further useful documents include:

- Advice on managing grasslands for invertebrates:www.buglife.org.uk/sites/default/files/Grassland_web.pdf
- Advice on managing grasslands that are in environmental schemes: www.eblex.org.uk/wp/wp-content/uploads/2013/04/managementguidelinesforgrasslandinenvironmentalschemes_210710-final-report.pdf
- Further advice on grazing:www.grazinganimalsproject.org.uk/
- Meadow & Pasture in Wales information www.ccw.gov.uk/pdf/Meadows-website.pdf
- General information on Hay Meadows: www.floralocale.org/page24057
- Lowland Grassland Management (Chapter 6 mowing & cutting):www.publications.naturalengland.org.uk/publication/35034

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