

Guidance on Managing Unimproved Grassland

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Introduction

Permanent pasture accounts for more than 50% of the Malvern Hills AONB. Most of this grassland is farmed and will usually have been fertilised or re-seeded to improve its economic value. This is known as 'improved' grassland. Other areas of grassland, ranging from very small field parcels to large swathes of common have never been agriculturally improved. These areas of 'unimproved' grassland may have been managed traditionally for hundreds of years and are usually of great heritage interest. Unimproved grassland habitats within the AONB range from acid grassland on the granite ridge of the Malvern Hills to calcareous (lime-rich) grassland on the Suckley Hills.

The purpose of this guidance

The purpose of this guidance is to help those who manage grass fields which are 'unimproved'. These may still be wild flower-rich, or unimproved but with just a few wild flowers. They also include the grassland within some traditional orchards.



Wildflower meadow

Understanding grassland habitats

- Q** Why is unimproved (species rich) grassland so important for wildlife?
- A** Species rich grassland has declined by over 97% nationally in the last 50 years. It is the assemblage of a wide range of grasses and wild flowers together which makes it such a rich habitat, providing pollen, nectar and seeds for many animals which are now rare, particularly insects.

Further help: www.worcswildlifetrust.co.uk/wildlife/habitats/grassland: for information on wildlife on species rich grassland.

- Q** How can I tell whether my grassland is improved or unimproved (species rich)?
- A** Unimproved grassland will contain at least some of the following indicators:
- a variety of grasses and wild flowers;
 - a good percentage of broadleaved plants in the sward;
 - certain plants such as bird's foot trefoil, lady's bedstraw and orchids; anthills.

- Q** What is meant by traditional management?
- A** Traditional management comprises grazing by livestock at a sustainable stocking density according to the season's growth, or taking a hay cut, usually in July, followed by grazing. The hay is usually fed to stock in winter as grass growth declines.

Managing your grassland

- Q** Should I manage my species rich field by hay-making or grazing?
- A** It is normally best to continue with the existing management regime for a field, particularly if this has been in place for many years. Some specialist hay-meadow plants are annuals, and they can be lost if management changes from hay cutting to grazing.

- Q** How many animals will I need to graze my grassland?
- A** Aim for one livestock unit per hectare. A horse or cow is one livestock unit; a ewe and lambs is 0.12 livestock unit (so 8 ewes per hectare). This rate will allow resting and rotation of grazing in an average summer.

Further help: www.teagasc.ie/publications/2011/70/70_Horse_Grassland_2010_web.pdf.

Q Can wild flowers contribute to the health of my livestock?

A Native breeds of sheep, cattle and horse find wild flower grassland palatable and nutritionally beneficial. Many broadleaved plants are a good source of vitamins and minerals, and benefit all herbivores

Further help: www.alternativevet.org for one vet's views



Anthills

Q My grassland contains anthills and this is making management difficult. What should I do?

A Anthills indicate that grassland has been managed traditionally as pasture, possibly for hundreds of years. It is a valuable remnant of the historic landscape, rich in invertebrate life and probably plant life too. If grazed sensitively by sheep, it will retain its special character and wildlife value. However, horses and cattle can quickly damage anthills so avoid these grazers. Be sure to keep on top of weeds.

Q My field is an old pasture, but has few wild flowers. How can I introduce them?

A If the nutrient status of the field is not too high, it may be possible to introduce wild flowers successfully. For example, by strewing green hay from a local species rich grassland site. Analyse the soil and take advice. Ensure that the species you introduce are appropriate for your site and that future management encourages them.

Further help: www.naturalengland.org.uk/information_for_farmers_andland_managers/default.

Q How can I encourage the wild flowers which I have in my grassland?

A Don't allow the grasses to dominate by under-grazing, or damage the sward by over-grazing. Try to avoid weeds, scrub or patches of bare ground. The plants of unimproved pasture are mostly perennials, and do not need to flower and set seed every year, but they will gradually decline if grassland is not managed sensitively.

Q Should I do something at the end of winter to help the grassland recover from poaching and bare ground?

A This can be an opportunity to add wild flower seed, but not if the localised site will be worn bare again. For small areas, disturb the soil surface to make a shallow seedbed, and sow a mix of wild flower seeds ideally of local provenance, but always check that seed is of 'English-native' origin. Sow, then roll.

Further help: See Guidance on Keeping Horses in the Landscape: Top Tip for Managing Gateways, and Enhancement. Visit www.naturalengland.org.uk for Technical Information Notes on grassland including sward enhancement (TIN062).

Q Is there a limit to the quantity of manure to spread?

A There is a limit set for spreading, but on unimproved hay meadows, 5-8 tons/acre (12-20 tonnes/hectare) will replace the nutrients removed in the year's hay crop, together with nitrogen supplied from the atmosphere and clover in the sward.

Managing your grassland with horses

Q How do I prevent sour patches forming in my horse-grazed paddock?

A Grazing with sheep as well as horses will address this, along with picking up horse droppings. Regular removal of droppings is essential, and will help control the spread of gut parasites and flies. Harrowing and topping (rake up and remove the cuttings) will also help.

Further help: See www.pasture4horses.com

Q Can horses maintain wild flower-rich grassland on their own?

A This is possible, but land management and stock management are key. By picking up droppings regularly and by topping rough areas you will overcome most of the disadvantages of horse-grazing without other stock, especially if you rest the field (make hay instead) when you can.

Further help: See Guidance on Keeping Horses in the Landscape: Top Tip on Haymaking.

Q My fences need replacing. What are the best options?

A Green stakes with green polyrope are good if you need temporary fencing. Wooden fence posts 10 metres apart with green polyrope are excellent for permanent horse fencing.

Further help: Visit www.electricfencingonline.co.uk. See Guidance on Keeping Horses in the Landscape: Top Tip for Fencing and Boundaries, pages 10-11

Q I need to keep my laminitic horse on tight grazing. Will this harm my wild flower rich grassland?

A Yes. To keep a horse which is prone to laminitis healthy, the grazing regime is likely to lead to bare ground between plants and ingress of weeds, and to plants being pulled up by the root during grazing. Grazing muzzles can be a very successful aid to laminitic horse management without harming the grassland.

Further help: Visit www.safergrass.org/articles

Q What is the best way to store and use horse manure?

A Have several manure heaps to allow the manure to rot down as much as possible before spreading. The best use of nutrients is to spread in late winter before a hay crop. See above for how much to spread.

Further help: See how much to spread below.

Q Is it safe to use manure on my field which has been produced from wood shavings used as bedding?

A Yes. Wood shavings take longer to break down, so leave for at least two years before spreading.



Hay-making on the common

Q I need to feed my horses hay in the field in winter, (I have no stabling). How do I avoid damage to the grassland?

A Create a stoned area alongside a fenced boundary, as wide as necessary, where haynets can be tied, or build a field shelter. Horses will spend time in these areas limiting damage to the grass sward.

Q What are the disadvantages of grazing in small temporary paddocks?

A Small paddocks can be very visually obtrusive, especially in a sensitive landscape. They also prevent the horse from foraging naturally (by roaming to select variety from the grass sward). Small paddocks must be intensively managed to avoid build-up of parasites and horse-sick grass area.

Q What are the advantages of grazing in small temporary paddocks?

A They control the grass intake of a horse, and help avoid dietary problems including laminitis and obesity. They allow grass which is not required to be rested, or for a hay crop to be taken.

Common problems and threats to grassland

Q I cannot find anyone to cut or take hay, and I don't have any stock. What effect will this have on my grassland?

A Coarse grasses such as cocksfoot will gradually take

over, at the expense of small broadleaved plants. Gradually weeds, bramble and scrub will develop and, if left, eventually the field will turn to woodland.

Q Scrub is developing in my field. I have heard this is good for wildlife: should I let it develop?

A Scrub is very valuable for wildlife, but it develops rapidly and can out-compete wild flowers and grass, so on unimproved grassland habitats it should be controlled.

Q The local farmer who takes the hay from my field says he/she is wants to put fertiliser on it. Will this affect the wild flowers?

A Yes. Wild flowers will decline rapidly. Fertiliser will increase the vigour of the grass, and the wildflowers will be out-competed. However, you do not want to lose the interest of a local farmer in your hay crop. Carry out soil analysis to check the pH, and if it is below 5.6, take advice: the field may benefit from an application of lime.

Further help: See Guidance on Keeping Horses in the Landscape: Top Tip for use of Fertilisers page 6. Visit www.naturalengland.org.uk for TIN045 Lime and semi-natural grassland.

Q When my meadow is cut for hay, no signs of wildlife remain. Is this good management?

A Hay meadow plants and animals have adapted to this ancient system of grassland management so don't worry, but a 6-metre margin of grass along one or more boundaries of the field will provide a refuge of value to some species.

Weeds

Q How do I avoid weeds getting out of hand?

A Avoid poaching in winter, over-grazing, or the creation of bare ground which can arise from feeding in-field. These practices allow weeds to get a foothold. Control weeds through topping or spot spraying.

Further help: See Guidance on Keeping Horses in the Landscape: Top Tip for Managing Weeds.

Q How do I get rid of weeds?

A Top or strim nettles regularly: grass will soon replace them. Treat weeds with herbicide at the right time with the right product, always taking specific advice from an agronomist.

Further help: Topping weeds which regrow will weaken them, and help keep them under control. www.thephonebook.bt.com: for list of advisers and herbicide products. In 'Business type', type in: 'agricultural supplies' or see this section in Yellow Pages.

Further help: Visit www.gardenorganic.org.uk/organicweeds/downloads/creepingthistleleaf.pdf www.gardenorganic.org.uk/ for good general advice.



Poisonous Ragwort

Q I have ragwort. Should I get rid of it, and if so, how?

A All parts of ragwort are poisonous. Whilst the plant is growing, animals always avoid it, but will eat it when it has wilted or is present in hay. Land managers have to control the spread of this plant by law. Pull ragwort (use gloves) and remove all parts of the plant and burn them.

Further help: The British Horse Society Welfare Department can provide free advice, advisory literature and posters on the control and dangers of ragwort. Contact welfare@bhs.org.uk or call 02476 840571 or 02486 840573.

Q What does ragwort look like early in the season? Which plants are covered by The Weeds Act? My neighbour's spear thistle seed is spreading onto my field. How do I make a complaint under the Weeds Act?

A Natural England's website has good photographs to identify these plants, including ragwort and thistles early in the season at the rosette stage. It is an offence to allow the spread of five weed species: common ragwort, broad-leaved dock, curled dock, creeping thistle and spear thistle. You can contact Natural England for advice, however complaints will only be taken forward once a fully completed form is received.

Further help: visit www.naturalengland.org.uk/our-work/regulation/wildlife/enforcement/injurious-weeds.aspx: for 'Code of Practice on how to prevent Spread of Ragwort', 'Identification of Injurious Weeds', 'The Weeds Act', 'Complaint Form', 'Enforcing the Weeds Act 1959'

Q My field has many thistles. Should I leave them for wildlife?

A Thistles are a good source of nectar for insects but creeping and spear thistle can get out of control. Leave other thistles, such as marsh thistle, which are unlikely to become a problem.

Further help: visit <http://wildflowerfinder.org.uk> for identification

Grazing animals and fencing

Q Do I need to protect my hedges from grazing animals?

A Hedges provide valuable shelter as well as stock control. Management prevents gaps from appearing or 'growing out', and becoming a row of trees, or just gaps. Some hedges need restoration by laying, or if they are very overgrown and gappy, by coppicing just above the ground, and gapping up. Hedges should ideally be fenced from livestock; this is essential after planting, laying or coppicing.

Further help: See Guidance on Keeping Horses in the Landscape: Top Tip for Planting and Managing Trees and Hedges. Phone MHAONB for further advice.

Q Will grazing animals damage the trees in my orchard, and if so how do I prevent this?

A Any livestock can damage bark which can lead to the death of a tree, especially when it is young. Horses and sheep are the worst offenders, but cattle can also suddenly develop a taste for the nutrients under the bark. Cattle and horses will also rub against the tree, and break lower branches. Construct a guard to suit your circumstances, from a simple hoop of chicken wire around the trunk of a mature tree, to a tall solid fence guard reinforced with barbed wire.

Further help: www.naturalengland.org.uk/information_for_farmers_andland_managers/default for Technical Information Note 'Planting and Establishing Fruit Trees'

Q What types of fencing are least visually intrusive in the landscape?

A Wooden post and rail fencing stands out and should be avoided. Two strands of barbed wire for cattle. Three or four strands or sheep netting with barbed wire for sheep are cost effective and practical. When grazing with mixed livestock including horses, dark electric tape or rope can be used to raise the height of wire fences and deter horses from getting close to them.



Meadow

Text and images courtesy of Janet Lomas.

Produced by the Malvern Hills AONB Partnership
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