

## Summary notes

**Grazing Management with horses and ponies: How it can work for both biodiversity and equines. Wed 20<sup>th</sup> July 2022** By very kind invitation of Lindsay and Jane Williams, Colwall, Malvern

The event explored the benefits of using equines for grazing flower rich meadows and pastures, including a very interesting talk with lots of photos and anecdotes from Ann Harris, and Lindsay Williams shared his thoughts and methods employed at Brookmead followed by a walk around the meadows there.

### Notes:

Horses and ponies have a poor reputation in relation to grassland management, being associated with unsightly weeds and bare ground. In addition, horse health can be compromised by a higher worm and parasite burden and potential for mud-fever. The grass is stressed and so has a much slower growth rate with lower sugars etc., there is poor biodiversity and little structure in the sward, soils can become compacted and impede drainage.

English Nature study (online [here](#)) found that beneficial grazing is not related to herbivore, but to grazing intensity. Horses and ponies are just as effective as cattle and sheep as long as the grazing management is correct for the site and circumstance. Grazing is better than not grazing a site.

Discussion then centred around **species diversity on a field and which were beneficial to horse health**: [Birdsfoot trefoil](#) is high in tannins and so good for parasite control, as is [ribwort plantain](#). Historically many farms had 'hospital fields' or 'medicine fields' which contained a very herb rich sward and sometimes species rich hedgerows. Sick animals were allowed to graze and would select those plants with medicinal properties. For example, willow contains salicylic acid, and its bark acts a bit like aspirin for animals. [Sainfoin](#) translates directly to 'good forage' and the Latin translated to something about a donkey's favourite meal. Its properties prevent bloat by aiding the digestion of protein.

Selective grazing habits can be used as a tool to manage for or against certain species. Some plants are not very palatable, or not at certain time, and some animals have individual preferences. [Common centaury](#) had thrived in Ann Harris's fields as her ponies do not favour it when grazing and the same can be said for [Eye-bright](#), however [orchids](#) are a favourite of other ponies and so an area was fenced off from grazing to allow them to set seed, resulting in a huge increase in a short period of time.

Questions about the impact of [yellow rattle](#) were asked. This year, 2022, it had been prolific in many fields. It is a plant that feeds off grasses and is used to reduce grass vigour when creating flower rich meadows. It is an annual so can be relatively easily controlled, if it becomes too dominant, by cutting or grazing before it sets seed. However, as it feeds off

grasses when they become less dominant (enabling more flowers to come into the sward) then the yellow rattle declines.

**Grazing to promote species diversity** – rotationally grazing fields, or strip or patch grazing, with a rest period of at least 6-8 weeks to allow flowers and grasses to set seed. Sward needs not to be too short so that the plants have a chance to grow. Introducing seed – by purchasing native flower seed and sowing onto harrowed ground. Or feeding hay taken from a nearby species rich meadows.

**Questions about toxic plants were raised:**

Bracken – can be toxic when young but it takes several years for toxicity to build to a concerning level and would only occur where grazing was restricted to that plant. Ponies can be a useful tool to control bracken by allowing them to trample the rhizomes in the winter months and bruise the young stems in spring/early summer.

Ragwort is recognised as a toxic plant, but is generally only palatable when dried, so removal after flowering but before seeding still allows it's benefits to be appreciated by invertebrates.

Sycamore seedlings and acorns came under similar scrutiny, and it was concluded that trouble mainly came from 'mast' years when there was a glut of the seed. Fencing off the affected area or removing the bulk of the seed under the tree canopy.

Creeping buttercup – can become an issue in overgrazed damp soil conditions. It is a pioneer plant that spreads by rhizomes (runners above and just below the ground) and so it takes advantage of over-grazed (no competition from other plants) and compacted ground. To reduce its vigour – reduce compaction and increase competition with other species, if necessary, sowing other species including grasses. Allow the sward to grow tall to shade out the buttercup. Grasses have deeper roots if allowed to develop, and so will even up the balance.

Liverpool University undertook research on grazing systems, producing a study document ["The use of alternative grazing systems in the UK"](#).

**Soil health:** longer swards protect the land and soil in the winter. Grazing so that there is still a couple of leaf nodes will enable the grass (or flowers) to start growing again more quickly, allowing a return to the grazing compartment sooner. Taller grass means longer roots. Increased root depth increases carbon storage in the soil, improves drainage, helps reduce compaction. Some plants can be used to break through compaction pans in the soil profile, such as those with tap roots – chicory, docks. A greater root depth enhances resilience to drought and cold, allows deep cycling of soil nutrients lower down in the soil profile, and provides a bigger boost re-start growing after grazing.

Some animals require controlled grazing due to health issues. At Brookmead there are 3 ponies, each with different grazing requirements. One pony needs young fresh growth due to poor dental health, the second, no lush grazing due to a tendency to colic with too much protein and the third puts on weight too easily and needs to be kept hard. Each is grazed in a separate compartment but there is a grazing pattern. Pony 1 starts, pony 2 follows and pony 3 finishes.

Ann Harris employs a 'loafing' area where there is access to water and the gate and shade. She then moves the electric fence to allow fresh grazing each day and closes behind on sections of the loafing area and/or the recently grazed areas. The recently grazed sections are closed off again at ankle length. There is plenty left to feed the next growth spurt and so they will be re-grazed in a few weeks.

This is like the 'track system' that some at the meeting discussed.

Questions about shod or un-shod – Ann has both. It depends on what you want from your pony and so you manage the ground, grazing and access accordingly. She manages the ponies to suit the land and sward, because if the land is damaged, there will not be any grazing for the ponies. Match your pony to your land – heavy ones on light land, and light ones on heavy ground. In an ideal world, obviously!

**General grassland management: the subject of poo-picking.** Lindsay's primary reason to pick up manure was to reduce the parasite risk. The poo is removed before any possible parasite can hatch and re-infect the grazing animal. Five days was a timescale overheard. This raised the question of worming, and the damage wormers have on the wider environment. Many wormers stay in the system for longer than realised. The manure cannot be broken down by dung beetles etc, as these are killed off by the chemicals, so it lies on the surface for longer than intended. Increased opportunity for latrine areas to develop, bare ground, increased nutrients, greater opportunity for weeds to colonise, such as docks and nettles. At the very least the land should be harrowed to disperse the manure.

**The story of Brookmead.** The grassland was boring (Lindsay's words), but the wish was for flower rich meadows to aid horse health. Lindsay Williams' background is that of equine veterinarian, and his wife Jane ran a livery yard, so they have a wealth of knowledge to recognise the need for, and to support, the changes required. Horses' digestion and metabolism has developed to utilise poor forage, yet the modern way introduces too rich a diet in many cases. The meadows at Brookmead had not been fertilised for many years but the diversity had been lost due to previous inappropriate management. Stopping fertilisers does not bring back diversity but it does prepare the soil and environment to enable species introduction. The sward was cut for hay then harrowed (or not in one field) then locally harvested seed was broadcast. At the start of the process there were 4 – 5 species of plant per square metre, now there are 10-15 plants per square metre. The aim is for 15+ so that the grassland may be categorised as Lowland Meadow BAP (Biodiversity Action Plan) habitat in good condition and can be recorded on the Priority Habitat Inventory as such. This will demonstrate a small step to recovering those lost 97% of meadows existing at the end of WW2.

Events organised for the Malvern Hills AONB landowner group are free to all. They are organised by the Malvern Hills Area of Outstanding Natural Beauty Partnership, which aims to conserve and enhance the landscape and habitats of the Malvern Hills AONB.

[www.malvernhillsaonb.org.uk](http://www.malvernhillsaonb.org.uk)

Charlotte Vincent 07547 718310 Paul Esrich 01905 845057

Commented [EP1]: Did Lindsay say 5 days rather than 5 weeks as the maximum time he allows horses to stay in one area?