

Sensitivity

By reading nature in your site and soil you can build an understanding of what you already have before you rush in to make changes. What does nature tell you about your site? What already grows there? Does it already contain a good selection of wild flowers, or is it plagued with vigorous, pernicious weeds that indicate high fertility? What grows in your immediate locality that can suggest plants to try or even be a direct source of seed?

Seeds

Seeds provide the keys to unlocking nature's potential because remnant wildflower communities have become so fragmented and isolated that they cannot find their own way back and need some assistance dispersing to fresh locations. In his trials in the Dales Professor Roger Smith scientifically demonstrated the transformative effect that reintroducing seeds of key meadow flowers like yellow rattle and bird's-foot trefoil can have on grassland diversity and soil health.



Richard Brown. Photo courtesy of Andy Hay

Scythes

Without the invention of the scythe in the late Iron Age, it is thought that there would be no meadow communities as we see them today (Peterken, 2013). Essentially, it is the mowing for hay to feed livestock that shaped the Dales into such a rich patchwork of meadows with their characteristic stone walls and barns intermingled with woodland and moorland. This landscape mosaic is not only wonderful to behold but is rich with closely linked diverse habitats and perfect for wildlife and biodiversity to flourish.

Mowing a meadow with a scythe provides a more intense sensory engagement with grassland and nature than is ever possible with a machine. Every moment you spend mowing you learn more about the character, composition and structure of your meadow community and how this varies across your site, and from season to season.

Working with nature and its natural designs is not only good for biodiversity and the environment: it is good for the soul – and a whole lot easier and more sustainable than the effort required to battle against nature to impose a garden of exotic plants that are out of place.

Richard Brown, Manager, Emorsgate Seeds

Further reading

Hay Time in the Yorkshire Dales Eds. Don Gamble and Tanya St Pierre, Yorkshire Dales Millennium Trust 2010 (chapter 8 by Roger Smith)

Meadows, Peterken, G, 2013 (pp 93-117)

Emorsgate Seeds www.wildseed.co.uk



Jim McVittie at the northern scythe championships near Settle, held on national meadows day 2019. Photo courtesy of Richard Brown

Our Trustees Go Wild

Friends of the Dales trustees believe in practising what they preach. Here Wilf Fenten and his wife Hilary, Mark Corner and Kyle Blue describe how they have done their bit to bring back native flora.



Hay meadows close-up.
Photo courtesy of Wilf and Hilary Fenten

The field behind our house is about 1 hectare and was used for light sheep grazing for decades, without using fertiliser or anything else. Five seasons ago we decided that any sheep should be taken off in May to let the grass grow for hay. Apart from scattering some yellow rattle seeds we just let nature take its course and every year more species appeared. Last year, as if by magic, we noticed the first orchid. We are lucky that our local farmer cuts the grass in late July and takes the hay. A win-win situation for all.

Wilf and Hilary Fenten



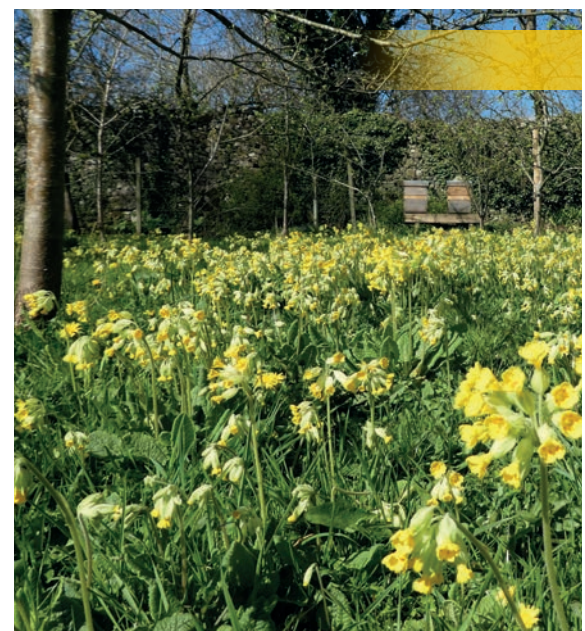
Hay meadows.
Photo courtesy of Wilf and Hilary Fenten



Wildflower meadows at Ghyll Bank Farm.
Photo courtesy of Kyle Blue

In the 1960s the British chemical giant ICI carried out cutting-edge experimental work on my wife's family farm. This involved the application of nitrogen to the land and effectively ended the traditional hay meadow with its enormous diversity of plant life. However, the wheel has now come full circle and the farm has been largely nitrogen-free for a number of years. On the suitable land we have successfully re-established wildflower meadows, creating a wonderful wildlife habitat with vastly increased numbers of insects and ground-nesting birds whilst at the same time giving much pleasure to those visiting the fields.

Kyle Blue



We have two wildflower projects under way, neither of which is going particularly smoothly - I think mainly because nature seems to do her own thing and at her own pace and won't be overly influenced by us.

In our garden we've attempted to establish a wildflower area, partly as forage for the honeybees that we've been keeping for a couple of years. We started by sowing yellow rattle seeds kindly provided by a local donor. Yellow rattle, known as 'the meadow maker', suppresses neighbouring grasses and creates space for other wild flowers, the seeds of which we bought from a commercial supplier (Emorsgate – see manager Richard Brown's approach to rewilding on page 8). For some reason we now have a proliferation of cowslips, which have crowded out other species. They are very attractive and the bees like them too so we don't mind. We're now trying to introduce lavender, another favourite of bees (though also, we've discovered, of the local rabbit population).

Our second project is trying to introduce wild flowers to a wood that we own near home. A few years ago we planted bluebell bulbs from a friend's woodland and wild garlic seeds. There are no signs of bluebells although the garlic is establishing itself, albeit in a very patchy and slow way. We also cleared a couple of patches of grassed land, which doesn't have trees nearby, and tried the yellow rattle and seed mix approach, though the grass seems to be winning that battle.

We'll persevere. It feels like the right thing to do and it is fun to observe the limited progress that we have made.

Mark Corner

Cowslips in the wildflower meadow.
Photo courtesy of Mark Corner



Horsehouse Village Green

From Barry's Dinner to Flowery Meadow

In the tiny village of Horsehouse (in Coverdale), the village green is a pocket-handkerchief-sized triangle of steeply sloping grass in front of the Old School.

Over 25 years ago, the grass was tussocky, covered in divots and grazed by a friendly white horse called Barry. After Barry retired, the green was mowed weekly by well-meaning local volunteers, whose mantra was 'the easiest grass to cut is short grass' and who kept it short and looking very smart for many years.

Latterly, with #NoMowMay and the Friends of the Dales road verge campaign in mind, the green has been maintained on a much more relaxed basis. Swathes of it are left uncut from April to September, to encourage wild plants to grow. This has led to a most spectacular spring display of milkmaids (cuckooflower/ lady's-smock), joined and followed as the season

progresses by pignut, buttercups, sorrel, speedwell and many more. To prevent mutterings about untidiness, we've mowed round the edges and cut wide paths, to make access easy and to maintain the village green appearance. We've actually had no complaints at all – in fact, nothing but compliments.

Most importantly, our green doesn't just look pretty: it's a haven for all manner of wildlife. On a sunny day, it's full of butterflies, bees and other insects, feasting on the flowers. Thrushes like to hop down the paths, seizing snails out of the long grass. A little flock of goldfinches comes and goes, enjoying the dandelion clocks and sorrel seeds.

It's like a relic of meadows in days gone by, and a small island of biodiversity in a sea of increasingly intensively farmed grassland.

Anne Readshaw,
Friends of the Dales volunteer



Photos courtesy of Ann Readshaw

Wetland Wonders

From huge tracts once regarded as wasteland – fit only for drainage to make more profitable through grazing or crops – to an ecological *cause célèbre*, the stock of peatlands is on the rise. Yorkshire Peat Partnership has been restoring one very specific form of peatland since 2009: blanket bog. What is blanket bog and what can you expect to see there?

Sundew and sphagnum in spore. Photo courtesy of Lizzie Shepherd

Blanket bog is peatland habitat that forms in cold, rainy conditions above 200 metres (in England, anyway – there is sea-level blanket bog in northern Scotland). It is an *ombrotrophic* habitat (from Greek *ombros*, a rainstorm, and *trophos*, a feeder), meaning that all of its water and nutrients are derived from precipitation (rain, snow, hail or mist). It is consequently very nutrient-poor; because of that precipitation and sphagnum mosses, it is also very wet. On healthy blanket bog, there are fewer solids in a pint of peat than in a pint of milk.

The Magic of Moss

Sphagnum is the architect of this marvellous, quaking landscape: a primitive, rootless plant that, left to its own devices, is immortal. As sphagnum grows, the lower parts are shaded from the light by the living upper and die off. Spaces between sphagnum cells expand to hold water; through this intercellular magic, sphagnum can hold up to 20 times its own weight in water. The wet, acidic conditions this creates impede decomposition; the bottom of the sphagnum, instead of rotting, becomes peat. In four metres' depth of blanket bog, the foot of the peat column is perhaps 4,000 years old and yet the top is living moss.



Short-eared owl. Photo courtesy of Richard Lee



Sphagnum divinum. Photo courtesy of Jehny Sharman



Golden plover. Photo courtesy of Andrew Parkinson



Common lizard. Photo courtesy of Rosie Snowden

This habitat will support only a certain kind of plant – moisture-tolerant, ericaceous, not too nutrient-needy:

- **cotton grasses: fluffy, white blooms bobbing in the summer breeze**
- **berry-bearing dwarf shrubs: bil-, cloud-, cran-, and crow-, tiny, sweet jewels nestling just above the peat**
- **sundew: sticky fronds trapping and digesting insects to supplement its meagre root uptake**

This vegetation supports a complex web of life. Scurrying through the flora, the tiny furry torpedo that is the field vole is prey for hovering kestrels and short-eared owls, quartering the ground on stiff, rowing wings. Sharing shelter in the moss are the mosaiced common lizard and our only venomous snake, the adder.

In summer, blanket bog is alive to the sound of breeding birds: the curlew's looping lament; the golden plover's one-note dirge; the skylark's 'jubilant sweet songs of mirth'; the musical *tsee-tsee-tseek* trilling of the meadow pipit; perhaps the throaty *prrrrrrrruk* of the raven or the ring ouzel's *tac-tac-tac* of alarm. To lie on your back on blanket bog in the summer is to bathe in birdsong as you gradually sink.

There's a lot we don't understand about the invertebrate community on peatlands, but we do know that community needs wet conditions to thrive and that impacts on that community can have impacts up the food chain.

If you're in the Dales, you're not far from blanket bog. You just need to get uphill and see what's there – it's a beautiful habitat that rewards patient exploration.

Lyndon Marquis, Yorkshire Peat Partnership Communications Officer

Friends of the Dales are in favour of banning peat in all horticultural products.

In a recent speech Secretary of State for Environment, Food and Rural Affairs George Eustice said: 'We will also phase out the use of peat in horticulture, publishing a consultation in 2021 on banning the sale of peat and peat-containing products in the amateur sector by the end of this Parliament.'

We find it surprising, and disappointing, that this ban applies only to the 'amateur sector'.



Fleet Moss Tarn with Ingleborough in the distance. Photo courtesy of Lizzie Shepherd



Sarah Smout performing
Photo courtesy of Film on the Brain

Spotlight on Peat

You can now download a video of singer-songwriter Sarah Smout performing her latest composition *Atlas* in the Yorkshire Dales.

As featured in the spring 2020 issue of the *Review*, the Skipton-based cellist was inspired to write the song as a way of raising awareness of the ecological importance of blanket bogs.

The video highlights the importance of the restoration work carried out by Yorkshire Peat Partnership and can be viewed at www.sarahsmout.co.uk

WHERE THE WILD THINGS ARE?

"By 2040 the Yorkshire Dales National Park will be home to the finest variety of wildlife in England."



Bird's Eye Primrose above Kettlewell (this flower is our charity's emblem).
Photo courtesy of Ann Shadrake



Hart's-tongue fern, wild thyme and herb robert on limestone pavement. Photo courtesy of Paul Harris

It's a bold claim but can it be justified? The ambition is one of six objectives included in an overall 'vision' for the national park set out in the management plan for 2019-24, even though not all the necessary funding was in place.

On 30 March 2021, at the full meeting of the Yorkshire Dales National Park Authority*, members heard about the progress that has been made towards improving priority habitats and supporting populations of key species. There was some good news. Over the last ten years a series of conservation initiatives has thrown a lifeline to much-loved but threatened species such as the red squirrel and dormouse. While populations of wading birds such as the curlew, redshank, lapwing and snipe have plummeted elsewhere in the country, the Dales have bucked the trend thanks in part to pioneering agri-environment schemes offering payment by results. The percentage of Dales rivers with good ecological status increased from 47% to 62% in the three years to 2020, compared to just 14% for England overall. And over 25% of the Yorkshire Dales is designated as nationally

or internationally important for wildlife – more than any other English national park.

Patchy Progress?

But there is still a long way to go to meet some of the targets in the management plan. For example, it aims for all the blanket bog in nationally and internationally important wildlife sites to be 'recovering' by 2024. Ninety-five per cent of that in SSSIs – roughly 60% of the total – is in good condition but that figure falls to 13% elsewhere. In fact, the state of this habitat across the Dales has deteriorated since 2016. The winter 2021 issue of the *Review* highlighted how nature is returning to Oughtershaw following a Yorkshire Peat Partnership project to tackle years of erosion and habitat loss and there is a belated recognition of the important

role that bogs play in carbon storage. Yet the recovery process is slow and moorland burning continues despite the government's introduction of a voluntary ban.

The overall area of upland hay meadows and rock, scree and limestone pavements thought to be in good condition has improved over the last five years, yet – as is the case for most other priority habitats – the situation appears to be far better within the SSSIs than elsewhere. The problem is that even this data may not be all that reliable. Funding cuts over the last decade have forced Natural England to carry out less routine monitoring and some of these sites have not been assessed for six years.

95%
decline in
hedgehogs since
1950s

* <https://www.yorkshiredales.org.uk/meeting-type/full-authority/>

** <https://www.yorkshiredales.org.uk/park-authority/living-and-working/recover-habitat-network-map/>

Curlew



Red squirrel



Lapwing



Thinking Outside the Box

The apparently large disparity between priority habitats inside and outside SSSIs is hardly surprising but there's a growing awareness of the important role that undesignated areas can play in improving biodiversity. In 2019 the Glover Report called for national parks and AONBs to lead on Nature Recovery Networks extending beyond their boundaries in order to protect wildlife and reintroduce species that have been lost. The Tees-Swale: naturally connected project (featured in the autumn 2020 *Review*) is already breaking new ground by working with farmers and landowners from both the Dales and the north Pennines to restore, expand and link habitats and increase biodiversity.

Developing more such initiatives would mean a shift in focus towards undesignated areas rather than concentrating conservation efforts on SSSIs. Re-cover, an interactive habitat map** launched by YDNPA in December, is just one tool that will help farmers and landowners expand and connect habitats such as native woodlands and hay meadows.

The national park authority is to be applauded for its aim of encouraging an 'exemplary' quality of biodiversity and wildlife but there is only so much it can do. It owns and manages less than 0.001% of land in the Dales. So while its work with farmers and landowners to stabilise or increase the populations of UK red-listed upland birds such as curlew and lapwing has been a success, preventing the illegal persecution of raptors such as the hen harrier has proved to be more difficult.

The national park authority is faced with a difficult balancing act. It exists in part to promote the understanding and enjoyment of the spectacular Dales landscapes by the general public but – along with intensive agriculture and climate change – visitor pressure is a threat to their wildlife and biodiversity. Conservation objectives are dependent on securing funding to bolster increasingly limited budgets.

Yet, as the current pandemic has shown, there is a desperate need for people to connect

68%
decline in
common toad

with the environment on their doorsteps. As we return to normality, perhaps the Glover Report's call for Nature Recovery Networks takes on an added urgency.

In May the government announced a 47% increase in its funding for Natural England as part of its pledge to 'build back greener' – yet its budget is still smaller than it was in 2008-9 and, after many years of under-investment, it will have its work cut out to reverse decades of decline in biodiversity.

Lynn Leadbeater, life member

Red squirrel



- The Yorkshire Dales contain 17 nationally important habitats covering 83,000 hectares – more than any other English national park.
- They have over 100 UK priority species, which have been facing decline across the country.
- These include nationally important populations of breeding waders, black grouse, ring ouzel, bird's eye primrose, northern brown argus butterfly and white-clawed crayfish.

North Craven Girl Guides Win with Celebration of Dales

It's great to see young people engaging in a creative project and celebrating the Yorkshire Dales, writes Membership & Events Officer Victoria Benn.

Sixteen girls from Hellifield and Long Preston Guide and Ranger Unit under the guidance of leader Helen Cressey and Hellifield-based textile artist Christine-Ann Lambert have succeeded in becoming the winners of a county-wide art competition for Guides. Their winning composition, a large mixed-media banner incorporating four stunning images of North Craven, took the group six months to make and will be displayed in the new Guide centre at Birk Crag, Harrogate, when it opens.

Worked in watercolours, fabric collage and free machine and hand embroidery, the banner depicts scenes that inspired the girls. Meticulously crafted local wild flowers including buttercups, cow parsley, thistles and poppies alive with bees and butterflies inform one of the quadrants alongside the Settle-Carlisle Railway at Ribbleshead. A view of Penyghent from Horton also dominates, brought to life

through stepping stones over the river made from beads and the mountain's purple heather moorland created from one of Christine-Ann's old tweed skirts.

Christine-Ann said: 'All the girls were very enthusiastic throughout the whole project, bringing in fabrics to use and also excited to learn new skills such as machine embroidery, which is a specialist skill known as "painting the needle".'

Laura, one of the Guides, added: 'Through the tapestry we learned new skills and techniques that we can use in the future and we worked as a team with everyone inputting ideas. This was a very enjoyable experience, developing new skills week after week with everyone getting involved.'

Textile artist Christine-Ann has exhibited her work all over the north of England, including at the Royal Birmingham Society of Arts (RBSA). The very large brocade banner on permanent display in St Peter's, Conistown Cold, is a further example of her work.

Victoria Benn



The winning banner. Photo courtesy of Helen Cressey