



Going with the flow

Once the most fertile land on a farm, water meadows are now increasingly valued for the huge diversity of life they sustain, as Natasha Goodfellow discovers on a tour of some of the Cotswolds's best examples

Photographs by Sussie Bell and Britt Willoughby-Dyer





Preceding pages: Willow by the stream at Thyme, Southrop, Gloucestershire. Above: Ragged robin appears as the weather warms

FOR a couple of weeks in April or early May each year, hordes of visitors flock to the small town of Cricklade, known as the southern gateway to the Cotswolds. They are here not for a festival or a show, but for the chance to see one of Britain's rarest sights—the rich purple haze created by the chequered, nodding blooms of thousands of snake's-head fritillaries (*Fritillaria meleagris*).

Once so plentiful they could be gathered by the armful, these flowers now grow wild on fewer than 30 sites in the UK—and several of them are near here, clustered along the floodplains of the Thames. At Elmlea Meadow, just to the north west of Cricklade, they grow with the rare downy-fruited sedge. White-flowered varieties prevail at Upper Waterhay meadow, a few miles to the west. At a few miles further still, at Clattinger Farm,

one of the only lowland farms in Britain known never to have been sprayed with agricultural chemicals, they form part of a meadow considered our finest remaining example of enclosed lowland grassland, bursting with great burnet, meadow saffron, tubular water-dropwort and green-winged orchids.

To look at these meadows today, alive with dragonflies, butterflies and birds—not to mention less frequently spotted water voles, water shrews and otters—it's easy to assume that these landscapes are entirely natural, an undisturbed enclave amid more intensively farmed fields. But that is not the case. 'As are so many of the habitats we now value, water meadows are a cultural landscape,' says Matt Pitts, meadow adviser at conservation charity Plantlife. 'They exist because of the way the landscape was managed by farmers in the past.'

It was—and is—the production of hay that gives these sites their incredible diversity: more than 250 plant species alone in the meadow at Cricklade, compared with perhaps 10 in a modern field. Winter flooding meant that soil temperatures were higher than in surrounding fields and so the sward (grasses, herbs and wildflowers), fertilised by the nutrients in the silt-laden waters, grew earlier and stronger. This allowed livestock to graze earlier in the year, produced a larger, better-quality hay crop (historically, the main winter feed for animals) and meant livestock could return to the pasture sooner once the hay had been cut.

Crucially, the regular cutting and grazing ensured nutrient levels never built to a point where grasses could outcompete other plants. 'In an era before artificial fertilisers or any other way of increasing productivity, these



Above: Gold amid the mist: yellow flag iris flourishes at Thyme. *Following pages:* Devil's-bit scabious at Clattinger Farm, Wiltshire

were really valued pieces of land,' says Mr Pitts. Already in the Domesday Book of 1086, floodplain meadows were valued more highly than arable land and, by the 17th century, many farmers were emulating the natural systems, building complex networks of channels and drains, which were often operated by professional 'drowners' or watermen, to allow them to flood their land selectively. Despite the cost and complexity of these works, Historic England estimates that, in the 1700s, water meadows 'commonly doubled the value of meadow land and could increase its value by as much as 60 times its unimproved price'.

With its relentless focus on productivity at all costs, the more industrialised agriculture of the 20th century has been fatal for our water meadows and many of them have been ploughed up, reseeded, drained or otherwise damaged by excessive levels of phosphorus

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and nitrogen. Of the meadows still in existence in 1930, it's estimated that only 3% remain, mostly now managed for Nature rather than agriculture and, ironically, valued for their ability to mitigate so many of the problems that modern farming has spawned: pollution, erosion, uncontrolled flooding and an ecosystem-threatening collapse of biodiversity, as well as for their capacity to store carbon and to provide much-needed nectar for pollinators.

The good news is that where floodplain and water meadows have fallen out of use, they can often be revived over time, as Caryn Hibbert, founder of the Cotswold destination Thyme, on the banks of the River Leach in Southrop, Gloucestershire, has discovered. 'When we moved here 20 years ago, the fields had been mowed almost as lawns,' she says. 'It was the river that had made us fall in love with the place and I wanted a wilder, more natural look, so I left the grass to grow longer.'

When she did then cut it two years later, following a winter flood, she was delighted to find orchids springing up on an island in the river that had never been cultivated. The fields are now mown annually and then grazed with sheep. 'The diversity of grasses and flowers we have is extraordinary,' she says. 'The year starts with cowslips and buttercups and then we have ragged robin, a sea ➔







Above: Snake's-head fritillaries nodding at Clattinger Farm. *Right:* Swans at Thyme

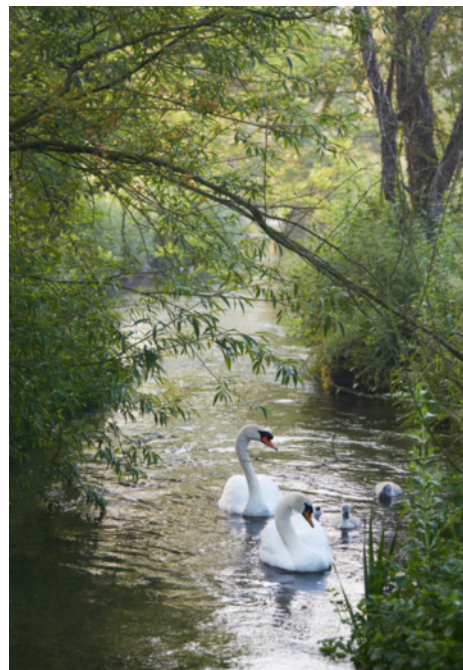
‘Floodplain meadows were valued more highly than arable land’

of orchids (marsh, common spotted, pyramidal, twayblade and bee orchids), and then meadowsweet, vetch, vetchling, plantain...

The flood meadows further from the house are cut rotationally once every three years and are thus less diverse, dominated by grasses, rushes and fragrant water mint, the basis of Thyme's range of botanical beauty products. As Mr Pitts points out, what they may lack in wildflowers they make up for in other ways. ‘People can get fixated on flowers, but rough grassland has a huge role to play for carbon capture, as well as as a habitat for wildlife.’

Indeed, the birdlife at Thyme is superb, with all five species of native British owl making their home there, together with kingfishers, dippers, kites, kestrels and a host of migratory birds including snipe, teal, egrets, reed warblers, sedge warblers, grasshopper warblers, lesser whitethroats and cuckoos returning each year. ‘Hearing that first call of the cuckoo in April and knowing they’ve come all the way from the Congo basin never fails to amaze me,’ says Mrs Hibbert. ‘You realise how important areas such as this are to conservation and begin to understand how connected everything is. We’re not an isolated little spot here, we’re part of something much bigger.’ ➔

Clattinger Farm is part of the Wiltshire Wildlife Trust Lower Moor Farm complex, (01380 725670; www.wiltshirewildlife.org) Thyme, Southrop, Gloucestershire (01367 850174; www.thyme.co.uk)





Rare jewels in the grass: common spotted orchids (*Dactylorhiza fuchsii*) and meadow buttercups (*Ranunculus acris*) at Thyme

Save your water meadows

Residents of Stockbridge, Hampshire, explain how they clubbed together to save their water meadows from development

As water meadows have fallen out of agricultural use, few people outside of planning or conservation bodies are aware of their history. For the residents of Stockbridge on the River Test, that all changed in 2018 when a developer proposed building on land just off the High Street. Alex Lawrence, a keen local historian, began researching the area, discovering a sophisticated 'bedwork' system of water meadows, complete with ditches, drains, cart bridges, sluices and channels. Covering about 100 hectares (about 250 acres), the system is still remarkably intact

—largely because the boggy conditions have made the land unsuitable for arable farming or most other development.

Mr Lawrence discovered that the water meadows had long contributed to the town's economy: the hay crop supported both the local sheep trade and, later, its horse trade. He also demonstrated that, although they were no longer in agricultural use, the meadows continued to play an important role today, attracting walkers, anglers and Nature lovers keen to spot the egrets, cormorants, orchids and yellow flag iris that can be found here.

'The water meadows are an important part of our heritage and a special place,' says Save Our Stockbridge campaigner Chantal Hallé. 'They're special for their ecology, for their beauty and for the

wellbeing of the people who live and visit here, and they're something that needs to be preserved.'

Happily for the campaigners, the developer has now withdrawn and the duo advise others wishing to save their local water meadows to start by finding out more about their history and usage. 'Our research unearthed a nationally important asset, the significance of which many of us had been unaware,' points out Mr Lawrence.

For anyone who finds themselves in a similar position, local archives and history centre can help with researching the history of water meadows. For more general help, contact the Floodplain Meadows Partnership (www.floodplainmeadows.org.uk) and Historic England (www.historicengland.org.uk). 🐌