

Country-Side

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The Magazine of the British Naturalists' Association



Tansy Beetle – Trouble in the Wood – Laikenbuie Ecology Trust – Liebig's Trading Cards – Common Galls on Oak – Riverside Green Space



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Front cover: Cola Galls on Oak. Photo: Steven Rutherford Back cover: Bear Tachnid Fly. Photo: Genevieve Tompkins

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Notes for Contributors

The Editor is always glad to receive articles, photographs or drawings for inclusion in the magazine. Contributors are reminded that:

- (1) Manuscripts should be submitted in electronic form, by disc or email with accompanying photos & drawings as separate attachments:
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Editorial

Pauline Rutherford

Each year is different these days. Gone are the obvious changes in seasons, now we have milder winters and hotter summers, and what of spring and autumn? They seem to blend into the previous season. 2025 was very hot and dry which meant flowers and insects emerged earlier than 'normal'. There were high numbers of species such as the Jersey Tiger *Euplagia quadripunctaria*, and they were seen as far north as North Yorkshire in July. As I write this, fungi season is early too; with huge displays of species such as Fly Agaric *Amanita muscaria*, which I have been recording during September.

In this issue there is a mix of subjects covered including an article about the Liebig's Chromolithographic Trading Cards, some people may know these as cigarette cards which were in all packets of cigarettes. This article is the first of a series from a natural history collection collated by two BNA Fellows in North Staffordshire.

As always, I am indebted to those members and guests who have submitted articles, without which there would be no Country-Side magazine!

Natural History Observation

The Tale of Two Beetles Mark Dudley MBNA

For many years I have wanted to visit York, not for its Viking history, but in the hope of observing a beetle which up to a few years ago was close to extinction in this country and could only be found on the banks of the river Ouse. It has since been rediscovered on the Cambridgeshire fens at Woodwalton Fen 2014 and Welney at the Wildfowl and Wetland trust in west Norfolk 2018 (Oxford, G.S (2021)

The Tansy Beetle (Chrysolina grammis) is an iridescent green leaf beetle approximately 10mm in length and specific to one plant the Tansy (Tanacetum vulgare), a plant I have seen many times, but unfortunately not with any beetles on it in any previous visits. This plant is common across the UK but not evidently the beetle, although it is probable particularly in the southwest, to come across an identical beetle in both size and colour the Mint Beetle (Chrysolina herbacea), but fortunately not yet discovered on the banks of the river Ouse. The Tansy Beetle can also be confused with the Dock Beetle (Gastrophysa viridula) which is also iridescent green. However, it is specific to Dock (*Rumex sp*) and although this beetle can be found at the same York site, as well as widespread across the British Isles, being only 3-4mm long it should be distinguishable from the much larger Tansy Beetle. If you're not good at judging sizes, always a good idea to add a 15cm ruler in your naturalist backpack, if you have the room to spare....



Tansy Beetle



Tansy Plant





Dock Beetle

It was the morning of 6th May 2024 and for once the outlook was sunny as we set off for York with ruler, camera phone, and identification book. We started at the Yorkshire Museum gardens where in previous years they had been recorded so one would expect to find them. Despite half the grounds being designated for VE day with full gun salute there were no Tansy plants to be found, and therefore I suspect no Tansy Beetles. So, we headed along the Dame Judi Walk towards Clifton Ings a walk we had done many a times at different times of the year, but not evidently in May when the sun was shining. The beetles prefer sunny days and when the T.B.A.G (Tansy Beetle Action Group) do an annual survey count, a 5-week window between August and September, recorders are encouraged to go on sunny days. (Oxford, G.S 2021)

Adult beetles can be found between April and June after hibernation and again late July to September before they burrow at the base of the Tansy plant to overwinter. After overwintering and emerging in April, they feed, mate and lay eggs before this adult population dies off in June. The eggs which are pale yellow to dark orange are around 2mm long and could easily be mistaken for the egg of an Orange Tip or Large White butterfly, especially as in the case of the latter as they are also laid in neat clumps. Once the eggs have hatched the yellow-grey larvae feed for several weeks before pupating in the soil in May, the new generation of adults emerges late July. Here they feed for a few weeks before burrowing underground at the base of the plant to overwinter emerging between April and May the following year. Oxford, G.S (2015)

So, in May the timing was looking good to observe an overwintered Tansy beetle which would be feeding and/or mating. Previously we had gone in September with little success. On this occasion, I am pleased to say we did find the adult beetles, about halfway between the museum gardens and Water End Road bridge on the east bank, if I turned 180 degrees from the edge of the river I would be in line with St Peters school and the Clifton Methodist church tower, this is the start point from where they were first seen. No eggs or larvae were found probably a bit early, so something to go and discover another time. As a bonus we did get the Dock Beetle much closer to the Water End Road bridge, the beetle clearly much smaller so no ruler was required.

The fact that we saw the beetle on this visit as opposed to previous visits could be just timing, but I would like to believe it was due to the hard work of the T.B.A.G which was set up in 2008, to initiate and oversee the conservation efforts from extinction in Britain. One of the discoveries in further reading about this beetle on Buglife is that this beetle has specific needs beyond just the plant. One fascinating claim is that they only walk a maximum of 200m, very rarely do they fly (Wilkins. V 2023) and as a result they are at risk from flooding, which the Ouse often does. The T.B.A.G have taken action to reduce the risk of flooding by creating these 'Ark' populations away from the riverbank and therefore much less likely to flood. (Wilkins-Kindemba, V.L et.al 2016) Latest figures on population numbers suggested that despite best efforts they did decline by 72% between 2023-24 (Chappell, J 2024) so the fact that we saw so many on this visit gives me hope that their numbers will increase this year when the survey is completed, and results published later in the year. It does seem that numbers do fluctuate from year to year as they are susceptible to overgrazing, flooding, pressure from invasive species like Himalayan Balsam (Impatiens glandulifera). Let's hope that the Jewel of York (Oxford, G.S et.al 2003) continues to flourish and numbers increase and spread beyond the Vale of York for the next generation and beyond to enjoy.

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Trouble in the Woods

Ian D. Rotherham

Understanding the issues and problems for the effective conservation of ancient woods, begins with the official 'Ancient Woodland Inventories' and even with 'Ancient Tree Inventories'. This is in part because these were never designed to assume the planning and guidance functions that they now have, and whilst they are currently under review, many wooded sites have been wrongly attributed or overlooked. Furthermore, physical 'cultural' heritage is frequently ignored or unrecognised for what it is, and the living 'biocultural heritage' of say a 500-year-old coppied oak or a 1,000year-old clonal holly for example, is often cleared away with barely a second thought. Furthermore, re-planting after woodland clearance does not help this, does not replace it, and may turn a 'wood' into a 'plantation'. With a lot of luck and maybe 500 years of history, such a site might become something resembling an ancient 'wood'.

A key point from my earlier article 'What is a Wood?', (Country-*Side* issue 36 - 6 published Summer 2025) is that whilst past woodland management might have been quite intensive, it occurred in long-term, predictable cycles often over many centuries. Furthermore, the process of coppicing and felling, with a boom-bust of light and dark, selected out the species of plants and animals which we now know as 'ancient woodland indicators. Additionally, such continuous over centuries, was undertaken by sheer brute force of (mostly) men, and their animals - horses, ponies, and oxen. These processes continued to an extent into the earlier days of modern forestry in the 1800s and early 1900s. However, there were major changes in process and scale of operations from the establishment of the British Forestry Commission following World War One timber shortages. This coincided with the demise of many remaining rural crafts, depopulation of the English countryside in the 1920s and 1930s, and then the importation of American heavy machinery such as tracked vehicles in the Second World War and the period that followed. These were game-changers in terms of woodland management and its impacts, and their effects can be traced back from the pre-petrochemically subsidised age of woodmanship of the early 1800s, through to the 1950s.

A consequence of the post-World War Two period of 'improvement' and the appliance of new technologies was massive destruction. This led Oliver



Rough Standhills ancient woodland, Sheffield

Rackham to describe the period of forestry from the 1950s to the 1980s as the 'Locust Years' for woodlands in the UK. Great numbers of medieval woods that had survived until then were swept away. However, with the post-War rise of conservation and environmentalism, it seemed these adverse impacts on woodland heritage declined. This was in part with changing forestry guidance from the intensive afforestation of the 1970s and 1980s, reaction to public outcry, and growing recognition of what became known as 'ancient woods. The latter was a term developed and refined by Oliver Rackham and George Peterken, and which became enshrined in British conservation policy triggering the emergence of conservation NGOs such as the Woodland Trust. Discussions with foresters from the 1960s, confirmed that they knowingly ploughed-out features such as prehistoric hilltop enclosures from the countryside as they drained and planted exotic conifers. Furthermore, whilst the individuals realised the damage that was being done, it was simply what they were told to do, and they did it. Nevertheless, whilst the destruction wrought on countryside heritage was severe, it was to an extent limited by the mode of practice on the ground which still relied on numbers of men working with chainsaws clearing sites of pre-existing woodland. As Rackham later noted, the ecological components of some of these replanted woodland sites proved quite resilient in its recovery. The heritage on the other hand was often terminally compromised.



By the 1990s, there was a step away from publiclyfunded forestry on heaths, peat-bogs, and ancient woodland sites, and it seemed that conservation had turned a corner. Yet within just a few decades, there has been a corporate and cultural loss of memory and awareness of the unique values, history, and ecology of ancient woods, which is combined with a drive to manage 'neglected' sites. This seems to be driven by a general desire to interfere rather than to conserve, and particularly to remove 'diseased' trees (always a bugbear of the Forestry Commission), and to plant new trees rather than to manage natural processes of regeneration. These are complicated matters, and I have written about them in detail elsewhere. However, there is a sobering observation which scales-up the type of damage now being wreaked, for whatever reason. In these 'New Locust Years' for our ancient woods, the operations on site are undertaken by individual workers in huge, often tracked, vehicles. In order to remove cut timber, access roads like motorways are cut through and surfaced to facilitate the operation of large lorries. This includes large turning circles and parking areas within medieval woodland boundaries and often undertaken by woodland conservation NGOs. In many cases, the timber extraction makes no profit and often is mandated by Defra because a notifiable disease has been reported within a certain distance of the site. Very often it is the vehicle ingress to the site, the construction of roadways, and the physical taking of timber out that cause the damage, and these are only done in order to pay the costs of extraction. Indeed, if diseased trees were found on site and simply ring-barked or felled by chainsaw and left on site, the damage would be negligible, and the costs would be a fraction of those now incurred. This is madness, and a final irony is that in most instances the action to contain or to eliminate the spread of tree diseases, fails to do so. Yet there is an imperative 'to do something' even if it is costly, damaging, and doesn't work, but is justified by vague ideas of 'sustainability'. The waves of pests and diseases are clearly triggered by processes of climate change, environmental stresses including atmospheric nitrogen deposition, and globalisation. Drastic site disturbance and stress in our woodlands simply makes things worse. Undoubtedly and increasingly, there will be more problems in the future.

Today's foresters often justify their intensive operations because 'these have always been working woods'. Indeed, this reawakening of the historic nature of the working woods emerged from the studies of historians like Oliver Rackham and Melvyn Jones. However, this is a misunderstanding of history, and the foresters fail to compare like with like. Rather than continuing the traditions as old woodmen used to do, the modern way with few men and huge machines,





Two photos of Woodland in Cromford, Derbyshire and the damage done by the large vehicles



The resulting pile of cut timber





Vehicle tracks though the monument Whitwell Wood



Veteran small-leaved lime coppice, Clumber Park, Nottinghamshire

simple erases what went before – i.e., the unique traces and evidence of nature and people over thousands of years. As explained previously, this heritage is unique and irreplaceable. The old ways left their scars in the woods which we now regard as heritage, but they also preserved unique patinas and traceries of ecology and a way of life extending back through time. Modern forestry work wipes the slate clean, levels out the palimpsest, and creates a new, industrial, bland treescape often justified as 'conservation'; it is nothing of the sort. In a sort of Orwellian 'double-speak' we use 'low impact' vehicles and machines, which in practice

grind down earthworks and flatten standing stones to erase all that has gone before. Multi-stemmed former coppices sometimes many centuries old, are cleared in just a few minutes often in the names of forest hygiene or conservation best practice. To make matters worse, the evidence of centuries of human-nature interactions are largely destroyed, and what remains is masked by the ruts, tracks, and gouges of twenty-first century machines. In effect this is like taking a felt-tip pen to the Mona Lisa you still have a painting just not what it was.

Why does this happen even when the heritage is known?

Essentially, even with raised awareness of the importance of ancient woods, whilst sometimes the heritage is known, for specific sites, this resource is often not surveyed. Oliver Rackham and Melvyn Jones particularly, triggered a revolution in awareness and thinking about ancient woods and their heritage. Then, with help from the Heritage Lottery, the Forestry Commission, English Heritage, and the Woodland Trust, back in 2008 we produced the Woodland Heritage Manual. Yet the importance of this remarkable heritage and archaeology is still ignored, damaged, destroyed, and eroded with most woodland management driven by established forestry practice sometimes with ecological influences too. Yet little thought is given to 'heritage' and archaeology. A significant compounding problem is that most formally trained archaeologists do not recognise the archaeology 'of' woodland management, and little is recorded in the local authority archiving systems which themselves trigger consultations on proposals for site work. So, although woodland heritage is far more sensitive than ecology (being easily displaced stones and humps and bumps in the soils) and is irreplaceable, modern management rarely considers it. Yet it is this ecocultural patina that influences and maintains the remarkable ecologies of ancient woods, and it is this which makes them 'ancient'.

For conservation bodies, the idea of 'conserving' through custodianship but not actively managing a site, i.e., allowing nature to be free-willed and protecting cultural heritage, seems contrary to current thinking. This is despite free-willed nature being an underpinning principle of much now fashionable rewilding. Ecological change in woods is inherently a slow process and generally, there is little reason to hurry into illinformed, damaging management operations. However, the tendency today is to fail to: 1) consult widely with experts, 2) to consult with the public, and to work within an approved and agreed *management plan*, and 3) for the latter to be based on the necessary and appropriate surveys of history, heritage, and ecology. And yet there is no real need to rush.



Overall, most modern management of woodland and forestry sites is driven by traditional silviculture practice but with some aspirations to nature conservation, and increasingly the delivery of active outdoor recreation and sports. Infeed, some wildlife conservation NGOs when challenged on site damage caused by construction of recreational cycle tracks inside ancient woods, simply stated that they are 'leisure organisations' rather than conservation bodies. If that is so, then who are the advocates for nature and heritage? In this scenario, irreparable damage can easily occur as poorly-known or unrecorded biocultural heritage is erased, eroded, and removed. With major cuts to local authority countryside services over recent decades, there has been widespread change in practice from indepth, carefully researched and consulted management plans in the past, to often gung-ho, short-term implementation of practical works sometimes simply driven by a desire to do something even if wrong (what I call the 'David Cameron badger cull effect'). This exacerbates an already challenging situation for the future of these remarkable heritage palimpsests.

Even when effective surveys have been undertaken, there is often a gulf between the evaluation and the practitioners undertaking work on the ground. If damage is to be avoided, then the guidance of the 'Woodland Heritage Manual' and more recent notes on working practices on site, need to be applied. Importantly, operatives need to be briefed on the ground, with vulnerable sub-sites marked-up, and safe extraction routes for timber, and access routes for vehicles identified. In ancient woods, work by machines should be with genuinely ultra-low-impact vehicles. Present-day working with heavy machines converts 'traditionally managed ancient woods' into 'industrially managed woods' or even 'post-industrial woods', and yet grant-aid and site protection in planning do not reflect these altered states. Recognition of status and of good practice would help, but at present there are no accepted standards or forest kite-marks for sustainable cultural heritage, and the timber quality kite-marks are not fit for purpose when it comes to heritage. A big problem is that current official guidance from Defra and the Forestry Commission does not take these issues into account and grant-aid steers projects into damaging actions. Most conservation bodies, primarily led by ecological and leisure practice, simply get it wrong, and this situation must be addressed.

Even when effective surveys have been undertaken, there is often a gulf between the evaluation and the practitioners undertaking work on the ground. If damage is to be avoided, then the guidance of the 'Woodland Heritage Manual' and more recent notes on working practices on site, need to be applied.

Some recommended readings:

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This article is a follow up to 'What is a Wood?', (Published in Country-*Side* Vol. 36 No. 6 Summer 2025) All photos © Ian Rotherham

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A Naturalists' tour of Laikenbuie

Genevieve Tompkins

In January 2023 the Laikenbuie Ecology Trust was formed, a charity responsible for continuing a legacy of nature restoration and organic farming on this 143-acre site. The hope is to achieve this using rewilding principles to support functioning ecosystems with high levels of biodiversity, while demonstrating how organic farming and nature restoration can work hand-in-hand. We are particularly keen to share this journey with the local community, with the site becoming a centre for ecological education and genuine nature connection.

Featuring the Auldearn burn, alongside a rich mosaic of native broadleaf woodland, wetland, scrub and grassland, one of the greatest assets of Laikenbuie, to both biodiversity and organic farming, is habitat heterogeneity across much of the site. I am one of the custodians of Laikenbuie and this article will give you an insight to the plants, animals and habitats found in this wonderful little glen.

Occupation began early at Laikenbuie. Approaching the site via our access track, one of the first things to draw the eye is the Bronze Age stone circle in the field on your right. There was once a small community living here, in around 800BC. This date is usually associated with the Iron Age, but such technology took time to reach the Scottish Highlands. Hiding among the lumps and bumps left behind by these people, it is worth looking for the alert outline of a Brown Hare (Lepus europaeus). The avenue of mixed broadleaf and coniferous trees bordering the track twitch to the movements of Coal Tit (Periparus ater), Goldcrest (Regulus regulus) and Siskin (Carduelis spinus), foraging for insects and pine seeds. A sudden chattering makes you look up, just in time to see a Red Squirrel (Sciurus vulgaris) leaping from a Rowan (Sorbus aucuparia) tree, where it had been busy feasting on berries, to the relative safety of the dense-canopied Beech (Fagus sp) tree beside it.

Heading out along the north side of the glen, you enjoy views across the top of the Willow (*Salix sp*), Birch (*Betula sp*) and Rowan woodland at the bottom of the slope. On the sunny, south-facing slope itself, large stands of Bracken (*Pteridium sp*) grow over Common Dog-violet (*Viola riviniana*), Primrose (*Primula vulgaris*) and Bugle (*Ajuga repetans*), the Bracken providing the dappled light conditions these plants prefer. In early to mid-summer Small Pearl-bordered (*Boloria selene*) and Dark Green Fritillary (*Arynnis agaja*) can be seen here, feeding on thistles and



Aerial view of Laikenbuie (c) Mark Hamblin scotlandbigpicture.com

egg-laying on violets. In May you will see several Bumblebee workers and Orange-tailed Mining Bees (*Andrena haemorrhoa*) foraging on the dazzling white Hawthorn (*Crataegus monogyna*) flowers.

This is where you are currently most likely to bump into the Iron Age pigs who live here, their deep-chested grunts transporting you to a time when Wild Boar (Sus scrofa) roamed freely across these lands. These pigs are performing the same functions for us as their Wild Boar ancestors: disturbing thick thatches of vegetation, rootling up rush and other plant roots and grazing on coarse grasses like Yorkshire Fog (Holcus lanatus), all allowing germination of a wider variety of plants. Their dung is teeming with Dung Beetles such as Aphodius pedellus, and Water Beetles, such as Cercyon melanocephalus, who swim through the wet dung. These insects are an important food source for birds and bats who roost in our buildings. You may spot Robin (Erithacus rubecula), voles and mice following the pigs around, picking up exposed insects and seeds. In damper areas at the bottom of the slope you will come across Tapered Drone hoverflies, (Eristalis pertinax), egg-laving into damp mud exposed by the pigs, and Red Mason Bees (*Osmia bicornis*) collecting damp mud with which to build their nests. At night, Woodcock (Scolopax rusticola) forage here, dipping their bills into the soft, moist earth. As well as their role as ecosystem engineers, the Iron Age pigs fulfil another function of Wild Boar: providing a healthy source of meat for human consumption.





Orange-tailed Mining Bee on Hawthorn



Iron Age pig



Hedgehog Scalycap

On this damp soil, the woodland is dominated by young willow, food plant for the beautiful Bordered Beauty moth (*Epione repandaria*). In the absence of Eurasian Beaver (*Castor fiber*), these stands of willow have grown dense and shaded, with the lack of light preventing Water Mint (*Mentha aquatica*) and other plants below from flowering. However, in those areas still open to the light, vibrant stands of species like Angelica (*Angelica sylvestris*), Meadowsweet

(Filipendula ulmaria), Marsh Ragwort (Jacobaea aquatica) and Marsh Thistle (Cirsium palustre) can be found, alongside the occasional Heath Spotted orchid (Dactylorhiza maculata). Looking up, dead willow branches support uncommon Hedgehog Scalycap fungus (Phaeomarasmius erinaceus) while groups of Bullfinch (Pyrrhula pyrrhula), Great Tit (Paris major) and Long-tailed Tit (Aegithalos caudatus) pass through the canopy.

This wet woodland is interspersed with ridges of glacial deposits, with the deposited gravel and sand increasing the acidity and dryness of the soil in these areas. Here, Downy Birch and Silver Birch dominate, with the understory containing tiny tufts of Heather (Calluna vulgaris), Bilberry (Vaccinium myrtillus) and Tormentil (Potentilla erecta) that struggle to overcome the impact of grazing Roe Deer (Capreolus capreolus). We hope to better understand how Roe Deer are using this site through a thermal drone count of individual deer. We also plan to increase the level of Roe Deer control at Laikenbuie, mimicking the regulatory role of extinct Eurasian Lynx (Lynx lynx) and Grey Wolf (Canis lupus), while providing another source of healthy meat for humans.

Leaving this woodland behind, you find yourself on a path bordered by another area of Bracken to the south. Keep an eye out for Green Tiger Beetles (Cicindela campestris) basking here from May onwards. In spring, through the old Bracken stems, constellations of Chickweed Wintergreen (*Lysimachia* europaea) appear, an Ancient Woodland Indicator predominantly found in the Scottish Highlands. Beyond the Bracken, you can see the largest loch on the site where, if you are lucky, you may spot a shy Eurasian Teal (Anas crecca) skulking among the Mare's Tail (*Equisetum arvense*). In winter, you might hear the tell-tale sound of pinging ice, giving away a Eurasian Otter (*Lutra lutra*) as it trots over the frozen water. During early summer, the bulrush and sedge beds beside the loch are host to Sedge Warblers (Acrocephalus schoenobaenus), their erratic song drifting towards you through the air.

This path leads to our green burial ground, a peaceful place with seas of rippling native Bluebells (*Hyacinthoides non-scripta*) in spring, bright red cherries in summer and rich with plums and hazelnuts come autumn. A Common Buzzard (*Buteo buteo*) calls as it circles overhead, instantly evoking a sense of wilderness. Behind the burial ground, a small area of pony-grazed grassland is tucked away. In summer this is alive with insects. The Footballer hoverfly (*Helophilus pendulus*) and Orange-legged Furrow Bee (*Halictus rubicundus*) float over Cat's-ear (*Hypochaeris radicata*), Eyebright (*Euphrasia sp*) and Harebell



(Campanula rotundifolia) flowers while Mottled Grasshoppers (Myrmeleotettix maculatus) and Common Lizards (Zootoca vivipara) sunbathe on sparsely vegetated ground. Two of our rarest plants can be found here, the endangered Heath Cudweed (Gnaphalium sylvaticus) and the declining arable "weed" Corn Spurrey (Spergula arvensis). Both rely on disturbance by ponies for their continued existence here. In autumn, the grassland is dotted with lurid Crimson (Hygrocybe punicea) and Blackening (Hygrocybe conica) Waxcaps.

Pass the burial ground and you enter an area of rushdominated fen, part of the extensive wetland weaving through the bottom of Laiken Glen, both on our site and beyond. Small Copper (*Lycaena phaeas*) butterflies can occasionally be seen here, sunbathing on Water Mint leaves.

In summer, where this wetland transitions to woodland the ground is awash with the joyful yellow of Marsh Hawksbeard (Crepis paludosa). Heading up the southern slope of the glen takes you through one of the oldest areas of woodland at Laikenbuie. Here, lofty birch trees preside and provide a home to species like the Rannoch Sprawler (Brachionycha nubeculosa) moth, cited in Version Three of the Red Data List, while deadwood is used by specialists like Bee Beetle (Trichius fasciatus) and Scarce Cardinal Beetle (Schizotus pectinicornis), a species designated as Nationally Rare. Shaded areas of the woodland floor feature Sanicle (Sanicula europaea), another Ancient Woodland indicator plant, and the leaf litter is home to beautiful, Orange-striped Millipedes (Ommatoiulus sabulosus). Small streams trickling down the woodland slope are carpeted in the delicate, translucent leaves of Shining Hookeria (Hookeria lucens), a liverwort-like moss. A smattering of fine woodchip on the ground indicates freshly excavated Greater-spotted Woodpecker (*Dendrocopos major*) nest hole, the chicks noisy but invisible, hidden within the dead birch trunk. Stare at tree trunks for long enough and you might notice the Tree Slug (Lehmannia marginata), bright keel running down its back, while riffling through the undergrowth could reveal impressive Leopard Slugs (Limax maximus), working hard on our behalf as decomposers and soil makers.

Further south and the woodland transitions again, through Juniper (Juniperus communis) and Gorse (Ulex europaeus) scrub, to another fen, this time dominated by both Sharp-flowered Rush (Juncus acutiflorus) and Purple Moor-grass (Molinia caerulea). Like scattered confetti, in late summer the lilac pompom heads of Devil's-bit Scabious (Succisa pratensis) bob and white stars of the Grass-of-Parnassus (Parnassia palustris) flowers shine. Wet flushes appear



Endangered Heath Cudweed with Cats-ear



Shining Hookeria

along these southern slope fens, with vegetation including Black Bog-rush (Schoenus nigricans), Roundleaved Sundew (Drosera rotundifolia) and Common Butterwort (*Pinguicula vulgaris*), the last two being some of the few carnivorous plants to be found in the British Isles. The fen vegetation may look washed-out and lifeless in winter but delving into Black Bog-rush tussocks reveals tiny insects waiting for warmer weather, such as the ground beetle, (Amara plebeja), and rove beetles like (*Reichenbachia juncorum*). Overhead, large flocks of whistling Redwing (Turdis lliacus) and cackling Fieldfare (*Turdis pilaris*) swirl into the surrounding canopy as the early evening light fades, looking for a quiet place to roost. They've been busy feeding on nearby Rowan berries, while the rattling Mistle Thrush (*Turdis viscivrus*) jealously guards the Holly (*Ilex aquifolium*).

Walking to the far south of the site takes you into an Ash dominated woodland, with some impressive veteran Ash (*Fraxinus excelsior*) and Cherry (*Prunus sp*) trees. Evidence of Ash dieback disease in some of these trees has instigated an Aspen (*Populus tremula*) reintroduction project at Laikenbuie. Both species have similar bark pHs and structure, and Aspen is home to many hundreds of specialist species. In May, sooty-



black Chimney Sweeper (*Odezia atrata*) moths flutter through the dappled understory, egg-laying onto carpets of lacy Pignut (*Conopodium majus*). A Badger bolthole can be seen beneath an old Ash tree, pigeon-toed footprints visible in the soft, excavated earth. In its mantle of winter snow, this woodland is a kaleidoscope of footprints, from the Pine Marten (*Martes martes*) crossing over our stone wall boundary, Brown Hare trailing between the trees, Red Fox (*Vulpes vulpes*) following them and Roe Deer delicately stalking through the rest.

Turning east, you pass through a chaotic mix of fen, woodland and scrub. In spring, Tongue-of-fire fungus (Gymnosporangium clavariiforme) can be seen licking up the branches of Juniper, which also plays host to the Juniper Shieldbug (Cyphostethus tristriatus) at Laikenbuie, a species expanding its range into the Scottish Highlands. Veteran Willow trees host uncommon Willow Bracket fungus (Phellinus igniarius), while huge Holly stools are home to species like the Lesser Thorn-tipped Longhorn Beetle (Pogonocherus hispidus), a scarcity up here. Scattered patches of Cross-leaved Heather (Erica tetralix) and Bell Heather (Erica cinera) hint at a slightly more acidic



Juniper Shieldbug



Scotch Argus

soil in places while Melancholy Thistles (Cirsium heterophyllum) stand proudly among the tall-herb fen vegetation. In late summer, clouds of Scotch Argus (Erebia aethiops) butterflies lift from the Purple Moorgrass (Molinia caerulea) that its caterpillars call home, while in spring Orange-tip (Anthocharis cardemnes) butterflies can be seen daintily travelling between Cuckoo Flowers (Cardamine pratensis). The tall stands of Meadowsweet are worth searching to find stunning Emperor Moth (Saturnia pavonia) and Dark Tussock (Dicallomera fascelina) caterpillars in summer, while the acid-yellow flowers of Carnation Sedge (Carex panicea) are worth a moment to admire. Come autumn, the homes of Four-spotted Orb Weaver (Araneus quadratus) spiders can be seen, where tall stems of vegetation have been drawn together with silk. During the breeding season, roding Woodcock can be heard grunting and squeaking as they dart over the fen and

woodland on this southern slope of the glen.

Continue east, passing over a little stream, and you reach an area of mostly young birch woodland. Here you might see magnificent Golden-ringed Dragonflies (Cordulegaster boltonii) egg-laving into the stream, while Common Hawkers (Aeshna juncea) patrol the woodland edge for insects. Scattered through the woodland is a mixture of mainly Ash, Holly and Willow trees, with an understory of Blackthorn (*Prunus* spinosa) in places. Due to a lack of large herbivores, much of the woodland is dense and shaded with regrowth, but sunlit track edges host Barren (Potentilla sterilis) and Wild (Fragaria vesca) Strawberry in drier areas and Yellow Pimpernel (Lysimachia nemorum) in wet patches. We hope to graze hardy cattle and ponies here in the future, opening up more glades to the dappled light that most woodland plants prefer and increasing the structural diversity of the woods. In spring, the trees reverberate with the heart-lifting song of Willow Warbler (Phylloscopus trochilus) and Chiffchaff (*Phylloscopus collybita*) while the mournful hoot of Tawny Owl (Strix aluco) keeps us company year-round. In summer, from the ground at the base of tree trunks, you might hear the hungry calls of Robin nestlings. An area of wet woodland bordering the Auldearn Burn features veteran Alder stools, home to the rare Alder Jumping Weevil (Orchestes testaceus), and with an understory of delicate Beech Fern (Phegopteris hexagonoptera) and Marsh Violet (Viola palustris). Brown Trout (Salmo trutta) and European Eel (Anguilla Anguilla) can sometimes be spotted in the burn, with a rare sighting of the endangered Water Vole (Arvicola amphibius) an indication that our efforts to trap the non-native, invasive American Mink (Neogale vison) are not wasted.

We travel on to another area of fen, dominated by Meadowsweet and Sharp-flowered Rush (Juncus



acutiflorus) but with patches of Ragged Robin (*Lychnis flos-cuculi*) and Globeflower (*Trollius europaeus*) on top of deep peat (over 5m in places), interspersed with shallow gravelly soils featuring elegant Lesser Butterfly-orchids (*Platanthera bifolia*). We are experimenting with reducing the dominance of the rush here by cutting the vegetation, removing the cuttings and spreading parasitic Marsh Lousewort (*Pedicularis sylvatica*) seed collected on-site.

A clump of Blackthorn scrub to your west rustles with shy Blackbirds (*Turdis merula*) and Dunnocks (*Prunella modularis*) in winter but is strung with pollinators in spring, particularly early emerging species like the Common Drone hoverfly (*Eristalis tenax*), which has spent the winter hibernating as an adult. Meanwhile, the disarmingly cute face of the Bear Tachinid fly (*Tachina ursina*), a parasitoid, looks up at you from the path, where it basks in the spring sunshine.

Follow the trail and you reach a beautiful little lochan nestled in the fen. In late summer it is framed by lilac Devil's-bit Scabious, pale-pink Wild Valerian (Valeriana officinalis), creamy Meadowsweet, yellow Lesser Spearwort (Rananculus flammula), purple Water Mint and white Angelica: a fine-tuned harmony of colour and fragrance. In early summer, you will be rewarded by the delicate flight of the endangered Northern Damselfly (Coenagrion hastulatum), easily confused with the Common Blue (Enallagma cyathigerum) and Azure Damselflies (Coenagrion puella) that it shares this pond with. Overhead, Fourspotted Chasers (Libellula quadrimaculata) jealously guard their territory. As the year rolls on, this cast of characters is replaced with Black (Sympetrum danae) and Common Darter (Sympetrum striolatum) pairs flicking eggs into the water, Emerald Damselflies (Lestes sponsa) posing on Branched Bur-reed (Sparganium erectum) flowers and Common (Aeshna juncea) and Southern Hawkers (Aeshna cyanea) dogfighting in the sky overhead. Crouch down and you might spot Water Scorpions (*Nepidae sp*) poking their breathing tubes through the Floating Club-rush (Isolepis fluitans) which borders the pool, while thousands of tiny toadlets jostle as they make the treacherous journey from water to woodland.

Follow the path northwards and you will pass an area of swamp, dominated by Water Horsetail (*Equisetum fluviatile*), Bulrush (*Scirpoides sp*) and Marsh Woundwort (*Stachys palustris*). Throughout the year, this area holds the potential thrill of hearing the sudden squeal of a passing Water Rail (*Rallus aquaticus*). In spring, the cautious song of the Reed Bunting (*Emberiza schoeniclus*) emerges from the surrounding willow scrub, while the willow flowers are food for



Northern Damselfly

foraging Early Bumblebees (*Bombus pratorum*). In autumn, the unprepossessing brown flower heads of Bulrush are worth a closer look for the shiny bottoms of Bulrush Bugs poking out. Underfoot, pink-flowered Red Bartsia (*Odontites vernus*) parasitises the grass and golden Silverweed (*Potentilla anserina*) flowers shine in the sun.

Cross the fen behind this swamp and you will find incongruously frilly pink Bogbean (*Menyanthes trifoliata*) flowers in spring and cathedral-spire golden Bog Asphodel (*Narthecium ossifragum*) in summer. Leaving the fen you reach another of our lochans and the end of our tour. Here the water is shaded by Birch, Willow, Alder (*Alnus glutinosa*), Bird Cherry (*Prunus padus*) and English Oak (*Quercus robur*), scrambling with Brambles (*Rubus sp*) and Honeysuckle (*Lonicera sp*). The thickly vegetated islands provide shelter for nesting Mallards (*Anas platyrhyncho*) while Mottled Sedge caddisflies (*Glyphotaelius pellucidus*) flicker through the shadows, depositing snotty egg masses on leaves, ready to drop their young cargo into the dark water below.

Every day, every season offers a new range of plants and animals to admire, at Laikenbuie Ecology Trust, while the Trust's plans for the future aim to let nature continue to lead its way back to even greater diversity and habitat health. Visitors are welcome and you can follow us on our Instagram and website, where a full, live species list can be found.

Find out more on this link:

https://Laikenbuieecologytrust.org.uk/

Genevieve Tompkins works alongside her husband, David, as a custodian for the Laikenbuie Ecology Trust. She also supports nature conservation across the Highlands in a variety of other roles.

All photos: G. Tomkins unless indicated.



Liebig's Chromolithographic Trading Cards in the Andrew Taylor Natural History Collection

Stephanie Holt FBNA and Andrew Taylor FBNA

This article is the first in a new series in which Stephanie Holt (Natural History Museum and Oxford University) and Andrew Taylor explore notable objects, artworks, and specimens from the Andrew Taylor Natural History Collections.

"My Lord, I've got every cigarette card they ever printed of you. My whole family took up smoking just so that we could get the whole set. My grandmother smoked herself to death so we could afford the album."

Trading cards have had a long association with packets of tea and cigarettes, however from 1865 to the 1970s the Liebig's Extract of Meat Company, later to become OXO, also started producing its own series of cards. These cards, produced primarily for advertising, covered an incredible range of subjects and provided cheap and accessible education to thousands of people. By the time their production had finished in 1965, the company had produced nearly 2000 sets, with 11,000 individual cards distributed across 14 countries and many sets reproduced in multiple languages. Many of the cards depict natural history subjects, and it is this that has drawn Andrew Taylor to add them to the ephemera section of his collection.

Lithography (using limestone plates rather than wood or copper engraving blocks to produce printed images) was invented in the 1790's by Alois Senefelder (1771-1834), and the earliest published example is from work Vollstandiges Lehrbuch own Steindruckerei (1818), translated in 1819 as A Complete Course of Lithography. By 1837 the technique been developed chromolithography, which for the first time enabled printing in colour. All earlier forms of colour images in published works required hand colouring, making the process lengthy and expensive, and therefore many. The introduction inaccessible to chromolithography enabled mass-produced coloured images to be available to all.

By the 1860s chromolithographic books were frequent, and coloured printing using this technique transformed not only publishing, but advertising. Advertising or trading cards first started as cigarette cards - they were initially plain cards used as stiffeners in early cigarette packets - but companies such as H.O. Wills, Players, and Ogdens realised that these stiffening cards could be printed on using the new technique of chromolithography, and that these printed cards might help to sell packets. Tea companies quickly picked up the idea, and the Liebig cards followed shortly after. Liebig had no need for packet stiffening, the cards were

Baldrick to Lord Flashheart, Blackadder Goes Forth



Treasures of the Sea. Liebig code: S716



The Production of a Liebig Card. Liebig code: S850



simply a marketing tool, but one that could also be used to educate the public. Packaging for Liebig products was also larger than cigarette packets, enabling the cards to be some of the largest and most intricate trading cards produced. The front side of the card would be printed with a scene depicting a subject, with information (usually around 75 words) about the subject on the reverse of the card, often alongside an image or logo relating to the product. Most cards were produced in Antwerp, the home of the Liebig's Extract of Meat Company, but they were also produced across the Liebig corporate empire, with subsidiary companies producing their own sets in local languages.

Often little is known about the production of individual sets, or about the lithographers, but one wonderful set, recently added to the Andrew Taylor collection, shows the entire process of producing a Liebig's Extract of Meat Company card - from cutting of the stone slabs, to the artist designing the set, to its printing over the course of several layers of colour sometimes up to 20 coloured layers might be used to achieve full depth of colour. We do in some cases know a little about the artists who produced the sets. All of the sets are beautiful miniature illustrations, and some contain the signature of the artist. Émile Bayard (1837– 1891) crafted numerous French cards showcasing animals, Louis Charles Auguste Steinheil (1814-1885) contributed early botanical and zoological sets, and other skilled engravers and chromolithographers, employed by Liebig's printers, lent their expertise to other natural history illustrations.

But what of the sets themselves? Each set released would be around a theme, usually with 6 cards in a set. You were encouraged to trade cards with friends and neighbours to complete your collection, and albums could be purchased to hold the cards so they could be kept and treasured. A person could effectively build up a miniature encyclopedia if enough cards were collected.

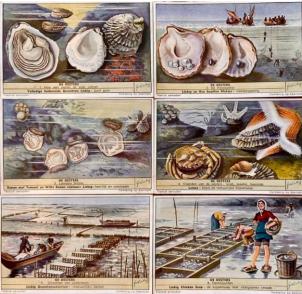
The themes range from very general subject areas, to very specific. There seems to be little overall limit to what could be depicted in a set. Some sets focus on history (kings and queens, castles etc.), some on fashion, some on literature or music, and some on engineering or vehicles. It should be noted here that some of the subjects are very much a product of their time, and offer the perspective of European colonial empires on both nature and global human cultures. Some depict cultures and people from around the world in a way that we certainly would not do today, a subject which gives food for thought when looking at imagery from this time period. Others capture historical attitudes to activities such as whaling and hunting.



The Sea Down to 900 Metres. Liebig code: S1360



Shells on Our Shore. Liebig code: S1489



Oysters. Liebig code: S1596



The subject of natural history represents a relatively high proportion of the cards, either specifically, or related to a wider topic. The earliest natural history card set is S40* on Butterflies and Flowers, with Flowers I and Flowers II as S45 and S46 and Birds I, II, III, and IV following shortly after as S61-64. Some are quite whimsical, such as *Insects and Children* (S91) which depict scenes such as a child fencing with a bumblebee, boating in the shell of a brown-lipped snail, and listening to a grasshopper play the cello. Later however these quite ornamental cards tended to become more educational, with subjects such as Protected Birds (S1804), Astronomy I and II (1840 & 1841), Marine Parasites (S1727), and Owls (S1761). In total, 240 sets are directly related to natural history, many of these in the later, more educationally focused, sets. Further card sets also indirectly include natural history themes, for example there are several sets relating to hunting and agriculture. A comprehensive list of all the card sets, alongside images, can be http://www.cartolino.com/liebig/list.html and a list of the natural history sets, including those found in the Andrew Taylor Natural History Collection, can be found at the end of this article.

Andrew's collection of natural history has been developing for the last 40 years, and the ephemera collection has been running alongside this. The ephemera collection includes letters, stamps, original prints, lithographs, copper plate engravings, illustrations, and a range of trading cards all related to natural history. The trading cards section includes tea, cigarette, and cigar cards as well as the Liebig's Extract of Meat Company cards which have their own unique style and charm. In total, the collection now holds 47 complete sets of Leibig's cards, not including duplicates in different languages. While this is far from complete, and some of the sets are now very rare, particularly the earlier cards, it represents nearly 20% of the natural history cards, spread across almost the whole of the time period of their production. The collection provides a fantastic insight into the understanding of natural history and natural history education over time. The oldest set in the collection is set \$545 Whaling, and dates from 1898, while the most recent (Strange Insects) was produced in 1965.

*The alphanumeric codes used for the Liebig cards are the Sanguinetti catalogue numbers, also given at https://www.cartolino.com/en/liebig-cards.html



Large Insects of the Belgian Congo. Liebig code: S1644



Pond Life. Liebig code: S1673



Prehistoric Animals Still Surviving S1705

The trading card collection, alongside the wider natural history collection and its associated library (located in North Staffordshire) is available to BNA members for study and research. For more information contact Andrew at andrew4040@hotmail.com or Stephanie at stephanieholtnaturalhistory@outlook.com

Stephanie Holt FLS received FBNA in 2009 and was awarded the David Bellamy award at the 2024 National Encaenia

Andrew Taylor FLS received his FBNA in 2024. His article "The Taylor Collection" was published in Country-Side: Volume 36 no. 5, Winter 2024.



Observations of the Common Galls on Oaks

Steven Rutherford FBNA

In the biodiversity crisis that we are experiencing, we need to extend our knowledge by looking at underrecorded and difficult to find groups to help explain ecological inter-relationships, and with the rapidly changing climate, identify changes in the populations of plants, birds and other animals. Many of the organisms which give rise to galls (gall-causers) are probably underrecorded because of their small size and difficulty to identify as adults. Recording can be made easier, however, by searching for the galls themselves rather than their causer. This article looks at some of the common galls found on both of our native oaks: the Pedunculate Oak Quercus rubur and the Sessile Oak Quercus petraea. This may appear to be rather a narrow selection, but native oak galls can be prolific and so their causers may be providing an important food source for small woodland birds, bats and shrews, insect eating invertebrates and spiders.

What is a gall?

Within the study of galls ('cecidology') a gall is defined as an abnormal growth produced by a plant under the influence of another organism. It involves enlargement and/or proliferation of the host's cells or vascular tissue and provides both protection and nutrition for the gall-causer (Redfern and Shirley 2011). As the gall-causer gains from this relationship but the host does not, the gall-causer must be thought of as a parasitic organism, although in fact very few are detrimental to the overall growth and wellbeing of the host plant (Rutherford 2021). Both native oaks in this article are parasitised by the same causers, who cause more than fifty types of gall (Chinery 2011). These gallcausers include a variety of organisms such as the larvae of flies (Diptera), wasps and sawflies (Hymenoptera), moths (Lepidoptera), weevils (Coleoptera), aphids (Hemiptera), gall mites (Acari), fungi, bacteria and nematode worms (Redfern and Shirley 2023). Some gall-causers have two stages to their life cycle and use different parts of the host tree for each cycle, while others will use a different species of oak for a second stage. A group of Andricus gall wasps, for example, which will be featured below, use the native oaks for one stage and then the Turkey Oak Quercus cerris for the next.

Looking for galls

Galls are found on most parts of the native oaks including the bark and roots but most of the commonly found galls occur on the twigs, buds, flowers and leaves, so searching these features makes a good starting point



Ancient Oak Tree, Brecklands.

when setting out. The search will give the greatest number of finds when the leaves are in full flush, but regular observations throughout the year are essential to see both generations of some of the species and to include those that use the flowers. Marble, cola nut, knopper, oak apple, ramshorn and artichoke galls can be searched for during the summer but remain on the trees through to winter long after the gall-causers have left. Many of these galls can also be found on very young trees and saplings, and looking at the twigs, buds and leaves on the lower branches of mature trees is often enough to reveal all of the common species when present.

The common oak galls on flowers, leaves, buds and acorns.

Searching as the buds are starting to develop in spring will show two of the common galls. The first of these - the Currant Gall - occurs on the native oak's flowers and is caused by the wasp *Neuroterus quercusbaccarum*. The second generation of this wasp emerges from the Currant Gall and will then lay on the leaves to produce the Common Spangled Galls which are found on the undersides of these leaves. The next





Currant Gall



Oak Apple Gall



Smooth Galls



Common Spangle and Silk Button Galls

gall that shows well in the spring is the Oak Apple Gall, caused by the gall wasp Biorhiza *pallida*. These attractive red galls wrap around a developing bud at a very early stage before the bud starts to lengthen and contain many chambers that can be viewed without harming the grubs if the old galls are cut open in the winter months. Oak Apple Galls follow a two-year cycle where plentiful galls can be seen in one year, while in the second year they are much more scarce. This is because the first-year female wasps who emerge from the Oak Apple Gall mate, drop to the ground and lay eggs in the oak's roots, producing galls there. After a full year, a second generation of wasps emerges from these root galls, returning to the tree's buds to begin the cycle again.

Turning over native oak leaves to look for galls can produce a satisfying assemblage of species. Rather like the Common Spangled Galls mentioned above, Smooth Galls are small disk-like structures that vary in colour from a pale creamy beige through to a delicate pink and a vivid red. The Smooth Galls are produced by the second generation of the wasp Neuroterus *albipes*, with the earlier generation being laid on the first flush of leaves, giving a distorted twist to the fresh leaf. Along with the Common Spangled Galls, large numbers of Silk Button Galls caused by the wasp Neuroterus numismalis can often be found on the underside of affected leaves. The first generation of these galls are difficult to find and photograph as they are small green disks that colour-match perfectly the fresh host leaf. The Cherry Gall caused by the wasp Cynips quercusfolii is a large (up to 15-25mm in diameter) and obvious gall that starts off green and then becomes diffused with yellows and reds as it ages on the underside of a leaf. Cherry Galls can form as single galls or large clusters that fall to the ground to complete their life cycle in the detritus in the shaded area below the



Cherry Gall



Three galls that are found on the leaf veins are the tiny Oyster Gall caused by *Neuroterus anthracinus*, the Striped Pea Gall caused by *Cynips longiventris* and the Pea Gall caused by *Cynips divisa*. The Oyster Gall tends to disperse earlier than the other two galls on the leaf veins by pinging off when disturbed. This leaves a small brown crescent shape on the vein that can be found by looking with the naked eye or using a 10x hand lens. The Striped Pea Gall falls to the ground to mature and then hatch in the late summer, while the Pea Gall will persist and complete its life cycle on the leaf and can be collected to add to an interesting collection of empty galls in the autumn without harming the gall-causer.



Oyster Gall



Striped Pea Gall



Pea Gall Country-Side Winter 2025

Along with the Oak Apple Gall, three other commonly found galls on native oak buds are caused by wasps. These are the Marbled Gall caused by the wasp Andricus kollari, the smaller and more irregularly rounded Cola Nut Gall, (caused by Andricus lignicolus), and the wonderfully structured Artichoke or Hop Gall, (Andricus forcundatrix). All three persist well on the tree and so can, like the Pea Gall, be collected and studied at home when the gall-causers have left the structures. Another gall that is found on the buds that is worth mentioning here is the Ramshorn Gall, caused by the wasp Andricus aries. This was a predominantly southern species that is now spreading north and seems to be becoming more common as it progresses, so worth looking out for as it extends its range.



Marble Gall



Cola Nut Gall



Artichoke Gall



The strangely structured Knopper Gall starts out as a sticky green eruption either in the newly formed acorn cup or on the side of a developing acorn, with some acorns infected by two galls, As the gall matures it becomes dry and turns a woody/brown colour. The causer of this gall is the wasp *Andricus quercuscalicis*.

Three of the above galls (Marbled, Cola Nut and Knopper) use the Turkey Oak to host their first generations and then hatch and return to the native oaks as the hosts of the next generation. It is worthwhile, therefore, to be able to recognise and record where the Turkey Oaks are in relationship to the host native oaks when these galls are found.



Ramshorn Gall



Ramshorn Gall



Old Marbled Galls with an old Ramshorn above it









Four photos of Knopper Galls



Recording finds and the joy of sharing time looking at galls

The British Plant Gall Society recommend that all gall records can be submitted to iRecord to increase our understanding of the local and national biodiversity trends. Distribution maps can also be viewed along with information on population trends and records on the NBN Atlas website.

This summer has been interesting, bringing to my notice three galls that were new to me. These finds made by fellow naturalists and gall enthusiasts show the benefit of sharing time and information. The first was spotted by one of the BNA Young Naturalists Jonathan Sullivan, who found Andricus grossulariae on acorns on an Oak in the gardens of Beth Chatto during the BNA Weekend. Secondly, BNA Student member Harry West posted on the BNA Student WhatsApp page his finding of Andricus lusidus on an Oak bud in Kent. The third discovery was made by BNA Hon. Fellow Dr. Chris Gibson, who identified a relatively new gall to our islands, Andricus gemmeus, on the bark of an Oak while we spent time walking and looking at the natural history on the Suffolk Wildlife Trust nature reserve Knettishall Heath in the Brecklands.

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Steven Rutherford FLS is Honorary Chairman for the BNA and has had an interest in woodland ecology from a young age.

He wrote his first book - How to Begin the Study of Plant Galls in 2021, published in the BNA's series "How to begin the Study of" books available from the BNA website.

All photos: S. Rutherford unless indicated.



Andricus grossulariae



Andricus lusidus. Photo: H. West



Andricus gemmeus



New Life on a Riverside Green Space

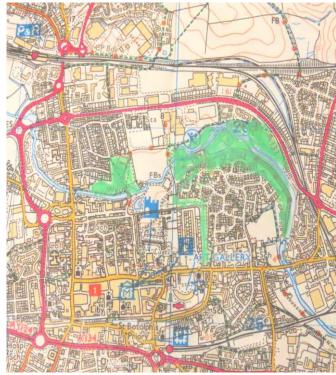
Ted Benton Hon. FBNA

In the early 1970s my partner and I lived in a small terraced house close to the river Colne in central Colchester. A favourite walk was to follow the south bank of the river through an area of rough sloping grassland, across the local park, over a footbridge, and on past a formal meadow on the north side of the river. The rough grassland was on the site of a former brickworks, and there were damp areas marking the presence of a natural spring. My diaries from that time report the presence of a wide variety of wild plants, especially bank-side species such as Flowering Rush, Dittander, Wild Radish, Gypsywort, Purple Loosestrife and Hedge Woundwort. Water Voles were a common sight, and among the common birds to be seen were numerous winter visitors, along with nesting species such as Skylark, Meadow Pipit, Reed and Sedge Warbler, Reed Bunting, Swallow, House Martin and Swift. The grassland supported a wide range of common butterflies, including the Wall Brown.

Then, in 1975, work began on a large building project that took new housing down close to the river, eliminating the area of rough grassland that had supported the breeding habitat of many of the bird species, along with the butterflies. According to my 1975 notebook 'there has been a general exodus of birds with the encroachment of the housing estate'. Many species persisted through 1976, despite vegetation by the river being 'denuded'. What followed was a systematic process of 'landscaping' though which all irregularities were eliminated as remaining patches of grassland were brought under 'municipal' closemown lawn-like uniformity. A small concession was the provision of an artificial lake, and the mysterious retention of a small riverside willow copse, with an associated abundance of Purple Comfrey and some ground-flora. Small areas of semi-natural habitat survived on the north bank for the river until these too were broken up by a new (hotly contested) housing estate within the last decade or so.



Municipal grassland management



The favourite walk - Colchester City centre, (the site marked in green)

Fast forward to the fateful year of 2020. Our local council had followed the national frenzy for tree-planting and proposed to plant a quarter of a million trees in the coming 5 years, offering a solution to climate change and providing great photo opportunities for councillors digging in saplings. Our Natural History Society, together with several independent ecologists, immediately raised strong objections. Not only was grassland also important for carbon sequestration, but also any planting needed to take into account existing biodiversity on chosen sites. The onset of Covid regulations added a further dimension to the debate: dense tree-planting on our green spaces would encroach on opportunities for large numbers of residents to take their allowed daily recreation.



Dense tree planting



Initially the council would not relent on its planting programme but did allow ecologists to advise on where *not* to plant trees and agreed to some changes in grassland management to favour biodiversity on selected green spaces. The project was now re-branded as 'woodland and rewilding'. In fact it was neither, but the changes in management of some areas did provide opportunities for us to monitor associated changes – and hoped-for increases – in biodiversity.

Back to our riverside walk. The remaining open areas to the south of the river were now to be cut only once a year, and a related green space (Land Lane) adjacent to our Roman wall would also become a longgrass area. Each subsequent year the Natural History Society held walks, sometimes joined by 'Friends' of the park, and together with more frequent visits by individuals, provided a cumulative account of the changes in biodiversity that followed. This was limited by available expertise and also by rival demands. Throughout the period active campaigning and survey work was being conducted to save a large and exceptionally biodiverse army firing range (Middlewick) from building development. So, there have so far been no moth-trapping events, and little or no evidence on beetles and some other less 'popular' groups.

Nevertheless, our studies so far indicate an extraordinary recovery of wildlife. Several expert ornithologists have visited regularly, and one (Sean Nixon) has recorded 79 bird species along this stretch of the river. There has been no return of the grassland breeding species, and the hirundines are rarely seen. However, many of the more common species observed during the 1970s are still present. These include Kingfisher, Dab-chick, Common and Black-headed Gull, Jackdaw, Jay, Wren and, importantly, Songthrush. Several common warblers nest, especially on the north side of the river, and Cetti's Warbler is a new and very evident presence on both banks. The river now seems to be more important than in previous times for its winter visitors: Redwing and Siskin winter here as before, and they are joined by Goosander, Teal, Gadwall, Shoveller, Cormorant and the occasional Great Crested Grebe on the river and lake. Stock Dove and both Greater Spotted and Green Woodpeckers can also be seen. Unfortunately, the Water Vole is long gone, but the occasional sighting of Otters provides a partial recompense.

It is perhaps with the insects that we see some of the most remarkable recovery, and this can be illustrated by indicating the emergence of some groups of species through the seasons.

Some spring insects

During March and April, we see the first bees as well as the butterflies, at first mainly the species that overwinter as adults, and then the newly emerged species, notably the whites. In 2020 Small Tortoiseshells bred here - but none since. Instead, we have Peacock, Comma, Red Admiral and Brimstone the last-mentioned probably not breeding but regularly visiting. Speckled Wood butterflies are often seen before the end of March, and they are soon followed by Small, Green-veined and Large Whites, together with Orange-tips (Anthocharis cardamines) and Holly Blues. Though they have lost some of their botanical richness, the meadows have fine stands of Meadow Buttercup and Cuckooflower, whilst some of the damper areas and hedge-banks have Garlic Mustard. The Orange-tips lay their eggs singly on both Garlic Mustard and Cuckooflower, while the former is the main local host plant for the larvae of the other whites, and all take nectar from its flowers.



Male Orange-tip butterfly



Female Early bumble bee



The post-hibernation queen bumblebees are first seen in March, or sometimes even in late February in some years. The Buff-tailed Bumblebee (Bombus terrestris) queens are particularly impressive as they feed from Red or White Deadnettles or begin to prospect for potential nest-sites among patches of tussocky grasses. They are soon joined by the Earlynesting Bumblebee (Bombus pratorum), the Common Carder Bumblebee (Bombus pascuorum) and the other widespread species. There are now ten bumblebee species to be seen on the site, including two 'cuckoos' and, for the first time in 2025, the national biodiversity priority species, *Bombus ruderatus*. A queen was seen visiting White Deadnettle in early spring, followed by sightings of several workers on both sides of the river later in the year.



Female Orange-tailed mining bee



A mating pair of Banded Demoiselles

Willow trees along the riverbank begin to display their catkins in April, and by this time many solitary bees are to be seen. The first is usually the Hairy-footed Flower Bee (Anthophora plumipes), the fawn-haired males emerging first, the black-haired females sometimes more than a week later. Deadnettles and Green Alkanet are favoured nectar and pollen sources for the flower bees, and females can often be seen 'stalked' by a queue of males hopeful of a chance to mate. This species nests in crevices in the Roman wall, where its nest-parasite, the Mourning Bee (Melecta albifrons) seeks out nest-entrances and lays her eggs in the host's brood cells. April also sees the emergence of several species of mining bee (Andrena species). This is a large UK genus, with almost 70 species, about twenty of which have so far been identified inhabiting this green space. Of these, twelve are spring-flying, and they include the common Grey-patch, Orange-tailed, Tawny Yellow-legged (Andrena and haemorrhoa, fulva and flavipes). They also include the more localised, Essex Red Data species Andrena bimaculata and Andrena tibialis. The brood cells of both species are parasitised by the 'nomad' bee, Nomada fulvicornis, also a localised species, which is also present. Interestingly, these species have been recorded only in the green space adjacent to the Roman wall, suggesting that the wall itself or the bare ground at its base may be the nesting habitat. Willow and Sallow are important sources of pollen for some of these species, but they also make use of Dandelions, Daisies, Green Alkanet, Cow Parsley and other flowers. A wide range of these early mining bees are parasitised by the familiar Dark-edged Bee Fly (Bombylius major) which can be seen 'squirting' its eggs around their nest entrances.

Another familiar sight from early April are the common Alderflies (Sialis lutaria), as they emerge from their aquatic stages and settle on bank-side vegetation. In a small number of damp areas, it is possible to find Slender Groundhoppers (*Tetrix subulata*). These small, inconspicuous relatives of grasshoppers are usually extremely well camouflaged, and, unlike grasshoppers, do not stridulate. They are believed to be quite localised in Essex but are likely to be under recorded. April is a good time to search for them, as their habitats are less vegetated, giving them less cover. With its acid or neutral soils, east Essex is generally deprived of chalk-loving plants, but the Roman wall, running alongside this site compensates a little, as it is noted for its scarce lichens and also has locally scarce ferns (Black Spleenwort and Maidenhair Spleenwort) and the Rue-leaved Saxifrage (Saxifrage tridactylites), best looked for in April.



Early Summer

Towards the end of April the early summer 'flush' of damselflies and dragonflies begins with the emergence of the so-called Large Red Damselfly (*Pyrrhosoma nymphula*). Common Blue and Azure damselflies soon follow, together with the Red-eyed damselfly (*Erythromma najas*), often seen perched on the lamina of a floating lily leaf. The most spectacular of the damselflies is the Banded Demoiselle (*Calopteryx splendens*), whose vivid courtship flights attract the attention of passers-by on the footbridge. This bridge was recently widened, and it provides a superb vantage-point from which to watch the dragonflies and birds that use the over-hanging shrubs to come down safely to drink.

Two early-flying dragonflies are well worth a mention. The Hairy Dragonfly (Brachytron pratense) has always been a very scarce species in Essex and appeared to be confined to a site in the coastal marshes, where a group from the Colchester Natural History Society found it in 1985 and '86. However, there is now a flourishing population along this stretch of the River Colne in central Colchester. The males fly endlessly in sunshine along the riverbanks in search of females. The latter can sometimes be seen laying their eggs among the riverside vegetation (Bur Reed and Reed Sweetgrass). The males look superficially like Southern Hawkers, but are smaller and fly much earlier. The other species of interest is the Scarce Chaser (Libellula fulva). This species previously had a very restricted distribution in southern Britain, but in Essex began to colonise three river systems from the late 1990s onwards. It was first seen a few kilometres up-stream from Colchester but subsequently became established in the town-centre stretch of the river. When they first



Scarce Chaser

emerge both sexes are mainly orange brown, with a central black line down the dorsal surface of the abdomen which widens to form a series of diamond-shaped markings from the fourth segment on. The female retains this pattern, but the male acquires a powder-blue 'bloom' (pruination) when fully adult. The males settle on prominent vegetation, darting out to catch insects or to intercept passing females. After mating, areas of the blue pruination are rubbed off, leaving exposed the blackish surface below.

In May and June the meadow buttercups dominate the damper grassland, and new hoverflies can be seen - notably the black hoverfly, *Cheilosia albitarsis*, often abundant on the buttercup flowers. Other hoverflies of early summer are members of the Erisalini with longitudinal yellowish stripes on the thorax. The most common is *Helophilus pendulus*, but in a few places adjacent to the riverbank it is associated with two more localised species, Parhelophilus frutetorum and Anasimyia lineata. All three species are associated with bulrush. In May 2023 we first noticed the intriguing flight of groups of Mackerel Mayflies (Ephemera vulgata), performing their extraordinary 'bobbing' vo-vo flights over areas of short grass close to the riverbank. The performances have been repeated at various dates in May since then.



Hoverfly Parhelophilus frutetorum



Mackerel Mayfly





Bryony Mining bee

In June new solitary bees appear. The Red-girdled Mining Bee (Andrena labiata) favours patches of speedwell flowers (Veronica species) but also visits Hedgerow Cranesbill stands of (Geranium pyrenaicum) that grows by the south-facing hedgerows that border two meadows on the north side of the river. By this time White Bryony, which climbs these hedges, is coming into flower. The plants bearing the larger, pollen-bearing male flowers are visited by numerous insect species, but the species of particular interest here is the Bryony Mining Bee (Andrena florea). This was formerly a very localised species in southern Britain but has spread as far as our site in north-east Essex in the last few years. It is similar in appearance to a Honeybee, but smaller and with red markings - sometimes complete bands - on the front segments of the abdomen. The females collect pollen only from Bryony, but both sexes also visit the much smaller female flowers borne on separate plants, so effecting pollination.

The botanically rather poor grassland supports two broad-leaved flowering plants which carry much of the burden of supplying pollen and nectar to bees, butterflies and hoverflies at this site. The first of these is White Clover. It is almost the only labiate species on the site and has a problematic relationship to the mowing regime. The species tends to be concentrated along path-edges, which have shorter grass because of footfall, but also because paths through the long-grass areas are regularly mown. During the flowering period, the White Clover flourishes, but intermittently disappears with each cut. In 2023 I first noticed two significant solitary bee species foraging from available patches of flowering White Clover. The first is the Large Meadow Mining Bee (Andrena labialis). This

species is in decline nationally and is rare in East Anglia. The males are distinctive for the large white patches on their faces. Unfortunately, this species has not been seen since 2023, but hopefully it is still present. The other species associated with the white clover is the Clover Melitta (*Melitta leporina*) – the vernacular name being a clue to its favourite pollen source. The Melittas are sometimes called 'blunthorn' bees, in reference to the sharply 'cut off' tips to their antennae. They are believed to be the 'oldest' group of bees – i.e. they are least changed since the evolutionary origins of bees. They share the characteristic of collecting pollen for their larvae from one, or a small number of plant species. This species is red-listed for Essex, so its presence at this site is of conservation importance.

The site is also home to other solitary bees of interest in late spring and early summer. One of these is the Hawk's-beard Mining Bee (*Andrena fulvago*). Females have orange-haired tips to their abdomen and bright orange hind tibia. As suggested by their vernacular name, they forage from yellow flowers in the composite family Asteraceae. Like the Clover Melitta, this bee is also Red-listed for the county.

Another bee species takes us to the second of the hard-working flowers in this rather poor grassland: Yarrow (*Achillea millefolium*). This plant is very abundant, and present on roadside verges and many urban green spaces. On this site pollen is collected from it by the 'plasterer' bee, *Colletes similis* (the Baresaddled Colletes). This species is quite common along the Thames estuary, but very scarce in our part of the county. From June onwards Yarrow is an important nectar source for flies and grassland butterflies. As well as soldier beetles and the distinctive Swollen-thighed Beetle (*Oedenera nobilis*), the Yarrow flowers attract the large, metallic green Rose Chafer (*Cetonia aurata*).

High Summer into Autumn

The unmown grassland supports populations of many of the common grassland butterflies. The three common 'golden' skippers are seen every year, but the Large Skipper is relatively scarce. Both it and the Essex Skipper lay their eggs on coarse grasses, especially Cock's Foot, which is abundant in both Land Lane and in the riverside grasslands. The Small Skipper lays its eggs on Yorkshire Fog, another common grass here. The 'browns' are well represented, with the Meadow Brown the first to be seen in early summer. The Ringlet is more localised, appearing in the damper, more shady areas, while the Gatekeeper emerges a little later, and is widespread across the site. The Small Heath is a species of considerable conservation concern, but it occurs commonly in some local sites. However, it is scarce on this one and may be represented only by 'wanderers' from elsewhere. The Marbled White has been making



it way northwards in Essex for some years and has begun to colonise some local sites. Just one has been reported on this site (in 2024), but there seems to be no reason why it might not become established.

Fresh Commas, Red Admirals and Peacocks make their appearance in summer, unfortunately without the Small Tortoiseshell. However, a small party on a local nature-walk were treated to guite a surprise in 2023: a somewhat worn White Admiral. As the site lacks honeysuckle, this was clearly a 'visitor' from elsewhere. In fact, there are strong populations of this species both to the north and south of Colchester, and this sighting is evidence of the use of a site such as this to provide a 'stepping stone' for insects that are travelling between local breeding sites. In this way gene-flow between local sub-populations supports the maintenance of the wider 'metapopulation'. Summer broods of Common Blue, Brown Argus and Small Copper are also observed, but numbers are small, and possibly also dependent on flow from nearby sites.



Marbled White



Hoverfly Myathropa florea

From early July several large stands of Creeping Thistle attract many insect species. In 2025 I began to focus on solitary wasps. The Bee Wolf and Ornatetailed Digger wasp had both been recorded previously and now were watched either foraging from or hunting around the flowers of the thistle. On July 9th a patch of Creeping Thistle near the Roman wall had these species present, together with several mining bees, 'blood' bees (small red-banded nest parasites in the genus *Sphecodes*), and the common fly parasite of bumblebees, Sicus ferrugineus. There were also small, black-and-yellow banded wasps that had to be taken for identification. These turned out to be the four-banded Digger Wasp (Gorytes quadrifasciata) and the Fourbanded Weevil Wasp (Cerceris quadricincta). The first of these is a very localised species, and another Essex Red Data species, while the latter is a national Biodiversity Action Plan priority species. To the south of Essex is the now infamous Middlewick Range, formerly intended to be sold off for housing, but now in limbo following a powerful 8-year campaign by local residents and ecologists. One of the important invertebrates on this nationally significant site is the four-banded Weevil Wasp, so its occurrence at this city centre site indicates this is a local speciality that should be looked for elsewhere.

The long grass areas now support several Orthoptera species in addition to the Slender Groundhopper mentioned earlier. Both Field and Meadow Grasshoppers are well established, while Long-winged Conehead (Conocephalus discolor) and Roesel's Bush-cricket (*Metrioptera roeselii*) appeared more recently. The first record of the latter species was in the Summer of 2023, and, appropriately enough, was of the long-winged form associated with the range expansion of this species. The wake of a period of high winds in late summer 2024 led to the first record of the southern Oak Bush-cricket (*Meconema meridionale*). This is a relative newcomer to Britain, and probably under-recorded as it does not stridulate and lives in the tree canopy. This specimen had fortuitously been blown off its perch!

Another group so far under-recorded on the site is the bugs (Hemiptera), so a start has been made to search for the most accessible of these – the Shieldbugs (with the help of Richard Jones's excellent *New Naturalist* volume). So far we have Bishops Mitre, Hairy Shieldbug, Common Green Shieldbug, Birch Shieldbug, Forest Bug, Dock Bug and Parent Bug, but no doubt there are many more to be found. Well into October Migrant Hawker dragonflies and the Willow Emerald Damselfly are to be seen over the river, while Ivy Bees, Common Wasps, Red Admirals and the beautiful hoverfly *Myathropa florea* cluster round the



flowers of Ivy that festoons the walls and fences around the site.

Some reflections

Though we don't have good base-line evidence for many of these groups, it seems reasonable to conclude that the change in moving regime has had great overall benefits for wildlife. The loss of the rough grassland from the 1970s almost certainly caused the demise of some of the breeding birds, and the introduction of the 'standard municipal grassland' regime that prevailed between the late 1970s and 2020 no doubt led to the loss of many other species. The change since 2020 has been responsible for at least a partial recovery. Some changes represent wider scale expansions contractions of range for some species. For example, the Wall Brown butterfly has been lost, as elsewhere, while the Speckled Wood has become common here as part of its range expansion. Cetti's Warbler, Willow Emerald damselfly and the Bryony Bee are new to this site, again, as part of a wider range expansion.

But, despite the generally good news about the new management regime, there are limitations. The grassland remains botanically poor and overall biodiversity could be greatly improved by efforts to change that. Suggestions to use 'green hay' from a richer site or to scarify and distribute wildflower seed have so far not been implemented. A more complex mowing regime, with some rotational cutting, and, more crucially, removing cuttings after a cut are also difficult to implement. Partly this is a matter of funding, but perhaps more importantly the 'contracting out' of the grassland management severely limits flexibility and the range of options.

Finally, it is important to recognise that to radically change the management of a public green space is very different from changing management of a privately owned space. Partly there is the matter of the politics of the local authority. Successes in embedding a commitment to enhancing biodiversity in the policies of council can be reversed overnight by an electoral change, but, even without that, maintaining consistency can be made difficult by changes of personnel, whether elected councillors or employees. One serious threat to this project was the appearance of a proposal from consultants to 'animate the river'. This meant installing water sports facilities on this stretch of the river for swimming, boating, and canoeing. In fact, the technical difficulties and costs associated with this might have defeated it anyway, but a broad alliance of the local Civic Society, Friends of the park and ecologists formed a powerful opposition.

As well as engaging with the local authority a change such as this cannot be successful unless it is accepted by



Female long-winged Roesels Bush-cricket



Southern Oak Bush-cricket

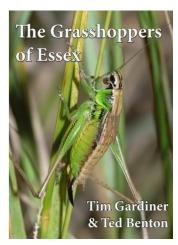
a wide range of users – cyclists, walkers, joggers and dog-walkers as well as nature-lovers. In this case, there have been attempts to engage with two local residents' associations, with the local 'Friends' group, and with individual passers-by. There have also been several guided walks and emailed up-dates on the changes to biodiversity. However, these efforts have not been as energetic or systematic as they could have been. The only excuse is that the volunteer activists are very few, and council rangers already have too much to do. In fact, we have been very lucky. There has been very little opposition to the changes, and many positive comments. A common expression is that the changes have brought the feel of a countryside walk right into the city centre.

Ted Benton is Professor Emeritus at Essex University. He gained BNA Fellowship in 2008 and became an Honorary Fellow in 2017. He is an active member of the BNA and recently attended the Beth Chatto members weekend, where he gave an illustrated talk on Grasshoppers of Essex and co-led a walk. All photos: T. Benton.



Book Reviews

Editor: Roy Stewart MSc, FIBMS, FLS, FRSB, FBNA



Grasshoppers of Essex

By Tim Gardiner and Ted Benton
Dedham Vale Publishing/Essex Wildlife Trust, 31 July 2025
ISBN: 978-1-0369-2437-8 paperback 278 pages. £15 (including p&p)
Visit this link to purchase from: - https://grasshoppersofessex.blogspot.com/

The long summer days and swaying of grass on a gentle breeze and with the sounds of the grasshoppers singing; these were the summers of my childhood. I still now love walks along the hedgerows and field margins, interspersed with mounds of bramble, searching the south-facing leaves of these connecting corridors for basking insects. Amongst the ensemble on these warming green platforms quite often are the bush crickets. In my home county of Yorkshire, we have quite a few species of grasshoppers and crickets, and with the changes in the climate, more could be joining them as southern species move north. But the continuing urban spread will also be putting pressure on our populations of invertebrates with expanding fragmentation and noise pollution.

As we read in this book, the grasshoppers and crickets are important indicator species and as such it is vital that we understand what is happening to them. And this understanding can only come from accurate identification and recording. To gain the skills that are required to achieve the high level of accuracy needed, the recorders will need to understand the species, their habitats and requirements. And so, those looking to learn about the ecology and how to identify grasshoppers and crickets would do well to read this book.

With the layout, Chapter 1 gives us 17 pages of information that introduces the reader to the groups covered through the book. The pages are peppered with useful information and personal observations starting with the incredibly complicated courtship, beginning with the calls and songs that lead in some cases to what Gardiner and Benton describe as a song and dance routine, and before copulation, a nuptial gift and then goes on to describe the life cycle developments. The opening chapter also explains the subdivisions within Orthoptera with crickets, bush crickets, grasshoppers and their relatives and groundhoppers and ends with a comprehensive look at the history of Orthoptera recording in Essex.

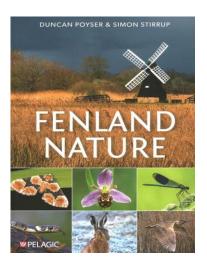
Chapter 2 provides the nuts and bolts of this book, with the bulk of the 160 pages given to the identification and ecology of each of the species. The photographs are all by Ted Benton, with at least two per species to help with identification. Individual distribution maps of the county records are also included. Each species is given an introduction before sections entitled "Description and behaviour", "Similar species", Distribution" and "Habitats and conservation".

The next three chapters show the skills, knowledge and understanding of the authors as they tackle habitats, looking for grasshoppers and changes that will affect these insect's future, and will help in their conservation.

The fact that of the 27 species of Orthoptera believed to be native, 21 species are to be found in Essex means that most of the species found in other counties across the UK are described in this book. Bringing together a continued study of 25 years by a team of recorders, Tim Gardiner and Ted Benton have presented us with an outstanding book, bringing their skills in storytelling and writing with their academic backgrounds that makes this book essential reading.

Reviewed by Steven Rutherford FLS FBNA





Fenland Nature

by Duncan Poyser and Simon Stirrup.
Pelagic Publishing May 2025
ISBN-13:978-1784274108. Paperback. 336 pages. £35

I have lived and worked in East Anglia for more decades than I care to recall and still I gravitate to the areas of (minor) topographical relief: the coast, the Brecks, the low lines of hills, even the Broads. For me the Fens have always seemed a place of utter, unrelenting, soul-sapping flatness... But this book could well cure me and convert me to loving and visiting the Fens rather than simply driving through them on the way to somewhere more interesting.

Duncan Poyser's words and Simon Stirrup's photos both play a part in this in equal measure, and all in a sturdy, attractive book. My only (minor) criticism about the appearance of the book itself would be a slightly archaic over-reliance on images isolated within a sea of white; more bleeding images would have been appreciated by me! But I fully accept this is a matter of very personal preference.

The first seventy pages comprise a very interesting and accessible run through the (pre)history of the region that has shaped the Fenland we now see: essential reading to get under the skin of the place – and of course a salutary lesson about the changes our species has wrought upon the world over the last few centuries. The next thirty or so pages on Fenland ecology cover all taxonomic groups that one could reasonably expect and hope for, without becoming a series of turgid lists, followed by a section on existing sites of wildlife importance and new ones that are being developed. For me, this lacks one thing: a map, to help get a real sense of context.

Then we have about 150 pages, almost half the book, in the form of a series of typically four- to eight-page discursive essays on some aspects of Fenland wildlife, ecology and conservation, based loosely around a particular visit, regrettably again without a map for locational reference. Each is a mini-masterpiece, spinning off from the ostensible focus of the essay into a range of tangential, but clearly related topics. Again, and very commendably, these don't fall unto the usual trap of equating 'wildlife' with 'birds'.

These essays are told with real flair, and while each stands alone, they have been expertly edited such that they feel part of a greater coherent whole, not just linked thematically. They bring a unique personal touch into the book, by introducing friends, professionals and experts who help interpret the scene before us. And they are informative: I certainly learned things, even things I didn't know I wanted to learn about.

This is a book I would have loved to have written about my own undervalued area, the Essex Coast. Indeed one we have semi-written, but not published: if ever ours sees the light of day in a package like this, we shall be very proud. It may not be a traditional guidebook (and nowadays, the internet provides better real-time resources for that) but it is certainly an inspiration.

Reviewed by Dr Chris Gibson Hon FBNA



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