Urban Countryman Monthly Field Notes

July 2022

At its best July is a month of long, sunny, hazy days that pass in a dreamlike belief that the summers of our childhoods were ever thus. School holidays beckoned, which for me meant endless days of cricket with friends, trips to the seaside and picnics in the local park, and a return to school seemed a very long way off. However, there was a time in the countryside when school holidays meant hard work, as the break was spent helping to gather the harvest.

July is the time when fields start to turn golden as wheat, barley and oats ripen in the sunshine beneath cloudless blue skies and the arrival of the full moon is the traditional time for hay-making.

However, the reality is that July can occasionally be the wettest month of the summer, making it a nightmare for farmers. If we are unlucky to get such a month it is not helped by the knowledge that the longest day is now behind us and that, even now, the hours of daylight are already shortening. St Swithin's Day (15th) is said to dictate the weather for the rest of summer – whatever the weather on that day will continue for the next 40 days (so fingers crossed for a day of warm sunshine).

After the energetic burst of spring, July seems to represent a well-deserved period of rest and stability in the natural world, when much has fallen silent. Fledglings have departed the nest and exhausted parents concentrate on building up their energy reserves ahead of their annual moult. Woodlands are a place of cool tranquillity, the dense canopy of darkened leaves casting deep shadow over much of the floor and woodland flowers only hanging on in glades and at the edges of wide rides where the sunlight can still steal in. Meanwhile, by the middle of the month, many meadow wildflowers have reached their peak and the late summer flowers are now in the ascendency – the first Saturday of the month (2nd) is National Meadows Day.

July 1 - Condition Assessment - Manor Park

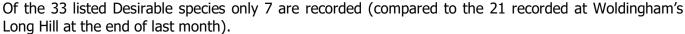
Today's condition assessment exercise is conducted at Caterham's Manor Park – a special site to me because I spend so much time wandering around it through the seasons, conducting unofficial wildflower surveys and where I campaigned for a delayed annual cut to benefit the many invertebrate species that can be found across the site.

The day's 20 quadrats are split (10 each) between inside and outside the grazing enclosure.

The first thing that is apparent inside the grazing enclosure (right) is how densely grassed much of it is, leading to an average Sward height of 29cm, with a maximum quadrat average of 60cm. This is greater than would be expected for a managed site. %Herbs is 62%, with a maximum quadrat average of 80% (the average falls to 30% in the grassier middle section).

%Scrub is just under 10%, with a maximum quadrat of 30% and some non-recorded areas higher, up towards 100% in the denser areas.

% Bare ground is 3% average, with half the quadrats having none.



9 of the 10 quadrats have at least 1 'desirable' species, with a maximum of 4 'desirable' species in a quadrat (again compared to a maximum of 12 species recorded at Long Hill).

The most numerous 'desirable' species is Wild Marjoram, which appears in 9 of the 10 quadrats.

Bird's-foot Trefoil is recorded in 5 of the 10 quadrats.

Cowslip 1/10.

Kidney Vetch 1/10.

Orchid 1/10.

The meadows outside the grazing enclosure (right) have an average Sward height of 18.5cm, with a maximum quadrat average of 25cm. While there is still a lot of grass, it is not as dense, nor as tall as inside the grazing enclosure.

%Herbs is just under 60%, with a maximum quadrat average of 75% (in 3 quadrats).

There is no scrub (and none was seen outside of the quadrats).

% Bare ground is 1% average, with half the quadrats having none.

Of the 33 listed Desirable species only 5 are recorded.

9 of the 10 quadrats have at least 1 'desirable' species, with a maximum of 5 'desirable' species in a quadrat.

The most numerous 'desirable' species are Bird's-foot Trefoil, Cowslip and Ox-eye Daisy, each of which appears in 8 of the 10 quadrats.

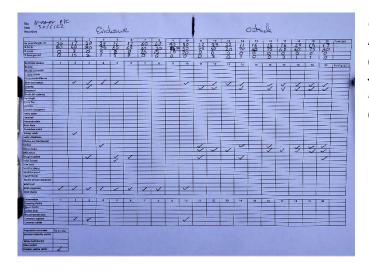
Rough Hawkbit 3/10

Orchid 6/10 - a vast amount of Pyramidal Orchids (which I counted a few days ago as in excess of 1,200) and a good number of Common Spotted Orchids.

Inside and outside the enclosure are probably equal in 'other' species, which are limited.







Completed condition assessment form for Manor Park, split between inside the grazing enclosure (managed through a combination of grazing with sheep and annual brush-cutting – see task later in the month) and outside the grazing enclosure (managed through an annual mechanical cut).

July 2 - National Meadows Day

Meadows and other species-rich grasslands are a key part of our heritage, rich in flora and fauna, character, folklore, history and memories of childhoods past. Yet it is entirely feasible that for future generations these will be little more than colourful entries in nature books.

Sadly, mostly due to a combination of intensive modern farming practices and land management, development, road and airport expansion, and neglect, the UK's remaining species-rich grasslands are now a mere fraction of what they once were. It is estimated that only 2% of the meadows that existed in the 1930's remains. Looking around today it is hard to believe that there were once natural wildflower meadows in every parish. Nearly 7.5 million acres of wildflower meadow have been lost and they are still being destroyed. Of those that do survive, around 75% occur in small fragments and remain vulnerable to destruction as housing pressures continue to increase.

Changes to farming practices has had a major impact upon our lowland meadows, 97% of which have been lost since the 1950s. Extensive wildflower margins have been squeezed out as yields have been intensified and fields combined to make more efficient use of ever-larger machinery. In the latter half of the 20th century the application of artificial fertilisers favoured the more vigorous grasses that easily out-competed the less robust wildflowers. Added to these pressures there has been a move towards high-yield grasses that can be harvested without drying to make the more popular fermented silage that is fed to cattle – the big advantage to farmers being that they are no longer hostage to the unpredictable British weather. But none of these changes are good news for our wildflower meadows, nor the bees, butterflies, myriad invertebrates and wildlife that depend upon them for survival. And losses inevitably ripple up the foodchain!

The continued survival of much of what remains mostly depends on financial incentives for farmers or the extensive efforts of conservation groups and charities. With the future of farming subsidies uncertain there is a big question mark over what the conservation role of farmers will look like in the future. Meanwhile, I can speak from experience when I say that conservation groups face the double challenge of maintaining funding (at a time when local authorities and funding partners are under increasing pressure to do more with less and the public are also having to think carefully about where their support goes) and a mostly aging volunteer workforce. Added to the housing pressures this can only point towards even more challenging times ahead for our wildflower meadows.

Meadows support a huge range of flora and fauna including wildflowers, fungi, mosses, lichens, bees, flies, beetles, spiders, moths, butterflies, reptiles, amphibians, small mammals, bats and birds. It is often said that a single square metre of good chalk grassland can contain up to 50 different plant species. They also provide other environmental benefits including carbon storage, water retention to prevent flooding and habitat for crop pollinators. Culturally they have a long history of inspiring artists, writers and composers. And on an individual level they enrich our lives and well-being. Yet only 1% of

the UK's land area now supports species-rich grassland. It should therefore come as no surprise that the 2015 UK State of Nature Report found that 65% of UK species are currently in decline.

What had been a widespread part of people's daily lives has virtually disappeared within the space of a single generation.

Heart-warming sight of a juvenile Robin (right) in the garden this morning, it's red breast just starting to appear through its initial speckled plumage.

July 3

5 Goldfinches in the garden, taking turns at the sunflower hearts feeder.

July 5 - Condition Assessment - Caterham Viewpoint

Today sees another condition assessment exercise, this time at Caterham Viewpoint (on the North Downs), somewhere I regularly walk and where I have also conducted many unofficial surveys.



Over the past fifteen years I have been involved in restoring and maintaining the chalk grassland slope below the Viewpoint (where the main part of the assessment will be conducted).

As I expected, the restored area at the front of the Viewpoint to be quite densely covered in wildflowers. However, even the large mown area, where most people stop to picnic and enjoy the view, has a good display of wildflowers if you take the time to look (especially bird's-foot trefoil, wild thyme, wild marjoram, rough hawkbit, self heal, buttercups and daisies).





Meanwhile, the restored chalk grassland slope below the Viewpoint (left) is rich in flowers, with nearly half of the list of 'Desirable' flower species present, with wild marjoram (appearing in 12 of the 13 quadrats) and bird's-foot trefoil (10 of the 13 quadrats) being the most numerous, with plenty of greater yellow rattle and a number of 'other' species.

All 13 quadrats had at least 1 of the 'desirable' species present, with the maximum number of 'desirable' species in a quadrat being 8.

There was also a number of Common Spotted Orchids still in flower. For the first time in a few years I didn't see any Bee Orchids.

	Top (Long Grass)	Top (Short Grass)	Restored Slope
Av Sward Height (cm)	31 (max 40)	4	16.7 (max 24)
% Herbs	76	51	48 (max 85)
% Scrub	<11	0	14 (max 60)
% Bare Ground	1	5	7 (max 30)
Desirable Species	Bird's-foot Trefoil	Bird's-foot Trefoil	Bird's-foot Trefoil
	Rough Hawkbit	Rough Hawkbit	Rough Hawkbit
	Wild Marjoram	Wild Marjoram	Wild Marjoram
		Hairy Violet	Mouse-ear Hawkweed
		Mouse-ear Hawkweed	Ox-eye Daisy
		Ox-eye Daisy	Wild Thyme
		Wild Thyme	Fairy Flax
			Rock Rose
			Orchid (Common
			Spotted)
			Milkwort
			Salad Burnet
			Dwarf Thistle
			Wild Basil
			Horseshoe Vetch
			Small Scabious

July 8

I spend a lot of my time walking and working on the local North Downs, so it is great to spend some time exploring the South Downs, including Beachy Head, Belle Tout, the Birling Gap and the Seven Sisters.

It is amazing to think that the North and South Downs were once joined by a giant dome of chalk, believed to be up to a mile high! The chalk itself is created from the skeletal remains of billions and billions of tiny sea creatures that were deposited on the bottom of a shallow sea. The Downs (from the old English word 'dun' which means hill) was formed at the same time the forces of crashing tectonic plates created the Himalayas.



Lighthouse at the bottom of the chalk cliff at Beachy Head on the South Downs











July 11

Whilst many people are no doubt enjoying the current spell of hot sunshine, the water level in the lake at Reigate Priory Park (right) indicates how we desperately need a prolonged spell of rain. This is clearly a worry for resident wildlife, especially aquatic life that is forced into a small and smaller area, creating greater competition and the increasing danger posed by predators.

Some reservoirs that would normally be at 70% capacity at this time of year are reportedly down to



as low as 50%, with some even lower and with feeder streams drying up. The heat and lack of rain means that farming is placing an unusually high demand on water sources. People are already being asked to refrain from using water for non-essential purposes. How much longer before hosepipe bans are in place?

The ground is baked hard and cracked, water sources are starting to dwindle, many plants are already wilting and trees will be under extreme stress (the full impact of which will be witnessed when the winter storms start to arrive). However, there is not a drop to be had in the forecast, with the possibility of the highest UK temperature (37.8C!) being challenged at the weekend. A Heat Health Alert has already been issued.

Meanwhile, the drive to build more and more houses, especially in the south-east, will further deplete the already dwindling water supplies - with nearly 2 months of summer still to go! A number of councils have announced a climate emergency, but quite frankly I've yet to see them actually do anything about it! It's almost as if announcing an emergency is regarded as 'job done'. I wonder what has to happen for people in authority to understand the impact of what we face in the years ahead.

Twenty years ago — 'An Inconvenient Truth', warning the world of the impact of Climate Change, was released in 2006 — it was probable that the changes required to address Climate Change would have had minimal impact upon our lives. Ten years ago, the impact would have been greater. To act now, it is inconceivable that we will get away without major changes to our way of life, something that, despite their claims at COP26 in January, most politicians seem reluctant to grasp, believing — or trying to get us to believe — that Climate Change can now be tackled with serious implications to our current lifestyles. Meanwhile, as we dither, the warnings continue to come.

July 12 - Grass Cutting - Manor Park Grazing Enclosure

This week's annual grass cutting in the grazing enclosure (right) on Caterham's Manor Park coincides with the hottest week of the year!

Thankfully, there is a slight breeze to take the edge off the heat, while some of the large oak and beech trees provide welcome, but brief, spells in the shade. For all those who say to me that it must be great to be working outside in the summer, I can assure them that it's exceptionally hard work - give me the winter for working any day!



Grazing enclosure: After day 1



Grazing enclosure: Before

The aim is to concentrate on removing the dense grass, scrub (mostly young hawthorn and dogwood) and rougher vegetation that will outcompete the more delicate wildflowers, leaving the best wildflower areas and clusters intact. Using brush-cutters allows us to be more selective and sympathetic in our cutting, compared to the mechanical cutting used on many wildflower meadows (including outside the enclosure) and verges that removes everything. This means that the site can remain as a valuable foodsource for invertebrates for many weeks to come.

Once cut it is important that the arisings are raked off rather than left in place to rot, which will not only create a dense thatch (suppressing new growth), but will allow nutrients to be added to the soil, which will encourage the tougher grasses and vegetation that will out-compete the wildflowers that predominantly thrive in nutrient-poor conditions.

With the temperature rising, frequent breaks, plenty of drinks and ice-cold melon pieces are very much the order of the day!



A wander around Manor Park (left) after the day's grass cutting reveals that so much of the grass has been bleached by the prolonged heat wave, turning golden and white, with remaining tinges of green mostly visible only in the sheltered areas.

Thankfully, the delayed cut I campaigned for last year has meant that there are still plenty of flowers (including lots of pyramidal orchids) to act as a valuable food source for the many invertebrates flitting around.

Among the many butterflies were a large number of Meadow Browns, with Gatekeepers, Marbled Whites, Common Blues, Brimstones, Large Whites, Silver-washed Fritillaries and a variety of Skippers. There were also plenty of bees, mostly Honey Bees and Red-tailed Bumblebees.

Sadly, the day after the delayed cut (due in a couple of weeks) all of these will be gone. For now, the battle of neatness versus biodiversity is weighted in favour of the former, to the detriment of our endangered and already plummeting invertebrate populations, but the fight continues.

Talking of plummeting invertebrate numbers, what has happened to all the moths? Normally, leaving the windows open after dark would be an invite for numerous of these night time flyers to visit, so where are they?

July 13 - Grass Cutting - Manor Park Grazing Enclosure (cont.)

Another warm, muggy day, with the temperature pushing up towards 30C, but not quite as hot as yesterday. Thankfully, cloud cover tones down the full force of the sun. And the slight breeze is still there, coming up the slope. Another day for frequent breaks (timed by a full tank of fuel for the brush-cutters lasting on average 40 minutes), plenty of drinks and more of the very welcome ice-cold melon pieces!

The brush-cutting and raking continues (below left), selectively leaving the densest clusters of flowers (such as the Perforate St John's Wort, below right) for the many butterflies that are suddenly taking to the wing as we progress down the meadow – Meadow Browns, Marbled Whites, Small Coppers, Common Blues, Silver-washed Fritillaries.



Today's July full moon is known as the Buck Moon as it is the time of year when the bucks grow their antlers. It's also known as the Thunder Moon, because of the summer thunderstorms, and the Ripe Corn Moon. Unfortunately, there is too much cloud cover to capture it.

July 14 - Grass Cutting - Manor Park Grazing Enclosure (cont.)

A sunny but thankfully fresher day, with the temperature falling below 30C. A nice breeze makes brush-cutting and raking a lot easier. And the bigger trees (such as the towering beech tree pictured) provided welcome cool shade. Not to mention another supply of ice-cool melon!

Interesting to see how the areas cut over the past couple of days have already turned brown under the strength of the sun.

The addition of a wheelbarrow also greatly reduces the number of journeys across the field to dispose of the arisings.

It's just a pity it's taken until the 3rd day for it to occur to us! Still, better late than never.



Another good day's progress, clearing the densest areas of scrubby young dogwood and tangled layers of black briony and wild clematis. The dogwood put up very little resistance against the metal blade, while the trailing briony and clematis show a frustrating ability to continually wrap round the shaft of the brushcutter.

Meanwhile, it is very satisfying watching the ranks of tall grass being swept away to form lines of vegetation to the side of me (windrows) that makes it far easier for raking.

By the end of the day, we have nearly doubled the area cut over the first 2 days. A hot few day's work but extremely satisfying.



Last area of the grazing enclosure cleared

Leaving the better wildflower areas uncut will provide a valuable foodsource for weeks to come

July 15

The heat health warning level has been upped from amber to red, indicating a serious risk to health with the temperature now forecast to reach 40C for the first time ever in the UK!

July 16

As the temperature again pushes into the upper 20sC the best place to be is in the shade of the local woods on the North Downs.

I've never seen so much wilted Dog's Mercury carpeting the woodland floor before, while many fallen tree limbs highlight the stresses that are being placed upon our trees. From the bleached grass, to the wilting flowers to the discarded branches it is clear that countryside is struggling. We desperately need some rain!





July 17

A lovely day in deepest Kent, with friends who are rewilding their farm – increasing the diversity of their meadows (including increasing the yellow rattle – known as the meadow-maker – which will reduce the prevalence of the tough grasses to allow the more delicate wildflowers to thrive), turning their former arable fields into wildflower meadows and sympathetically managing (a term I prefer to the over-used term 'rewilding') their woodland for the benefit of the amazing bluebell display, through coppicing, tree thinning and directing footpaths where they do the least damage to the flora.



Even in the sun-baked wildflower meadows the impact of the yellow rattle in supressing the tough grasses is easy to see.



Having visited in spring I can vouch for the fact that the sympathetically managed woodland is a great place for bluebells.

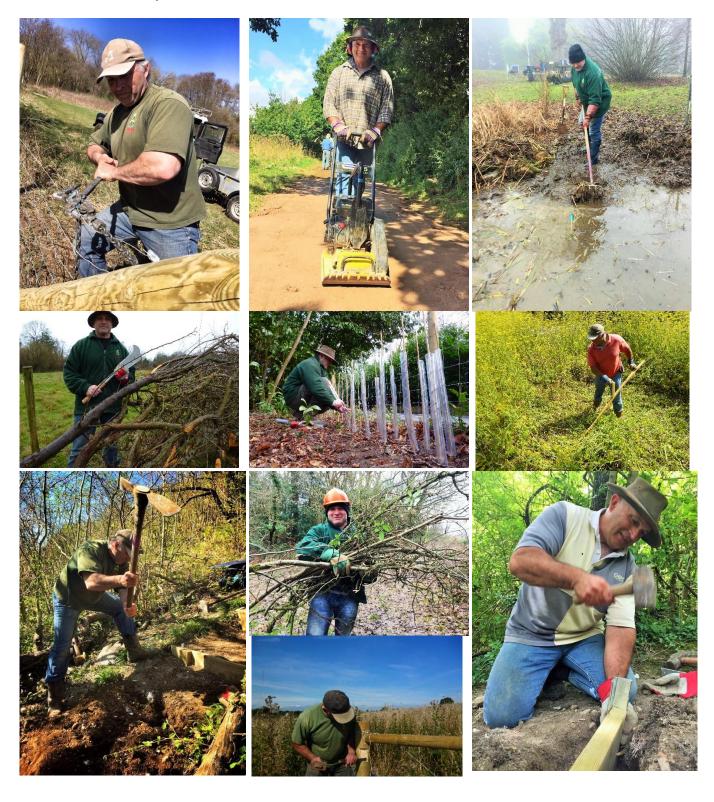


Left: One of a number of gates made from the timber harvested from the woodland

July 18

Celebrating an amazing 15 years as a countryside day and I can honestly say that the worst day working in the countryside was still better than the best day working in a London office. In that time, I also spent 8 years as a trustee of the Downlands Trust (of which I was a founding member), 5 of them as chairman.

To celebrate my time as a countryside volunteer here is a selection of some of the many skills I have acquired over the years (including: hedge laying, coppicing, tree felling, hedge and tree planting, scything, fencing, step building, path surfacing, pond maintenance, brush-cutting and promoting conservation and the countryside, not to mention the greater understanding I have acquired about biodiversity and environmental issues).



As many countryside volunteers will know, this is the time of year when the most demonised native wildflower – Ragwort - takes centre stage, as day after day is spent removing it from fields due to be cut for hay – in accordance with legal obligations. It would be fair to say that over the years I have done more than my fair share of ragwort clearance, with one year particularly memorable for the 7 consecutive weeks we spent on a number of sites, filling tailer after trailer – weeding on an industrial scale!

Early on it was easy to simply accept the demonisation of this plant, based unquestioned claims of its toxicity, itself based upon an unscientific survey. Now, I'm not arguing against its removal from hay fields, but the more I delved into this plant, the more I came to realise that things were not as black and white as we have been led to believe.

Right: In a field where it looks as if ragwort is being grown as a crop! A typical example of how overgrazing encourages ragwort to thrive.



Ragwort: The Good, The Bad And The Not So Ugly.

Of all our wildflowers none are more controversial or divisive than Common Ragwort (with Hoary Ragwort not far behind). Indeed, its removal from our fields has become a staple summer task of many conservation volunteers. On the one hand it is public enemy number one for many horse owners, whilst on the other hand it is an extremely important plant for environmentalists. So where does the truth lay?

Ragwort, with its mass of bright yellow flowers and ragged leaves on tall erect stalks, brings a welcome splash of gold to many uninspiring environments - roadside verges, railway embankments and patches of waste ground. Many a rural poet, such as John Clare, were quick to enshrine its virtues in verse. It is naturally a biennial plant, taking two years to mature to flowering. In its first year it forms a dense rosette of leaves growing close to the earth and is at its most poisonous. The leaves give off an unpleasant smell when bruised, hence local names such as 'Stinking Willie' and 'Mare's Fart'. It is its toxicity - that can cause irreversible liver damage in livestock, especially horses - that is at the root of its bad press.





As a general rule animals will not touch it in its fresh and bitter form – I have seen many instances of horses standing in fields full of untouched ragwort – but dried in hay it loses its bitterness but not its toxicity. It is deemed to be of sufficient threat that under the Weeds Act 1959 the Secretary of State can serve an enforcement notice on the occupier of land on which ragwort is growing, requiring them to take action to prevent its spread. It is also illegal to fail to remove it from a field that is cut for hay. And the subsequent Ragwort Control Act 2003 promotes the more efficient control of ragwort where it is deemed a threat to animal welfare. However, whilst not doubting its potential dangers or the need to remove it from a hay crop, the 'science' upon which its impact is based quickly falls apart upon even the most cursory scrutiny.

In 2002 the British Equestrian Veterinary Association (BEVA) published a claim that a staggering 6,500 horses die in the UK every year from ragwort poisoning — a claim that has since been held up, unchallenged, as proof of the need to rid the countryside of this toxic threat. This would no doubt have come as something of a surprise to the former Ministry of Agriculture, Fisheries and Food (MAFF), whose 1990 report placed that figure at 10 horses per annum. So, why the massive difference?

In 2002 BEVA contacted all its members in relation to the impact of ragwort poisoning. Out of all its members 4% responded to say that they had seen, on average, 3 'suspected' (note – not 'confirmed') cases of ragwort poisoning. BEVA then simply multiplied the number of suspected cases to cover their full membership, producing a total of 6,500. At no point did it appear to occur to anyone conducting the survey that 96% failed to respond because they had no cases to report. Indeed, I have heard of equestrian vets who have practiced for 30 years and have never encountered a single case of suspected ragwort poisoning. However, since its publication, the BEVA figure has developed an unquestionable life of its own.

It is interesting to consider that livestock has lived with ragwort for centuries. There are numerous other plants that are toxic to livestock – foxglove, black briony, white briony, cuckoo pint, bracken, yew and elder, to name just a few – yet none have been demonised in the manner of ragwort. It is also interesting to learn that, according to latest thinking, for it to be fatal an animal would have to eat a vast amount of it – estimates are a minimum of 5% of bodyweight (and possibly a lot higher) for horses and cattle and 125% of bodyweight for goats. Indeed, I have heard of instances of pregnant ewes making straight for it, probably instinctively knowing that the toxins will fight against parasites that could be harmful to the unborn lambs.

Ragwort thrives best in conditions where the ground has been disturbed (such as excessive trampling by livestock) and where there is little or no competing vegetation. It is therefore a common consequence of over-grazing. I have seen numerous instances of animals standing in a field of ragwort where the grass and wildflowers have been grazed right down to the ground. I have never understood how some horse owners, believing ragwort to be highly dangerous, can leave their animals in a field with nothing else to eat.

Another belief is that the plant is so toxic that the poison can be absorbed through the skin of anyone pulling it. However, there appears to be no scientific evidence to support this. Bees regularly take pollen and nectar from ragwort, but there has never been a claim of the resultant honey being poisonous. Personally, I would always wear gloves because of the noxious smell that would impregnate the hands.

Another claim is that it can spread at an alarming rate, the seeds being carried vast distances on the wind. However, the latest research indicated that 60% of seeds fall at the base of the plant, with lessening volumes being carried further away. However, it is only the lighter seeds – those less likely to be viable – that are dispersed at any distance.

However, claims of mass livestock deaths aside, there is a complete other side to the story of this plant. It is a British wildflower of significant importance to many insects and therefore has a major role to play in maintaining a healthy biodiversity and balance of nature. It is estimated to support around 120

different species of invertebrate – more than any other wildflower. Of these, 30 species, some rare or scarce, rely entirely upon it for their existence, including 7 beetles, 12 flies, 7 micro moths and 1 macro moth (the black and yellow-banded cinnabar moth caterpillar that turns the toxin to its own advantage to deter predators). Any eradication of the plant would therefore prove to be fatal for these populations. It ranks as one of the most visited plants by butterflies, moths, bees and hoverflies – a major source of nectar for at least 30 species of solitary bee, 18 species of solitary wasp and 40 species of nocturnal moth.

Another important characteristic of ragwort is its long flowering period, extending right through summer and well into autumn, even into the start of our increasingly milder winters – I have recorded ragwort in flower well into November. This means that it is often the lone food source long after all the other flowers have gone to seed and disappeared.

Personally, I think it makes sense to continue to remove ragwort from fields that are being cut for hay. However, its benefits far outweigh its disadvantages so, after more than a decade of spending my summers clearing it from field after field, I have reached the decision to leave it be for the benefit of wildlife.

July 19

Following a new UK record night time temperature of a very sweaty 26C, by 9am it is already 30C! With the temperature forecast to top 40C (104F) for the first time ever in the UK, it is not a surprise that today's countryside tasks have been cancelled – heatstroke and heat exhaustion are not to be taken lightly.



It's not just barbecues that are a danger to the countryside in these hot, dry conditions.

The sun is at the height of its intensity, the grass is parched, the countryside is a tinder box and discarded glass magnifies the sun - the perfect combination for starting a wildfire!

Discarding glass bottles (such as this one I remove on my walk this morning) may be a sign of laziness, ignorance or thoughtlessness, but the impact could be devastating. It's a day for getting out early for a walk across nearby Manor Park, where in the past week the grass has noticeably become more parched and, where just a couple of weeks ago there were masses of wildflowers, the intense sun, heat and lack of rain have taken their toll. Now, there are just a few remaining, mostly the tougher Common Knapweed. With the temperature already rising it is nice to have the shade of the trees on the way around the edge of the site.



12:50 - The Met Office have reported that 40C has been recorded in the UK for the very first time – a new record temperature of 40.2C at Heathrow.

As if we really need warnings of the need to before even more careful in these conditions, more than 250 firefighters are tackling grass fires in London, including Shirley Hills, somewhere I have worked a number of times over the years.

- 17:00 The Met Office are reporting a new record high temperature of 40.3C at Coningsby.

 At the same time they are reporting that 34 sites across the country are reporting having broken the previous UK record temperature of 38.7C, set just in 2019.
- 18:30 Clouding over, with thunderstorms now forecast. We desperately need some rain. Hopefully, it doesn't come in a sudden deluge and just run off the concrete-like surface.
- 21:00 No worry about a sudden deluge as, when it comes, the rain is a non-event, with a token flash of lightning and a roll of thunder.

July 20

After years of inaction and empty words and promises it's sickening listening to politicians suddenly talking about the need to take action over the impacts of Climate Change! Meanwhile, government targets of 2050 will subject us to another 30 years of worsening conditions before anything serious is done. We cannot wait 30 more years! The current political rhetoric seems to now be that any action must not adversely impact the people. I've got news for them, the point of no impact has long gone!

July 21 – Annual Summer Cut of Banstead Woods Orchard

Today sees the first day of the annual summer cut in the main orchard in Banstead Woods (right).

One of the first things that strikes me, apart from the massed ranks of tall pink Rosebay Willowherb, is that all the other flowers that should be around at this time of year — red campion, bird's-foot trefoil, buttercup, yellow pimpernel — are already gone, victims of the exceptionally hot, dry weather. I can even hear the dryness as the scythe slices through the vegetation.



Apart from the willowherb the only other vegetation

consists of brambles, trailing across the ground, patches of nettles and a patch of Solomon's Seal, which I save from the blade of the scythe. I also give a temporary reprieve to a patch of a patch of Rosebay Willowherb that seems particularly attractive to a number of bees, which make up a very small number of insects that are about today. Even the ever-present crickets seem to have gone awol! There is just a single Brown Argus butterfly to attract much attention.

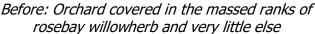


With 4 scythes (mine pictured left) and the petrol strimmer (right - with its double strimmer cords) the progress through the morning is good, if somewhat sweaty in the cooler but humid conditions.

Normally, cutting and raking the orchard takes around 4 days, but by the end of the day we have done close to a half – possibly an indication of the impact of the missing vegetation. The arisings are left in a number of piles to deal with on a subsequent visit.









After: End of the first day's cutting and raking

Cutting the Rosebay Willowherb now will prevent it from seeding and spreading to swamp all the other wildflowers in the orchard.

On the way home I pass Chipstead's Elmore Pond, or what's left of it. The heat and lack of rain has had a major impact on it and it is now a clear indication of how desperately we need rain. How very different from the pond we worked on in December, where close the edge the water was already near the top of our wellingtons!

All that remains is a couple of small puddles in the centre, the mud has hardened and cracked and it is possible to walk from one side to the other without fear of getting muddy, let alone wet! And, with little

rain in the forecast, how long before even this is





Meanwhile, what of the pondlife that wasn't able to move to another pond (assuming the other nearby ponds aren't in a similar state)? Their world would have become smaller and smaller until they could no longer survive.

Wildfires, water shortages, infrastructure collapse, decimation of our already dwindling wildlife - these are the realities of climate change that we can apparently wait until 2050 to deal with.

At least I come home to the joy of seeing the juvenile Great Spotted Woodpecker (right) at the garden feeders, where the sunflower hearts seem to be a particular favourite.

July 22

Not seen the Long-tailed Tits for some time, so really nice to see 5 of them grouped together at the suet block feeder.

At least 1 juvenile Starling is still visiting the garden, but the adults seem to have disappeared.

At last! enough rain to at least dampen the ground, even if, at the pint where it felt like it could be the first significant rain for some time, it stopped and the sun came out again. Worryingly, there is no significant rain forecast for the coming week at least.



July 23

Alerted by the Clack! Clack! from the garden to a Song Thrush bashing a snail on a paving slab to get at the juicy contents. Although they used to be regular visitors, I've not seen one for a while. For me it is exciting to see one again – for the snail, probably less so.

July 24

The recent brief spell of rain has made little or no difference to the parched conditions on Caterham's Manor Park. With the annual cut now imminent, I thought I'd take what might be my last opportunity to enjoy the mesmerising rippling grass shimmering in the breeze.

Meanwhile, around the outskirts of the capital the fire brigade is again fighting more grass fires!



July 25

A day of mostly heavy cloud, promising the much-needed rain, but yet again delivering so little.

Walking along the local – Chaldon - section of the North Downs, where fields of wheat and barley stand almost white, even in the grey conditions, ready to be harvested. The stiffer wheat stands upright and rigged, while the barley ripples in the stiff breeze, producing a blurred landscape. Nearby, in field that have already been harvested, the discarded straw forms thick tramlines, awaiting the tractor-pulled baler that is hard at work in the next field, hoovering up the straw, the mechanical clunking dropping square bales out the back, where they will be picked up and stored away. Even when out od sight the progress of the tractor can be followed by the rising cloud of dust that accompanies it.

Overhead, a Red Kite glides slowly across the field searching for any pickings that have succumbed to the mechanical passing.



A sea of deep green is created by a field of maize, the dense ranks reaching up to head high, the wispy pink beards of the crop starting to show where the cobs will emerge. Opposite is a field of beans, the plants starting to turn black, the pods swollen with their bean contents.

July 26 - Re-instate Kissing Gate on Chipstead Downs

Today's task is to re-instate the kissing gate that was removed after the hanging post has rotted and snapped off at the base.

Installing the replacement post has its challenges, first in digging out most of the concrete footing used for the original post and then trying to firm in the new post with soil so dry it's like tamping dust - even dousing with water from the cattle trough at the top of the slope makes little difference.

With the post eventually in we can construct the box structure that will take the weight of the gate and the tensioned wire fence.

Meanwhile, Wild Parsnip has exploded across sections of Chipstead Downs.

This is a plant definitely worth being able to recognise. The sap, if you get it on your skin (which only requires you to rub up against the plant), can react with sunlight to cause severe blistering, akin to very bad sunburn. The resultant scarring can take many months to disappear.

Every summer the press has a meltdown over the dangers of giant hogweed (a plant that in all my years working in the countryside I have never encountered), yet wild parsnip can be just as nasty and is far more likely to be encountered. So, please take care if you come across it.



On the plus side it is a magnet for many invertebrates, including ladybirds, beetles, wasps and an array of hoverflies.

July 27 Enjoyable early morning walk along nearby Happy Valley and Farthing Downs.





Right: Not a rare plant but a scarce one, this cluster of Woolly Thistle is a nice find on the hillside of Happy Valley.



This grass fire on the slope at Happy Valley was thankfully caught before it became something far more significant (especially with conservation grazing sheep in the adjacent enclosure).

We are experiencing the driest year since the unforgettable summer of summer of '76, the area has so far received just 5% - 10% of its July average rainfall and the countryside is a tinderbox. Extreme care must be taken not to be responsible for starting a wildfire by carelessly discarding cigarettes, bottles (the glass acts as a magnifying glass when hit by the sun) and don't have barbecues.



July 28 – Annual Summer Cut of Banstead Woods Orchard (cont.)

Today sees the completion of the vegetation scything, raking and clearing in the main orchard in Banstead Woods (right).

Meanwhile, despite the extended dry weather the trees are laden with apples and appear to be doing really well following our major pruning exercise at the start of the year (below and below right) – the first time they have been pruned since being planted nearly 30 years ago.





In the garden there are pieces of shattered snail shells along the concrete path, clear signs that the Song Thrush has been a regular visitor since I saw it a few days ago.

July 29

Loving the new 'living wall' on the refurbished office block in the town centre, brightening up the town and providing a vital habitat for our plummeting invertebrate populations and nesting sites for small birds. Would love to see loads of these in all our towns and cities. Really looking forward to seeing how this one matures.



Unexpected encounter with a roe buck while walking through the trees on Tillingdown this afternoon.



July 31

And so we say goodbye to July 2022, a month that saw a potential turning point – extreme heat, with the first ever record of 40C, while over 30 sites broke the previous record temperature; wildfires destroying property and wildlife and pushing the emergency services to the limit; heat impacting transport, with roads and airport runways melting and rails buckling, lack of rain (reported as just 5% to 10% of the monthly average in the south-east and nationally the driest July since 1911) seeing ponds and streams run dry and reservoirs at worryingly low levels; wildflowers withering and disappearing, robbing wildlife of valuable foodsources; crops desperate for water, placing greater pressure on farming. So far this is the driest year since the unforgettable one of 1976. A stark warning of what climate change has in store for us in the years ahead, while we wait for politicians to realise that this is one can that cannot continue to be kicked down the road.