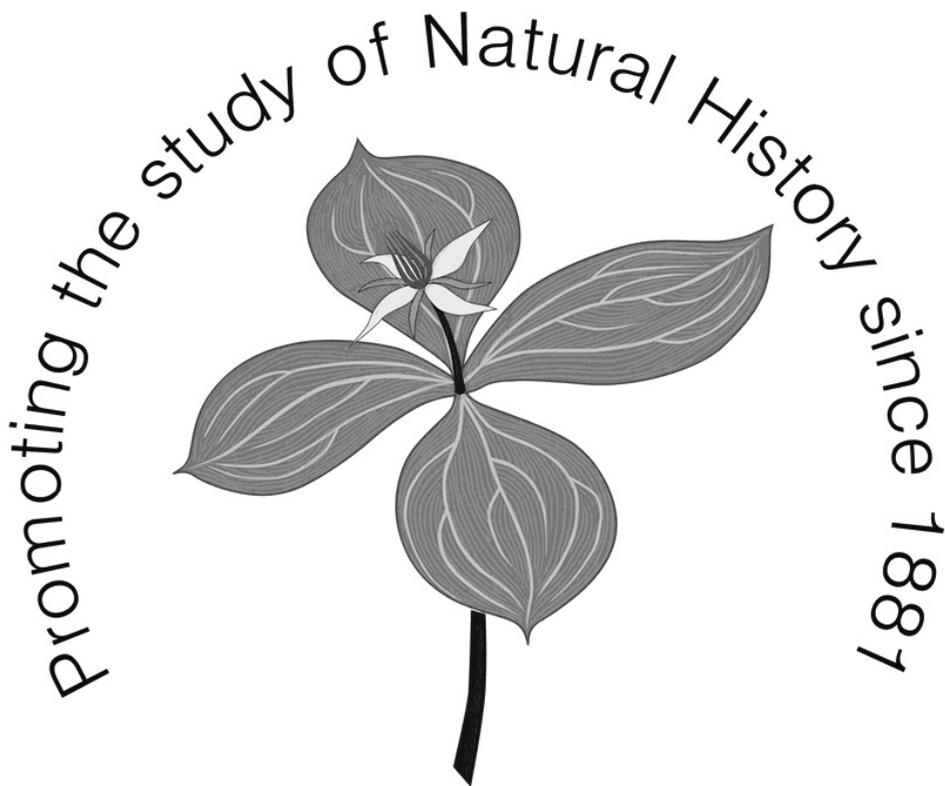


# The Reading Naturalist

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**THE READING NATURALIST**  
**No 72 for the year 2019**

**The Journal of the**  
**Reading and District Natural History Society**

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My special thanks to all the contributors for their determined efforts in meeting the deadlines whilst carrying on with their busy lives. The Honorary Recorders do a fantastic job on their respective taxa, as well as the many who produce the reports of the walks, excursions and meetings, articles and help with validating and proof reading, in particular Julia Cooper and Jan Haseler, without whom the task of producing the Naturalist would be impossible.

So now it is time for anyone with a passion for natural history to create interesting articles for the next RDNHS Naturalist journal. The spring, summer and autumn time is imminent to inspire you in your particular fields of interest. So don't forget to document and photograph all those interesting expeditions and discoveries, whether they are near or far and submit them for publication here.

**Ken White (Hon. Editor)** email your articles and photos to: [white.zoothera@gmail.com](mailto:white.zoothera@gmail.com)

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## Presidential Musings by David Cliffe

Last year's musings came into my head while sitting in the front bay window of my house on New Year's Day. This time it's New Year's Eve, and I was musing whilst lying in bed last night, waiting to get to sleep. During the day, I'd seen Greta Thunberg talking to David Attenborough via Skype on the television news. Her haunted little face was stuck in my mind, and it started me thinking about the number of our natural history talks which had mentioned the effects of climate change.

I thought of the talk on climate change given by Michael Keith-Lucas in January 2018, and his saying that if you wanted proof of it happening, look at the wild orchids from farther south in Europe appearing in southern England. And then I thought of the Lizard Orchid which turned up on a verge on Basingstoke Road, Reading, in 2019, and wondered how many years the plant had been there, unnoticed, building up its energy reserves before it came to flower.

The range of talks we've had in 2019 was as wide as ever. Some of the subjects which I'd thought would have been straightforward turned out to be anything but. After two bookings which unforeseen circumstances caused us to postpone, we finally heard the talk on neonicotinoids and bees by Dr. Ben Woodcock. I was intrigued, but, not being a trained scientist, some of it "went over my head," as they say. But when it came to question time, it was obvious that at least some of those present had understood more than I, and some very perceptive questions were raised – and expertly answered. I did feel a bit sorry for Ben, because the questions and discussion continued for a long time after the "official" time for questions was answered. It had obviously been a very valuable talk for a good number of people, from someone who was at the forefront of current research.

My own presidential address was at the other end of the scale – an account of a week's holiday I'd taken in 2006. I thought it might work – a bit of Europe not much visited by people from England, with pictures of rocks, plants, different landscapes, with the odd church and rune-stone thrown in for good measure. I needn't have worried - after the talk people went out of their way to say how much they'd enjoyed it. So I tend to think that this kind of variety is desirable, and the popularity of the talks, academic or otherwise, seems to bear this out.

The field excursions always seem well attended – maybe occasionally too well attended? In May we had a successful coach trip to the Dorset coast, for seabirds and interesting plants. It was successful inasmuch as enough people came, so we didn't lose money, the things we'd gone to see were there, and the weather was good. It now seems incredible that the Early Spider Orchids were a bit small, because of the dryness of the season. The other day I was talking to a man opening up gates in Caversham Weir on the Thames, who said they were letting water through more quickly in an attempt to stop Purley getting flooded. During the course of the year I also enjoyed the trips to Old Winchester Hill, and the fungus foray at Exlade Street.

My first presidential address, in 2017, was about Ken Grinstead's slides, which had been given to the Society. What on earth could we do with them, and with the 4-drawer filing cabinet containing them? Over the last couple of years, I've edited them down, from over 9,000 to just under 2,000, and have been digitising them and the information written on them. My idea is then to add the various images we've used, in the exhibition put on to mark the Society's 125<sup>th</sup> anniversary in 2006, and in the talk I gave on the history of the Society in 2011, so that they can all be stored in a database and anyone interested can view them. It's taken a long time, but, having worked as a librarian, for me it's a pleasant task, and I'm more than half way there.

I hope you enjoy reading this edition of the "Naturalist," which has been appearing since 1949, and is another of the things that we do rather well. It's a splendid record – you can read every edition on our website. No-one, I suspect, reads through all of the recorders' lists – except the editor, and the President, who is supposed to proof-read the lot! I'm expecting to stand down at the A.G.M. in March, but, following tradition, will step back in as Vice-President when required.

I'd better not write any more now, or there will be nothing to say at the Annual General Meeting!

## **MEMBERSHIP by Norman Hall & Ian Duddle**

Paid up Membership figures as they stand as at the end of December 2019

Single members	58
Family/Couples	34 (x2)
Honorary members	8
	—
<b>Total</b>	<b>134</b>

of whom we welcomed 4 as new members to the group:

<b>Ruth Elwell</b>	<b>Katie Jenks</b>
<b>Dr Gustav Clark</b>	<b>Ross Laughher</b>

## **MEMBERS' OBSERVATIONS 2019 by Julia Cooper & Rob Stallard**

### **15<sup>th</sup> January**

Philip Allen – after the work party at Moor Copse on 13/01/19, gulls flying back to Theale over 5 Acre Field formed 3 balls of about 20 birds each which moved slowly along.

Tricia Marcousé – about 30 very noisy Rooks in the Ash tree at the end of her Earley garden recently for 6 days in succession. She had never seen Rooks there before and wondered if they were looking for a new site for a rookery.

John Lerpiniere – a Great Northern Diver currently at Child Beale Trust, Lower Basildon, easily viewed in the lake straight ahead from the car park.

Rob Stallard – a Blackberry in flower at Sonning on 09/01/19.

### **29<sup>th</sup> January**

Tricia Marcousé - 21 Magpies (a parliament) on an Ash tree in her Earley garden today. She was wondering if they were looking for nesting sites.

Jenny Greenham - A black-plumaged Pheasant was fighting a common cock Pheasant in her garden at Hampstead Norreys today.

Ken White - Male Hazel catkins and female flowers were out in Woolhampton on 16/12/18 and throughout January near the River Kennet. This seems rather early.

Ken White - Chiffchaff on overhanging vegetation at Woolhampton by the R. Kennet 28/01/19.

### **2<sup>nd</sup> February**

Ken White – in their garden at Plastow Green during the recent cold weather: 23 Chaffinches and 11 Greenfinches, and 3 Fieldfares, for the sunflower hearts and apples.

Ailsa Claybourn – a Woodcock in Moor Copse near an area of recent coppicing today.

## **19<sup>th</sup> February**

Ailsa Claybourn – the first frog of this year in the pond in her Tilehurst garden on 28/01.

Norman Hall – a Red Admiral near warm sand on the beach at the mouth of the River Test on 14/02.

Alice Ayers – a Red Admiral in her Earley garden on 17/02, and a Peacock butterfly at St Brides Bay, Pembrokeshire, on Saturday 16/02.

Rosemary James – 3 recent sightings of a Buzzard in Sonning Common, but none of the (escaped) Rhea.

BBOWT mid-week team – the first Brimstone of the year at Moor Copse last Thursday 14/02.

John Lerpiniere – recent sightings of 2 different species of bee and a Blackcap in his Tilehurst garden, a Muntjac deer at Barefoot's Copse in Tilehurst and a Field Vole at Hosehill.

Zoe Freedman – a Peacock butterfly in the garden of the Three Horseshoes in Brimpton on 17/02.

## **5<sup>th</sup> March**

Roger Frankum – at Lower Farm, Thatcham this morning: 1 Black-tailed Godwit, 1 Redshank and at least 14 Snipe.

Jane Sellwood – Toad patrols in Farley Hill are already underway. Last week approx 200 toads were moved across the road on their way from the woods to their breeding lakes, last night (which was colder) there were none, and tonight 5.

Norman Hall – Quaker moths have emerged in quantity very early this year, 35 Common Quakers were trapped in his Earley garden on Thursday 21/02 (max temp 14°C), 52 on 22/02 and 97 on 23/02. Related moths e.g. Hebrew Character, Small and Twin-spotted Quakers were also seen in these three warm nights – with a remarkable total of 16 species. This was before the recent hot spell (record winter high of 21.2°C in Kent on 26/02) and before the Sallow had catkins to provide nectar for the adult moths; it was also unlikely the Sallow (larval foodplant) would be in leaf by the time the moth eggs hatched.

Michael Keith-Lucas – the first frogspawn of the year in their garden pond in Reading on 24/02 – the earliest he has seen. There are now several clumps.

Ailsa Claybourn – the first frogspawn in her Tilehurst garden on 02/03. She counted 31 frogs in the very small pond.

Rob Stallard – 7 Small Tortoiseshells near Devizes on 27/02.

Marion Venners – 6 Brimstones and a Comma in her Purley garden on 24/02.

## **19<sup>th</sup> March**

Ailsa Claybourn – a Chiffchaff at Bowdown Woods on 11/03.

John Lerpiniere – 2 Bloody-nosed Beetles mating at Hosehill on Saturday (16/03).

Ken White – a Chiffchaff in local woods at Plastow Green on 17/03, and a female Blackbird and House Sparrows both showing some nest-building activity.

Rob Stallard – A Hairy-footed Flower Bee *Anthophora plumipes* on Lungwort in his Tilehurst garden on 05/03. In the last 2 years Rob had first recorded the bee on 22/03 and 13/03.

## **1<sup>st</sup> October**

June Housden – very tiny ground bees had moved in 2 weeks ago on a flower bed in her garden near Upper Woodcote Road, Caversham where grass had been planted but not established well. Many of

the bees were flying haphazardly over the earth and landing occasionally. None were observed going to forage. Tricia Marcousé added that last Thursday (26/9) she had seen more than 100 of the bees after a rainstorm, flying and foraging in cyclamen flowers; some of the burrows were flooded. The bees were probably *Andrena* spp.

Brian Sargent – at home near Aldermaston, a Pipistrelle flying at 2pm on 31/9 and about 30 Martins flying high and feeding over his field in the morning and afternoon. Brian noted that the Sumatran Rhino had become extinct in Sabah, Malaysia, during the summer, although a few are left elsewhere.

Philip Allen – about 100 Ivy Bees at Lousehill Copse meadow on 7/9, and 50 Martins over Tilehurst after a thunderstorm.

Tony Rayner – 15 White Storks, a White-tailed Eagle and a Great White Egret in Cholsey in the last 2 weeks, reported by sharp-eyed birdwatchers.

Tricia Marcousé – near her house in Earley recently, a ‘Magocet’, a Magpie with a long curved beak which is a good adaptation to gather berries from Rowan. No other members had seen a bird like this.

Rob Stallard – a great concentration of about 10,000 Ivy Bees in 100 square metres between Pincents Lane and Sainsbury’s at Calcot. This was one of the first areas colonised by the bees which have now spread to peoples’ gardens.

### **15<sup>th</sup> October**

Ken White – a large flock of Chaffinches initially heard and then seen flying westwards over Plastow Green at 7.15 this morning, the first migrating flock of them observed this autumn.

Ailsa Claybourn – 6 Redwings flying over her Tilehurst garden last Thursday (10/10/19), the first seen this autumn, and 2 calling in the dark this evening.

Roger Dobbs – a male Muntjac on his lawn at Plastow Green, Headley, enjoying being groomed by a Magpie perched on his head and pecking round his horns and ears. Over several minutes the Magpie moved down his back to his tail where it pulled out some hairs – not appreciated by the deer. The Magpie jumped off and started pecking at molehills, the Muntjac followed it as if hoping for more attention, but the Magpie did not oblige.

Norman Hall – commented on his exhibit of the fruit of the tree Liquidambar *Liquidambar styraciflua* or Sweet Gum tree. It is a North American tree, commonly planted for autumn colour and with leaves similar in appearance to maples. However the fruit which is a woody ball covered with spikes is very different from the winged fruit of maples.

Julia Cooper – alerted by squeaking noises, a Fox was carrying prey, possibly a Grey Squirrel, on the road outside her Tilehurst house at 12.30 am last Saturday 12/09.

### **5<sup>th</sup> November**

Ian Duddle – a Green Woodpecker looking at the honey bees in their garden in Tilehurst on 24/10 – a first sighting there.

Jenny Greenham - a Moorhen visiting her Hampstead Norreys garden and eating windfall apples in October – last seen there 20 years ago.

Ken White – a female Blackcap eating apples at Plastow Green on 03/11, and a Black-headed Gull with a bright green plastic colour ring, **JOL1** on its left leg, in Victoria Park, Newbury. The bird was ringed in Oslo, Norway as a 2 year old in 2016 and this was the first report of it in the UK; Ken would like to hear of any other sightings.

Ken also gave an update on the pair of Peregrines which attempted to nest on the BT building in Newbury last summer. Sarah first spotted them on 01/04/19. The male is colour-ringed Black 69 on its left leg, and was ringed as a chick from a nest on Chichester cathedral 3 years ago. The female is unringed so her origin is unknown. Ken and Sarah obtained permission to inspect the nest site after

the breeding attempt failed, and found one unhatched egg. The Peregrines are still around and can be seen on the window ledges on the east or north side of the building; see report p 45.

Norman Hall – commented that the last fortnight had been very poor for moths, which need a sector of warm air from the Atlantic. There was one such night when Norman caught around a dozen moths including an Oak Rustic *Dryobota labecula*, a species which is spreading slowly north.

Grahame Hawker – Anne Booth saw a Goosander on Maiden Erlegh lake last Friday 01/11.

Lesley Hawker – found recently released White Storks in the wild when they visited Knepp Castle Estate near Horsham, West Sussex, to see the deer rut there.

Rob Stallard – identified seven different insects on ivy flowers in his Tilehurst garden on 27/10: House flies (*Musca* sp.), Ivy Bee (*Colletes hederæ*), Common Dronefly (*Eristalis tenax*), Common Wasp (*Vespa vulgaris*), *Tachina fera* (no common name, a large Tachinid fly), Red Admiral (*Vanessa atalanta*) and a female Bright Batman Hoverfly (*Myathropa florea*).

### 19<sup>th</sup> November

Ken White – a Peregrine falcon carrying prey flew over their garden in Plastow Green on 16/11 at 1pm. The bird was identified as a juvenile by its brown colour; no colour-rings were visible and the prey could not be identified due to the uneven surface of the field.

Marion Venners – a Barn Owl at Stratfield Saye on 17/11 at 4.15pm.

Peter Twitchett – what initially appeared to be 2 giant rabbits but were then identified as Wallabies at 8.30am this morning – a first sighting in Upper Basildon.

Ken White gave an update on the pair of Peregrines which made their first breeding attempt on the top of the Newbury BT Exchange building in Newbury last summer (see 05/11 Observations above). BT has been asked for and granted permission to install a Peregrine nest box. Funding has been sought from the Berks Ornithological Club Conservation Fund for a box and video camera, and the BOC has offered a substantial contribution towards the cost. Ken will construct the box and the camera will be installed in January. There are 3 recorded pairs of Peregrines in Berkshire but this will be the only one with video surveillance for public viewing. See Peregrine article p.45. The Black-headed Gull with green colour-ring J0L1 from Oslo, Norway reported earlier on in the Victoria Park boating lake in Newbury is still there.

### 3<sup>rd</sup> December

Jenny Greenham – now has 2 Moorhens in her fully enclosed Hampstead Norreys garden. They chase off visiting pheasants, and might be looking for a nest site.

Jan Haseler – a bat, probably a Pipistrelle, flying over their Tilehurst garden this evening at dusk.

Anne Dewing – a pair of Pheasants in their garden in Upper Basildon today.

Roger Dobbs – following a recent BBOWT Dormouse footprint tunnel day, he set up a tunnel in his Headley garden where he was last aware of Dormice about 20 years ago. Inky footprints appeared on the white card inside the tunnel and were confirmed as Dormouse by an expert.



**Tachinid** imago nectar-feeding on Sneezewort; their larvae are highly predatory on other larvae. © Ken White



Norwegian **Black-headed Gull** "J0L1" seen at the Newbury Victoria Park 3rd & 14th Nov © Ken White

## OBITUARIES

**Shirley Yselle Townend** (20th Sept 1922 - 10th Sept 2019) by Tricia Marcousé

Shirley grew up in Winchester where her father was an Alderman and ran a general outfitters. She took a degree in Botany with Zoology at Southampton University and went to work as a lab technician in Aberystwyth before moving to the field studies centre at Dale under John Barrett who developed the Pembrokeshire coastal path. Here she took on her dream job as warden of Skokholm island, "my island".



She came to Reading in 1951 to organise the lending of artefacts from Reading Museum to local schools. Brian Baker was already on the staff (later to become curator) at the museum and introduced her to the RDNHS. She kept her membership going until now. Shirley became a committee member (or part of the editorial committee in those days) in 1960 and stayed at the centre of RDNHS until 1985, becoming our President for the period 1975-1977.

An expert artist as well as a naturalist, Shirley was one of the illustrators for the Collins Pocket Guide to the Seashore as well as other books. Her original artwork for the Collins Guide is now in Reading Museum. Her ashes will be taken to Skokholm in the summer.

**Ivy Brickstock** by Tricia Marcousé

Ivy was a Reading lass and lived here all her life. She was a Nursery person throughout her life - training for work with children and also growing plants as a major hobby. She married Alan Brickstock and became part of the RDNHS.

Ivy was never a formal committee member, but she hosted RDNHS committees for many years and fed the group with amazing home-made cakes and biscuits including the famous "thief-dog" that grew richer year on year. Many of us ate it at the garden tea party she hosted for RDNHS members in the summer of 2017. She was a great communicator, making friends wherever she went and getting other people, from gravel pit managers to children, interested in conservation.



**Brian Kemp** by Meryl Beek

Very sadly, we report the death of Brian on 12<sup>th</sup> August 2019 at the age of 79. His association with RDNHS goes back to his school days, in the 1950s, when his Forest School, Winnersh, was affiliated to the Society, and then, in 1960, Brian became a full member. By profession he was a medieval historian, and was at Reading University from undergraduate days to professorship. Even if he was very busy, he always tried to keep in touch by joining the Society's annual coach outing. During this last year he attended several of the lectures at Pangbourne.



His father was a horticulturist, who came to work at Sutton's seed trial grounds in 1951. Through this influence, Brian was a plantsman almost from his cradle! He started a fine collection of pressed flowers very early on, which still survives in quite good condition to this day. He loved nothing better than roaming the countryside with his brother, Roger.

On a trip out in 1961, they discovered a single plant of Lady Orchid *Orchis purpurea* beneath a beech canopy on chalky ground in southern

Oxfordshire. They placed a twig by the plant, but the flowering spike got removed, probably by a perching bird. The following year, several eminent botanists, including Professor E. F. Warburg of Oxford University, confirmed its identity, and a small colony still exists there today.

For an unknown reason, one of his favourite plants was Vervain *Verbena officinalis*. To most of us it is a rather insignificant plant growing on lime. Not to Brian! He would get down on his hands and knees and almost worship it! Another of his favourites was Goldilocks Buttercup *Ranunculus auricomus*, which got the same attention. Apparently he was also very fond of Yellow Archangel and Wood Sorrel.

Beyond the RDNHS, his natural history interests extended into other related organisations, including BBOWT and RSPB, The Woodland Trust, Butterfly Conservation and the Hampshire and Isle of Wight Wildlife Trust. Closely linked were garden plants, and he enjoyed tending his own patch. There were continual visits to Henry Street garden centre. Buying new plants was a bit of an obsession. Henry Street also provided a good lunch, which saved him cooking later!

Although completely aware of “nature red in tooth and claw”, he had intense feelings for the beauty of the natural world. A wonderful sunset or a quiet day of contemplation (sitting down of course!) suited him fine. This was strongly linked with his love of music and his interest in monastic life, which spilt over into his academic work on Reading Abbey.

Brian was a very private person, but he needed plenty of people in his life as well. This was borne out by the numbers who attended his funeral. Apart from his brother, Roger, nobody was dearer to him than his family of nieces and nephews. They all benefitted from his interest in their lives, and the treats he gave them. Brian, you have made life richer for so many people – even if you were a naughty mimic at times! Rest in peace.

## **EXCURSIONS 2019**

**by Jan Haseler, Sean O’Leary, Norman Hall and Ken White**

The first field trip of 2019 was a geology walk at **Boxford**, led by Lesley Dunlop. 19 members and guests met outside St Andrew’s Church on the cold, grey morning of **Saturday 5 January**. The walk started in the churchyard. On the north wall is a narrow Saxon window with a wooden shutter. The walls of the church were constructed with flints and chalk rubble, while Cotswold limestone was used for the corner stones. Within the walls were a few blocks of local chalk, including one with a hole which had once supported a mass dial. Lesley pointed out that the limestone tombstones had patches of yellow and white lichen, while a sandstone tombstone was covered with lime-green lichen. The song of a Mistle Thrush *Turdus viscivorus* was heard and it was seen to fly out of a clump of Mistletoe *Viscum album* on a tall tree nearby. Next stop was Boxford chalk pit. It is a SSSI, designated for its geological interest. It was not possible to get close to the chalk face, and a lot of vegetation is screening the surface. But apparently the chalk face shows signs of tectonic activity. Tilted Chalk beds are overlain by fractured and folded Chalk, which has been interpreted as evidence of localised Upper Cretaceous severe basement faulting, unknown from elsewhere in Britain. Thin layers contain fossil teeth of sharks and dog-fish.

The walk continued down a footpath to the River Lambourn, which was flowing fast and crystal clear over a bed of gravel, over a bridge and onto the Boxford Water Meadows, another SSSI. Lesley pointed out that the River Lambourn deviates from its north-west to south-east course at Boxford and follows a big meander around the meadows. This may be further evidence of faulting and tectonic activity. Beneath the meadows is a peat layer which is about 2.5 metres deep. This rests on a layer of sharply pointed river gravel, which lies in turn on the Chalk bedrock. Analysis of the pollen in a peat core sample shows that the peat was laid down, with some gaps, over about 9000 years. The pollen in the lowest layers indicates that the landscape was initially wooded, while higher up there are more grass pollens. At this point, a Little Egret *Egretta garzetta* flew overhead. Next stop was Westbrook Farm, reached by a footpath which crossed a grassy field at the bottom of the Chalk slope. Lesley pointed out the red and grey bricks on an outbuilding next to the track. The grey bricks were glazed and were

fired at a higher temperature. Several of them had a glassy surface. The building had a slate roof, which became possible when the railway came to the valley. Older buildings in the village are roofed with thatch or local tiles. The walk continued along Westbrook Lane, which had old cottages on both sides. The lane is a little higher than the adjacent water meadows and lies on a drier gravel terrace. Several big sarsen stones were noted on the verge outside one of the cottages and the first Snowdrop *Galanthus nivalis* flowers were seen. A Little Egret got up from its perch in a riverside tree and flew away, followed by a Grey Heron *Ardea cinerea*. Tall Ash *Fraxinus excelsior*, Alder *Alnus glutinosa* and Poplar *Populus* trees lined the road back to the mill and the church, but only the Poplars had clumps of Mistletoe.

Marcus Wheeler led a walk looking at trees in **Central Reading** on the bright and sunny morning of **Saturday 2 February**. Following days of snow, a partial thaw and a hard frost, a thin carpet of crisp snow covered the ground. The pavements were mostly clear, but there were still lethally slippery stretches of ice in places. Almost all of the 15 attendees arrived by bus or on foot. Meeting place was the churchyard of St Mary's Church. Near the west door is the twisted trunk of an old Indian Bean-Tree *Catalpa bignonioides*. It had been severely pollarded and a younger replacement tree had been planted nearby, but the old tree has since sprouted a number of healthy-looking new branches. In the south-west corner of the church yard is a small lollipop-shaped Box tree *Buxus sempervirens*, quite unlike the usual bushy hedge form. On the eastern side of the churchyard is an enormous London Plane tree *Platanus occidentalis x orientalis*. Marcus pointed out the smooth leathery leaves which can be washed clean by rain water and the flaking regenerative bark, both features which enable the tree to grow in polluted urban conditions. On the north side of the churchyard is a big Evergreen Oak *Quercus ilex*. Next stop was the paved area in front of the Old Town Hall, where a group of Whitebeams *Sorbus aria* have been planted. The walk continued along an alleyway to the churchyard of St Lawrence's Church. Trees here included a Judas Tree *Cercis siliquastrum* and a big Copper Beech *Fagus sylvatica* 'Purpurea'. Crossing the road, the next destination was the Forbury Gardens. On the south side of the gardens, surrounded by a low fence, is the Verdun Oak *Quercus petraea*. It was grown from an acorn collected from the battlefield in 1916. Other trees seen here included a Black Mulberry *Morus nigra*, a Ginkgo *Ginkgo biloba*, a Handkerchief Tree *Davidia involucreata*, a Tulip Tree *Liriodendron tulipifera* and a Paperbark Maple *Acer griseum*.

The walk continued across Reading Bridge and into Christchurch Meadow. A pair of Wellingtonias *Sequoiadendron giganteum* had been planted, one on each side of the bridge. A row of tall Lombardy Poplars *Populus nigra* 'Italica' line the east side of the meadow and a line of Weeping Willows *Salix alba x babylonica* can be seen in the north-east corner. Heading west, a Caucasian Wingnut tree *Pterocarya fraxinifolia* had distinctive dangling columns of seeds. Marcus commented that Birches were one of the first trees to recolonise Britain after the last ice age, along with Scots Pine *Pinus sylvestris* and Juniper *Juniperus communis*. As well as several big Silver Birches *Betula pendula*, the meadow has a few very white-barked non-native birches. He pointed out that the cones (woody female catkins) on an Italian Alder *Alnus cordata* were significantly larger than those on our native Alder. Other trees seen in the north-west side of the meadow included Black Walnut *Juglans nigra*, Corkscrew Willow *Salix matsudana* (an alternative name for *S. babylonica*), Hornbeam *Carpinus betulus* and Horse-chestnut *Aesculus hippocastanum* with thick twigs and big brown sticky buds. The final destination was Caversham Court. The tall Limes *Tilia* at the entrance are covered in Mistletoe. An old Black Mulberry has recently split and fallen over, but it continues to grow from its prone position. Near the river is a tall Wellingtonia with surprisingly spongy bark. Beyond are a Cedar of Lebanon *Cedrus libani* with level branches and a Blue Atlas Cedar *Cedrus atlantica* var. *glauca* with ascending branches. On the west side is the oldest tree in the garden, an ancient Yew *Taxus baccata*, a 'family' tree. At the centre is a massive trunk. Spreading side branches have dropped to the ground and rooted, sending up a circle of younger trees. Snowdrops were flowering under the outer branches. Finally, on the east side of the garden is a big Bhutan Pine *Pinus wallichiana*, with its needles growing in bundles of five and up to 6 inches long.

A stretch of riverbank and a quiet cemetery in **Wallingford** provided the venue for the Annual Moss

Walk on **Saturday 2 March**, led by Sean O’Leary, ably helped by Sue White. Heading north along the river from the Boathouse pub, 18 members examined riverside willow trees for ‘epiphytic bryophytes’, mosses and liverworts whose preferred habitat is tree bark. Typical species such as *Syntrichia latifolia*, *Orthotrichum affine*, *Leskea polycarpa* (richly fruiting as usual), *Cryphaea heteromalla* and *Orthotrichum diaphanum*, with white hair-points on its leaves, were soon found. Other species of more catholic taste were also seen on stone, tree and soil, such as *Brachythecium rutabulum*, *Kindbergia praelonga* and *Tortula muralis*. A short detour led to a walled cemetery, always an exciting venue for the moss enthusiast, providing a variety of habitats including lawns, paths, old walls and undisturbed gravestones of non-local material such as limestone. Several *Didymodon* species were added to the list including *D. vinealis*, *D. insulanus* and *D. sinuosus*, as well as *Grimmia pulvinata* with its swan-necked capsules. *Bryum capillare* on the cemetery wall had distinctive bright green dangling capsules, while the slate roof of a low building had tiny silvery cushions of *B. argenteum*. A patch of Small Nettle *Urtica urens* was identified by the botanists. Returning to the river, a rotting log provided the substrate for an unusual find by Sue – initially thought to be the scarce *Brachythecium salebrosum*, microscopic examination revealed the moss to be the commoner *B. mildeanum*, growing in a very unusual habitat. It is normally confined to paths and scrappy soil, often referred to by moss-enthusiasts as ‘car-park moss’. The weather began to look a little threatening at this point so members decided to head back along the river, where, to round the day off nicely, they were rewarded with a good view of a Kingfisher *Alcedo atthis*, a common sight in the area.

Renée Greyer led 11 members on a walk at **Aldermoor’s Local Nature Reserve and Ashenbury Park, Woodley on Saturday 13 April**. It was a bright afternoon with intermittent sunshine but the air was cold. Common Whitlowgrass *Erophila verna*, Sticky Mouse-ear *Cerastium glomeratum*, Shining Crane’s-bill *Geranium lucidum* and Hedgerow Crane’s-bill *G. pyrenaicum* were all found in the car park, while Dove’s-foot Crane’s-bill *G. molle* and Common Stork’s-bill *Erodium cicutarium* were seen on an adjacent road-side verge. The route then led into the woodland of Aldermoor’s reserve, where there were sheets of Wood Anemones *Anemone nemorosa* and the first Bluebell *Hyacinthoides non-scripta* flowers. The only butterfly of the afternoon, a female Orange-tip *Anthocharis cardamines*, was seen here. Flowers of Moschatel *Adoxa moschatellina*, Ground-ivy *Glechoma hederacea*, Wood Forget-me-not *Myosotis sylvatica* and Wood-sorrel *Oxalis acetosella* were found beside the path. The bright yellow flowers of Opposite-leaved Golden-saxifrage *Chrysosplenium oppositifolium* lit up the ground in a damp gully and more plants were seen on the banks of the stream which runs through the reserve. The calls of Nuthatch *Sitta europaea*, Great Spotted Woodpecker *Dendrocopos major*, Great Tit *Parus major*, Blackcap *Sylvia atricapilla*, Chiffchaff *Phylloscopus collybita*, Song Thrush *Turdus philomelos* and Wren *Troglodytes troglodytes* were heard. Continuing through the woodland, Primrose *Primula vulgaris*, Greater Stitchwort *Stellaria holostea*, Lesser Celandine *Ranunculus ficaria* and Common Dog-violet *Viola riviniana* were added to the tally of spring flowers. The next part of the walk was across the open grassland of Ashenbury Park, a restored landfill site. Rabbits *Oryctolagus cuniculus* were quite numerous. Round the edge of the park, the Blackthorn *Prunus spinosa* blossom was mostly over, the Field Maple *Acer campestre* blossom was fully out and the first Hawthorn *Crataegus monogyna* blossom was just beginning to come out. One slope was covered by a sea of Hemlock *Conium maculatum*. A Mistle Thrush was foraging on the grass in the far corner of the park. The return route led round the edge of a gravel pit, where a few Mallards *Anas platyrhynchos* and Coots *Fulica atra* and a Mute Swan *Cygnus olor* were seen. Near the top end of the lake, there was a small patch of ancient woodland with Wood Spurge *Euphorbia amygdaloides*, Bluebells and Wood Anemones.

John Lerpiniere led a walk at the **Searles Farm gravel pit complex near Burghfield** on the evening of **Tuesday 30 April**. While the 16-strong group was assembling, Lesser Whitethroat *Sylvia curruca* and Garden Warbler *S. borin* were heard. John pointed out that the tangle of bramble and scrub around the gravel pits was ideal Nightingale *Luscinia megarhynchos* habitat, and a singing bird was soon heard from the dense undergrowth beside the lane. The group waited for several minutes, listening to the varied song, with its characteristic repeated whistles and phrases. The walk continued along a footpath between two lakes, where Blackcaps were the most numerous warblers. Three male Red-crested

Pochards *Netta rufina*, with bright red beaks, were seen on the lake to the south of the path, while there were a number of Great Crested Grebes *Podiceps cristatus* on the lake to the north. A party of Long-tailed Tits *Aegithalos caudatus* passed through the willows beside the path and a pair of Canada Geese *Branta canadensis* escorted their young family into the water. A distant Nightingale was heard, then another bird started singing close to the path, but ceased singing as the group approached. John led the party a little way up Cottage Lane, but no new birds were heard. At the start of the walk back, another distant Garden Warbler was heard. Highlight of the evening was when two Nightingales, one on each side of the path, started singing in competition, joined briefly by an explosively loud Cetti's Warbler *Cettia cetti*. A strange creaking call turned out to be Grey Herons in the heronry amongst the willows on the far bank of the gravel pit to the north. Above the trees at one point were a number of swirling black columns of flying insects. When the group walked back past the spot where the first Nightingale of the evening had been heard, it was no longer singing.

27 members turned out on **Saturday 4 May** for the annual coach trip to **Durlston National Nature Reserve near Swanage** in Dorset. It was a day of bright sunshine but with a cold wind. As the coach drove from Wareham to Swanage, Alan Parfitt explained how the route was travelling back in time – first the Tertiary sands of the Dorset heaths, then the Chalk ridge which runs through Corfe, then Wealden marls, then the Purbeck Beds and finally the Portland Beds. The day's walk started from the Visitor Centre along the cliff-top Coastal Path. There were fine views across to the Isle of Wight and a Peregrine *Falco peregrinus* flew past. Fulmars *Fulmarus glacialis* flew below on stiff wings and rafts of Guillemots *Uria aalge* with a few Razorbills *Alca torda* swam on the sea below. Further along the cliffs, it was possible to look back over the Guillemot nesting ledges, where there were also a few Shags *Phalacrocorax aristotelis*. On the other side of the path, Rock Samphire *Crithmum maritimum* and Wild Madder *Rubia peregrina* were noted, Whitethroats *Sylvia communis* were singing and there were a number of Wall *Lasiommata megera* butterflies. The path led steeply down a rocky stretch near Tilly Whim caves. A Rock Pipit *Anthus petrosus* flitted round a rocky platform, there were several Stonechats *Saxicola torquata* flying around the gully below the lighthouse and clumps of Thrift *Armeria maritima* and Sea Campion *Silene uniflora* cushioned the cliffs. A number of the hairy caterpillars of the Brown-tail moth *Euproctis chryorrhoea* were crawling across the short turf of the Lighthouse Green. A few Early Spider-orchids *Ophrys sphegodes* were found here, but they were mostly past their best. The walk continued into the first field beyond the lighthouse. More Early Spider-orchids were found here, and a few still showed the glossy brown spider markings. Other flowers found here included Green-winged Orchid *Orchis morio*, Horseshoe Vetch *Hippocrepis comosa*, Yellow-wort *Blackstonia perfoliata*, Dwarf Thistle *Cirsium acaule*, Wild Clary *Salvia verbenaca*, Pale Flax *Linum bienne* and both blue and pink Milkwort. After much discussion, it was decided that both Common *Polygala vulgaris* and Chalk Milkwort *P. calcarea* were present. Lunch was consumed in the sunshine and out of the wind, in the shelter of a rocky ridge. A Gannet *Morus bassanus* flew past out to sea. Continuing over the ridge, there was a fine display of Cowslips *Primula veris* and Early-purple Orchids *Orchis mascula*. Heading further west, the next steep field above the Coastal Path had good numbers of Green-winged Orchids. Small-flowered Buttercup *Ranunculus parviflorus* was found in cattle-poached areas and near a water trough. Returning along the top path towards the Visitor Centre, a number of Lesser Whitethroats were heard and a Small Copper *Lycaena phlaeas* butterfly was seen. A second group of members walked a shorter route. They explored the Saxon Field, where there were more Cowslips and Early-purple Orchids, and a small quarry had a good display of Early Spider-orchids, with many still fully in flower.

Jan Haseler led a walk on the bright and intermittently sunny afternoon of **Saturday 18 May** at the National Trust land at **Streatley**. 15 members started out across Lardon Chase, the steep south-facing slope above the village. A sign on the gate warned about grazing cows, calves and a bull, but the animals did not appear to have arrived yet for their summer grazing task. At the very top of Lardon Chase is a small area of Clay-with-flints and this section was covered with long grass and buttercups. There was then a sharp transition onto the Chalk, with shorter grass and a much more varied flora. Flowers here included Horseshoe Vetch, Kidney Vetch *Anthyllis vulneraria*, Mouse-ear-hawkweed *Pilosella officinarum*, Germander Speedwell *Veronica chamaedrys*, Common Bird's-foot-trefoil *Lotus corniculatus*, Oxeye Daisy *Leucanthemum vulgare*, Hoary Plantain *Plantago media*, Clustered Bellflower

*Campanula glomerata* and Field Scabious *Knautia arvensis*, and Yellow-wort leaves were seen. There were a few Small Heath *Coenonympha pamphilus* and Common Blue *Polyommatus icarus* butterflies and a Lesser Whitethroat was calling from the boundary hedge. An area of disturbed soil around a cluster of Rabbit holes had Common Gromwell *Lithospermum officinale*, Field Madder *Sherardia arvensis* and Cut-leaved Crane's-bill *Geranium dissectum* plants. At the eastern end of Lardon Chase were sheets of navy blue and white Chalk Milkwort and Horseshoe Vetch, together with a few spikes of Common Spotted-orchid *Dactylorhiza fuchsii*. The Whitebeam trees on the far boundary were covered in creamy-white flowers.

The walk continued through the gate into Lough Down, the north-facing part of the site. Several clumps of Field Mouse-ear *Cerastium arvense* were found on disturbed soil just past the gateway. Much of Lough Down is covered by a fine set of anthills. Common Rock-rose *Helianthemum nummularium* was growing on some and Wild Thyme *Thymus polytrichus* covered others. There is another small area of Clay-with-flints at the top south-west corner of Lough Down and this is where a number of clumps of Meadow Saxifrage *Saxifraga granulata* were found, with more plants amongst the anthills on the Chalk slope below. Also found here were a number of Early Forget-me-not *Myosotis ramosissima* plants, with tiny blue flowers. Part way down the slope amongst the anthills is an old sunken trackway and this is where there was the best display of Cowslips. A few plants of Common Milkwort were found here, and a flower spike was compared with a specimen of Chalk Milkwort. The Common Milkwort flower had a more purple hue; the veins on the sepals had closed loops, compared with an open branched structure on the Chalk Milkwort and the broadest part of each leaf was near the tip for the Common Milkwort and near the base for the Chalk Milkwort. On the eastern side of Lough Down was a patch of bare ground where scrub had been cleared recently. On it was a big clump of Deadly Nightshade *Atropa belladonna* which was about to come into flower, together with White Bryony *Bryonia dioica*, Wild Strawberry *Fragaria vesca*, Dense-flowered Fumitory *Fumaria densiflora* and more Common Gromwell. A Whitethroat was heard on the walk back across the top of Lardon Chase.

This year's moth trapping event, organised by Norman Hall, took place on the night of **1 – 2 June** at the **Hardwick Estate**, which runs from the Chiltern chalk escarpment down to the north bank of the Thames east of **Whitchurch-on-Thames**. The Hardwick Estate is owned by Sir Julian Rose, a strong advocate of organic farming, who has two organic farmers as tenants. The Society were the guests of one of them, Iain Tolhurst, who has three fields on which he grows organic vegetables for sale on site, see <http://www.tolhurstorganic.co.uk/>. Two of the fields, known locally as Lower Bec and Upper Knight, lie north and south of the Hardwick Road at the west gates of the estate, which is where Paul Black, Roy Dobson, Ian Esland and Norman Hall ran mercury vapour (MV) mothing lights, either as bare lamps over white sheets or as moth traps. Apart from the vegetables, the fields have strips of mixtures of *Phacelia tenacetifolia* and Crimson Clover *Trifolium incarnatum* which are used as a green manure to plough back into the soil. There are also 'beetle banks', which are not actually banks but strips planted with mixtures of tussock grasses and flowers that encourage beneficial insects and spiders, thereby helping to reduce pest numbers. The number of moths caught or seen nectaring near these beetle banks was impressive.

The fields are surrounded by hedges which are either natural species-rich ancient hedges or hedges that have been augmented by imaginative plantings of native trees such as Oak, Sallow, Field Maple and Alder. They have been (deliberately) left to grow much higher than is usual. Fields the other side of all these hedges are of species-rich grassland or downland that have been grazed by cows, but not over-grazed. The east side of the northern field (Lower Bec) is bordered by a high hedge, then a lane (Path Hill), then woodland. The other tenant farmer on the estate, James Norman, had kindly given the Society permission to go into parts of his land adjacent to Iain's. Norman also ran one light trap in the field to the north of Lower Bec, known locally as Bec Tythe. Near the gate is a flattish area grazed by cows, where the only interesting plant was Hound's-tongue *Cynoglossum officinale*, but further north the ground rises steeply, becoming too steep for the cows, and here the downland flora is much richer. Unfortunately, Norman's cable was not long enough to reach the best area. Jan and Laurie

Haseler put lights in a species rich meadow of James's known as 'The Park', entering at the walled garden, which is further east, near Hardwick House.

It was a surprisingly successful night, and very interesting because the Society had never trapped anywhere remotely similar. In Iain's two fields at the west gates, 114 species of the larger moths (macrolepidoptera) were recorded, together with 13 pyralid moths and 18 micros. Only 2 *additional* macrolepidoptera, Mouse Moth *Amphipyra tragopoginis* and Fern *Horisme tersata*, were seen in James's fields, together with 3 more pyralid moths, a plume moth and 4 more micros, bringing the grand total to 155 species. The number of macrolepidoptera species recorded on a single night is a good indication of the overall biodiversity of a site and anywhere where more than 100 can be found on a single night (especially early in June before numbers peak) is very good indeed. Ideal weather conditions may also have contributed to the high species count. During the day, the temperature had risen to 25°C, it was still 17°C at midnight, and had only fallen to 13°C by 06.00 next morning. At least one example of each of the macrolepidoptera species was kept for the benefit of the 8 RDNHS members who came to see and photograph the catch on the Sunday morning. Iain Tolhurst was shown some of the moths after he had finished some early morning ploughing.



**Satin Wave** *Idea subsericeata*

trapped on 1-2nd June on the Hardwick Estate, Whitchurch-on-Thames © - Rob Stallard



**White Ermine** *Spilosoma lubricipeda*

Records of particular interest included 2 specimens of the nationally scarce Buttoned Snout *Hypena rostralis*, whose larvae feed on Hop *Humulus lupulus*; 3 specimens of Netted Pug *Eupithecia venosata*, which is uncommon in our area and whose larvae feed on Campion species, *Silene*, which are numerous in the beetle banks; 1 specimen of the red data book Pauper Pug *Eupithecia egenaria*, whose larvae feed on Lime flowers; 3 specimens of Sandy Carpet *Perizoma flavofasciata*, including an unusual dark form; and the first record for Oxfordshire of the micromoth *Phtheochroa schreibersiana*. High numbers of the following were also of interest: very many Grass Rivulet *Perizoma albulata*, whose larvae feed on the seeds of Yellow Rattle *Rhinanthus minor*, in 'The Park' meadow; 52 Small Elephant Hawk-moth *Deilephila porcellus*, compared with just 1 Elephant Hawk-moth *D. elpenor*; a local concentration of 19 Reddish Light Arches *Apamea sublustris* on Lower Bec north side; and a local concentration of 26 Shears *Hada plebeja* in Bec Tythe.

Alan Parfitt led a walk at **Swain's Wood** near Christmas Common on **Sunday 30 June**. 20 members gathered in warm sunshine around the village green at Northend, before setting off down Holloway Lane. The path in to the reserve led through Beech woodland, which grows on the Clay-with-flints that caps the Chalk. Swain's Wood reserve, which is managed by BBOWT, lies on a steep south-west facing grassy hillside on the Chalk. Large numbers of orchids were in flower. Most numerous were the Common Spotted-orchids, which were a little past their best. Amongst them were quite a number of Chalk Fragrant-orchids *Gymnadenia conopsea*, which were mostly pink, but with a few white specimens as well. Most of the Pyramidal Orchids *Anacamptis pyramidalis* were the characteristic deep pink, but a few were white or pale pink. Bee Orchids *Ophrys apifera* were scattered across the reserve and there were also a few Common Twayblades *Neottia ovata*. Other flowers included Common Rock-rose, Wild Marjoram *Origanum vulgare*, Salad Burnet *Sanguisorba minor*, Carline Thistle *Carlina vulgaris*, Fairy Flax *Linum catharticum*, Yellow-wort, both blue and pink forms of Common Milkwort, Greater Knapweed *Centaurea scabiosa*, Field Scabious, Common Bird's-foot-trefoil, Common Centaury

*Centaureum erythraea*, Dark Mullein *Verbascum nigrum*, Wild Thyme, Lady's Bedstraw *Galium verum* and Agrimony *Agrimonia eupatoria*. Scattered bushes of Wild Privet *Ligustrum vulgare* were covered in creamy blossom. By contrast, the bottom part of the reserve, which had been grazed by sheep in the spring, was mostly without flowers. Meadow Brown *Maniola jurtina* and Marbled White *Melanargia galathea* butterflies were abundant and a few early Ringlets *Aphantopus hyperantus*, a Silver-washed Fritillary *Argynnis paphia* and a Painted Lady *Vanessa cardui* were seen. Small orange Skipper butterflies flitted through the grass, but none stayed still long enough for positive identification. A small bee carrying a blade of grass was identified as a Red-tailed Mining Bee *Osmia bicolor*. A Buzzard *Buteo buteo* circled overhead. On the walk back, the vegetation round the large village pond in Northend was investigated. Plants seen here included Brooklime *Veronica beccabunga* and Ragged-robin *Silene flos-cuculi* and a Broad-bodied Chaser *Libellula depressa* dragonfly was also noted.

Fiona Brown led 6 members on an all-day circular walk around **Walbury Hill and Combe**, south of Hungerford, on **Saturday 6 July**. While the group gathered at the eastern end of Walbury Hill, a Yellowhammer *Emberiza citrinella* sang from the top of a bush and a Sparrowhawk *Accipiter nisus* was seen. It was a sunny day with excellent visibility, with views stretching far across West Berkshire and Wiltshire. The walk started out westwards along the Wayfarer's Walk. Initially the trackside vegetation was dominated by Hogweed *Heracleum sphondylium*, but it soon led to an area of fine chalk grassland, with plants including Greater Knapweed, Small Scabious *Scabiosa columbaria*, Field Scabious, Common Bird's-foot-trefoil, Kidney Vetch, Wild Thyme, Lady's Bedstraw, Hoary Plantain, Common Toadflax *Linaria vulgaris* and Quaking Grass *Briza media*. Butterflies were abundant, including Meadow Brown, Marbled White, Small Heath and Painted Lady. Small orange Skippers darted through the vegetation, but didn't stay still long enough for positive identification. Spikes of Common Broomrape *Orobanche minor* were growing in the flowery grassland at the western end of Walbury Hill. There was a brief diversion down the road to Combe to admire the bankside vegetation, especially the tall brown spikes of Knapweed Broomrape *Orobanche elatior*. There were many orchids too - Common Spotted-orchids, which were a little past their best, Chalk Fragrant-orchids and Pyramidal Orchids. The walk continued past Combe Gibbet and along the first part of the Test Way. Musk Thistles *Carduus nutans* dotted the grassy field next to the track and many of the flower heads had nectaring Meadow Browns or Marbled Whites. Skylarks *Alauda arvensis* sang high above and a singing Linnet *Carduelis cannabina* was heard. A Whitethroat gave a loud alarm call from deep in a hedge and a loud buzzing sound announced the presence of a passing swarm of bees. Distant views across Hampshire opened up to the south.

Lunch was eaten in the shade of some field margin trees. The calls of Ravens *Corvus corax* became louder as a circling flock increased in numbers to at least 70 birds. The walk continued along the Test Way, following the edge of Combe Wood. A few Ravens were perched in the tops of the trees. The vegetation below was white with droppings and there were many black feathers, indicating that this must be one of their regular roosting places. The track then dropped down a steep, ungrazed grassy slope with rich chalk vegetation, with plants including Salad Burnet, Squinancywort *Asperula cynanchica*, Common Valerian *Valeriana officinalis* and Viper's Bugloss *Echium vulgare*. Big orange butterflies flew low over the grassland, sometimes fluttering down through the grass. In the warm sunshine, they rarely settled, but a photograph from the pre-walk on a cloudier day confirmed their identity as Dark Green Fritillary *Argynnis aglaja*. The walk continued down a wide grassy valley with many orchids and clouds of butterflies. Both Large Skipper *Ochlodes sylvanus* and Essex Skipper *Thymelicus lineola* butterflies were seen here. At the end of the open area, the route left the Test Way and climbed back up through Combe Wood towards the village. A big orange Silver-washed Fritillary butterfly was seen feeding on bramble blossom in a sunny clearing, and its swooping, gliding flight was very different from the earlier fluttering flight of the Dark Green Fritillaries. A smaller, bright orange Comma *Polygonia c-album* butterfly was also seen here. The track led to the 12<sup>th</sup> century church of St Swithin in the village of Combe. Leader Fiona had thoughtfully parked her car here, and in its boot was a cool box with slices of fruit and bottles of cold water. While consuming these very welcome refreshments, a family of Spotted Flycatchers *Muscicapa striata* were seen, feeding around the buildings of

Combe Manor Farm. The final section of the walk involved a steep climb back up to the top of Walbury Hill. Despite being tired after a long walk on a hot day, everyone agreed to finish the day at **Ham Hill**, a nearby reserve of the Wiltshire Wildlife Trust. After some careful hunting, single specimens of the tiny Musk Orchid *Herminium monorchis* and equally tiny Burnt Orchid *Orchis ustulata* were found.

Julia Cooper and Ian Duddle organised an all-day trip to **Old Winchester Hill National Nature Reserve** on **Saturday 20 July**. The reserve is on the east side of the Meon valley near West Meon in Hampshire and lies within the South Downs National Park. 11 members set out along a track which led steeply downwards across a west-facing field of fine chalk grassland, with plants including Crosswort *Cruciata laevipes*, Wild Marjoram, Wild Basil *Clinopodium vulgare*, Wild Parsnip *Pastinaca sativa*, Wild Carrot *Daucus carota*, Harebell *Campanula rotundifolia*, Perforate St John's-wort *Hypericum perforatum*, Greater Knapweed, Small and Field Scabious, Common Bird's-foot-trefoil, Kidney Vetch, Wild Thyme, Lady's Bedstraw, Hoary Plantain, Dwarf Thistle, Carlina Thistle, Salad Burnet, Clustered Bellflower, Squinancywort, Field Rose *Rosa arvensis*, Yellow-wort *Blackstonia perfoliata*, Pyramidal Orchid, Hoary Ragwort *Senecio erucifolius* and Quaking Grass. Deep blue Round-headed Rampion *Phyteuma orbiculare*, one of the target species for the day, was first encountered here. A Yellowhammer perched at the top of an isolated small tree. Butterflies included Meadow Brown, Chalkhill Blue *Polyommatus coridon*, Gatekeeper *Pyronia tithonus*, Dark Green Fritillary, Marbled White, Small Heath and Small Skipper *Thymelicus sylvestris*. The only rain of the day, a brief shower, happened at this point. Caterpillars of the nationally scarce Striped Lychnis *Cucullia lychnitis* moth were found on a flower head of Dark Mullein and several tall flower spikes of Nettle-leaved Bellflower *Campanula trachelium* were seen at the edge of the field. The route then led upwards through a belt of woodland, where the egg-timer shaped early stages of the Dryad's Saddle *Polyporus squamosus* fungus were found next to a rotten log. The path emerged from the wood on a steep north-facing slope, where two tiny Frog Orchids *Coeloglossum viride* were in flower. The walk continued along the north side of Old Winchester Hill, heading for the ramparts of the Iron Age hill fort at the top. Yellow Meadow Vetchling *Lathyrus pratensis* flowers and Brimstone *Gonepteryx rhamni*, Ringlet and Small White *Pieris rapae* butterflies were added to the species tally here. The ramparts were breath-taking, with their drifts of flowers, especially Round-headed Rampion and Betony *Stachys officinalis*.

The lunch stop was on one of the Bronze Age tumuli at the top of the fort. Skylarks sang overhead, and Swifts *Apus apus*, a flock of 9 Ravens and a Kestrel *Falco tinnunculus* flew past. The view to the south stretched from the New Forest to the Isle of Wight and on to Chichester Harbour, while the view to the north reached to Beacon Hill and Ladle Hill in the Hampshire Downs. After lunch the walk continued along the southern side of the ramparts. The field below on the steep south-facing hillside gave a first impression of dark blue and white, from Round-headed Rampion and Squinancywort. Closer inspection revealed many more flowers in an incredibly herb-rich sward. Pale Toadflax *Linaria repens* was found up against the fence. The route back led along the top of the ridge. Several more butterflies were seen at the scrub edge beside the path, including Red Admiral *Vanessa atalanta*, Peacock *Aglais io* and Comma. After returning to the cars, the next stop was the Thomas Lord pub in West Meon for welcome refreshments. Final destination of the day was the other Beacon Hill, a national nature reserve on the west side of the Meon valley. A Silver-washed Fritillary butterfly gave excellent views as it nectared on bramble blossom next to the track to the reserve. The reserve lies on a steep south-facing chalk hillside which is grazed by Manx sheep. Common Rock-rose, which had not been seen at Old Winchester Hill, Clustered Bellflower and Yellow-wort were all commoner here.

Renée Grayer led a walk to **Winter Hill and Cock Marsh**, starting from the National Trust car park at **Cookham**, on the morning of **Saturday 4 August**. 13 members started out along a footpath which ran alongside a colourful ditch, where there were tall spikes of Purple Loosestrife *Lythrum salicaria*, Hemp-agrimony *Eupatorium cannabinum*, Great Willowherb *Epilobium hirsutum*, Yellow Loosestrife *Lysimachia vulgaris*, Common Fleabane *Pulicaria dysenterica*, Gypsywort *Lycopus europaeus* and Common Valerian. The flower-heads of Wild Angelica *Angelica sylvestris*, Hogweed and Hemlock Water-dropwort *Oenanthe crocata* attracted many small insects. Other plants seen here included Square-stalked St John's-wort *Hypericum tetrapterum*, Water Figwort *Scrophularia auriculata*, Orange

Balsam *Impatiens capensis*, Bulrush *Typha latifolia* and False Fox Sedge *Carex otrubae*. There were a few Banded Demoiselles *Calopteryx splendens* and the round exit holes of the Hornet Moth *Sesia apiformis* were noted at the base of a path-side Poplar. The track then led under a railway bridge which had an interesting collection of plants growing out of the old brickwork, including Pale Toadflax, Meadow Crane's-bill *Geranium pratense*, Wild Marjoram, Wall Rue *Asplenium ruta-muraria* and Hart's-tongue Fern *Phyllitis scolopendrium*. The walk continued along a line of Hornbeam trees, through a kissing gate and out onto the National Trust's grassland of Winter Hill and Cock Marsh. To the left of the path, the fine chalk grassland of Winter Hill sloped steeply upwards, with flowers including Musk and Dwarf Thistle, Harebell, Small Scabious, Common Bird's-foot-trefoil, Wild Thyme, Lady's Bedstraw, Salad Burnet, Clustered Bellflower, Squinancywort, Common Rock-rose, Fairy Flax and Quaking Grass. To the right of the path was Cock Marsh, with meadows beyond stretching for half a mile to the banks of the River Thames. Usually, there are a string of ponds in Cock Marsh, but following prolonged dry weather, these were reduced to damp patches – which made it easier to get close to the special wetland plants. These included Tubular Water-dropwort *Oenanthe fistulosa*, Trifid Bur-marigold *Bidens tripartita*, Pink Water-speedwell *Veronica catenata*, Marsh Speedwell *V. scutellata*, Brooklime, Marsh Yellow-cress *Rorippa palustris*, Water Forget-me-not *Myosotis scorpioides*, Creeping-Jenny *Lysimachia nummularia*, Spear-leaved Orache *Atriplex prostrata*, Common Water-crowfoot *Ranunculus aquatilis*, Water-plantain *Alisma plantago-aquatica* and Water Dock *Rumex hydrolapathum*. Many of the Pink Water-speedwell flower heads had the round galls of the Speedwell Weevil *Gymnetron villosulum* on the seed capsules. Feathery rosettes of Water-violet *Hottonia palustris* were found on an expanse of bare mud. Rarest find of the day was Brown Galingale *Cyperus fuscus*, a small, tufted, annual sedge which was growing in the cattle-poached mud of the furthest pond. Purple-flowered Water Mint *Mentha aquatica* was abundant in the damper areas and visiting butterflies included Gatekeeper, Meadow Brown, Green-veined White *Pieris napi* and Small Copper. Beneath an isolated Oak just above the edge of the marsh was a long line of red-capped fungi. They had yellow pores on the underside which stained dark blue when rubbed and were tentatively identified as Ruby Bolete *Boletus rubellus*.

Ian Esland led 12 members on a walk round the northern section of **Aston Rowant National Nature Reserve on Saturday 7 September**. It was an afternoon of alternating sun and cloud, which turned out to be a bonus for the photographers because the butterflies were reluctant to fly when the sun was obscured. The walk started out across the steep side of Beacon Hill, with far-reaching views to the south-west, including the much-reduced Didcot power station, with just a single tall chimney remaining. Flowers seen here included Carline, Musk and Dwarf Thistle, Harebell, Small Scabious, Clustered Bellflower, Eyebright *Euphrasia*, Wild Marjoram and Wild Basil. A few Autumn Gentians *Gentianella amarella* were still in flower. A male Adonis Blue *Polyommatus bellargus* butterfly perched obligingly for the photographers and several more blue males and a few brown females were seen soon after. Ian, who walks the butterfly transect here, said that they had first been recorded at Aston Rowant about five years ago, but it was unclear if they had arrived naturally or had been unofficially released. They appear to be thriving. Also seen were a few Silver-spotted Skippers *Hesperia comma*, which favoured patches of bare ground. Other butterflies included Meadow Brown, Small Heath, Painted Lady, Brown Argus *Aricia agestis* and Small White, and a Hummingbird Hawk-moth *Macroglossum stellatarum* was spotted. A steep climb led to a large animal burrow near the top of the field. Several clumps of Wild Candytuft *Iberis amara* were flowering in the loose soil at the entrance to the hole. The route then led back down the hillside to the sunken trackway at the bottom. This is usually very sheltered and a butterfly hotspot – but unfortunately on this occasion the wind was funnelling along it and no butterflies were to be seen. Berries of Bittersweet [Woody Nightshade] *Solanum dulcamara* and Black Bryony *Tamus communis* were found on the bank, together with some juicy Blackberries *Rubus fruticosus*. The route continued up steps and round the side of Beacon Hill. There were Juniper bushes near the top, together with Blackthorn and Dogwood *Cornus sanguinea* bushes, both laden with glossy black berries. A House Martin *Delichon urbica* flew overhead and Linnets were heard. Along the north side of Beacon Hill is an arts trail. A Red Kite *Milvus milvus* sculpture is positioned at one of the best view-points, looking out far to the north-west. Another

installation features an audio recording of a fairy tale about Ring Ouzels *Turdus torquatus*, which visit on passage, read by local schoolchildren. Continuing into the woods, the round white slime mould *Reticularia lycoperdon* was found on a cut broad-leaved log and three Violet Helleborine *Epipactis purpurata* plants were seen beside the track.

Despite a forecast of heavy rain, 12 members turned up on the morning of **Sunday 22 September** for a walk round **Southcote Meadows** with Adrian Lawson and his young dog Luna. The walk started out south-westwards along a track which led through woodland to a bridge under the Reading to Newbury railway line. Pink Himalayan Balsam *Impatiens glandulifera* and Orange Balsam were in flower beside the track, while Green Spleenwort *Asplenium viride*, Rustyback *Ceterach officinarum* and Hart's-tongue Ferns were all growing in the brickwork mortar of the bridge. Looking over the meadow across the Holy Brook, a young Buzzard was perched on a cable and a Green Woodpecker *Picus viridis* was on a post beyond. The walk continued eastwards along the bank of the Holy Brook, where there had been some recent tree-felling work. On the other side of the channel, a large limb had split almost completely from a big Crack Willow *Salix fragilis*. After crossing the Holy Brook, the route led southwards across a wet meadow towards Southcote Mill. The meadow was dotted with scattered Hawthorns, Buckthorns *Rhamnus cathartica* and willows. The track was built up higher than the field, forming a barrier to drainage, so that the meadow was wetter on the upstream side than on the downstream side. Adrian explained that conservation volunteers would be working on an almost dried out pond next to the track. They would be clearing Bulrush plants from the middle of the pond and cutting back willows from the edges. The walk continued to Southcote Mill, over the narrow Milkmaid's Bridge across the mill stream, over the bridge across the Kennet and on upstream beside a side channel. Blue Waterforget-me-not was in flower at the water's edge and a young Toad *Bufo bufo* was spotted beside the path. Overhead, the sky darkened. Adrian pointed out the mixed flock of House Martins and Sand Martins *Riparia riparia* which was hunting in front of the approaching weather front. Next to the path was an area of dense woodland which marked the site of a former gravel pit. It had been filled with inert material and restored to meadow, but a dense growth of Alder had rapidly taken over. The path led through the wood to an open meadow area next to the Reading to Southampton railway line. This was another gravel pit which had been restored to meadow and sown with a wildflower mixture. Many Ash seedlings were growing up through the grass. The field is cut annually to control woody growth, but the cuttings are left behind, vigorous grasses are taking over and the flowers are being overwhelmed. Common Fleabane and Common Ragwort *Senecio jacobaea* were still in flower and there were seed heads on the Wild Teasels *Dipsacus fullonum*. The explosive call of a Cetti's Warbler was heard and another Buzzard was perching on an overhead wire. The rain set in in earnest, and by common consent, everyone headed back to the cars.

On **Sunday 20 October**, 16 members gathered mid-morning on roadside parking adjacent to the **Normandy Marshes near Lymington** for a field trip organised by Ken and Sarah White. The incoming tide had yet to cover all of the mud and seaweed, and it was here on 4-Acre Pond that the first suite of waders was seen: lots of Redshank *Tringa totanus* were mixed with varying numbers of Dunlin *Calidris alpina*, Ringed Plover *Charadrius hiaticula*, Grey Plover *Pluvialis squatarola*, Oystercatcher *Haematopus ostralegus*, Curlew *Numenius arquata* and Lapwing *Vanellus vanellus*. Gulls were mostly Black-headed *Chroicocephalus ridibundus*, but a few Herring *Larus argentatus* and Great Black-backed *L. marinus* gave the full size range. Early on some members found Little Grebe *Tachybaptus ruficollis* and Kingfisher; repeated views of the latter meant everyone eventually saw at least one. Continuing north-eastwards along the Solent Way, the inland brackish lagoons provided a huge array of wildfowl, many of which were Wigeon *Anas penelope*; most of the males were still wearing their rich rusty eclipse plumages. It was a delight to see several families of recently-arrived Russian Dark-bellied Brent Geese *Branta bernicla bernicla*. The many juveniles present indicated a successful breeding season for them up on the high latitude Siberian arctic tundra. Gradually, more and more families came in to join them off the Solent, eventually totalling 75 birds. A few Little Egrets and Greenshank *Tringa nebularia* added extra interest to a large flock of Lapwing, but without doubt the highlight of the morning was a Merlin *Falco columbarius* dashing around over Normandy Farm chasing a flock of Starling *Sturnus vulgaris*, not

once but twice within minutes. A group of Turnstone *Arenaria interpres* provided very confiding views turning over stranded heaps of seaweed along the bank, and groups of Swallows *Hirundo rustica* were found feeding over reedbeds and adjacent woodland.

Lunch was enjoyed at the nearby Chequers Inn, and it was from here that the afternoon walk started, heading off to the southwest across the grazing meadows of **Pennington Marsh**. The flooded fields yielded quite a different mix of birds, starting with the one and only Golden Plover *Pluvialis apricaria*. Resident Canada Geese were widespread, and in amongst these fresh water lagoons were Coot, Shoveler *Anas clypeata*, surprising numbers of Pintail *A. acuta*, Teal *A. crecca*, Mallard and Gadwall *A. strepera*. One very observant member found a caterpillar of the Ruby Tiger moth *Phragmatobia fuliginosa*. Meadow Pipits *Anthus pratensis* and Linnets seemed to be flitting about everywhere, no doubt of interest to a female Sparrowhawk whizzing to and fro over the gorse bushes. Even Stonechats were in good numbers along the pathway, and a single Wheatear *Oenanthe oenanthe* here delighted everyone with its presence. Seventy Turnstones were roosting on the concrete jetty-pipeline, but the final surprise was a group of Spotted Redshanks *Tringa erythropus* in full winter dress, roosting at high tide in the company of other shore birds. Forty-seven species was the final tally for the day, and for many it was a fine day for seeing and welcoming the incoming birds of winter and a final farewell to the last of the outgoing summer migrants. Some members stayed on for a hearty roast and a chance to review a splendid day's birding.

Mike Waterman led a well-attended fungus identification walk at **Hollyshaw Wood**, near **Exlade Street** and Checkendon, on the afternoon of **Saturday 16 November**. The owner of the wood, Ken Hume, very kindly came along too and gave the group an introduction to the history of the wood. Until the bypass was built in the 1970s, the narrow lane which runs along the western boundary of the wood was the main road from Reading to Oxford. In the early 1900s, there had been a house and garden at the bottom of the track into the wood. The north-west section of the wood had historically been pasture which was used for horses by the nearby Highwayman pub. Other parts of the wood were much older. 26 members and guests started out across the former garden. First find was *Tricholoma stiparophyllum*. Grey Candlesnuff Fungus *Xylaria hypoxylon* and Turkeytail *Trametes versicolor* were growing on stumps and black King Alfred's Cakes *Daldinia concentrica* were found on a fallen branch. Several specimens of Saffrondrop Bonnet *Mycena crocata* were growing out of the Beech litter on the ground. They had reddish stems which exuded a yellow-staining juice when broken. The walk continued into the larch plantation at the northern end of the wood, passing a deer skeleton on the way. A line of Trooping Funnel *Clitocybe geotropa* was spotted and a small group of the tiny Twig Parachute *Marasmiellus ramealis* was growing on a dead branch. The next section of the walk was up towards the eastern boundary, then southwards towards the main road. The woodland here was predominantly of Beech and Holly *Ilex aquifolium*, but with a scattering of other species, including Field Maple, Whitebeam and, to the delight of the botanists, a good-sized Small-leaved Lime *Tilia cordata*. A Magpie Inkcap *Coprinopsis picacea* was found at the base of a wood pile. Butter Caps *Rhodocollybia butyracea*, with two-toned brown, greasy caps, were growing out of the leaf litter and there were a number of specimens of the Clouded Funnel *Clitocybe nebularis*. Rings of Tawny Funnel *Lepista flaccida* were exactly the same colour as the fallen Beech leaves. Blusher *Amanita rubescens* and Sulphur Tuft *Hypholoma fasciculare* were added to the list of finds, followed by Deceiver *Laccaria laccata* and Ochre Brittlegill *Russula ochroleuca*. Mike pointed out that, rather than having the usual mixture of long and short gills, the False Chanterelle *Hygrophoropsis aurantiaca* had forked gills.

## MID-WEEK WALKS 2019 by Jan Haseler and Fiona Brown

Fiona Brown led 10 members on a walk on **Wednesday 16 January**, starting from **Mattingley**. It was a grey morning, initially dry, but as the walk progressed, there was first drizzle, then harder rain. The walk started at the church, an interesting building of timber and herringbone brickwork, dating from the late 15<sup>th</sup> century. A winter cherry *Prunus subhirtella autumnalis* was flowering in the churchyard. The route led on footpaths across farmland to the River Whitewater. Several Buzzards, plus flocks of Redwings and Fieldfares were seen. The dark red of the Alder male catkins marked the line of the river. The path led through the garden of Diple Mill and out to the road through the village. There was a brief diversion to the bridge to get a better view of the front of the mill and to admire the drift of snowdrops beside the mill pool. The tuneless song of a Mistle Thrush was heard nearby. The walk continued across more farmland to Sherwoods Farm and the lowest of a series of ponds. Hazel catkins were fully out here and there were a few flowers on a Cherry Plum bush *Prunus cerasifera*. The next destination was West Green Common. Two avenues, bordered by big oaks, cross the common. A few of the oaks have died, but they have been left as standing dead wood. Hazel Dormice have been found here, and a programme of coppicing has been started, to try to improve the habitat for the Dormice. At the far side of the common, there were information boards and wooden posts, and on the posts were clusters of ladybirds. Most were red 7-Spot Ladybirds, but amongst them was an 18-Spot Ladybird which was smaller and orange with white spots. The route led across the track to West Green House and across grass parkland. On the fence at the entrance to the parkland, there was a string of yet more ladybirds, this time even smaller and dull yellow with black spots. They were later identified as 16-Spot Ladybirds. The next track led back towards the Whitewater valley. At one point, the track dropped more steeply as it went through a section with sandy banks where there were many Badger holes. After crossing the river, the track led back towards Mattingley. Pussy Willow and a single Lesser Celandine were in flower along this stretch. The final path led back through woodland to the church. A fallen tree was coated with a black fungus from which black club-like structures projected, identified as Dead Man's Fingers. The walk was followed by lunch at the Falcon in Rotherwick.

Julia Cooper and Ian Duddle led a walk on **Wednesday 13 February**, starting from the Greyhound at **Tidmarsh**. It was a mild and sunny spring-like morning. While the group of 12 walkers were gathering, a Mistle Thrush flew into a tree across the road and started feeding on Mistletoe berries and Rooks congregated noisily in the tops of nearby trees. The walk started northwards along the road towards Pangbourne, but soon turned off along a footpath which led first past attractive gardens and then across fields towards the River Pang. A Green Woodpecker called and there was a flock of Goldfinches feeding in the riverside Alders. The route then led eastwards across the big field which lies to the south of Pangbourne. Three Greenfinches were spotted in the hedge at the edge of the allotments. In the far corner of the field was an area with Dwarf Gorse bushes. The walk continued southwards along Sulham Lane, where a freshly killed Badger was lying at the roadside. The next footpath crossed a field of winter wheat and then climbed steeply up to Sulham Woods. There were still plenty of glossy black berries on the Wild Privet bushes. The path continued through the Beech trees, before dropping back down through the fields to a footpath which ran above the back gardens of the cottages of Sulham. There were a number of clumps of Butcher's-broom beside the path, bearing white flowers and both green and red berries. A little further on, Barberry was found amongst the Blackthorn and Hawthorn in the hedge beside the path. It had a paler bark and spines in distinctive clusters of three. Next stop was the churchyard of St Nicholas Church at Sulham, where there was a stunning display of purple crocuses and snowdrops. The walk continued across fields to Sulham Brook, with Skylarks singing overhead and a glimpse of a Kestrel. The route then led through BBOWT's Moor Copse reserve. The first Primroses were in flower and one clump had a Marmalade Hoverfly resting on it. A tuft of the glossy orange Velvet Shank fungus was growing on a dead stump beside the path. Great Spotted Woodpecker, Marsh Tit, Goldcrest, Nuthatch and Siskin were all heard in the woods. The latest coppice plot was inspected. A dead hedge was being constructed along its ride-side edge, with two staggered lines of posts enclosing layered brushwood to make a deer-proof barrier. The path back to the River Pang passed a big tangle of Guelder-rose bushes which had been stripped of their berries. The final part of the walk followed the river back to Tidmarsh. Just before leaving the reserve, the mink raft was inspected. When it is in use in inspection mode, a removable clay pad records the footprints of any visiting creatures. Signs of both Otter and American Mink have been detected on or near the reserve in recent years. There were a number of big Poplars in the field beyond the reserve, and many of them had the characteristic round

exit holes of the Hornet Moth around the base of the trunk. The final stop was the 12<sup>th</sup> century church of St Laurence at Tidmarsh, with its beautiful Norman south doorway and unspoilt interior. Wall-rue was growing on the churchyard wall. The walk was followed by lunch at the Greyhound

The wind outside was at gale force, but within the shelter of **Pamber Forest**, all was relatively calm when Jan and Laurie Haseler led 12 members on a walk on **Wednesday 13 March**, starting from the Impstone Road car park at Pamber Heath. Following heavy rain in the preceding days, many of the paths were muddy but none were impassable. The walk started out through Lord's Wood, crossed the first stream and followed a wide grassy ride westwards. A shrubby Tutsan plant was found at the start of the ride, the willows were covered in yellow blossom and Goldcrest, Nuthatch and Great Spotted Woodpecker were heard. The route then turned southwards along the main ride which crosses the forest. The track climbed up to a heathy area with Bilberry, Heather and Gorse, then dropped back down into oak woodland. Much management work has taken place over the winter, with widely cleared ride margins and new areas of coppice. Alder Buckthorn bushes were growing back from coppiced stumps. Two Wild Service-trees were inspected, their identity confirmed by their distinctive leaves on the ground. The walk continued along a ride which led to an open grassy clearing where there were clumps of Wood Spurge, then followed a narrow path through woodland, where a rotting branch stained turquoise green by the Green Elfcup fungus was found. There was standing water next to the path in the second stream valley, with fresh new leaves of Hemlock Water-dropwort, patches of Floating Sweet Grass and Water Mint and rosettes of Marsh Thistle leaves. The next path led to the south-west corner of the forest where there was a splendid display of Wild Daffodils, with the flowers close to their peak. The route back led past a big fenced-off clearing where there was a stand of tall Aspen. A Buzzard flew along the edge of the trees. Continuing back to the main ride, the group re-crossed the second stream, then followed a narrow path down the valley through oak woodland. The feathery leaves of Pignut and the first Primrose flowers were seen here and a Marsh Tit was heard. The path led past a coppice plot where the surrounding fence was draped with a curtain of Honeysuckle. A gate led though to the extensive wood pasture area, where hoof prints and fresh dung indicated that the herd of Dexter cattle had been feeding here recently. Frogspawn was also seen in the pond here. The cattle were eventually spotted in the field below Inhams Copse, with two Roe Deer in the woods nearby. Back at the car park, the view over Silchester Common was dominated by the yellow of Gorse blossom. The walk was followed by lunch at the Calleva Arms in Silchester.

Rob Stallard led a walk, attended by 13 members, on the sunny spring morning of **Wednesday 17 April**, starting from the Three Horseshoes pub at **Brimpton**. First stop was the churchyard, where Meadow Saxifrage was growing on several of the graves. A footpath led along the field margin, down towards the valley of the River Enborne. Skylarks were singing high above, Blackthorn blossom was hanging on in the hedgerows and bright yellow Dandelion flowers were abundant. The next footpath followed the river bank upstream. There were Cuckooflowers on the bank and Marsh Marigolds in a wet ditch. Peacock, Green-veined White, Orange-tip and Brimstone butterflies were all seen here. The path continued through a poplar plantation, where a number of clumps of the parasitic Purple Toothwort *Lathraea clandestina* were found amongst the grass and nettles beneath the trees. The route then crossed the river, which along this stretch marks the boundary between Berkshire and Hampshire, and into Inwood Copse. Bluebells were just coming into flower and there were good numbers of Solomon's-seal plants. Wood Anemone, Greater Stitchwort, Common Dog-violet, Pignut, Primrose, Wood Spurge, Yellow Archangel and Common Twayblade were amongst the sightings here. A quiet lane marks the far boundary of the copse, and on the lane bank were Wood Mellick and Hairy Wood-rush. The walk continued across damp fields where a Grey Wagtail and two Brown Hares were seen. Skirting the edge of Ashford Hill, the route followed a track westwards and then a quiet lane back northwards. A Raven called from a pine plantation. The next footpath ran between shady banks that were covered by sheets of Moschatel. Approaching the River Enborne again, several more clumps of Purple Toothwort were found, this time on the Hampshire side of the county boundary. The final footpath started out through horse paddocks towards Brimpton Church. Several patches of the tiny-flowered Blinks were spotted beside the path. Continuing through a very stony arable field, Field Pansy was abundant and a patch of Corn Spurrey, with delicate white flowers, was discovered. A Whitethroat was singing from the hedge beside the footpath leading back to the village. The walk was followed by lunch at the Three Horseshoes.

Sally Rankin organised a walk on the hot and sunny morning of **Wednesday 15 May**, starting from the Maltsters Arms at **Rotherfield Greys**. Also joining the 20-strong group were Andrew and Wendy

Hawkins, who own Flowercroft Wood, the destination for the walk. Andrew kindly gave a fascinating commentary on the history, geology and management of the wood, and pointed out some of the special plants and trees. The walk started out along the footpath which leads past the church. Whitethroat and Yellowhammer were singing from the young trees planted next to the first field and a Small Heath butterfly was seen amongst the Dandelions in the second grassy field. The route followed the Chiltern Way briefly, before turning down Dog Lane. A large Red-tailed Bumblebee queen was seen investigating a hole in the bank beside the track and Southern Wood-rush and a large clump of Goldilocks Buttercup were noted. The next path ran along the bottom of the wood called The Paddock. Andrew commented that old maps show the wood as open farmland, and this was reinforced by the relatively impoverished flora, compared with the rich assemblage of flowers in the ancient woodland stretches. A bank marked the parish boundary and also the edge of Flowercroft Wood. Flowers here included Bluebells, Yellow Archangel, Greater Stitchwort, Bugle, Ground-ivy, Woodruff and Wood Anemone. A Nuthatch and a Great Spotted Woodpecker were seen. Andrew explained that the top of the wood was on gravel, the slopes were on chalk, and the bottom was on glacial till. The lowest section of the wood is called Bottom Wood, and this part had the best display of Bluebells. Butterflies seen here included Brimstone, Orange-tip and Speckled Wood. A Wych Elm had dropped its round, flat green seeds on the path. The next section of the walk was a wander across Kent's Hill, a sheltered grassy meadow on the steep chalk slope, with a rich chalk flora and lots of butterflies. The latter included good numbers of Dingy Skipper, a few Grizzled Skippers, a Green Hairstreak, plus Common Blue, Holly Blue and Small Heath. Common Twayblades were found in the corner of the field where the Green Gym had recently done some scrub clearing and there was Wood Spurge there too. Salad Burnet was in flower and Carline Thistle was seen. A Red-tailed Mason Bee *Osmia bicolor* was spotted, carrying a long piece of grass transversely, which it uses to build its nest in an empty snail shell. The route back led past first a big clump of Green Hellebore, then a cluster of Wild Service-trees with the flowers just coming out, and finally a group of 3 White Helleborines which were protected from browsing deer with metal mesh cylinders. The walk was followed by lunch at the Maltsters Arms.

Julia Cooper and Ian Duddle led a walk at **Hazeley Heath** near Hartley Wintney on **Wednesday 19 June**. It was a grey and humid morning, following several days of rain. 20 members gathered at a housing estate on the south-east side of the site for the start of the walk. First stop was a wet scrape, where about 10 plants of Oblong-leaved Sundew were found, together with clumps of Needle Spike-rush. A Tree Pipit was seen nearby. The route continued down a wooded stream valley at the edge of the open heathland. Several specimens of the brown fungus Tawny Grisette were found beside the path, an unusually early sighting. There were a number of Alder Buckthorn bushes in the woodland. A Stinkhorn was smelt but not seen. Common Valerian and big patches of Common Cow-wheat were flowering on the heathland edge. The next path crossed the open heathland. There were a number of funnel-shaped spiders' webs down amongst the vegetation. Both Cross-leaved Heath and Bell Heather were in flower. Where the path crossed a small stream, there was a fine display of Heath Spotted-orchids. A Common Heath moth was seen here. About a month previously, on 23 May, there had been a serious fire on the eastern side of the site. It was good to see new leaves sprouting on blackened birch trees and fresh vegetation coming up from the burnt ground. On the uphill side of the charred board-walk, Meadow Thistle leaves were growing back well and a single plant was already flowering. Higher up the slope, there was another big patch of Heath Spotted-orchids. Best of all, a large female Adder was seen, slithering in the channel between clumps of burnt grass. The route continued through woodland. There was a fine display of Foxgloves in a clearing to one side of the path, with a significant proportion of white flower spikes amongst the more usual pink ones. The track ran alongside the old boundary bank where there were some magnificent old multi-stemmed Beech trees. The RSPB owns the northern part of Hazeley Heath, and the next path ran through a section where they are actively managing the Gorse, with different age structures and mown pathways. A Dartford Warbler gave a brief snatch of song from deep in the Gorse, Linnets were active and an Emperor Dragonfly flew to and fro. Two adult Fallow Deer and a fawn moved off through the Gorse. Heath Bedstraw, Heath Speedwell, Heath Milkwort and Lousewort were in flower on the pathway and there were tangles of the parasitic red-stemmed Dodder on mown Gorse. A number of Silver-studded Blue butterflies were seen on the Heather, mostly blue males but also one or two brown females. The return track ran along the woodland edge on the south-west side of the heath. Ragged Robin was flowering in damper patches and a Broad-leaved Helleborine plant was growing next to the path. A robust brown fungus with flecks of veil on its cap was identified as *Amanita excelsa* var. *spissa*. A big shallow pond on the heathland edge had submerged feathery leaves of Floating Club-rush, while in the middle were a few leaves of Water-plantain. The final part of the walk was across an area where there had previously been gravel extraction, followed by a municipal

rubbish dump. Goat's-rue, with pale purple flowers, was seen here. Further on, a Bee Orchid and 3 Pyramidal Orchids were spotted beside the track. The walk was followed by lunch at the Shoulder of Mutton pub, where a Purple Hairstreak butterfly on the inside of a window came as a surprise addition to the morning's species tally.

Rob Stallard led 15 members on a walk at the National Trust's The Chase and the Forestry Commission's Great Pen Wood on **Wednesday 17 July**, starting from the Rampant Cat pub at **Woolton Hill**, south-west of Newbury. On a hot, sunny morning and after more than 3 weeks without rain, the woods provided welcome shade. The walk started out through woodland at The Chase. Yellow Pimpernel, Slender St John's-wort and Wood Sage were seen beside the first stretch of path, which led to an open meadow area. Here Meadow Brown butterflies were abundant and Small Skippers darted around, particularly on the flowers of Greater Bird's-foot-trefoil. The next section of the route was across an open area of heathland with Heather not yet in flower, Dwarf Gorse, Sheep's Sorrel and Trailing St John's-wort. A Lizard was glimpsed here. The walk continued to the main stream which runs through the reserve, a tributary of the River Enborne. Three Green-veined White butterflies were down on the mud by the water's edge and a Holly Blue flew nearby. A damp area by the stream held an interesting collection of plants, including Skullcap, Ragged Robin, Creeping Forget-me-not, Square-stalked St John's-wort and Creeping Jenny. The walk continued down the stream valley through Alder Carr woodland to a big pond where the stream had been dammed. The pond was fenced to protect the waterside vegetation, which included Cyperus Sedge, Orange Balsam, Wild Angelica and Gypsywort. White Water-lilies covered part of the pond surface and a Kingfisher darted past. The route led back through woodland on the other side of the stream. The smell of a Stinkhorn alerted the group to its presence near the path. Big clumps of pink Bog Pimpernel were in flower in a damp area on the way to the road.

After crossing the busy A343 road, the walk continued through Great Pen Wood. The track led through Beech and conifer woodland to a stream valley, where Yellow Loosestrife, Common Hemp-nettle, Common Valerian and a Broad-bodied Chaser dragonfly were seen. The track then climbed up the valley side. An Alder beside the path had extensively chewed leaves, the work of a team of shiny black larvae. These were later identified as the larvae of the Alder Leaf Beetle. On the other side of the track was a big Alder Buckthorn bush with ripening berries. The next track was wide with flowery margins. Butterflies seen here included Large Skipper, Speckled Wood, Ringlet and Gatekeeper, while flowers included the yellow spikes of Tall Melilot, Common Fleabane and Hemp Agrimony. The track crossed an open sunny stream valley with big flowering bramble bushes, where Red Admiral, Peacock and at least 4 Silver-washed Fritillary butterflies were seen. Further up the other side of the valley, the track was bordered on one side by abundant Crown Vetch. The final part of the walk led back across the A343, through the western section of The Chase and back to the Rampant Cat for lunch.

Des Sussex organised a visit on **Wednesday 21 August** to a farm near **Lambourn**, by kind permission of the Estate Manager, Robert Price. The farm has a number of linked areas where arable farmland has been successfully restored to chalk grassland and there is also some SSSI chalk grassland. Linking up the grassland areas not only makes it easier for wildlife to move around, but also makes it easier to move grazing stock. 15 members started out down the track towards Cleeve Cottage, passing a pond and a field of restored grassland from which a hay crop had recently been taken. In front of the cottage was an enormous old Ash tree. Its girth was measured as 4.6 metres, indicating that it was about 200 years old. The track continued along the edge of a wood where the regrowth on a strip of coppiced Hazel had been badly nibbled by deer. The Hazel on the other side of the track had been cut at a greater height and had regrown much better. A few plants of Nettle-leaved Bellflower were noted here. Several fields had been left with uncultivated headlands. The walk continued up Thorn Hill Bank, which had been split into two fields and restored to chalk grassland. Des explained that the fields had been sprayed off and then sown with a wildflower mix. For several years, they were mown tightly to control weed growth. The result has been floristically rich and varied grassland. Flowers seen in the first field included Harebell, Clustered Bellflower, Common and Greater Knapweed, Fairy Flax, Kidney Vetch, a Broomrape, Dropwort, Wild Marjoram, Sainfoin, Yellow Rattle and Eyebright, while butterflies included Common Blue, Small Heath, Meadow Brown and Painted Lady. A Long-winged Conehead - a small green bush-cricket - was identified here as well as Roesel's Bush-cricket. The second field had been reseeded at an earlier date and appeared to have less grass than the first field. Wild Mignonette and Common Rock-rose were seen here, and there were a number of orchid seed-heads. Moths included Lime-speck Pug, Yellow Shell and Silver Y, and a Brown Argus butterfly was

seen. On the other side of the fence at the top of the field was a colourful nectar and bird seed strip, with purple Phacelia, red poppies, yellow and white crucifers, blue Flax and tall green Quinoa. The next reseeded field ran across the top of BBOWT's Watts Bank reserve. Autumn Gentian plants were flowering here. There were good numbers of fresh Small Tortoiseshell butterflies, together with Brimstones, Small Whites and a single Small Copper. The route back led along the White Shute by-way, where Spurge Laurel and Nettle-leaved Bellflower were growing on the banks. The final destination was the SSSI grassland of Cleeve Bank. There appeared to be a higher proportion of grass here than in the reseeded fields. Quaking Grass and Dwarf Thistle were also more abundant. Insects seen here included a Dark Bush-cricket and, probably the rarest sighting of the day, a Hornet Robber-fly. The walk was followed by lunch at the Tally Ho pub at Hungerford Newtown.

Jan Haseler led a circular walk starting from the Vine pub at **Hannington on Wednesday 18 September**, a still morning with bright sunshine. The route and pub visit had been planned and prospected by Fiona Brown. 13 members started out along a footpath which led past the church and next to a field with much blue-flowered Chicory, fodder beet and other plants which might have been a winter bird mix. A single plant of Sainfoin was also spotted. The next path led to the north-east along For Down. There were extensive views southwards across the Hampshire countryside. The path ran along the edge of the stubble of a harvested cornfield. Flowers seen in the field margin included Field Madder, Scarlet Pimpernel, Field Forget-me-not, Field Pansy, Common Field-speedwell and Fool's Parsley. Most of the poppies were Common Poppy, but a single specimen of Prickly Poppy was also found. Several Brown Argus and very faded Painted Lady butterflies were seen here. Small White, Green-veined White and Common Blue were seen beside the grassy path, while Red Admiral, Comma and more Painted Lady butterflies were nectaring on the Ivy blossom in the hedge. The route continued north-westwards along the Wayfarer's Walk. The track ran between hedges which were blue-grey in places with a heavy crop of sloes. Swallows flew overhead and Speckled Wood and Small Tortoiseshell were added to the butterfly tally. As the track dropped down towards Watership Down, views opened up westwards along the North Hampshire Downs towards Beacon Hill and northwards over the valleys of the Enborne and Kennet towards the Berkshire Downs. The field had been ploughed almost up to the path, but a few plants of Musk Thistle, Wild Mignonette and Dwarf Spurge had escaped the plough. Two Wheatears flitted across the ploughed field on the other side of the path and Linnets perched at the top of the far hedge. Before reaching the Kingsclere to Whitchurch road, the next track led gently back uphill towards the Hannington television mast. It ran initially beside a ploughed grass field, then next to a field of long grass with grazing cattle and a hunting Kestrel. Yellow Toadflax flowers were growing at the field edge and a large party of Long-tailed Tits moved from tree to tree in what remained of the hedge. The final part of the walk was along quiet lanes and another footpath beside the Chicory field. The walk was followed by lunch at the Vine.

Marion Venners and Maggie Bridges led 13 members on a walk at **Silchester on Wednesday 9 October**, starting from the Calleva Arms. It was a bright and breezy morning, following a week of grey skies and a lot of rain. The walk started out north-eastwards across the Common. Two Buzzards flew overhead and a bright red Fly Agaric fungus was spotted under a Birch tree. The next track led eastwards towards the Roman town. A big Chicken of the Woods fungus was growing just above eye height on a Poplar and a flock of Long-tailed Tits moved through the trees beside the path. Just before the track reached the Roman walls, the next footpath led southwards through the adjoining grassy field. Many darker green circles marked out rings of Field Mushrooms. The path then ran beside the wooded ditch on the outside of the walls, where a Stinkhorn was seen. The route continued gently downwards across another grassy field with more rings of Field Mushrooms and a big Parasol mushroom. House Martins flew overhead. A ditch and bank crossed the field. Growing on one of the Ash trees on the bank was a bracket fungus with a dark velvet red upper surface and a wavy orange margin. A Hornet was seen here. The path continued through a short stretch of woodland where there were many puffballs. After crossing a road, the route led round the edge of a field of root vegetables, where Black Nightshade and Field Madder were seen in flower. An adjoining field had a plantation of cricket-bat willows. A bull and a herd of placid cows in the next field watched curiously as the group walked past. The footpath led back to the Roman walls and Silchester Church. A big Yew in the churchyard was covered in pink berries and a Red Admiral was feeding on the Ivy blossom. After looking round the church, the group walked up the lane towards the Roman amphitheatre, passing a pond where a mating pair of Common Darters and a Southern Hawker dragonfly were seen. A Speckled Wood butterfly and the new green shoots of Three-cornered Garlic were amongst the sightings at the amphitheatre. The route back led along the northern section of the Roman wall, where it was very windy. Black Horehound, Wild Basil, Common Toadflax, Field Scabious and very tall

spikes of Great Mullein were all in flower here, while Black Medick and Hedgerow Crane's-bill were found by the Northern Gateway. The walk was followed by lunch at the Calleva Arms.

Sue White led a walk round **Maidenhead Thicket** on **Wednesday 6 November**. 11 members gathered at the National Trust car park on the east side of the A404M, before crossing the footbridge over the motorway and heading westwards along a wide grassy ride. Sue pointed out the widely-spaced disease-resistant elms which had been planted by Butterfly Conservation volunteers to help the local population of White-letter Hairstreak butterflies. She also described the local geology, with a thin layer of more acid alluvial deposits lying on chalk, which explained the apparent anomaly of lime-loving Traveller's-joy growing next to lime-avoiding Bracken. The route led across an open area where Larches had been clear-felled and young broad-leaved trees had been planted. Fungi seen here included Buttercup, Deceiver, False Chanterelle, Blusher, Yellow Stagshorn and the memorably-named Scurfy Twiglet. A whitish spiky coral-like fungus on the ground was identified as *Thelephora penicillata*, the bright pink dots of Coral Spot outlined the form of a fallen Sycamore twig and a clump of Orange Peel Fungus was found. The walk continued south-eastwards through woodland. It seemed to be a good year for the Lilac Bonnet *Mycena pura*. An enormous ring of Clouded Funnel fungi had an estimated diameter of about 15 metres. Lines of Trooping Funnel were also seen here and both Common and Stump Puffball were found. Large numbers of the needle-like Slender Club *Macrotyphula juncea* poked up through the leaf litter. Ash seedlings covered in the moss *Kindbergia praelonga* looked like a forest of miniature Christmas trees. The route then followed a major ride which ran northwards through some of the bigger and older trees on the common. A path on the right led to a cleared area where there was a lot of Honey Fungus. Dryad's Saddle was found on a stump, Snowy Waxcaps were seen in a grassy area and a Fox crossed the path ahead of the group. The walk continued to Robin Hood's Arbour, the site of an Iron Age homestead with an enclosing ditch. Tiny orange blobs on top of a stump which looked like insect eggs were identified as the slime mould *Trichia decipiens*. Growing out of the base of another stump was the Upright Coral *Ramaria stricta*. The final part of the walk was along an avenue of tall Lime trees, most of which had big clumps of Mistletoe near their tops. Growing out of the end of a cut log was a fine specimen of the Wrinkled Peach fungus. The walk was followed by lunch at the Dew Drop Inn near Burchett's Green. The occupants of the front car had a close encounter with three Fallow Deer as they approached the pub.

Fiona Brown led a walk at **East Ilsley** on **Wednesday 18 December**. The village used to hold the biggest sheep fairs outside London and the walk partly followed a route used by the drovers. It was a lovely, mild winter's day, fairly breezy but remaining dry until just after the walk was completed. Setting off from The Swan Inn, a Mistle Thrush was heard at the back of the car park. Going north out of the village, the route ascended a muddy track enclosed by hedges, where a Stinking Iris was seen. Soon the view opened out as the track continued to rise between vast fields where Red Kites and Skylarks were flying. The field edges contained many vegetative plants including Field Pansy, Sun Spurge and Cleavers. There were also Wild Parsnip and Yarrow still in flower and the entrance to a tiny tunnel was spotted in the grass – probably the home of a Field Vole. While crossing the gallops at the top of the hill, a Wagtail flew past. The route now followed The Ridgeway eastwards. Flocks of Fieldfares, Corn Buntings, Starlings and Goldcrests were flying back and forth. A small dark raptor, almost certainly a Merlin, flew rapidly across the track, staying about two feet above the ground. Soon after, several Yellowhammers landed in an adjacent field below a fence post occupied by a Red Kite. Turning south off The Ridgeway the route descended between more fields. In the grass beside the track were Wild Mignonette, Ragwort and Musk Thistle. Further along, while taking a left fork, more Fieldfares and Starlings were seen flying towards some trees. Here the fields gave way to a small copse where a Wild Cherry log was host to several species of fungi including Turkeytail, some brown toadstools and a pinkish resupinate fungus. In the grass nearby were flowering Red Dead-nettle and Prickly Sow-thistle. A Redwing was seen in the trees near the end of the copse and lots of empty snail shells on a grassy bank suggested that a thrush had been feeding. Approaching the road at the bottom of the path, Bristly Oxtongue was found in flower. After crossing the road, the route climbed again between hedges and the adjacent field contained a crop of *Miscanthus*. In the hedgerow near the top of the hill were St John's Wort, Wild Basil and White Bryony with lots of berries. Turning right the path now descended quite steeply and a flock of about ten Yellowhammers were seen flying back and forth between a large tree and the field below it. Approaching the village, the path ran between small Spindle trees. They had square stems and their red shoots suggested that they were hybrids as the shoots would normally be green. A Wren flew into the hedge just before the route joined the road through the village and Purple Toadflax was found in a garden hedge. The route finally went past the duckpond which contained a few Mallards and a curious looking hybrid that may have been a Cayuga Duck. The walk was followed by lunch at The Swan.

## AWAY TRIPS 2019 by Fiona Brown

Sarah and Ken White led a trip to **Norfolk** in **February**. On the way the group met at **WWT Welney** in Cambridgeshire where several species of passerines including Tree Sparrows were using the bird feeders. In the distance to the east were a good number of Common Cranes and on the Ouse Washes to the west were large numbers of wading birds, resident Mute Swans and over-wintering Whooper and Bewick Swans from the arctic north and northeast high latitudes respectively. These were fed at 3pm outside the main hide by a warden whilst he gave an interesting talk via intercom to the visiting public. On leaving WWT Welney wonderful numbers of waders were seen flying over the washes with a magnificent sunset in the background.

The group continued their journey to Le Strange Arms, Hunstanton where we stayed for the first three nights. During this period there were two early morning visits were made to **RSPB Snettisham** to experience a super high tide event with huge numbers of waders, mostly Knot, flying in to roost as the tide came in. Thousands flew directly overhead with the sound of their wingbeats adding to the experience, and then they crowded beside the small lagoons behind the beach. Other highlights included seeing Russian Black-bellied Brent Geese flying overhead at **NOA Thornham Marshes** and Marsh Harriers coming in to roost at **RSPB Titchwell**. The third day included watching 3 Lesser Redpolls and one Coues's Arctic Redpoll on a birdfeeder at **Sculthorpe Hawk & Owl Trust Centre** and a visit to **Abbey Farm, Flitcham** where a Little Owl was found beautifully camouflaged in the trunk of an old tree, Hares were boxing on a hill above the farm and a ringtail (female) Hen Harrier gave an impressive flying display. The day ended with a second visit to Thornham Marshes where the group were treated to the sight of a Barn Owl quartering the area at dusk. The fourth day began with a trip to **NOA Holme** where a Long-tailed Duck was seen close to the shore and a Red-necked Grebe and several Red-breasted Merganser were spotted further out. The afternoon was spent at **Holkham** where 8 Snow Buntings were found flitting about in the area behind the dunes and the day ended with a walk around **Blakeney Marshes** in front of the Blakeney Manor Hotel where the group stayed for the next three nights.

The second half of the trip began with an early morning walk around Blakeney Marshes followed by a trip to **NWT Cley & Salthouse Marshes**. Here were seen a good mix of birds including various waders. Dunlin and Common Ringed Plover were seen on the beach, Common Scoter and both Red and Black-throated Divers were on the sea and a Glaucous Gull flew over. Behind the dunes were 20 Snow Buntings and amongst the *Phragmites* shining in the sun was a Peacock Butterfly. The next day another walk on Blakeney Marshes was followed by a boat trip to **Blakeney Point** to see the seals and birds further from the shore. These included gulls, Brent Geese and a small raft of Red-breasted Mergansers. The afternoon was spent at **NWT Hickling Broad** followed by an evening visit to **Stubb Mill** which included sightings of Marsh Harriers, at least 2 Cranes hiding in the undergrowth and a good view of some Chinese Water Deer. The trip ended on Tuesday with some members of the group making a second visit to WWT Welney on the way home.

**NOA** : Norfolk Ornithologists Association ([www.noa.org.uk](http://www.noa.org.uk))

**WWT** : Wildfowl and Wetlands Trust ([www.wwt.org.uk](http://www.wwt.org.uk))

**RSPB** : Royal Society for the Protection of Birds ([www.rspb.org.uk](http://www.rspb.org.uk))

**NWT** : Norfolk Wildlife Trust ([www.norfolkwildlife.trust.org.uk](http://www.norfolkwildlife.trust.org.uk))

## Andalucia in Spring 3<sup>rd</sup> – 9<sup>th</sup> April 2019

In April a group of 12 members went on the first overseas trip to southern **Andalucia, Spain**, led by Ken and Sarah White. On arrival at Malaga, the first excursion was to the **Rio Guadalhorce** nature reserve. It was a sunny day and there was lots of wildlife to see including a juvenile Bonaparte's Gull (a Nearctic species), 2 Purple Herons, Kentish Plovers, some Clouded Yellow butterflies and good views of Red-rumped Swallows. The next day began with a visit to Finca La Molina at **Casares** where local Penny Hale had kindly laid some moth traps the night before. There were 36 species of moth including a beautiful Goldwing *Synthima fixa*. Also seen at the Finca were Mirror Orchids *Ophrys speculum*, a Sombre Bee Orchid *Ophrys bombyliflora* growing in the shade of a fig tree and a Queen of Spain Fritillary butterfly *Euphydryas desfontainii*. The next stop was **Punta Carnero** looking southwards across The Straits, where groups of migrating birds were seen crossing the Straits from Morocco. These included dark and pale

morph Booted Eagles, 2 Egyptian Vultures and some Black Kites all losing height as they crossed but making landfall safely. There were also many Swallows which crossed at a lower height flapping their wings to stay aloft and seeming to pop up as they rose to avoid the cliffs. We went on to visit **Playa de los Lances**, just north of Tarifa which was very windy and busy with paragliders. However, sightings included Crested Larks and a Zitting Cisticola. The day ended in **Tarifa** where a mixture of Spotless Starlings, Lesser Kestrels and Cattle Egrets were roosting in a Norfolk Island Pine *Araucaria heterophylla*.

The first trip of the day on Friday was to **Laguna de Medina** which had huge numbers of birds including about 1000 Coot and at least 12 Black-necked Grebe. Next stop was at **Vejer d.l.f.** where 10 recently re-introduced Bald-headed Ibis were nesting; **this is the rarest breeding bird in Europe**. At **Barbate Marismas** estuary, a sandbank was occupied by Audouin's Gulls. A Caspian Tern and a Collared Pratincole were also spotted and there were quite good views of a pair of Stone Curlew, a Spoonbill and some Dunlin in their summer plumage with black belly patches. Growing near the track beside the lagoon was Pheasant's Eye *Adonis annua*, and a Short-toed Lark was seen on a nearby fence.

Saturday began with a fascinating visit to the Roman town of **Baelo Claudia** which lies below huge sand dunes that have almost buried some Umbrella Pines *Pinus pinea*. The lunch stop was at **Sierra de la Plata** where the massive vertical cliff-face was occupied by Griffon Vultures including a fluffy juvenile and further along the cliff a Blue Rock Thrush was spotted. In the afternoon there was a visit to **Castellar**. A Booted Eagle was seen hanging momentarily above the castle, then stooping at high speed and becoming a dot within seconds. 9 Lesser Kestrels were lined up on a telegraph wire and the hills were lit up with a beautiful rainbow.

On Sunday the group split in two with some getting a guided tour of the Avocado farm at Cortijo el Papudo by our hosts where the group were staying and then visiting Casares again. The rest went to **Laguna de Fuente de Piedra**, home to the largest colony of Flamingos on the Iberian Peninsula. Highlights included the vast numbers of Flamingos, 4 Montagu's Harriers and a small flock of Iberian Yellow Wagtails which have a much darker blue/grey head than those seen in the UK. Moving on, some Yellow Bee Orchids *Ophrys lutea* were spotted beside the road along with many arable weeds including Corn Marigolds and Salsify. The day finished with a visit to **Laguna Dulce** where Great Crested and Black-necked Grebes were doing their courtship dances, 10 White-headed Ducks were seen quite close to the hide and Whiskered Terns were flying at the far side of the lake catching flying insects.

On Monday the group visited **Sierra de Grazalema**, which has the highest average rainfall in Spain, and true to form it poured all day. Sue Eatocke, a local expert botanical guide, led the group on a tour of the mountains stopping at key points to look at some of the many rare and endemic plant species including Italian Man Orchid *Orchis italica*, Sawfly Orchid *Ophrys tenthredinifera*, Woolly Lavender *Lavandula lanata*, Dutchman's Pipe *Aristolochia baetica* and Spanish fritillary *Fritillaria hispanica*.

The trip was rounded off at dawn on Tuesday in the **Guadiaro Valley** with sightings of Black Storks, Bee-eaters, Corn Buntings and Short-toed Larks.

## **INDOOR MEETINGS 2019**

**Reports by Rob Stallard, Renée Grayer, Ailsa Claybourn, David Cliffe & Ken White**

**15<sup>th</sup> January**

**The magic of slime moulds by Mark Fricker (University of Oxford)**

Slime moulds are curious creatures; Mark began studying them in microscopy but soon became engrossed with them and his study has reached out into many other academic disciplines.

Slime moulds are now classified as amoebae rather than fungi. There are two main classes: cellular and acellular. The cellular type, typified by *Dictyostelium*, normally feeds as dispersed amoebae but when food is hard to find they temporarily aggregate together into a slug form that will crawl around to seek new food sources. This form may then form an exotically shaped fruiting body to produce spores. The acellular type comprise one giant cell (with multiple nuclei). The *Physaraceae* family of acellular slime moulds includes the widespread 'Dog-sick slime mould' *Fuligo septica*. The active plasmodium stage can

be a single cell 10cm in diameter. There are thousands in any small soil sample. They are simple to study as once placed on agar they will soon start to grow. Just like anti-bacterial hunter cells in animals they move to chase and entrap bacteria and other food.

The area that has been Mark's primary study has been how the acellular types feed on food sources. Similar cell movements take place in skin healing and the spread of cancer and so the slime moulds form a simple model for a much more general pattern of behaviour. Analysis of how the cell moves shows a pulsating self-organising pattern which turns out to be the same as Turing patterns from mathematical theory. This is a reaction-diffusion effect and naturally leads to patterns on animals, for example the stripes on zebras and gill markings of fish.

Mark has worked with Toshiyuki Nakagaki in Japan who is a pioneer of the study of these creatures. Toshiyuki carried out experiments to see how *Physarum polycephalum* built its feeding network. He found that the network was close to optimal. The cell concentrates into thick strands that link the main food sources together and avoids areas without food. It has some redundant links that enable it to continue as a single organism should one strand be broken. He also found that it would quickly find the shortest path through a maze. He then placed food at positions that model the network of Tokyo train stations and the slime mould built a very similar network with a few extra redundant links. For this work Toshiyuki and Mark Fricker were awarded an **Ig Noble prize** in 2010 (This prize is awarded for research that makes you smile and then think afterwards). Mark has applied the same treatment to the UK rail network. The Beeching cuts in the 1960s had reduced the network substantially and the slime mould built a network about 90% as efficient as the actual one but with more resilience to link failure.

The networks built by slime moulds seem to mimic not just traffic flow but many types of dynamic fluid flow in nature - including blood and leaf veins. Studying the algorithm used by slime moulds should enable near optimal networks to be devised for a diverse range of applications including power and water supply.

Slime moulds are not unique in this ability, tree-rotting fungi and plant mycorrhiza need to build a dynamic network to tap into food sources. Different species of fungi have different types of network depending on the changeability of their environment. If the food source is reliable a sparse network with little redundancy is built while if the fungal mycelium is subject to frequent disturbance then it will be dense with a good deal of redundancy.

Mark and his team used to monitor network growth by painstaking microscopic analysis. Now they use scintillation detectors to discover the distribution of a radio isotope within the mould to map out the network. This study has shown that the growth occurs in pulses and this behaviour is not yet fully understood.

Mark's absorbing presentation ably showed how even a very simple organism has a complex behaviour and yet has applications in all sorts of unexpected situations.

## **29<sup>th</sup> January**

In the absence of the scheduled speaker Rob Stallard and Jan Haseler gave talks at very short notice.

### **Lambourn Valley Way by Rob Stallard**

Rob has spent a good deal of time in the last 20 years exploring the long distance paths in the Reading area. He has walked the 30 mile Lambourn Valley Way (LVW) in a dozen short sections and taken many photographs that he used to illustrate the talk. The LVW starts in the middle of Newbury near the confluence of the Lambourn with the River Kennet. It is at Donnington Castle that it reaches open countryside. Much of the course of the LVW follows the dismantled Newbury-Lambourn railway and visibility is often restricted. At Bagnor there is a small wetland BBOWT reserve called Rack Marsh and from there the path continues on to Boxford. Up the hill at Boxford Common there is a small community wildlife reserve. At Westbrook there are attractive wetland meadows beside the river. Heading on to Welford which is famous for its snowdrops in spring there is a detour over farmland in order to cross the M4. Great Shefford is an attractive village and here the Lambourn has become more of a stream than a river. The section onwards to Lambourn has chalk downs on either side with many patches of grassland flowers including orchids. Near the attractive thatched houses of East Garston and Eastbury Rob had seen

two hares braced ready for a fight. The town of Lambourn is the source of the river and the clear water springs at Lynch Wood would be the natural endpoint of the LVW but the path has been extended north-west up onto the downs. The chalk downlands make a pleasing contrast to the river meadows. The LVW reaches its terminal point at the Uffington White Horse where it joins the Great Ridgeway. The Lambourn Valley Way is a very pleasant and little used path with many natural delights along the way.

### **Butterflies of Berkshire by Jan Haseler**

The talk described 40 species of butterfly which have been recorded in Berkshire in recent years. It started with a look at the butterfly life cycle and the different ways that butterflies get through the winter months. Then Jan explored a series of habitats to see where different species can be found. The habitats included grassland, arable farmland, woodland, gardens and churchyards, brown-field sites, chalk grassland and heathland.

### **5th February**

### **The Shearwater's world by Prof. Tim Guilford (University of Oxford)**

Apart from the constraint of breeding in dense colonies on remote islands, shearwaters spend the vast majority of their lives foraging over the vast oceans of the world, unseen and largely unrecorded. Tim outlined some recent advances in "micro bio-logging technology" and how this has allowed scientific researchers to explore the hidden shearwater's world, by investigating distribution & navigation patterns, breeding cycles and life histories which will help in shaping and determining their conservation programmes.

Tim's obsession with seabirds started on Skomer Island, Pembrokeshire, where an unbelievable 300,000 pairs of Manx shearwaters breed. Thousands of burrows perforate the ground, and deep inside large single eggs are incubated for over 50 days. Parents share in rearing of the chick which will end up 50% heavier than either of them, providing essential fuel for the chick's first flight all the way into the vastness of the South Atlantic in the southern hemisphere. Conventional ringing recoveries had indicated that some Manxies were getting as far as the east coast of South America. In 2004 Tim began his investigation into their pelagic marine existence aided by the fast growing technology of digital logging geolocators. In 2006 these devices were fitted to 12 birds captured in their nesting burrows; the loggers stored data daily on their global position by measuring the length and timing of daylight – archival light - to accurately determine their position wherever they were; would any manage to return to their nesting burrows the following year, at all ? It was a very exciting time when eventually the data was downloaded from all 12 birds a year later in 2007 when they all returned back in their own individual burrows. The data revealed a loop migration down the west side of Africa, down and across the Atlantic to give a winter distribution on the east coast of Argentina, well south of the Rio de la Plata estuary just off the Patagonia shelf. Then in the spring [Austral autumn] the birds migrated north around the coast of Brazil and then north-westwards past the Antilles, then up the US Atlantic seaboard and back across to the UK.

The data also revealed times where the birds appeared to be sedentary and that birds were spending periods of foraging - flying, swimming and diving - and resting on the open ocean as they had also been fitted with saltwater immersion loggers. Using more birds from Skomer and other birds from Co. Down, analysis of year by year data revealed that while core overwintering areas are individually consistent, there are particular areas during spring migration that are important foraging areas. Tracking other species as well showed use of the same important feeding areas, and have been proposed by BirdLife International for high seas Marine Protected Areas.

As technology progressed, data loggers became more accurate at GPS and were also designed for measuring and recording new parameters such as temperature and depth of water [TDRs] yielding data on how warm, how deep and for how long birds were submerged hunting for food; most dives were around 9 metres [29.5ft] from the surface, but although the mean maxima was 31 metres [101ft], the deepest was 51 metres [167ft]. Not surprisingly the TDRs confirmed that the diving was entirely diurnal. Data on surface foraging of Skomer Manxies showed that many of the trips were around 100kms, but some were 2,500kms, and it became clear that individuals setting off on a longer trip did so at a much faster initial speed. Measuring the mass of food brought into the burrow on each visit demonstrated that the most productive foraging was to be had by birds undertaking the longer journeys, allowing the parent birds to replenish their own needs as well as gathering food for their chicks, the shorter journeys largely

provisioning just the chick; this is called “dual provisioning.”

The foraging routes of birds from the separate but close-by colonies of Skomer and Skokholm showed remarkable separation, but converged at times of temporary abundance; this does suggest therefore that there might be different “socially acquired information” being exchanged at the nearby but separate colonies. Analysis of standard nest burrow breeding success gave an average of group [A] 58% of pairs of Manxies successfully rearing a chick, [B] 26% failed breeding at the egg stage and [C] 16% skipped breeding altogether [n = 111]. However, the following breeding season, group [C] went on to have an 80% successful breeding season while the pairs from group [A] managed only 64%, so by skipping a year individual birds seem to be able to recover from the longer term costs of breeding. To check this conclusion, some breeding pairs had their older chick experimentally replaced by a younger chick, thus extending the period of provisioning by both the parents, and their breeding success rate was significantly reduced.

Pin point accuracy of navigation by Manxies was established back in the early 1950s using nesting birds bearing standard BTO rings on their legs. Birds were removed from their burrows and released in Boston, Massachusetts, USA, 5,000kms away; 12 days later they were back in the very same burrows. Even when released from Cambridge University in a hostile unfamiliar environment, the birds soon made their way back to their burrows. Bearing in mind that Manxies only ever access their burrows at night due to their high vulnerabilities of predation by gulls, are the sun, the magnetic fields and olfactory fields aiding such accurate navigation? Any further research had to wait for the advent of the GPS age, for it was only then that after experimental treatment that their resulting navigation could be monitored by satellite tracking. Researchers investigating Cory’s Shearwaters took a number of nesting birds on the Canary Islands, and released them 700kms away in [A] a control group, [B] a group with magnets attached to interfere with detection of the magnetic field, and [C] a group treated with a temporary olfactory blocker and were unable to detect smell [Anosmic]. Most of group [A] and [B] birds were home within a couple of days, but the [C] group birds wandered widely, and seemed to use visual cues on coastlines to navigate their way home. Just go on a pelagic boat trip where they use “chumming” and you will soon see how well shearwaters, indeed all Procellariiformes can detect smell. By altering the perceived daylight time of Manxies nesting down inside their burrows using controlled artificial lighting, and when released away from their burrows and tracked by satellite, the birds showed significant deviation from the expected return routes. This showed that a sun compass is used in combination with other information to guide orientation.

Industrialisation of the world’s oceans and accidental by-catch are major threats to all members of the Procellariiformes; a 14% decline per annum is seriously affecting Mediterranean Shearwater populations – the rarest European seabird. TDRs alone have shown that the shearwaters feed mostly by day, so if the Long line fishing was carried out at night, the unnecessary mortality of these birds could easily be avoided.

## **19<sup>th</sup> February**

### **Of pests, disease and climate change by Dr Karsten Schönrogge**

Karsten studied for his doctorate at Imperial College on the study of the oak gall wasp. Since then he has widened his study to the general interaction between trees and their pests and diseases. He works at the Centre for Ecology and Hydrology at Wallingford carrying out studies on the complex ecosystem of trees and how trees may be affected by climate change.

Trees are foundation species, which means that they are major supporters of biodiversity. Our oak tree is exceptional in this respect as it supports about 2,300 different species of insects, birds, mammals, lichens etc. and 108 species of fungi (including endophytes), and importantly, 326 species of these have no other host. Moreover, another 229 species are highly associated with oak. There are often tales of doom in the news about tree diseases and pests even though there may be adequate control solutions available. An oak tree has to put up with about 450 herbivore species, but their numbers are usually kept in check by parasitoids and fungi.

He then summarised the effects of other well-known tree diseases: Dutch Elm disease; Ash die-back; Emerald ash borer; Sweet Chestnut blight; Oriental Chestnut gall wasp (which produces a distinctive gall on Sweet Chestnut and is notifiable for quarantine [[www.forestresearch.gov.uk](http://www.forestresearch.gov.uk)]) and Chronic Oak

dieback. The latter is a complex picture as oak decline has a number of causes and is now known to have had previous episodes in the UK so it is in part an endemic disease and not a recent import. Climate change may be making oaks more susceptible in part because it encourages earlier bud burst. There does seem to be a correlation between temperature increase and the prevalence of oak tree pests and diseases.

Addressing the challenges is hard because there are interactions both between pest/pathogen and the host but also with the environment and human activity. There are many defence strategies from bio-security (physically keeping pest away), bio-control (deliberately introducing virus, insects or fungi) and interceptions. Tree breeding programmes are able to select for resistance and in the case of Chestnut gall, some genetically modified resistant trees have been produced.

Karsten takes part in the Tree Health and Plant Bio-security Initiative. One project took place in northern France where 250,000 ash, oak, cherry seedlings were planted. The seed came from a wide range of places and was planted in a range of soils all 2m apart. It turned out that seeds of Turkish origin grew stunted. It seems that trees from more southerly latitudes have earlier bud burst and so are damaged by frost in northern latitudes. E.U. groups have developed climate software that will predict detailed future temperature and rainfall. In general the UK is expected to become like the Burgundy region by 2050 and then like southern Italy by 2080; the model can be used to suggest where seed should be collected to grow adapted strains of trees for the future.

A similar study has compared plantations in northern France with Scotland using seed from various countries. Oak trees produce shoots in two bursts. It was found that trees sourced from Italy produced stronger second 'Lammass shoots' which are more prone to powdery mildew; so they were not as healthy as local trees. On the other hand pests like leaf miners tend to preferentially attack locally sourced trees as they can taste the subtle chemical difference between them. The study has demonstrated the complexities for future planning.

The main lesson seems to be that trees adapt naturally; tree species are very long lived compared to other plants. They have a 'plastic' phenotype – they do not create new species but have somehow managed to avoid becoming extinct. It suggests they hold a lot of encoded genetic resilience to climate change because trees, at the seedling stage, are heavily selected for site suitability. This is particularly true for wind pollinated trees like oak and Scots pine because pollen can travel from a very distant tree and produce diverse offspring.

The same story is evident with the endophytic fungi of trees – only a few species of fungi are very problematic and trees generally have some resistance to members of the same genus of fungi; so selection for resilience is a promising technique to counter fungal attack.

Karsten then summarised the complex picture of interactions. Trees are pretty resilient to a single attack by an alien species but a series of attacks by different factors is much more problematic. With modern DNA testing it is much quicker to select suitable resistant individuals to breed from. It is a case of employing many strategies at the same time rather than expecting a single magic bullet solution.

Everyone can help find the best strategies for tree survival. A new computer game called 'Caledon' has been developed that allows forestry workers, scientists and the general public to explore the range of strategies available to help our trees survive into the future.

## **5<sup>th</sup> March**

### **The future of the African Elephant by Vicki Boulton (University of Reading)**

Our speaker was a postgraduate researcher, studying elephants in Kenya. We were introduced to the three species of elephant alive today, and the differences between them - the African Savannah Elephant, or Bush Elephant, the African Forest Elephant, and the Asian Elephant.

The talk concerned the African Savannah Elephant. The male is larger than the female, and they have different lifestyles. The females live in family groups, and the males are more independent – though the males are now known to socialise, and are not as solitary as was once supposed. Females live for up to 70 years, and become sexually mature at 10 years. Males live for around 50 years, become sexually active

in their teenage years, but are not at their most fertile until around 35 years old. Gestation lasts for 22 months, and lactation goes on for 4-6 years. Usually only one calf is born at a time, rarely two, so that the rearing of young is a very heavy investment for the females.

The threats to survival were considered. In the past, the greatest one was the killing of elephants for the sake of their tusks. A century ago there were reckoned to be 100 million elephants in Africa, and there are now thought to be around 375,000. Elephant poaching is still a problem, with poachers now carrying firearms. Governments have banned the sale of ivory, and there have been many campaigns to end the demand for ivory.

An even greater and increasing threat is the rise in human populations. The population of Africa as a whole has doubled since 1982. As a result the natural habitats of elephants have been reduced and fragmented by the creation of fields for agriculture, settlements, roads and railways. Elephants are being forced to live in ever-smaller isolated pockets, which appear to be damaging their health – though the longevity of elephants means that the full effects are probably not yet known. The curtailment of the ability of elephants to roam in order to find food and escape floods and drought makes them less resilient. Climate change may make conditions even harder for them.

Inevitably, there is conflict between elephants (and other large animals) and humans at the boundaries of reserves, with fences being broken down, crops eaten, houses damaged, and people and their livestock killed. Many people's livelihoods depend on subsistence farming, and when they retaliate, more elephant lives are lost.

Another problem for the elephants in protected areas is that their numbers tend to increase, leading to increased competition for food. The trees on which they feed may be destroyed, and woodland becomes grassland.

The solution to the problem in the last century was thought to be culling. Now, this is used only as a last resort. Translocation was another solution, with the sedated animals being transported across the bush. Many of these animals were moved to smaller reserves, which were not suitable and caused more problems. Contraception is now being used, using hormonal injections administered by dart-guns, and vasectomy. The long-term effectiveness of these measures is not yet known.

Our speaker then raised what for her is the big question: "Are we happy to allow elephants to exist only where they are heavily managed?" The conservation debate of "sparing" and "sharing" was explained. "Sparing" involves fenced reserves surrounded by large areas of monoculture with the resulting loss of biodiversity: "sharing" involves working towards the co-existence of elephants and humans. This latter option brings its own problems, and various ways of trying to avoid conflict were explained.

There have been many initiatives to educate young people and adults on the benefits of sharing space with elephants – tourism, the employment of rangers, and the beneficial effects on the ecosystem. There are moves to provide alternative livelihoods and secure incomes in these areas, with less dependence on subsistence farming. The Amboseli Ecosystem Trust in particular is working in this area, as is The Big Life Foundation.

A lively question time followed, and a number of interesting issues were raised. These included controlling the human population, the possibility of creating a huge reserve for elephants, migration corridors, and how well trans-located animals settled in to their new areas. Someone asked if any of them ever managed to find their way back to the area from which they had been taken, and this had been known to happen!

**19<sup>th</sup> March**

**Members' Talks**

**Galápagos Tortoises by Jane Sellwood:**

Last November Jane spent a seven day cruise exploring the famous Galápagos Islands off the Ecuador coast. There are about 17 main islands with lots of islets that make up a total land area half the size of Wales. The giant tortoises were the focus of Jane's talk. They have formed new species/subspecies on the different islands as they have evolved to cope with each island's particular conditions. At one time

hundreds of thousands of them were killed primarily for meat, now the remaining 10 species are heavily protected. For example tourists are not allowed within six feet of them. There are two main groups: [1] the ones with domed carapaces, and [2] the ones with saddle-backed carapaces. The tortoises trample and fertilize vegetation which promotes island eco-systems, as islands without any tortoises have become less species rich. There are major efforts to cull the feral goats, pigs and rats that have damaged the fragile eco-system of some of the islands. A huge conservation effort is also in progress to control the spread of invasive weeds. There are centres that help the endangered tortoises by hatching their eggs and caring for the young tortoises before transferring them back to their original islands. New discoveries are still being made: on the youngest island - Fernandina - a species not seen since 1906 was rediscovered in February 2019.

#### **Verdun Oaks by John Chapman:**

The battle of Verdun, northeast France, was the longest ever battle of the First World War. It raged from February to December 1916 and 750,000 people were killed. The bombing destroyed the surrounding countryside which used to have beautiful oak and chestnut woods. A campaign started immediately after the war to plant acorns to replace the ones that had been lost. To commemorate the event the mayor of Verdun sent boxes of acorns to the UK so that communities could retain a link with the battlefield. Reading received some acorns and managed to grow two trees – one at Prospect Park (now lost) and one in Forbury Gardens. The Woodland Trust is running a project to track down all the original Verdun oaks which are all sessile oaks (*Quercus petraea*). They have found thirty so far. To mark the centenary a group from Purley on Thames went to the battlefields and from a military cemetery near Vimy, to the northwest of Verdun, which is also planted with Verdun oaks, they collected acorns. From these acorns four saplings have now sprouted and the largest will be planted outside the Memorial Hall at Purley.

#### **Berkshire Beetles by John Lerpiniere:**

John gave an account of the many types of beetle he had come across in recent years in this area. He started with long horn beetles including some with striking black and yellow markings. He has seen the wasp beetle which seems to be getting rarer here. He regularly sees Thick-thighed beetles which spend years as larvae that develop within dry plant stems. Minotaur, Dor and Stag beetles have also been spotted. The Stag beetle is now protected and in this area often lives in decaying fence posts; John sees them quite often after they blunder into his moth trap. More colourful are the Rose Chafer and Violet Ground Beetles. A beetle that he initially took as a bright red Cardinal Beetle was in fact the rarer Black-headed Cardinal Beetle (*Pyrochroa coccinea*). He has also seen a range of different ladybird species including Harlequin, Orange and Adonis. John concluded with a weevil – the strange Hazel-leaf Roller (*Apoderus coryli*) that looks a bit like a tiny Black-headed Cardinal Beetle but as its name suggests it rolls up Hazel leaves to form a cradle for its larvae. John had seen them on Hazel at Moor Copse. John persuaded us that there is a wide range of beetles to be seen in the local area.

#### **1<sup>st</sup> October**

#### **Gotland in Midsummer by David Cliffe**

[*The Presidential Address* – see page 41]

#### **15<sup>th</sup> October**

#### **He's singing our song, Dr M's guide to British Grasses**

by Dr Jonathan Mitchley (University of Reading)

Dr. Mitchley is associate professor in Field Botany at the University of Reading and his research interests include grassland biodiversity & conservation in Europe and restoration ecology. He started his talk by giving the audience a quiz on grasses by showing the pictures of about 16 different plants. We had to guess which were really grasses and which belonged to other families. Most were indeed grasses, such as reed and bamboo, but there were also grass-like plants belonging to other families, such as a rush, a sedge, a reedmace and Grass of Parnassus, which belongs to the Saxifrage family and is a dicotyledon, not monocotyledon. The name "grass" is often used as a synonym of "herb".

The scientific name of the Grass Family is Poaceae after the genus *Poa*; πόα or πόα means "fodder" in

Greek. *Poa annua* (Annual Meadow-grass) is a very common weed between paving stones. The family comprises 28 different tribes, about 600 genera and 10,000 species world-wide and is represented in Britain by 8 tribes and 113 native species. Another 60 species have been introduced at different times, varying from long ago to recently. The Poaceae is the 5th largest family of vascular plants after the Orchidaceae, Asteraceae, Fabaceae and Rubiaceae. They are a very important group of plants as natural grasslands cover 20% of the earth and occur in many different habitats. They have important ecological relationships with wildfires (e.g. in savannahs and steppes). Grasses usually survive wildfires because their dense root system stays intact, whereas trees tend to burn down and all their carbon is released as CO<sub>2</sub>. Therefore, grasslands are arguably at least as important as forests as carbon sinks.

Other very important aspects of grasses include their domestication as cereals and staple foods, e.g. wheat, rice, maize and millet, prepared from their seeds. The vegetative parts supply forage for cattle, building material (bamboo, thatch), and fuel. Grasses are also becoming more and more popular as garden plants. There is a beautiful grass garden at Kew, worth a visit at any time of the year. Furthermore, grasses are valuable indicator species for ecological studies as different species grow in different habitats, such as calcareous and acid grasslands, wetlands, salt marshes and woods.

Grasses accumulate silica in their leaves to give them structural support and help deter herbivores from eating them. However, several animal groups have evolved ways of coping with the tough silica-containing leaves as their food, e.g. cows ferment the grass in their stomachs and horses have evolved special high-crowned teeth in which the enamel grows vertically when the top layer is worn down.

Grass flowers are adapted to wind pollination and therefore do not have to be big and colourful to attract pollinators. They can be very small and do not have petals and sepals. There is an ovary with usually two feathery stigmas to catch pollen blowing on the wind, and this is surrounded by three stamens and two bract-like organs, the lemma and palea. Grass flowers are called florets and a group of florets make a spikelet. Grass leaves consist of a sheath which surround the stem and a leaf blade. Between the sheath and the blade is a little tongue-like membrane or a fringe of hairs, called the ligule. The sheath of some grass species can also have two small wing-like extensions called auricles. Grasses can be identified by means of floret and spikelet characters, but also by leaf characters, such as the size and shape of the ligule and presence of auricles and hairs as well as features of the leaf blade and leaf sheath and presence of creeping rhizomes or stolons. A useful book for identifying grasses on the basis of their leaves is Poland & Clement (2009) *The Vegetative Key to the British Flora* (2nd edition due before Christmas). Other good books for the identification of British grasses in general include Hubbard & Hubbard (1984) *Grasses*, 3rd ed., and Cope & Gray (2009) *Grasses of the British Isles*. Flowers of sedges and rushes differ from those of grasses. Those of sedges are also reduced, consisting of an ovary with usually 2 or 3 stigmas, three stamens and a bract called a glume. Those of rushes are more flower-like, with usually 6 tepals, 6 stamens and 3 stigmas.

There are three main types of grass inflorescences, panicles, racemes and spikes. Dr. Mitchley had brought in grasses of all three types and distributed them among the audience. The first example of a panicle we looked at was False Oat-grass which has a very clear dorsal awn on the lemma, characteristic of Oat grasses. Meadow grasses and Yorkshire Fog also have panicles, Perennial Rye-grass and Couch Grass have racemes and the inflorescences of Timothy, Wall Barley and Crested Dog's-tail are spikes. A mystery grass with an umbel-like inflorescence and a ligule consisting of a fringe of hairs appeared to be a species of *Spartina*, a genus of salt-water grasses.

To the audience's delight, at the end of his talk Dr. M. sang the Poaceae song to us, comprising the names of all common British grass genera.

**5<sup>th</sup> November**

### **Hedgehogs by Dr Phil Baker (University of Reading)**

Dr. Baker is a lecturer at the school of Biological Sciences at Reading University. He began with an overview of hedgehogs. There are 17 species worldwide within the group of mammals that includes shrews, moles, solenodons, moonrats and gymnures. They are omnivores and are known to eat rabbit carrion and bird's eggs. They breed from May to September and hibernate from October until April, although this does depend on latitude. They occupy all land habitats except high meadows above the tree-line. They have been deliberately introduced to the Uist islands off the Scottish coast and New Zealand where they have prospered and become serious pests.

As their name suggests they are at home in wide, verdant hedges but equally at home on the edges of woodland so the name 'Edgehog' is more appropriate.

Photographic Competition 2019  
Winning Photographs (for article, see page 40)



**Overall Winner**  
&  
**Winner: Nature in Action**

**Garden Cross Spiders**  
*Araneus diadematus*

male and female spiders in a  
Reading garden

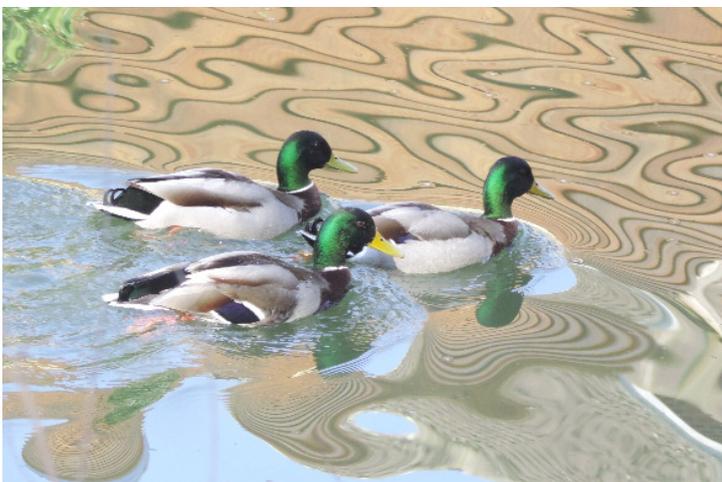
© David Owens



Early Spider Orchid *Ophrys sphegodes* Durlston, nr Swanage  
Winner: **Small is Beautiful** © Jenny Greenham



Scarlet Tiger Moths *Callimorpha dominula* Turville Northend  
Winner: **Colour Prejudice** © Rob Stallard



Mallards *Anas platyrhynchos* on the Kennet & Avon Canal,  
nr Devizes Winner: **Three of a Kind** © Rob Stallard



Emperor Moth *Saturnia pavonia* Caterpillar, Goat Fell, Arran  
Winner: **Pattern Perfect** © David Owens

Photographic Competition 2019: Winning photographs and Runners Up



Bee Orchid *Ophrys apifera*, suburban Earley

Winner: **Floral-Fungal UK & Overseas** © Grahame Hawker



Feral Pigeons *Columba livia*, park near Marble Arch, London

Winner: **Something to make you smile** © Lesley Hawker



Superb Starling *Lamprotornis superbus*, Tanzania

Winner: **Fauna UK & Overseas** © Jenny Greenham



Kestrel *Falco tinnunculus* on a signpost, near Thame

Runner Up: **Something to make you smile** © Fiona Brown



Moss, *Bryum capillare*, Wallingford

Runner Up : **Small is Beautiful** © Laurie Haseler



Sallow *Salix caprea* Blossom, Pamber

Runner Up: **Three of a Kind** © Laurie Haseler

Photographic Competition 2019: Runners Up



Banded Snails *Cepaea* sp., Theale  
joint Runner Up: **Pattern Perfect** © Fiona Brown



Marsh Thistle *Cirsium palustre*, rosette,  
joint Runner Up: **Pattern Perfect** © Lesley Hawker



*Phacelia tanacetifolia*, Chedworth, Gloucestershire  
Runner Up: **Colour Prejudice** © Grahame Hawker



American Kestrel *Falco sparverius*, St Thomas, US Virgin Islands  
Runner Up: **Fauna UK & Overseas** © Jenny Greenham



Bird of Paradise *Strelitzia reginae*, El Faro, Spain  
Runner Up: **Flora UK & Overseas** © Grahame Hawker



Milkwort *Polygala vulgaris*, The Holies, Streatley  
Runner Up: **Flora UK & Overseas** © Rob Stallard



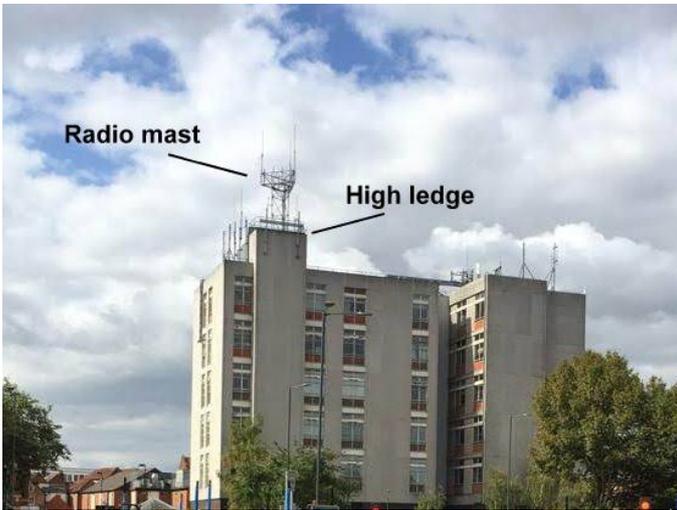
Black 69  
22nd April 08:00 hrs

Peregrine *Falco peregrinus*, the male "Black 69"  
Newbury BT Exchange April 22nd 2019 © Ken White



Broken central tail feather  
Mrs Newbury

Peregrine *Falco peregrinus*, the female "Mrs Newbury"  
Newbury BT Exchange April 22nd 2019 © Ken White



Radio mast  
High ledge

Newbury BT Exchange Peregrine nest site, town centre,  
viewed from the east © Ken White



Norman Hall and Ian Esland sharing the catches of the  
Hardwick Estate mothing night of 1-2nd June © Rob Stallard



Scorched Wing *Plagodis dolabraria*, Hardwick Estate  
mothing night 1st-2nd June 2019 © Rob Stallard



Violet Carpenter Bee *Xylocopa violacea*, with yellow  
pollen on the thorax, Casares, Spain © Fiona Brown

Phil then laid out a major problem – there is very limited knowledge of their distribution and population. As they are small, nocturnal and elusive it is not easy to track or count them. In the 1950s an estimated UK population was 30 million (about one per acre); however this was just extrapolated from one atypical area near Oxford. Present day estimates are around the 1 million mark so this suggests a 90% reduction. The original survey data could however equally well justify an estimate of 1 rather than 30 million; there is no strong evidence for such a rapid decline in the last seventy years. What is needed is a more careful, large-scale study but even up to the 1990s this had not been done. There are now three schemes looking at hedgehog population: a survey of road-kill deaths; volunteer surveys (typically gardens) and as part of Garden Birdwatch (BTO). All three put the UK population at around 1 million, two surveys show a decline but one an increase. The studies are again extrapolating from small samples in a limited range of habitats. The best modern estimate is of about 1.5 million in the 1990s which has reduced to about 0.5 million by the 2010s. The decline is probably due to habitat loss (thin, sparse hedgerows), reduced food supply (agrochemicals, farming practice) and fragmentation. Roads are known to act as barriers to hedgehog movement. Surveying is often limited to suburban or urban areas and so the distribution in rural areas is largely unknown.

Phil and his team have instigated a more rigorous approach in the National Hedgehog survey using footprint tunnels. A simple, triangular tunnel contains food as well as some ink that results in anything feeding there leaving footprints. The survey requires volunteers to check the tunnels for five consecutive days; as there are ten tunnels on each site it is quite an arduous task. So far occupancy is running at only 20% over a range of habitat types. Although the survey does not identify individual hedgehogs, modelling allows the occupancy and total number of hedgehogs to be estimated. The recent availability of trail cameras that activate on nocturnal movement may help build a more comprehensive distribution dataset.

An influence on hedgehogs has been the recent doubling in badger population. Hedgehogs compete with badgers for food and badgers may also kill and eat hedgehogs. Where badgers have been culled hedgehog numbers have increased. However where adequate food is available badgers and hedgehogs have been seen to co-exist.

Phil then turned to how we can help hedgehogs. Urban and suburban gardens are good habitats as they offer food (slugs and snails) as well as cover beneath shrubs and perennials. A recent, small survey showed 40% occupancy of suburban gardens in Reading. Many people put out food for them (as well as badgers) but we should never feed them milk or mealworms. The best thing we can do to help is provide tunnels through to neighbouring gardens. Hedgehogs need to forage over about 12 gardens each night and so hard barriers are a major obstacle to survival. Phil had tried various schemes to get neighbours to agree to install hedgehog holes in fences but there are several issues that have proved very hard to overcome. The scheme needs to reach a significant proportion of the population to have a measurable effect on hedgehog population.

It is surprising how little is known about one of our favourite animals, and we can all help gather data as well as welcome them into our gardens.

**19<sup>th</sup> November**

### **Cockatoos and Kookaburras: The birds of Sydney suburbs by Ailsa Claybourn**

Ailsa never thought that one day she would find herself on the steps of the Sydney Opera House, or face to face with a Superb Fairy Wren, but the imminent arrival of her twin grandchildren saw her travelling to Sydney to take on Nana duties in August 2018. She thought she might be lucky enough to hear a Kookaburra, but hadn't expected to see and hear so many big, bold or beautiful birds in Sydney's suburbs.

She stayed in leafy Putney, by the Parramatta River, and was woken each morning by noisy flocks of Rainbow Lorikeets feeding in the Gumtrees outside; and every night by loudly quarrelsome Fruit Bats, and Ring-tailed Possums (who lived in the roof), feeding in the trees. And tiny twins in the room next door, with a similar agenda.

The birds she saw were mostly large but rarely brown, usually loud and often raucous, most unlike our suburban birds. She was there in the Aussie Spring when there were no males singing melodically to attract a mate. No LBJs flitting around the garden. Just lots of calls, some loud, some bell-like song, the

laughter of Kookaburras and the insistent, angry complaints of Noisy Minerbirds.

The more she saw, heard and identified, the more she wanted to know why they were so different and was grateful to Tim Low's 'Where Song Began' (Penguin, 2014) for answers, including: sugar.

Australia is an ancient continent of depleted soils and extreme climates, and its plants - largely *Eucalyptus* spp. from the Myrtaceae family - have evolved to produce sugars to compensate for the limited food and nutrients available. The surplus sugar is fed to birds as nectar, in return for pollination.

Birds are the dominant pollinators in Australia, having the advantages over insects that they can transfer pollen in cold and wet weather as well as hot and dry conditions, and carry more of it. They eat insects, fruit, seeds etc for other necessary minerals.

Many Australian flowers are big and open, allowing birds easy access to nectar. Unlike berries and seeds, flowers keep producing food, *Banksia* flowers lasting about 20 days. The sugar gives birds extra energy to fuel aggression, and is so abundant and easy to find that birds have time on their...wings... to defend it enthusiastically; hence a lot of the noise I heard. *Eucalyptus* ("Gumtrees") flowers last a week, and many parrots and honeyeaters have bristle-tipped tongues to maximise the collection of nectar.

Australia has 700 species of Gumtree; Koalas, incidentally, eat the leaves of only 17 species, and deforestation is threatening their survival, a situation exacerbated by the current devastating bushfires. The Gumtrees' tough, evergreen, long-lasting leaves are impregnated by the famous *Eucalyptus* oils, and produce the sugars through photosynthesis. Some species have high resistance to fire and can sprout out after burning, but other species have fire-resistant seeds. The bark on new shoots is surprisingly thin, and this makes them vulnerable to sap-sucking insects. And that's good for birds: Psyllid bugs suck the sap, and produce abundant honeydew from the excess sugars as the proteins that they are after are in much lower concentrations. Much of the sugars are made into protective covers, called by the aboriginal name 'lerp'. Lerp is white and crusty, resembling small galls. Eaten by humans for millennia, their huge importance to birds, as Low reports, has only recently become clear. A wide range of birds rely on lerp.

Another important source of sugar is Manna, named after the Bible's miraculous food. 60% sugar, effervescent, and extremely popular amongst Victorian settlers, it was said to taste like wedding cake icing. Produced by plants in response to insect attack, it is not yet known which insect/s trigger its production. Birds love it.

All this sugar has proved bad for birds' health, as it makes their flesh taste sweet. The Red Wattlebird (one of the well-named honeyeaters, Australia's largest bird family) was a favourite, sold by butchers until hunting was banned in the 1960s. Low writes about wattlebird stew, the thick, fatty top layer being scraped off and used as butter.

The commonest honeyeater Ailsa saw was the Noisy Miner. About the size of a chunky Starling, they are inescapable, strident sugar lovers. You can tell you're in Australia when birds hop around you at cafes, ready to swoop in to steal not chips but packets of sugar! Constantly aggressive, even trying to chase one away, they explained the absence of small garden-birds: the Noisy Miners persecute them. Their aggression is a problem in eastern Australia: they dominate small birds (e.g Spotted Pardalotes) which eat both lerp and bugs, thus providing trees with protection. Noisy Miners eat only the lerp, leaving vast numbers of uncontrolled bugs to damage and fatally weaken trees. As the Miners are woodland edge-loving birds, planting wider areas of new woodland should limit their impact. Like several Australian birds, Noisy Miners are co-operative breeders: they may pair-up, but will mate with any bird in their group, sharing feeding and look-out duties. There are always family members available to launch an attack.

Other birds are famously aggressive. There were warnings about nesting Butcherbirds, advising people to wear hats and sunglasses for protection. Australian Magpies defend their nests, but the onus is put on people to avoid upsetting the birds, rather than blaming them for doing what comes naturally. One which blinded a boy wasn't killed but relocated. Australians voted their Magpie 2017 'Bird of the Year'; the Black-throated Finch, highly endangered, and further threatened by new, Government-endorsed coal mines, is 2019's top bird.

By the Parramatta River Ailsa encountered delightful Superb Fairy Wrens, Willie Wagtails, White-faced Herons and Pelicans; at Parramatta Park, home of Australia's first Government House, lakes held Purple

Swamphens and Dusky Moorhens, with Little Corellas and Fruit Bats in the mature trees. Magpie Larks and Masked Lapwings graced parks and gardens, and the ubiquitous Australian White Ibis (aka Bin Chickens) and Bush Turkeys demonstrated their successful adaptation to urban life.

In the rare heathland habitat of Manly Head, she saw Pied Currawong and Silvereyes, and one of the highlights of her trip - an Echidna.

Close to home were several Kookaburras, whose rousing call was a joy to hear; and on her final morning, a flock of Sulphur-crested Cockatoos descended on the garden – charming one into wanting to return....one day.

### **3<sup>rd</sup> December**

#### **Neonicotinoids and bees by Ben Woodcock (C.E.H.)**

Ben had worked at Reading University for six years before moving to the Centre for Ecology and Hydrology in 2008. It is a centre for excellence for agri-environmental schemes and did some of the original work on DDT. He first underlined the importance of bees that pollinate crops worth £430 million in the UK each year. Each pound of honey requires about 9 million visits of bees to flowers. However honey bees only provide 34% of pollination, the remainder is made up by other species of bee and hoverflies. In recent years most species have declined in numbers but a few have increased - especially the Ashy Mining Bee.

Ben's research looks into the factors that have led to this decrease and whether the use of neonicotinoids (NNIs) that are used as powerful insecticides play a part. Factors may include: loss of foraging areas, loss of nesting habitat, fragmentation of habitats, diseases, parasites, climate change, intensive agriculture and agrichemicals (including insecticides).

One study compared the effects of leaving different proportions of field area out of production: 0, 3% and 8%. The results show that over a five year period 8% was best and the increase in crop yield totally offset the reduction in productive area. Leaving strips of land for wildlife is not only good for the environment but will also increase profitability through higher pollination rates.

Neonicotinoids represent 24% of the global pesticide market at \$1.5billion and are used worldwide. They were introduced as an alternative to pyrethroids which were sprayed onto crops. NNIs are used as a systemic insecticide seed coating which removes the need for crop spraying with the attendant risk of drift onto neighbouring crops and hedgerows. Because it is a systemic insecticide the poison is expressed in all parts of the plant including pollen and nectar. Most forms of NNI are active for only about six weeks. By 2010 over 85% of oilseed rape (OSR) was NNI treated while acreage under OSR (1994 to 2012) had doubled. One survey looked at the fifty species of honey bee, bumblebee and solitary bee that feed on OSR. Members of the Bee Wasp and Ant Recording Society (BWARS) helped measure bee populations. The situation is complex because different species of bee vary in their interaction with plants and the environment. The broad picture is that when NNIs came into widespread usage for controlling pollen beetles on OSR there was a decline in bee populations but this does not prove a causal link. To settle the matter large scale studies were needed that could isolate the individual factors involved. One approach is to compare bee species that pollinate rapeseed and those that do not within the same area. The results from such a study gave a 99.9% confidence in a negative correlation between NNI and bee populations. However bees that did not forage on OSR also showed a smaller, but overall decline, so there must be additional factors causing bee populations to diminish.

European scale research was undertaken (funded by the agri-chemical companies but carefully scrutinised for independence) in the UK, Germany and Hungary. The study looked at colony strength and over-wintering success. The bees all came from the same genetic stock to avoid genetic factors. Areas were chosen over 1.5km from other flowering crops. Fields of OSR using two NNIs (Clothianidin and Thiamethoxam) were compared to a control without NNIs. The three countries showed quite different outcomes, in the UK and Hungary use of NNIs did reduce bee populations but not in Germany. This is probably explained by the greater proportion of rapeseed foraging compared to other pollen sources in the UK (50%) compared to Germany (15%). The climate of the UK may explain lower bee numbers in general and the lower numbers make them more susceptible to stress. Clothianidin had much more effect than Thiamethoxam. Following these results NNIs were banned in Europe in 2014 for use on oilseed rape, it can now only be used in greenhouses.

One key finding was that NNIs are resident in the soil longer than was thought. 80% of the insecticide ends up in the soil and early NNI formulations could last for years in the soil (for example Imidacloprid). Because NNIs were also used on wheat, rotating the crop between wheat and rapeseed can still lead to NNI residues affecting bees. In 2015 60% of honey had some NNI residue in it but this proportion is now decreasing.

Ben thinks that some usage of NNIs should be allowed as the only alternatives available to farmers are heavy dosages of pyrethroids to which some insects have developed tolerance. Rapeseed is very hard to grow organically because, like garden cabbages to which it is related, it attracts a wide range of pest species. Modern intensive farming is needed to feed the expected 46% population increase by 2050. Pesticides will have a part to play to achieve this but at lower dosages than are currently used. A typical farm will use 300 different chemicals to control pests and diseases. Increased vigilance and monitoring is required to determine adverse effects of agrichemicals on wildlife and everyone can play their part in helping to keep our wildlife safe.

**17<sup>th</sup> December**

### **Christmas Party**

This year as well as a fine spread of Christmas food there were four quizzes to tackle. Fiona Brown provided a set of 14 tree cones for us to identify; Michael Keith-Lucas won the quiz. Rob Stallard provided a fiendish A-Z identification quiz which John Lerpiniere won after a tie-break with Grahame Hawker. Lesley Hawker produced two quizzes for us; one was a picture quiz on words sounding like 'reading' while the other was a cryptic quiz of names containing 'arch'; two teams tied for the prize. Tricia Marcousé carried on from the Keith-Lucas's fine tradition to produce a fine vintage of mulled wine.

### **Photographic Competition by Laurence Haseler**

The Photographic Competition at the 2019 Christmas Party attracted just over 60 entries, somewhat down on the past few years. The same set of eight categories was used as in 2016, 2017 and 2018: six were restricted to photos taken in the UK, with two generalised to "UK or overseas". There was a good spread of entries with seven to ten pictures in every category.

The winners in each category are tabulated below, followed by a table showing the runners up, or in some cases the joint first. In each case there is an indication of where pictures were taken: it is pleasing to see that several of the pictures were taken on RDNHS outings, or in urban settings.

In most cases, voting presented a difficult choice for members: 23 of the photos got three or more votes for "best in category". In the "best overall picture" category, however two pictures stood out. One was Rob Stallard's three Mallards, notable for its colourful swirly background, which he later revealed to be the reflection of a fence. The other, the eventual winner by a single vote, was David Owens' picture of two Garden Cross spiders (*Araneus diadematus*). We learned subsequently that it was taken just before the tiny male mated with, and was then eaten by the much larger female. Nature in Action indeed.

In one category, three photos had the same number of votes, so David Cliffe, the Society's President arbitrated. Five different photographers appeared in the overall list of category winners, seven if runners-up are taken into account.

Category	No.	Winner	Subject
1. Small is Beautiful: (UK)	7	Jenny Greenham	Early Spider-orchid, Durlston, near Swanage
2. Three of a Kind: (UK)	7	Rob Stallard	3 Mallards, Kennet & Avon Canal
3. Nature in Action: (UK)	7	David Owens	Garden Cross Spiders in a Reading garden
4. Colour Prejudice: (UK)	10	Rob Stallard	Scarlet Tiger moths
5. Pattern Perfect: (UK)	8	David Owens	Emperor Moth caterpillar, Goat Fell, Arran
6. Makes You Smile (UK)	7	Lesley Hawker	Feral Pigeons, near Marble Arch, London
7. Any Flora or Fungus:	10	Grahame Hawker	Bee Orchid, suburban Earley
8 Any Fauna:	8	Jenny Greenham	Superb Starling, Tanazania
<b>Best overall</b>		<b>David Owens</b>	<b>Garden Cross Spiders</b>

Category	Posn.	Runner Up	Subject
1. Small is Beautiful: (UK)	= 2nd	Laurie Haseler	Moss, <i>Bryum capillare</i> , Wallingford
		Grahame Hawker	Common Blue butterfly
2. Three of a Kind: (UK)	2nd	Laurie Haseler	Sallow Blossom, Pamber
4. Colour Prejudice: (UK)	2nd	Grahame Hawker	Phacelia, near Chedworth, Gloucestershire
5. Pattern Perfect: (UK)	= 1st	Fiona Brown	Two-banded Snails, near Theale
		Lesley Hawker	Marsh Thistle rosette
6. Make You Smile: (UK)	2nd	Fiona Brown	Kestrel on sign-post, near Thame
7. Any Flora or Fungus	= 2nd	Grahame Hawker	Strelitzia, El Faro, Spain
		Rob Stallard	Milkwort, The Holies, Streatley
8 Any Fauna	2nd	Jenny Greenham	American Kestrel, St. Thomas, US Virgin Islands

## **PRESIDENTIAL ADDRESS** by **David Cliffe** (from meeting on 1st October)

### **Midsummer on Gotland**

The talk was an account of the visit I made to the island in 2006. The idea came to me at a committee meeting of this Society, when the question of my staying on as President for an extra year was being discussed, and whether or not I should give another Presidential Address. Someone round the table remembered that I'd been to Gotland – I had almost forgotten it! So, back at home, I looked out my notebook, and my photographs, and I remembered how good the trip had been, though it had only lasted a week. Then I started wondering just how much of the archaeology and history to include. The ship burials, rune-stones, churches and the museum at Visby had been among the highlights of the holiday for me, and led to me reading a bit more about the people we call the Vikings, and to watch once more some of the films of Ingmar Bergman, who had grown up on the island, the son of a priest. The talk was mainly about the wild flowers, with mentions of geology, climate, birds and animals, and the impact of humans. I hope I got the balance right for the audience. One of the nicest compliments I received afterwards was from someone who had bought a copy of the book I had taken with me to the talk, and was going to go there herself.

Gotland, “the good land,” is the largest of the Baltic islands. It’s about 90 miles from north to south, but the ends of the island are very thin. From east to west it’s no more than 30 miles, so in size it isn’t much bigger than an English county. It’s about as far north as Aberdeen, and is 50 miles from the coast of Sweden. It’s in the rain shadow of the Scandinavian peninsula, and is a favourite holiday destination for Swedes, but since their holiday season does not start until July, when I was there it was quiet. The island has a population of around 60,000, the only town is Visby, and the main industries are quarrying and the manufacture of cement, Ericsson electronics, tourism, agriculture and forestry. Around a half the land area is forested, mainly with conifers.

The underlying rock is mainly limestone from the Silurian period, with some sandstones in the south. Some localities have exposed limestone which are full of fossils, especially those of crinoids, or sea-lilies. The varying hardness of the limestones give rise to natural rock arches and stacks on parts of the shore. There are some sea cliffs, but the land is fairly flat, with none of it higher than 250 feet above sea level.

There are traces of human activity from the New Stone Age onwards. Dating from the time of the Vikings are burial sites with stones laid on edge in the shape of a longship, and every village seems to have picture-stones and rune-stones, usually in churches and churchyards. The significance of these is explained at the museum in Visby. Some idea of the wealth of this “good land” in the Middle Ages can be gained from the fact there are more than 100 medieval churches still standing on the island. They are maintained by the Swedish government, and are open to visitors during daylight hours. All have impressive towers, and many have curious medieval wall-paintings.



**Stone Longship Viking burial site**

photo © David Cliffe

The wealth that made this church-building possible came from trade across the Baltic. Gotland was an independent state, and Visby was one of the Hanseatic ports. Over time, its wealth and importance declined, and in 1361 the island was invaded by Denmark. Then, in 1645 it was ceded to Sweden following a war between the two countries, and it remains a part of Sweden.

Apart from the churches, many traditional buildings are preserved on the islands – farm buildings, windmills, watermills, and whole villages of fishermen’s wooden huts.

The narrowness of the channels linking the Baltic to the North Sea, and the many rivers flowing into the Baltic means that it becomes less and less saline as you move north. Around Gotland, both marine and freshwater fish swim together, and Mallards swim with Guillemots. There are no tides, and no saltmarshes where you might expect them. There are some cliffs, but much of the coast is bordered by fenny meadows sloping gently to the sea, or by dunes. In at least one area there are two parallel lines of cliffs, one by the sea and the other well inland, marking the rise of the land since the retreat of glacial ice of the last Ice Age advance creating raised beaches.

Plants found by the coast included the Sand Leek, *Allium schoenoprasum*; Sea Pea, *Lathyrus japonicus*; Spotted Cat’s-ear, *Hypochaeris maculata*, and Wild Asparagus, *Asparagus officinalis*. The Dark Red Helleborine, *Epipactis atrorubens*, was among the sand dunes, but not yet in flower.

Birds on and by the sea included Razorbills and Guillemots, which were nesting on the cliffs, Mallard, Shelduck, Eider Duck, Mute Swan, Black-headed Gull, Avocet and Curlew.

Despite agricultural “improvements” there are still extensive areas of fenland sloping down to the coast. Away from the coast there are more acidic wetlands, both with their specialities.

The flush fen of Kallgatenburg was particularly flowery. Oblong-leaved Sundew, *Drosera intermedia*, was not yet in flower, but Alpine Butterwort, *Pinguicula alpina*, most certainly was, as were Bird’s-eye Primrose, *Primula farinosa*; Dragon’s Teeth, *Tetragonolobus maritimus*; Grass of Parnassus, *Parnassia palustris*; Chives, *Allium schoenoprasum*, and Early Marsh Orchid, *Dactylorhiza incarnata*. There were also Cranes feeding here with their chicks.

Mallgard Kallmyr was an inland bog with more acid conditions. Here, a herd of Ross Ponies was feeding – a native breed. Here grew Common Cotton-grass, *Eriophorum angustifolium*; Bog-bean, *Menyanthes trifoliata*; Water Avens, *Geum rivale*; Alpine Bartsia, *Bartsia alpina*; German Asphodel, *Tofieldia calyculata*; Common Butterwort, *Pinguicula vulgaris*; and Bitter Vetchling, *Lathyrus linifolius*.

There were areas which had been covered by temporary shallow pools in winter, which drained quickly in the spring, and had been colonised by an endemic variety of Pasque Flower, *Pulsatilla vulgaris* ssp. *gotlandica*. This was, of course, well past flowering, but the seed-heads showed just how widespread and prolific the flowers must have been.

By contrast, the dry limestone pavements looked similar to parts of the Peak District, Yorkshire Dales, or the Burren in County Clare. On Gotland these areas were called “alvar.” Here I found just one remaining flower of the rare Yellow Pheasant’s-eye, *Adonis vernalis*. The Smooth Rupturewort, *Herniaria glabra*, was found, a member of the Caryophyllaceae, very rare in Britain, and also very small and easily overlooked. Other plants up here were Barberry, *Berberis vulgaris*; Hutchinsia, which is perversely named *Hornungia petraea* in the books; Woad, *Isatis tinctoria*; Sticky catchfly, *Lynchnis viscaria*; Bloody Cranesbill, *Geranium sanguineum*; Kidney Vetch, *Anthyllis vulneraria*; a Cotoneaster, *Cotoneaster niger*; Whitebeam, *Sorbus hybrida* – or was it *Sorbus suecica*?; Biting Stonecrop, *Sedum acre*; Swallow-wort, *Vincetoxicum hircundinaria*; Basil Thyme, *Clinopodium acinos*; Common Globularia, *Globularia vulgaris*; and Mouse-ear Hawkweed, *Hieracium pilosella*.

There were many more colourful species on the “unimproved” bits of grassland. From the following list, it is obvious that some areas of grassland were more acidic than others: Yellow Wood Anemone, *Anemone ranunculoides*; Maiden Pink, *Dianthus deltoides*; Long-stalked Cranesbill, *Geranium columbinum*; Cowberry, *Vaccinium vitis-idaea*; Spiked Speedwell, *Veronica spicata*; Twinflower, *Linnaea borealis*; Viper’s-grass, *Scorzonera humilis*; Frog Orchid, *Coeloglossum viride*; Musk Orchid, *Herminium monorchis*; and Fly Orchid, *Ophrys insectifera*. There were also two endemics – the Gotland Eyebright, *Euphrasia stricta*, var. *suecica*, and a large Cornflower, *Centaurea cheiranthifolia*. The small fern known as Moonwort, *Botrychium lunaria*, was also found among shorter grass.

Hedgehogs and Red Squirrels were seen, but no Golden Eagles, though they were said to breed here. Golden Plovers were seen, and the occasional Buzzard.

Just as there were many examples of old traditional farm buildings which had been preserved, there were also fields where old agricultural practices were being followed, resulting in cornfields with colourful weeds. There were Cornflowers, *Centaurea cyanus*, Common Poppies, *Papaver rhoeas*, and Long-headed Poppies, *Papaver dubium*.

Gotland among botanists is particularly noted for another kind of traditional land management, wood pasture. This was largely abandoned in the 18<sup>th</sup> century as more efficient ways of feeding farm animals in winter were found, involving the clearing of trees to create hay meadows. The old way of doing it was to have trees planted with enough space between them to grow grass and herbs for hay. The trees were kept trimmed back, and the trimmings themselves had their uses. The animals were kept indoors in winter, fed on hay, then turned out onto poorer land in spring and summer, and allowed onto the wood pasture in late summer when the last of the hay had been cut. Here on Gotland, a few of the old wood pastures are traditionally managed, and the results were worth going to see.

The parish pasture by the church at Oja had lots of Bistort, *Persicaria bistorta*. In the shorter grass was the diminutive Adder’s-tongue Fern, *Ophioglossum vulgatum*. Then there was Dropwort, *Filipendula vulgaris*; Moon Carrot, *Seseli libanotis*; Rough Comfrey, *Symphytum asperum*; and among the lilies, the May Lily, *Maianthemum bifolium*; Lily of the Valley, *Convallaria majalis*; the Angular Solomon’s Seal, *Polygonatum odoratum*; and Herb Paris *Paris quadrifolia*, the emblem of our Society. The Orchids were the Military, *Orchis militaris*; and the Burnt-tip, *Orchis ustulata*.

The wood pasture at Liste was equally colourful. There was Silverweed, *Potentilla anserina*, flowering profusely, Fine-leaved Vetch, *Vicia tenuifolia*, an unusual Clover, *Trifolium montanum*; Common Cow-wheat, *Malampyrum pratense*; and among the orchids, White Helleborine, *Cephalanthera damasonium*; Lesser Butterfly Orchid, *Platanthera bifolia*; the short-spurred variety of the Fragrant Orchid, *Gymnadenia conopsea*; Elder-scented Orchid, *Orchis sambucina*; Green-winged Orchid, *Orchis morio*; Alpine Orchid, *Orchis spitzelii*, and the Military Orchid, *Orchis militaris*. The “Military” seemed very much at home on

Gotland, and lined several of the roadside ditches I saw.

These two areas of wood pasture were probably the most flower-rich sites on the whole island. The woodlands on the island are mainly of conifers, and there was a rich ground flora on the edges and in the clearings. The species in flower included Wood Cranesbill, *Geranium sylvaticum*; Snowdrop Windflower, *Anemone sylvestris*; Pyramidal Bugle, *Ajuga pyramidalis*; Stone Bramble, *Rubus saxatilis*; Meadow Violet, *Viola pumila*; Hepatica, *Hepatica nobilis*; Chickweed Wintergreen, *Trientalis eurpaea*; Common Wintergreen, *Pyrola minor*; One-flowered Wintergreen, *Moneses uniflora*; Round-leaved Wintergreen, *Pyrola rotundifolia*; Red Helleborine, *Cephalanthera rubra*; Bird's-nest Orchid, *Neottia nidus-avis*; Lesser Twayblade, *Listera cordata*; Coral-root Orchid, *Corallorhiza trifida*; Early Purple Orchid, *Orchis mascula*; and Lady's Slipper Orchid, *Cypripedium calceolus*.



**Lady's Slipper Orchid**  
*Cypripedium calceolus* © David Cliffe

The Lady's Slipper colony showed flowers at various stages of opening, the finest I had ever seen. Close-up photographs showed the translucent "window" towards the heel of the "slipper," part of the pollination mechanism of this extraordinary plant.

The whole week had given so much to see, to photograph and to think about, that in retrospect, it seems now almost magical.

## LIZARD ORCHID IN READING

by Jan Haseler

A Lizard Orchid *Himantoglossum hircinum* was found on 16 June 2019 on the grass verge next to a busy road in south Reading by the botanist Dr Stephanie Bird, as she walked to a nearby local supermarket on the old A33 Basingstoke Road, opposite the Whitley Wood Recreation Ground at SU717697.



**Lizard Orchid *Himantoglossum hircinum***  
found and photographed © Stephanie Bird

It was partly under a tree, which perhaps is what protected it initially from the Council's mowing contractors. She contacted the local council, who responded very quickly by installing a protective wire cage; it was amazing that it managed to grow to full height without being damaged or vandalised

The Lizard Orchid is a striking plant, with this specimen eventually reaching a height of 60cm. According to *The Flora of Berkshire* (Crawley, 2005), it was last recorded in the county in 1979. Always sparse in its occurrence, in the UK the strongholds are the golflinks in Sandwich Bay, Kent and the Devil's Dyke running through Newmarket racecourse. It is widespread in Europe, from Spain across to the Balkans and northwest Africa, though usually never very common.

The Plantlife website [<https://www.plantlife.org.uk/uk>] comments that Lizard Orchid has had a bumper year, appearing unexpectedly on road verges in southern England where it has never been seen before. Two hot, dry summers in a row have provided ideal conditions for the Lizard Orchid to thrive. The genus name *Himantoglossum* refers to the strap-tongue appearance of the flower, and the specific name *hircinum* describes the billy goat-like odour emanating from the flower spike. In most European countries it is called the billy-goat orchid.



## HISTORIC PEREGRINE BREEDING ATTEMPT IN NEWBURY by Ken & Sarah White

Over the last decade there have been numerous sightings of a Peregrine roosting on the 9-storey high BT Exchange building in the middle of Newbury, most often reported during the winter months (Newbury & District Ornithological Club (NDOC) reports, Berkshire Ornithological Club (BOC) reports, pers. obs.), but interestingly the individual sightings reported over the years have been a mixture of adult female, juvenile and adult males. I have in the past personally given verbal accounts of the Peregrines present on the building to BOC indoor meetings and more recently at RDNHS meetings, plus the identity of the leftovers of their meals consumed on the window ledges. That the BT Exchange building is a tall rectangular building with a clear unobstructed approach from all sides, and with countless window ledges on every side, it is perhaps not surprising that this building caught the eye of wandering Peregrines - once they had overcome their instinctive fear of humans; short days and long dark nights, next to well-lit busy roads, with near-constant traffic emitting huge amounts of warmth from vehicle exhausts and lighting. The phenomenon of birds roosting in urban developments is well known and well documented, e.g. Starlings and Pied Wagtails. So is it not so very surprising to find other species taking advantage of this survival-enhancing activity - of roosting in urban areas. And yet these birds, that along with other raptors were considered vermin and persecuted for hundreds of years by the Victorians & Edwardians, who also wanted them stuffed in glass boxes to adorn their hallways and lounges, and were persecuted yet more during the World Wars of the 20th century for taking out messenger pigeons; and then to had their remaining populations hammered by the modern organophosphate pesticides. How forgiving these amazing birds are. But of course, it is their innate survival skills that are determining their behaviour, not how they might feel towards us - despite our best efforts to exterminate them.

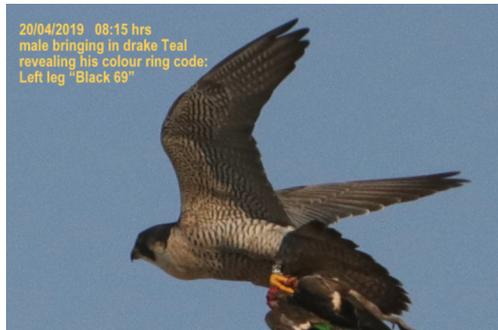
So, imagine our excitement when on the **1st April 2019** Sarah not only saw one but two Peregrines adorning the uppermost girder of the radio mast on top of the BT Exchange building in springtime, not the winter. And she knew that it was a pair due to the significant dimorphism between the two as they perched there only feet apart from one another. Very frustratingly, as I was nursing a bad back at the time, and anxious to recover enough to lead the RDNHS trip to Andalucia, we postponed our next visit to Newbury until we returned. On the morning of **17<sup>th</sup> April**, armed with a camera and telescope, we parked on the upper deck of the Sainsbury's car park for our permitted 2 hours and waited. Though a little distant from the BT building, it turned out to be a very convenient grandstand view. The male was particularly active, and although the light was not good, I did manage to get snapshots of him in flight as well as perched. On returning home I downloaded the photos and checked them out frame by frame. They were not brilliant, but they were good enough to see that as the male went to land on a high girder with feet outstretched.....he had a ring on each tarsus, one ring distinctly larger than the other, which had to be a colour-coded ring. The gauntlet was thrown before me: GET THE CODE.

On the morning of **18<sup>th</sup> April** Mrs Newbury appeared on the **high ledge** on the top of the building from behind – from inside the top roof space of the building, and then Black 69 dropped down to the ledge from the high **girder** of the radio mast (see photos p. 36) and disappeared behind the high ledge....maybe this was a change-over of incubation, and maybe we had we identified where they were nesting. On the morning of the **19<sup>th</sup> April** we saw the pair mating. Soon afterwards he flew off to the east and soon came back with breakfast, and she took off to greet him, but to our dismay they both flew around to the far side of the building and did not reappear before our 2 hours in the car park was up. We noticed that Black 69 would often perch on the highest horizontal **girder** of the radio mast that offers full 360° viewing. The female sometimes joined him there, but usually, if she was visible, she would more often perch on the highest point of the concrete edifice, on the high ledge.

Over the next week, whenever the male was perched his flank feathers always covered his legs; I could see his toes and half a coloured ring. Black with white digits, but only half of one digit. The female perched beautifully, showing the whole tarsi, but sadly no ring on either. Days of frustration went by, hundreds of photos taken: overhead - covered up; landed - facing wrong way; perched on window ledge - wrong side; facing perched on girder - covered up. Then very early on the **20<sup>th</sup> April**, he flew in with breakfast, to our astonishment a drake Teal, at around 330 grammes (11.5 oz), about 50% of his body weight, his legs were fully stretched with the weight, and at last.....the ring-code "**BLACK 69.**" Eureka.

I checked the colour-ring project website [www.cr-birding.org](http://www.cr-birding.org) and came up with a ringing scheme, although the actual numbers, 69, were way past the range stated, and sent a report to the ringer, Graham Roberts. By return I received a delightful reply. Graham stated that yes, he was the ringer of Peregrine "Black 69" when the Peregrine was still a fluffy flightless chick, and that since it had been ringed and fledged from Chichester Cathedral in the summer of 2016, not a single sighting record of Black 69 had

been sent in; one wonders where had he been all that time: answer - learning to be a Peregrine Falcon. Now sporting full adult plumage, Black 69 had clearly read the instruction manual and was doing his duty. Incredibly active, in full ownership of the BT roof top, he was whizzing around the tall BT building, very effectively setting up a 'no-fly-zone'; zero tolerance to any Carrion Crow, Buzzard or Red Kite, no intruder was allowed to get within 60 metres of the building. As we had established a name for the male, Black 69, we felt it appropriate to give the female one as well, and ended up with **Mrs Newbury**; the science indicates a very high level of fidelity, so it seemed a suitable choice.



All photos © Ken White

Male **Peregrine "Black 69"** in action while nesting at the Newbury BT Exchange building: chasing off an intruder Carrion Crow, bringing in a drake Teal for breakfast at the same time as fully revealing his colour ring 'Black 69'

As the weeks rolled by, we found that a 05.00 – 05.30 am arrival to the car park would just about be in time for the start of some action. Invariably Black 69 would be sat on a window ledge; a warm one if it was sunny, or if it was cold & grey or wet he would be tucked tightly into the most sheltered corner that the design of the building could offer. It wouldn't be long before Mrs Newbury became vociferous; she might be on the nest [where we couldn't see her] or she might appear on the high ledge, but from wherever she was, she would verbally stir him. He soon started stretching a wing and leg, a little preen here and there, and then suddenly go. In the most determined fashion, he would dash off at roof top level, most times eastwards, towards Thatcham gravel pits, sometimes the racecourse. The record time to come back with breakfast was 3 minutes, often around 7 minutes and sometimes half an hour. His tactic did not seem to be the high-level soaring and then the breath-taking stoop, it seemed more akin to a sparrowhawk's mad dash and surprise; many of his offerings that he brought back were passerines; a lot of Blackbirds, Starlings, and Jackdaws. The Teal was an exceptional catch for him in size, and his smaller tiercel body size clearly suiting smaller quarry species, thus increasing the range of prey species that the pair collectively can hunt for.

When he was gone for half an hour, he usually came back with bulging crop, quite clearly having had his own breakfast first. Early on in April, Black 69 would fly in and up to the top girder with his offering; Mrs Newbury would join him there and initially it was a dignified bill to bill food exchange. It did not take long though for her to join him on the girder and get a little more assertive with him. She resorted to grabbing the breakfast from his feet with hers, but by May she was flying out to intercept him and tried to grab it from him in level flight, her larger size and astonishing power of flight matching with ease all the ducking and dodging he was doing to avoid her. He always doggedly headed for the top girder, and on one occasion when she lunged at him on the girder he took flight above her, and in a moment of magic dropped his offering which she then caught it in mid-air from below; maybe this is how food-passing evolves between a pair of raptors, the male finding the safest way to hand the booty over.

As the weeks passed everything seemed to be going swimmingly. We think that with Black 69 undertaking his first breeding attempt - as we know he was only 3 years old - the pair started the breeding cycle a few weeks late compared to the national average; 1<sup>st</sup> egg-laying date is mid-March [www.bto.org/birdfacts & Drewitt 2014]. Mating occurs up to 2 days after the last egg is laid, and incubation is 4 weeks. From their behaviour, clearly Mrs Newbury was incubating by late April. Black 69 often took over from incubation after provisioning her with breakfast. After eating, and a little preening – after all she was in a partial moult, common in incubating females - she would drop straight back down to the nest, no exercise or flying off to keep her fitness up. And then no Peregrines would be visible at all, you just would not know that they were there.

By mid May we saw Mrs Newbury take food to the nest area; we did not know if she was she feeding chicks or caching food, or both. This was a problem for us. We could not observe behaviour at the nest, and as a Schedule 1 species, it would be an offence to knowingly disturb them to find out, so we had to just sit back and observe. As we approached the beginning of June, the regular pattern of behaviour that we had observed over the 6 weeks noticeably changed. And so had the weather; endless rain and cold grey days. The clockwork togetherness of the Peregrines seemed to fall apart. He brought in food, and would not give it to her, eating some himself and then hiding it on a window ledge. She became very vociferous with him, he then, it seemed, would fly off for a bit of peace and quiet. She sat on the high ledge watching and waiting for him to return, and often he did not while we were there. One day she surprised us by flying off eastwards out of sight – the first time we saw her more than 50 metres away from the BT building in over 6 weeks, AND she came back to the nest with a feral Pigeon, so we were really confused as to what was going on. As the days passed by, both birds just spent more time roosting on the window ledges, until eventually we found them both slumbering fast asleep on adjacent ledges. Sadly, it was finally clear that the breeding attempt had failed and was over.

On inspection of the rooftop in September with expert Nick Dixon – who has managed the Exeter Peregrines for 25 years - we found one complete unhatched egg, but no sign of any chicks or fledglings; if there had been any that had perished, they may well have been scavenged. The nest area was simply a thick layer of detrital algae and pigeon guano. The internal drainage of the flat roof was blocked with the detritus, and it seems likely that the roof flooded sufficiently to destroy any eggs or chicks during the adverse weather events. The managing company of the BT building kindly agreed to allow a wooden nest box - designed by Nick Dixon - to be installed complete with video camera. The BOC very kindly and generously agreed to finance the materials and camera, but sadly since making the box and having a camera ready to install by early-January, the managing company has not allowed us access to the roof top to install in time for the 2020 nesting season; remember that the 1<sup>st</sup> egg laying date is mid-March. History may well repeat itself and the Peregrines fail again for exactly the same reasons.

Our thanks go to: Dean Cleall and Graham Brown of CBRE for their help over the many months of working together to get a nest box installed; Nick Dixon from Exeter Peregrines for his expertise, help and nestbox advice; Jason Fathers who advised on the technicalities and practicalities of the nestbox design, camera supply & installation; Ed Drewitt from Urban Peregrines who has been analysing the feathers and other remains of the Peregrine diet; Renton Righelato of BOC for presenting and guiding our application for funding from the BOC Conservation Fund, and Grahame Hawker for helping with installation as far as we could progress with it.

Reference: Drewitt, E. (2014) *Urban Peregrines*, Pelagic Publishing



**Black 69** ringed as a chick at Chichester May 17th 2016 by Graham Roberts

## **BOTANY RECORDER'S REPORT 2019 by Renée Grayer**

The plant records below for 2019 have been selected from the plant species seen during the RDNHS field meetings and Wednesday walks, and from those observed by members during wildlife or plant recording trips. The *Flora of Berkshire* by M.J. Crawley (2005) was used for selection of the species, using rarity or decrease in numbers as criteria.

The plants in this report have been arranged according to the alphabetical sequence of the scientific names. The 3rd edition of C.A. Stace's *New Flora of the British Isles* (2010) has still been followed for the scientific and British names of the plant species, although the 4th edition has now been published. Family names are given in brackets after the English name. Nearly all species belong to the class of the Flowering Plants (Angiospermae). However, a few species belong to the gymnosperms (Gymnospermae) or to the ferns and allies (Pteridophyta) and only in these two cases the name of the class is given in addition to the family name. When a species was recorded during a RDNHS trip or walk, often the name of the excursion leader is given after the record, even if another member of the group discovered the plant.

***Achillea ptarmica* - Sneezewort (Asteraceae)**

15/08/19. Averys Pightle, 2 plants. SU435650 (JL)

***Alnus incana* – Grey Alder (Betulaceae)**

01/08/19. Hosehill LNR. SU650694 (JL)

***Anacamptis pyramidalis* - Pyramidal Orchid (Orchidaceae)**

30/06/19. Northend (RDNHS trip). SU73929213 (AP)

06/07/19. Walbury Hill (RDNHS trip). SU370619 (FB)

19/06/19. Hazeley Heath, 3 specimens (RDNHS walk). SU763575 (JC&ID)

16/07/19. Lambourn, Sheepdrove Farm. Patch of 25 flowering plants. SU349817 (JL)

***Anagallis tenella* - Bog Pimpernel (Primulaceae)**

17/07/19. The Chase, Woolton Hill (RDNHS walk). SU446626 (RS)

***Asperula cynanchica* - Squinancywort (Rubiaceae)**

06/07/19. Combe Wood (RDNHS trip). SU353599 (FB)

04/08/19. Winter Hill, Cookham (RDNHS trip). SU888866 (RG)

***Asplenium ceterach* - Rustyback (Pteridophyta/Aspleniaceae)**

22/09/19. Southcote Meadows (RDNHS trip). SU692715 (AL)

***Asplenium ruta-muraria* - Wall-rue (Pteridophyta/Aspleniaceae)**

13/02/19. Tidmarsh (RDNHS walk). SU634745 (JC&ID)

04/08/19. Cookham (RDNHS trip). SU890864 (RG)

***Asplenium viride* - Green Spleenwort (Pteridophyta/Aspleniaceae)**

22/09/19. Southcote Meadows (RDNHS trip). SU692715 (AL)

***Atropa belladonna* - Deadly Nightshade (Solanaceae)**

18/05/19. Lough Down, Streatley (RDNHS trip). SU58918134 (JH)

***Campanula glomerata* - Clustered Bellflower (Campanulaceae)**

18/05/19. Lardon Chase, Streatley (RDNHS trip). SU587809 (JH)

04/08/19. Winter Hill, Cookham (RDNHS trip). SU88848661 (RG)

21/08/19. Lambourn Woodlands (RDNHS walk). SU333768 (DS)

07/09/19. Beacon Hill, Aston Rowant NNR (RDNHS trip). SU728968 (IE)

***Campanula trachelium* - Nettle-leaved Bellflower (Campanulaceae)**

21/08/19. Lambourn Woodlands (RDNHS walk). SU332766 and SU330771 (DS)

***Cardamine amara* - Large Bitter-cress (Brassicaceae)**

29/04/19. Fobney. SU705710 (JL)

08/05/19. Loddon LNR. SU786757 (JL)

***Carex pseudocyperus* - Cyperus Sedge (Cyperaceae)**

17/07/19. The Chase, Woolton Hill (RDNHS walk). SU446628 (RS)

***Cephalanthera damasonium* - White Helleborine (Orchidaceae)**

15/05/19. Flowercroft Wood, Rotherfield Grays, 3 specimens (RDNHS walk). SU725810 (SR)

***Cerastium arvense* - Field Mouse-ear (Caryophyllaceae)**

18/05/19. Lough Down, Streatley (RDNHS trip). SU58878115 (JH)

***Chrysosplenium oppositifolium* - Opposite-leaved Golden-saxifrage (Saxifragaceae)**

13/04/19. Aldermoor, Woodley (RDNHS trip). SU77437392 (RG)

***Cirsium dissectum* - Meadow Thistle (Asteraceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU764580 (JC&ID)

***Cirsium eriophorum* - Woolly Thistle (Asteraceae)**

10/07/19. Streatley, The Holies, 6 plants. SU591798 (JL)

***Cuscuta epithymum* - Dodder (Convolvulaceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU758581 (JC&ID)

30/09/19. Tilehurst, 2 plants on allotment. SU67087489 (JL)

***Cynoglossum officinale* - Hound's-tongue (Boraginaceae)**

01/06/19. Hardwick Estate (RDNHS meeting). SU649780 (NH)

***Cyperus fuscus* - Brown Galingale (Cyperaceae)**

04/08/19. Cock Marsh, Cookham (RDNHS trip). SU88008674 (RG)

***Dactylorhiza maculata* – Heath-spotted Orchid (Orchidaceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU764580 and SU764581 (JC&ID)

***Drosera intermedia* - Oblong-leaved Sundew (Droseraceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU764576 (JC&ID)

***Eleocharis acicularis* - Needle Spike-rush (Cyperaceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU764576 (JC&ID)

***Eleogiton fluitans* - Floating Club-rush (Cyperaceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU756579 (JC&ID)

***Epipactis helleborine* – Broad-leaved Helleborine (Orchidaceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU756579 (JC&ID)

20/07/19. Paices Wood, one specimen, in flower. SU585640 (JL)

18/08/19. Paices Wood, 3 plants with fat seed pods. SU583636 (JL)

***Epipactis purpurata* - Violet Helleborine (Orchidaceae)**

07/09/19. Beacon Hill, Aston Rowant NNR, 3 specimens (RDNHS trip). SU729970 (IE)

***Euphorbia exigua* - Dwarf Spurge (Euphorbiaceae)**

18/09/19. Hannington (RDNHS walk). SU521567 (JW)

***Galega officinalis* - Goat's-rue (Fabaceae)**

19/06/19. Hazeley Heath (RDNHS walk). SU761575 (JC&ID)

***Genista tinctoria* - Dyer's Greenweed (Fabaceae)**

20/06/19. Averys Pightle. SU435650 (JL)

***Gentianella amarella* - Autumn Gentian (Gentianaceae)**

21/08/19. Lambourn Woodlands (RDNHS walk). SU331771 (DS)

07/09/19. Beacon Hill, Aston Rowant NNR (RDNHS trip). SU728968 (IE)

***Gymnadenia conopsea* - Chalk Fragrant-orchid (Orchidaceae)**

30/06/19. Northend (RDNHS trip). SU739920 (AP)

06/07/19. Walbury Hill (RDNHS trip). SU370619 (FB)

***Helleborus viridus* - Green Hellebore (Ranunculaceae)**

15/05/19. Flowercroft Wood, Rotherfield Grays (RDNHS walk). SU725811 (SR)

***Herminium monorchis* - Musk Orchid (Orchidaceae)**

06/07/19. Ham Hill (RDNHS trip). SU333617 (FB)

***Himantoglossum hircinum* - Lizard Orchid (Orchidaceae)**

16/06/19. Basingstoke Road, Reading. 1 specimen, SU71786972 (SB)

***Hottonia palustris* - Water-violet (Primulaceae)**

04/08/19. Cock Marsh, Cookham (RDNHS trip). SU88168678 (RG)

***Hyoscyamus niger* - Henbane (Solanaceae)**

03/09/19. Waltham Place, a few plants. SU85547707 (JL)

***Hypericum humifusum* - Trailing St John's-wort (Hypericaceae)**

17/07/19. The Chase, Woolton Hill (RDNHS walk). SU442628 (RS)

***Iberis amara* - Wild Candytuft (Brassicaceae)**

07/09/19. Beacon Hill, Aston Rowant NNR (RDNHS trip). SU728968 (IE)

***Juniperus communis* - Juniper (Gymnospermae/Cupressaceae)**

07/09/19. Beacon Hill, Aston Rowant NNR (RDNHS trip). SU725971 (IE)

***Lathraea clandestina* - Purple Toothwort (Orobanchaceae)**

06/04/19. Prospect Park, large patches. SU690726 (JL)

17/04/19. Brimpton (RDNHS walk). SU558633 (RS)

17/04/19. Hyde End (RDNHS walk). SU553633 (RS)

***Lathyrus latifolius* - Broad-leaved Everlasting-pea (Fabaceae)**

08/07/19. Fobney, 1 specimen. SU681711 (JL)

***Lathyrus nissolia* - Grass Vetchling (Fabaceae)**

25/05/19. Moor Copse, 5-Acre Field. SU638740 (JL)

***Leucojum aestivum* - Summer Snowflake (Amaryllidaceae)**

29/04/19. Hosehill LNR, 28 specimens. SU650694 (JL)

***Linaria repens* - Pale Toadflax (Veronicaceae)**

04/08/19. Cookham (RDNHS trip). SU890864 (RG)

***Montia fontana* - Blinks (Montiaceae)**

17/04/19. Hyde End (RDNHS walk). SU552641 (RS)

***Myosotis secunda* - Creeping Forget-me-not (Boraginaceae)**

17/07/19. The Chase, Woolton Hill (RDNHS walk). SU445628 (RS)

***Narcissus pseudonarcissus* - Wild Daffodil (Amaryllidaceae)**

13/03/19. Pamber Forest, hundreds of specimens (RDNHS walk). SU610601 (JH)

***Neottia ovata* - Common Twayblade (Orchidaceae)**

17/04/19. Brimpton (RDNHS walk). SU557632 (RS)

15/05/19. Flowercroft Wood, Rotherfield Greys (RDNHS walk). SU725810 (SR)

30/06/19. Northend (RDNHS trip). SU73919215 (AP)

***Oenanthe fistulosa* - Tubular Water-dropwort (Apiaceae)**

04/08/19. Cock Marsh, Cookham (RDNHS trip). SU88358678 (RG)

***Ophrys apifera* - Bee Orchid (Orchidaceae)**

30/06/19. Northend (RDNHS trip). SU739920 (AP)

19/06/19. Hazeley Heath, 3 specimens (RDNHS walk). SU763575 (JC&ID)

24/06/19. Paices Wood, 3 specimens. SU586636 (JL)

***Orchis mascula* - Early-purple Orchid (Orchidaceae)**

28/04/19. Beenham, Greyfield Wood, 18 flower spikes. SU579691 (JL)

01/05/19. Bradfield, Long Copse, 52 specimens. SU580728 (JL)

22/05/19. Burghfield Common, Omers Gulley. SU646673 (JL)

***Orchis ustulata* - Burnt Orchid (Orchidaceae)**

06/07/19. Ham Hill (RDNHS trip). SU333617 (FB)

***Orobanche elatior* - Knapweed Broomrape (Orobanchaceae)**

06/07/19. Walbury Hill (RDNHS trip). SU370619 (FB)

***Papaver argemone* - Prickly Poppy (Papaveraceae)**

18/09/19. Hannington, 1 specimen (RDNHS walk). SU530553 (JW)

***Sanicula europaea* - Sanicle (Apiaceae)**

18/05/19. Paices Wood. SU586640 (JL)

22/05/19. Burghfield Common, Omers Gully.  
SU646673 (JL)

18/08/19. Paices Wood, patch of plants. SU588638  
(JL)

***Saxifraga granulata* - Meadow Saxifrage  
(Saxifragaceae)**

17/04/19. Brimpton churchyard (RDNHS walk).  
SU557646 (RS)

18/05/19. Lough Down, Streatley (RDNHS trip).  
SU58758119 (JH)

***Securigera varia* - Crown Vetch (Fabaceae)**

17/07/19. Great Pen Wood, Woolton Hill (RDNHS  
walk). SU446621 (RS)

***Setaria pumila* - Yellow Bristle-grass (Poaceae)**

09/10/19. Silchester (RDNHS walk). SU6482861467  
(RS, JW)

***Silybum marianum* - Milk Thistle (Asteraceae)**

12/07/19. Combe, patch of five in field margin.  
SU385594 (JL)

***Sorbus torminalis* - Wild Service-tree (Rosaceae)**

13/03/19. Pamber Forest, two specimens (RDNHS  
walk). SU615608 (JH)

15/05/19. Flowercroft Wood, Rotherfield Greys  
(RDNHS walk). SU725811 (SR)

***Spergula arvensis* - Corn Spurrey  
(Caryophyllaceae)**

17/04/19. Brimpton (RDNHS walk). SU553644 (RS)

***Tilia cordata* - Small-leaved Lime (Malvaceae)**

16/11/19. Hollyshaw Wood, Exlade Street, good  
sized tree. SU660816 (JW)

***Veronica catenata* - Pink Water-speedwell  
(Veronicaceae)**

04/08/19. Cock Marsh, Cookham (RDNHS trip).  
SU88008674 & SU88608673 (RG)

***Veronica scutellata* - Marsh Speedwell  
(Veronicaceae)**

04/08/19. Cock Marsh, Cookham (RDNHS trip).  
SU88358678 (RG)

***Viscum album* - Mistletoe (Santalaceae)**

06/11/19. Maidenhead Thicket (RDNHS walk).  
SU852811 (SW)

## **BOTANY REPORT CONTRIBUTORS**

Thanks are due to the following members and their friends for their submissions:

**AL** Adrian Lawson; **AP** Alan Parfitt; **DS** Des Sussex; **FB** Fiona Brown; **ID** Ian Duddle; **IE** Ian Esland;  
**JC** Julia Cooper; **JH** Jan Haseler; **JL** John Lerpiniere; **JW** Jerry Welsh; **NH** Norman Hall; **RG** Renée Grayer;  
**RS** Rob Stallard; **SB** Stephanie Bird; **SR** Sally Rankin; **SW** Sue White

## LEPIDOPTERA RECORDER'S REPORT 2019 by Norman Hall

2019 was an interesting year, but not exceptional. Highlights included the Society's mothing evening at the Hardwick Estate (between Whitchurch-on-Thames and Mapledurham), where we were guests of Iain Tolhurst at his organic gardens, and trapping events at Snelsmore Common, where one *Mythimna vitellina* (Delicate), a migrant, was recorded new for the site, one *Agrochola haematidea* (Southern Chestnut) for the second time, and 20+ examples of *Catocala fraxini* (known as either the Clifden Nonpareil or the Blue Underwing) including 5 on a National Moth Night when *fraxini* was the 'target species'. In my own garden, I noted a sudden increase in numbers of *Cydalima perspectalis* (Box-tree moth) compared with last year, two more *Calophasia lunula* (Toadflax Brocade) and one more *Dryobota labecula* (Oak Rustic). These are species increasing in range and numbers, where I had waited for them to appear in my garden rather than to look for them elsewhere where they were known to have occurred.

There were nine dates in 2019 when the temperature reached 28 °C, about 82°F, in Reading. They were as follows (with the next midnight temperature in brackets):

29 June: 33° (19°), 22 July 28° (16°), 23 July 32° (25°), 24 July 30° (18°), 25 July 37° (21°), 24 Aug 29° (15°), 25 Aug 32° (15°), 26 Aug 31° (16°), 27 Aug 30° (20°).

These data were obtained from a website called 'time and date' which I have used regularly to obtain data on sunrise and sunset and moon data, without realising that it was a source of past weather data for any significant place such as Reading. It gives the maximum and minimum temperatures in every six-hour period (00.00 to 06.00, 06.00 to 12.00, 12.00 to 18.00, 18.00 to 2400) going back to 2009. My interest in this lies in the fact that for a good moth trapping night, I know that the temperature should not only be high in the day, but also must remain high throughout the night. Hence, the data will help me try to analyse how climate change is affecting trapping conditions. Anyone wishing to see how the temperature data is presented in 'time and date' could follow the following link:

<https://www.timeanddate.com/weather/uk/reading/historic?month=6&year=2019>

If they then scroll left to the data for June 1<sup>st</sup>, the date of the RDNHS mothing event at the Hardwick Estate, they will see that the temperature reached 25° in the day (not bad for early June), was still up at 17° at midnight (as high as it was following many of the hotter days later in the year) and was still 13° at 06.00. This partially explains why we had such a successful mothing night so early in the season, though the excellence and biodiversity of the habitat was unquestionably the main factor.

The systematic list that follows includes records from up to about 20 miles from Reading, almost all from Vice County 22 (Old Berkshire S or W of the Thames) & VC23 (Oxfordshire N or E of the Thames), though a few are from Kings Barn Farm near Medmenham, just within VC24 Buckinghamshire.

Selected records are listed for all butterflies and most moths not considered common in the standard field guides, with just a few for common moths. Records from 'Hardwick' are mostly from Tolhurst Organic, and the individual field names used by the tenant farmers are given if they were reported from one field only.

Where there are no lines prefixed with 'Earliest:' and 'Latest:' in a species report, it can be assumed that all records received have been included.

**BAP** indicates that there is a Biodiversity Action Plan to promote the conservation of the species.

**RDB** indicates that a species has been listed in a Red Data Book as an endangered species.

## ADELIDAE

### 07.002 *Nemophora metallica*, Notable B

09/07/19, 8 together, Watts Bank SU330772 [JL]

20 & 21/08/19, Lambourn Woodlands, Cleeve Bank SU332765 & Cleeve Hill SU334765 [JL]

## TINEIDAE

### 12.012 *Triaxomera parasitella*, Local

02/06/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

## GRACILLARIIDAE

### 15.012 *Caloptilia semifascia*, Local

17/04/19 & 03/10/19, Harcourt Drive, Earley SU735709 [NH]. The summer & autumn generation were once mistakenly thought to be separate species. Both of my records are of the autumn generation, which overwinters as an adult.

## YPONOMEUTIDAE

### 16.010 *Zelleria hepariella*, Local

22/04/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

## YPSOLOPHIDAE

### 17.001 *Ypsolopha mucronella*, Local

06/03/19, Hungerford Newtown, Little Hidden Farm SU348713, disturbed from Blackthorn. [JL]

23/05/19, Hampstead Norreys SU5375 [JL]

## OECOPHORIDAE

### 28.008 *Metalampra italica*, Migrant

31/07/19, Westwood Road, Tilehurst SU666742, new species for garden. [JH]

Spreading. Occasionally found in both gardens and woodland. [NH]

### 28.024 *Tachystola acroxantha*, Local

Seen on 14 dates in my garden from 30/03/19 to 08/09/19. [NH]

24/08/19, Westwood Road, Tilehurst SU666742, 2nd record for garden. [JH]

An invasive species of Australian origin. I don't understand why others see so few. [NH]

### 28.025 *Pleurota bicostella*, Local

23/06/19, Broadmoor Bottom SU856628 [JL]

## DEPRESSARIIDAE

### 32.002 *Semioscopis steinkellneriana*, Local

18/04/19, Greenham Common, Estovers SU499652 [NH]

22, 26 & 30/04/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

Affectionately known as 'Stinker'. [NH]

### 32.029 *Agonopterix umbellana*, Local

18/04/19, Greenham Common, Estovers SU499652 [NH]

## MOMPHIDAE

### 40.004 *Mompha propinquella*, Local

31/07/19, Westwood Road, Tilehurst SU666742 [JH]

## PTEROPHORIDAE

### 45.011 *Amblyptilia punctidactyla*, Brindled Plume, Local

20/03/19, Red Cow, Cholsey SU592868 [AR]

## TORTRICIDAE

### 49.087 *Acleris literana*, Local

20/02/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

23/02/19 & 15/04/19, Harcourt Drive, Earley SU735709 [NH]

### 49.093 *Phtheochroa schreibersiana*, Red Data Book

01/06/19, 1, Hardwick (Upper Knight, VC23) SU649776 [NH[RD]]

Now confirmed by dissection. [NH]

### 49.275 *Eucosma conterminana*, Local

09/06/19, Sheepdrove Farm SU358817 [JL]

Record awaiting review. [JL]

**49.309 *Dichrorampha plumbana*, Local**

23/05/19, Hampstead Norreys SU5375 [JL]

**49.363 *Pammene argyrana*, Local**

22/04/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

**SESIIDAE**

**52.003 *Sesia bembeciformis*, Lunar Hornet Moth, Common**

04/07/19, Decoy Heath SU611633, landed briefly. Clear thick orange venation and size. [JL]

**52.012 *Synanthedon vespiformis*, Yellow-legged Clearwing, Notable B**

20/06/19, Averys Pightle SU435650 [JL]

**LIMACODIDAE**

**53.001 *Apoda limacodes*, Festoon, Notable B**

25/06/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

05/07/19, Miram's Copse, Bradfield SU578731 [PB]

18/07/19, Padworth Common SU618647 [NH[PB]]

**HESPERIIDAE**

**57.001 *Erynnis tages*, Dingy Skipper, BAP species**

Earliest & High Count: 11/05/19, 17, Aston Upthorpe Downs, Juniper Valley SU544832 [JH]

Latest: 01/06/19, Red Cow, Cholsey SU592868 [AR]

**57.002 *Pyrgus malvae*, Grizzled Skipper, BAP species**

Earliest: 18/04/19, 3, Aston Upthorpe Downs, Juniper Valley SU544832 [JH]

Latest: 21/05/19, 20, Paices Wood, top park SU586636 [JL]

**57.005 *Thymelicus lineola*, Essex Skipper,**

Earliest: 05/07/19, Westwood Road, Tilehurst SU666742 [JH]

High Count: 16/07/19, 21, Sheepdrove Farm SU358817 [JL]

Penultimate: 09/08/19, Red Cow, Cholsey SU592868 [AR]

Latest: 24/08/19, Leckhampstead SU430747 [JL]

**57.006 *Thymelicus sylvestris*, Small Skipper,**

Earliest: 17/06/19, Red Cow, Cholsey SU592868 [AR]

Latest: 31/07/19, Red Cow, Cholsey SU592868 [AR]

**57.008 *Hesperia comma*, Silver-spotted Skipper,**

Only record: 07/09/19, 4, Aston Rowant NNR, Beacon Hill SU727969 [JH[RDNHS]]

**57.009 *Ochlodes sylvanus*, Large Skipper,**

Earliest: 02/06/19, Sheepdrove Farm, car park chalk bank SU357818 [JL]

High Count: 03/07/19, 15, Bradfield, Mirams Copse SU577730 [JL]

Latest: 04/08/19, Broadmoor Bottom SU856628 [JL]

**PIERIDAE**

**58.003 *Anthocharis cardamines*, Orange-tip,**

Earliest: 28/03/19, Arborfield, The Coombes SU772677 [JH]

Latest: 30/05/19, Red Cow, Cholsey SU592868 [AR]

**58.006 *Pieris brassicae*, Large White,**

Earliest: 11/04/19, Red Cow, Cholsey SU592868 [AR]

Latest: 19/09/19, Fobney Island SU699711 [JL]

Latest: 19/09/19, Red Cow, Cholsey SU592868 [AR]

**58.007 *Pieris rapae*, Small White,**

Earliest: 29/03/19, Red Cow, Cholsey SU592868 [AR]

High Count: 20/08/19, 53, Aston Upthorpe Downs, Juniper Valley SU544832 [JH]

Latest: 25/09/19, Red Cow, Cholsey SU592868 [AR] & Sheepdrove Farm, herb garden SU358818 [JL]

**58.008 *Pieris napi*, Green-veined White,**

Earliest: 30/03/19, Red Cow, Cholsey SU592868 [AR]

Latest: 01/10/19, Red Cow, Cholsey SU592868 [AR]

**58.013 *Gonepteryx rhamni*, Brimstone,**

Earliest: 20/02/19, Wargrave, Orchid Field SU787782, Female. [JL]

High Count: 11/05/19, 17, Aston Upthorpe Downs, Juniper Valley SU544832 [JH]

Latest: 20/09/19, Red Cow, Cholsey SU592868 [AR]

**NYMPHALIDAE**

**59.003 *Pararge aegeria*, Speckled Wood,**

Earliest: 01/04/19, Westwood Road, Tilehurst SU666742 [JH]

Latest: 28/09/19, Red Cow, Cholsey

SU592868 [AR]

**59.005 *Coenonympha pamphilus*, Small Heath, BAP species**

Earliest: 07/05/19, Paices Wood SU585637 [JL]

Latest & Highest Count: 23/09/19, 11, Aston Upton Downs, Juniper Valley SU544832 [JH]

**59.009 *Aphantopus hyperantus*, Ringlet,**

Earliest: 09/06/19, Sheepdrove Farm SU358817 [JL]

High Counts: 03/07/19, 100, Bradfield, Mirams Copse SU577730 [JL]; 6/07/19, 50, Clayfield Copse (VC23) SU727770 [JL]; 07/07/19, 49, Sheepdrove Farm SU358817 [JL]; 12/07/19, 44, Averys Pightle SU435650 [JL]

Latest: 29/07/19, Thatcher's Ford SU743636 [JH]

**59.010 *Maniola jurtina*, Meadow Brown,**

Earliest: 02/06/19, 9, Sheepdrove Farm SU359821 [JL]

High Counts: 27/06/19, 129, Beech Hill, Elm Tree Inn SU695641 [JH]; 28/06/19, 46, Sheepdrove Farm SU358817 [JL]; 06/07/19, 50, Clayfield Copse (VC23) SU727770 [JL]; 12/07/19, 105, Averys Pightle SU435650 [JL]

Latest: 23/09/19, 11, Aston Upton Downs, Juniper Valley SU544832 [JH]

**59.011 *Pyronia tithonus*, Gatekeeper,**

Earliest: 06/07/19, Fobney, south shore SU698711 [JL]

Latest: 24/08/19, North Heath SU457742 [JL]

**59.012 *Melanargia galathea*, Marbled White,**

Earliest: 17/06/19, Red Cow, Cholsey SU592868 [AR]

High Count: 06/07/19, 40, Clayfield Copse (VC23) SU727770 [JL]

Latest: 12/08/19, Sheepdrove Farm SU358817 [JL,R.Barker]

**59.013 *Hipparchia semele*, Grayling, BAP species**

High Count: 18/07/19, 67, Mortimer, Hundred Acre Piece, Grayling bank SU633651, First sighting. [JH]

24/07/19, 1, Decoy Heath SU610634 [JL]

29/07/19, 1, Broadmoor Bottom SU856629 [JL]

13/08/19, 6, Mortimer, Holden's Firs SU646655 [JH]

Highest Count: 105, 17/08/19, Mortimer, Hundred Acre Piece, Grayling bank SU633651 [JH]

**59.017 *Argynnis paphia*, Silver-washed Fritillary,**

Earliest: 27/06/19, Beech Hill, Elm Tree Inn SU695641 [JH]

Latest: 17/08/19, Bradfield, Mirams Copse SU577730, one a *valezina* form. [JL] & Mortimer, Hundred Acre Piece SU639651 [JH]

Also seen at Compton [JL], Bradfield, Mirams Copse [JL], Combe Wood [JH[RDNHS]], Averys Pightle [JL], Great Pen Wood, Woolton Hill [JH[RDNHS]], Pangbourne, Great Bear SU6174 [JL], Decoy Heath [JL] & Hosehill LNR, Butterfly Bank. [JL]

**59.019 *Argynnis aglaja*, Dark Green Fritillary,**

30/06/19, Streatley, Child Beale SU616788 [JL]

06/07/19, Combe Wood SU354596, Leader: Fiona Brown. [JH[RDNHS]]

09/07/19, Watts Bank SU331771 [JL]

16/07/19, Aston Upton Downs, Juniper Valley SU544832, Last sighting [JH]

**59.021 *Limenitis camilla*, White Admiral, BAP species**

27/06/19, Beech Hill (East) SU707648, First sighting. [JH]

04/07/19, Sole Common SU412707 [JL]

12/07/19, East Woodhay SU4061 [JL]

20/07/19, Paices Wood SU584638 [JL]

20/07/19, Wokefield Common SU6565 [JL]

**59.023 *Vanessa atalanta*, Red Admiral,**

Earliest: 21/02/19, Red Cow, Cholsey SU592868 [AR]

Penult: 06/10/19, Harcourt Drive, Earley SU735711 [RG]

Latest: 04/11/19, Red Cow, Cholsey SU592868 [AR]

**59.024 *Vanessa cardui*, Painted Lady,**

Earliest: 06/06/19, Hosehill LNR SU649698 [JL]

Latest: 19/09/19, Westwood Road, Tilehurst SU666742 [JH]

86 other records submitted between these dates! [NH]

**59.026 *Aglais io*, Peacock,**

Earliest: 23/02/19, Red Cow, Cholsey SU592868 [AR]

Penult: 24/08/19, Boxford, fen SU429717 [JL]

Latest: 19/10/19, Red Cow, Cholsey SU592868 [AR]

**59.027 *Aglais urticae*, Small Tortoiseshell,**

Earliest: 24/02/19, Red Cow, Cholsey SU592868 [AR]

Latest 25/09/19, Sheepdrove Farm, herb garden SU358818 [JL]

**59.031 *Polygonia c-album*, Comma,**

Earliest: 21/02/19, Red Cow, Cholsey SU592868 [AR]

Latest: 25/09/19, Sheepdrove Farm SU358817 & Nut wood SU360820 [JL]

**RIODINIDAE**

**60.001 *Hamearis lucina*, Duke of Burgundy, BAP species**

Only 2 records: 12/05/19 & 19/05/19, Site info. sensitive SU38 [JL]

**LYCAENIDAE**

**61.001 *Lycaena phlaeas*, Small Copper,**

Earliest: 21/04/19, Red Cow, Cholsey SU592868 [AR]

Latest: 29/09/19, Moor Copse SU634737 [JL]

**61.004 *Favonius quercus*, Purple Hairstreak,**

2 records only: 12/07/19, Averys Pightle SU435650 [JL] & 23/07/19, Leverton SU3370 [JL]

**61.005 *Callophrys rubi*, Green Hairstreak,**

Earliest: 18/04/19, Lardon Chase SU588809 [JH]

High Count: 21/05/19, 10, Paices Wood, top park SU586636 [JL]

Latest: 03/06/19, Woolley Firs SU853792 [JL]

**61.010 *Cupido minimus*, Small Blue, BAP species**

Earliest: 19/05/19, Farncombe, Lodge Down SU300777 [JL]

High Counts: 19/05/19, 68 Lambourn, Crog Hill SU3283 [JL]

High Counts: 09/06/19, ca 100, Lambourn, Crog Hill, The Holloway SU3283 [JL]

Latest 16/07/19, Sheepdrove Farm, car park chalk bank SU358819, First of second brood. [JL]

**61.012 *Celastrina argiolus*, Holly Blue,**

Earliest: 23/03/19, Tilehurst, back garden SU665742 [JL]

Latest: 26/08/19, Red Cow, Cholsey SU592868 [AR]

**61.014 *Plebejus argus*, Silver-studded Blue, BAP species**

19/06/19, 6, Hazeley Heath SU753582 [JH[RDNHS]]

11/07/19, 1 male, Broadmoor Bottom SU856628, Very late but the only one so far at this site. [JL]

21/07/19, 29/7/19 & 4/8/19, 1, Broadmoor Bottom SU856628. Probably the same individual seen on 11/7/19, getting progressively more worn. [JL]

**61.015 *Aricia agestis*, Brown Argus,**

Earliest: 06/05/19, Red Cow, Cholsey SU592868 [AR]

Latest: 29/09/19, Red Cow, Cholsey SU592868 [AR]

**61.018 *Polyommatus icarus*, Common Blue,**

Earliest: 12/05/19, Westwood Road, Tilehurst SU666742 [JH]

Latest: 23/09/19, Lardon Chase SU588809 [JH]

**61.019 *Polyommatus bellargus*, Adonis Blue**

Two records only: 24/08/19, 8, Lardon Chase SU588809 [JH]; 07/09/19, 1, Aston Rowant NNR, Beacon Hill SU727969 [JH[RDNHS]]

**61.020 *Polyommatus coridon*, Chalk Hill Blue,**

10/07/19, Streatley, The Holies SU590800 [JL]

10/07/19, The Holies SU59297979 [JL]

High Count: 15/07/19, 53, Lardon Chase SU588809 [JH]

16/07/19, Aston Upthorpe Downs SSSI SU546838 [JH]

24/08/19, Lardon Chase SU588809, Last sighting. [JH]

**PYRALIDAE**

**62.021 *Oncocera semirubella*, Notable B**

Only 4 records this year. [NMH]

04/07/19, Greenham Common, Estovers SU499652 [NH]

10/07/19, The Holies SU590800 [JL]

24/07/19, Decoy Heath SU611634 [JL]

24/07/19, Westwood Road, Tilehurst SU666742, 2nd record for garden. [JH]

**62.022 *Pempelia genistella*, Notable B**

04/07/19, Greenham Common, Estovers SU499652 [NH]

**62.032 *Nephopterix angustella*, Local**

01/06/19, 1, Hardwick (Lower Bec, VC23) SU650780 [NH]

**62.038 *Acrobasis consociella*, Local**

07/07/19, Harcourt Drive, Earley SU735709 [NH]

18/07/19, Padworth Common SU618647 [NH]

**62.047 *Assara terebrella*, Notable A**

01/06/19, 1, Hardwick (Lower Bec, VC23) SU650780 [NH]

This species is spreading.

**62.072 *Pyralis farinalis*, Meal Moth, Common**

17/07/19, Harcourt Drive, Earley SU735709 [NH]

## CRAMBIDAE

### 63.009 *Pyrausta nigrata*, Local

11/05/19, Aston Upthorpe Downs, Juniper Valley SU544832 [JH]

### 63.031 *Udea ferrugalis*, Rusty-dot Pearl, Migrant

12/07/19, Averys Pightle SU435650 [JL]

24/08/19, Westwood Road, Tilehurst SU666742 [JH]

01/11/19, Harcourt Drive, Earley SU735709 [NH]

Very small numbers in a poor year for migrants. [NH]

### 63.052 *Nomophila noctuella*, Rush Veneer, Migrant

07/08/19, Westwood Road, Tilehurst SU666742 [JH]

### 63.054 *Cydalima perspectalis*, Box-tree Moth, Adventive

28/06/19, 1, Westwood Road, Tilehurst SU666742, 2nd record for garden. [JH]

From 06/07/19 to 11/10/19, 23 in total on 8 dates, Harcourt Drive, Earley SU735709 [NH]

11/09/19 & 06/10/19, 1 on each date, Crowthorne (Actinic) SU839638 [IE]

Larvae of this species are said to have eaten almost every box hedge in France, and have caused a lot of damage in this country as they have spread north – but this is the first year that they have come to my garden light trap in any number (23 this year, 4 last year). It is a pest species, but to my eyes it is a very beautiful moth. [NH]

### 63.060 *Evergestis pallidata*, Common

25/07/19, Fobney Island SU701710 [JL]

### 63.075 *Eudonia pallida*, Local

Earliest: 01/06/19, 6, Hardwick (VC23) SU650780 [NH]

11/06/19, Kings Barn Farm (VC24) SU813850 [NH[RS]]

Latest: 21/06/19, Westwood Road, Tilehurst SU666742 [JH]

### 63.091 *Agriphila latistria*, Local

20/08/19, Lambourn Woodlands, Thornhill Bank SU429717 [JL]

29/08/19, Decoy Heath SU611633 [JL]

29/08/19, Decoy Heath SU611633 [JL]

### 63.118 *Nymphula nitidulata*, Beautiful China-mark, Local

25/07/19, Fobney Island SU698712 [JL]

13/08/19, Fobney Island SU698712 [JL, A. & J.Booth]

## DREPANIDAE

### 65.003 *Watsonalla cultraria*, Barred Hook-tip, Local

Earliest: 11/05/19, Watlington Hill N.R. (VC23) SU7093 [PB[RD]]

Latest: 17/08/19, opp. Ashdown House, Ashbury SU286818 [PB]

### 65.011 *Tethea or*, Poplar Lutestring, Local

Only record: 25/05/19, Snelsmore Common SU460711 [LF,PB]

### 65.016 *Achlya flavicornis*, Yellow Horned, Common

Earliest: 24/02/19, Snelsmore Common SU460711 [LF,PB]

Latest: 21/03/19, Snelsmore Common, Estovers SU499652 [PB]

Total of 154 recorded in 7 sessions 24/02/19 to 18/03/19 at Snelsmore Common SU460711 [LF]

## LASIOCAMPIDAE

### 66.003 *Malacosoma neustria*, Lackey, Common

05/07/19, 9, Miram's Copse, Bradfield SU578731 [PB]

06/07/19, Westwood Road, Tilehurst SU666742 [JH]

18/07/19, Padworth Common SU618647 [NH]

## SATURNIIDAE

### 68.001 *Saturnia pavonia*, Emperor Moth, Common

21/07/19, Fully grown larva, Broadmoor Bottom SU856629 [JL]

## SPHINGIDAE

### 69.010 *Macroglossum stellatarum*, Humming-bird Hawk-moth, Immigrant

15/04/19, Westwood Road, Tilehurst SU666742 [JH]

09/05/19, Red Cow, Cholsey SU592868 [AR]  
08/06/19, East Garston SU3676 [JL]  
28/06/19, Sheepdrove Farm SU358817 [JL]  
14/07/19, Tilehurst, allotment E SU670748 [JL]  
12/09/19, Sheepdrove Farm SU358817 [JL]  
18/09/19, Westwood Road, Tilehurst SU666742 [JH]  
**69.017 *Deilephila porcellus*, Small Elephant Hawk-moth, Local**  
Earliest: 24/05/19, Red Cow, Cholsey SU592868 [AR]  
Latest: 24/07/19, Hill Green, Leckhampstead SU451767 [PB]

## GEOMETRIDAE

### **70.010 *Idaea sylvestriaria*, Dotted Border Wave, Notable B**

Only record: 18/07/19, Padworth Common SU618647 [NH[PB]]

### **70.015 *Idaea emarginata*, Small Scallop, Local**

09/07/19, Paley Street farm SU869769 [PB]  
18/07/19, Padworth Common SU617647 [PB]  
13/07/19, 1, 20/07/19, 2 & 01/08/19, 1, Red Cow, Cholsey SU592868 [AR]

### **70.018 *Idaea straminata*, Plain Wave, Local**

Earliest: 23/06/19, Snelsmore Common SU460711  
Latest: Snelsmore Common SU460711 [PB,LF]  
Mostly reported from Snelsmore, but also present at Greenham Common and Padworth Common (NH)

### **70.025 *Scopula immutata*, Lesser Cream Wave, Local**

06/07/19, Beale Park marsh SU619778 [PB]  
13/07/19, Bradfield College watermeadow SU599725 [PB]

### **70.027 *Scopula floslactata*, Cream Wave, Local**

Only record: 23/05/19, Snelsmore Common SU460711 [PB]

### **70.031 *Cyclophora annularia*, Mocha, Notable B**

26/05/19, Ockwells Park, Maidenhead SU879790 [PB]  
01/06/19, 1, Hardwick (Lower Bec, VC23) SU650779 [NH[IE]]  
21/06/19, Kings Barn Farm (VC24) SU813850 [PB[RS]]

### **70.032 *Cyclophora albipunctata*, Birch Mocha, Local**

Earliest: 23/04/19, Snelsmore Common SU460711 [PB, LF]]

Latest: 02/08/19, Snelsmore Common SU460711 [PB]

### **70.038 *Rhodometra sacraria*, Vestal, Immigrant**

Only record: 08/08/19, Red Cow, Cholsey SU592868 [AR]

### **70.050 *Xanthorhoe biriviata*, Balsam Carpet, Local**

06/07/19, Beale Park marsh SU619778 [PB]  
28/07/19, Snelsmore Common SU460711 [PB, LF]

### **70.055 *Xanthorhoe quadrifasiata*, Large Twin-spot Carpet, Local**

06/07/19, Beale Park marsh SU619778 [PB]  
23/07/19, Watlington Hill N.R. (VC23) SU7093 [PB]

### **70.056 *Catarhoe cuculata*, Royal Mantle, Local**

Only record: 23/07/19, Watlington Hill N.R. (VC23) SU7093 [PB]

### **70.064 *Euphyia biangulata*, Cloaked Carpet, Notable B**

Only record: 04/07/19, Greenham Common, Estovers SU499652 [NH[PB]]

### **70.065 *Euphyia unangulata*, Sharp-angled Carpet, Local**

Only record: 15/08/19, Estovers SU499652 [PB]

### **70.083 *Thera cupressata*, Cypress Carpet, Local**

Only record: 10/10/19, Maiden Erlegh SU750709 [PB[BMG]]

### **70.084 *Plemyria rubiginata*, Blue-bordered Carpet, Local**

Earliest: 09/06/19, Paley Street farm SU869769 [PB]  
Latest: 08/07/19, Snelsmore Common SU460711 [LF, PB]

### **70.085 *Cidaria fulvata*, Barred Yellow, Common**

21/06/19, Westwood Road, Tilehurst SU666742, First garden record since 2010. [JH]

Also reported from Kings Barn Farm (VC24) and Greenham Common, Estovers SU499652 [NH]

### **70.112 *Euchoeca nebulata*, Dingy Shell, Local**

Earliest: 04/07/19, Greenham Common, Estovers SU499652 [NH]

Latest: 18/07/19, Padworth Common SU618647 [NH, PB]

### **70.117 *Minoa murinata*, Drab Looper, Notable B**

25/05/19, 1, Beenham, Greyfield Wood

SU579689 [JL, JH, GH]

25/05/19, 5, Bradfield, Mirams Copse SU577730 [JL, JH, GH]

25/05/19, 7, Moor Copse, Park Wood SU637739 [JL, JH, GH]

None on 25/05/19 at Ashampstead Common or at Moor Copse, Horsemoor Wood in spite of swathes of spurge. [JL, JH, GH]

**70.118 *Philereme vetulata*, Brown Scallop, Local**

05/07/19, Miram's Copse, Bradfield SU578731 [PB]

06/07/19, Beale Park marsh SU619778 [PB]

**70.119 *Philereme transversata*, Dark Umber, Local**

Earliest: 26/06/19, Waltham Place, White Waltham SU855773 [PB[B.Clark]]

Latest: 23/07/19, Watlington Hill N.R. (VC23) SU7093 [PB]

**70.121 *Hydria undulata*, Scallop Shell, Local**

Earliest: 25/06/19, Snelsmore Common SU460711 [LF,PB]

Latest: 05/07/19, Miram's Copse, Bradfield SU578731 [PB[RD]]

**70.127 *Horisme tersata*, Fern, Common**

Earliest: 01/06/19, 1, Hardwick (Bec Tythe, VC23) SU650780 [NH]

Latest: 23/07/19, Watlington Hill N.R. (VC23) SU7093 [PB]

**70.134 *Perizoma bifaciata*, Barred Rivulet, Local**

Only record: 07/08/19, Hill Green, Leckhampstead SU451767 [PB]

**70.137 *Perizoma albulata*, Grass Rivulet, Local**

25/05/19, 1, Red Cow, Cholsey SU592868 [AR]

01/06/19, 139, Hardwick (VC23) SU650780  
Common to abundant at most lights, especially in 'The Park'. [JH] [NH[RDNHS]]

No other records! [NH]

**70.148 *Eupithecia inturbata*, Maple Pug, Local**

Earliest: 04/07/19, Greenham Common, Estovers SU499652 [NH[PB]]

Latest: 24/07/19, Hill Green, Leckhampstead SU451767 [PB]

**70.155 *Eupithecia venosata*, Netted Pug, Local**

01/06/19, Red Cow, Cholsey SU592868 [AR]

01/06/19, 4, Hardwick (VC23) SU650780  
Singles seen at most lights. [NH[RDNHS]]

No other records [NH]

**70.159 *Eupithecia phoeniceata*, Cypress Pug, Local**

Becoming commoner. 6 records.

Earliest: 26/08/19, Red Cow, Cholsey SU592868 [AR]

Latest: 12/10/19, Harcourt Drive, Earley SU735709 [NH]

**70.164 *Eupithecia egenaria*, Pauper Pug, Red Data Book**

01/06/19, 2, Hardwick (Lower Bec, VC23) SU650780 [NH,IE,M.Townsend]]

**70.177 *Eupithecia satyrata*, Satyr Pug, Common**

Only record: 21/06/19, Kings Barn Farm (VC24) SU813850 [PB]

**70.186 *Eupithecia millefoliata*, Yarrow Pug, Notable B**

Only record: 24/07/19, Hill Green, Leckhampstead SU451767 [PB]

**70.189 *Eupithecia subumbrata*, Shaded Pug, Local**

01/06/19, 3, Hardwick (VC23) SU650780 [NH]

21/06/19, Kings Barn Farm (VC24) SU813850 [PB]

**70.195 *Chesias legatella*, Streak, Common**

15/10/19 & 01/11/19, Harcourt Drive, Earley SU735709 [NH]

**70.198 *Lobophora halterata*, Seraphim, Local**

Earliest: 23/04/19, Snelsmore Common SU460711 [PB]

30/04/19, Westwood Road, Tilehurst SU666742, Cream form; first garden record since 2012. [JH]

Latest: 25/05/19, Snelsmore Common SU460711 [LF,PB]

**70.203 *Archiearis parthenias*, Orange Underwing, Local**

26/02/19, 27 & 28/03/19, Paices Wood SU573636, seen flying by at head height. Nearest aspen 600m away [JL], so unlikely to be the rarer Light Orange Underwing. [NH]

**70.205 *Abraxas grossulariata*, Magpie, Common**

Only record: 24/07/19, Hill Green, Leckhampstead SU451767 [PB]

**70.208 *Ligdia adustata*, Scorched Carpet, Local**

Earliest: 27/03/19, Waltham Place, White Waltham SU855773 [PB[MF]]

Latest: 23/06/19, Snelsmore Common SU460711 [LF,PB]]

**70.211 *Macaria notata*, Peacock Moth, Local**

Earliest: 16/05/19, Greenham Common, Estovers SU499652 [NH]

Latest: 29/08/19, Snelsmore Common SU460711 [LF,PB]

**70.231 *Apeira syringaria*, Lilac Beauty, Local**

Only record: 04/07/19, Greenham Common, Estovers SU499652 [NH[PB]]

**70.233 *Ennomos quercinaria*, August Thorn, Local**

Only record: 17/08/19, Ashdown House, Ashbury SU286818 [PB]

**70.235 *Ennomos fuscantaria*, Dusky Thorn, Common**

Earliest: 20/07/19, Ashdown House, Ashbury SU286818 [PB]

Latest: 21/09/19, Snelsmore Common SU460711 [LF,PB]

In higher numbers than usual, max. 8. [AR]

**70.254 *Agriopis aurantiaria*, Scarce Umber, Common**

13/11/19, Winterbourne lane through Snelsmore, headlights SU460714 [PB]

24/11/19, Hill Green, Leckhampstead SU451767 [PB]

Not very common in our area. [NH]

**70.264 *Deileptenia ribeata*, Satin Beauty, Common**

Earliest: 05/07/19, Miram's Copse, Bradfield SU578731 [PB[RD]]

Latest: 23/07/19, Watlington Hill N.R. (VC23) SU7093 [PB]

**70.267 *Hypomecis roboraria*, Great Oak Beauty, Notable B**

Only record: 21/06/19, Kings Barn Farm (VC24) SU813850 [PB[G.Hawker]]

**70.294 *Aspitates ochrearia*, Yellow Belle, Local**

16/05/19, Greenham Common, Estovers SU499652 [PB[LF]]

25/08/19, Greenham Common (daytime) SU499652 [PB]

**70.295 *Perconia strigillaria*, Grass Wave, Local**

23/06/19, Broadmoor Bottom SU856629 [JL]

**70.297 *Pseudoterpna pruinata*, Grass Emerald, Common**

11/07/19, Broadmoor Bottom SU856629 [JL]

18/07/19, Padworth Common SU617647 [PB[M.Botham]]

**70.300 *Comibaena bajularia*, Blotched Emerald, Local**

Earliest: 09/06/19, Paley Street farm SU869769 [PB[B.Clark]]

Latest: 25/06/19, Snelsmore Common SU460711 [LF,PB] & 25/06/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

**70.302 *Hemistola chrysoprasaria*, Small Emerald, Local**

Only record :10/07/19, Hill Green, Leckhampstead SU451767 [PB]

**NOTODONTIDAE**

**71.016 *Peridea anceps*, Great Prominent, Local**

Earliest: 17/04/19, Paley Street Farm SU869769 [LF,PB]

Latest: 30/05/19, Snelsmore Common SU460711 [LF,PB]

**71.022 *Ptilodon cucullina*, Maple Prominent, Local**

21/06/19, Kings Barn Farm (VC24) SU813850 [PB[RS]]

05/07/19, Miram's Copse, Bradfield SU578729 [NH[PB]]

18/07/19, Padworth Common SU617647 [PB]

**EREBIDAE**

**72.004 *Hypena rostralis*, Buttoned Snout, Notable B**

22/04/19, Westwood Road, Tilehurst SU666742.

Earliest of 3 garden records, previous earliest 24/5/09 [JH]

01/06/19, 3, Hardwick (VC23) SU650780 [NH]

**72.012 *Euproctis chrysorrhoea*, Brown-tail, Local**

03/07/19, Snelsmore Common SU460711 [LF]

18/07/19, Padworth Common SU618647 [NH]

**72.029 *Callimorpha dominula*, Scarlet Tiger, Local**

Earliest 01/06/19, 2, Hardwick (VC23) SU650780 [NH[RDNHS]]

Latest: 12/07/19, Combe SU3859 [JL] & Sheepdrove Farm SU358817

**72.030 *Euplagia quadripunctaria*, Jersey Tiger, Notable B**

24/07/19, Tilehurst, back garden SU665742, UV light overnight. [JL]

'Aug/19', Caversham, SU704765, sitting on window (daytime), photographed from inside. [NH[John Roberts]]

01/08/19, Red Cow, Cholsey SU592868, first for site. [AR]

06/08/19, Frogmill Hurley SU812835, Daytime observation. [NH[Fiona Farnsworth]]

24/08/19, Westwood Road, Tilehurst

SU666742, 2nd record for garden; last recorded 2014. [JH]

26/08/19, Red Cow, Cholsey SU592868, second for site. [AR]

**72.037 *Thumatha senex*, Round-winged Muslin, Local**

11/06/19, Kings Barn Farm (VC24) SU813850 [NH[RS]]

06/07/19, Beale Park marsh SU619778 [PB]

24/07/19, Hill Green, Leckhampstead SU451767 [PB]

24/07/19, Tilehurst, back garden SU665742 [JL]

**72.038 *Cybosia mesomella*, Four-dotted Footman, Local**

23/06/19 & 08/07/19, Snelsmore Common SU460711 [LF, PB]

18/07/19, Padworth Common SU617647 [PB]

**72.041 *Lithosia quadra*, Four-spotted Footman, Notable A**

Only record: 27/07/19, Snelsmore Common SU460711 [LF, PB]

**72.043 *Eilema depressa*, Buff Footman, Local**

Earliest: 05/07/19, Miram's Copse, Bradfield SU578731 [PB]

Latest: 04/08/19, Snelsmore Common SU460711 [LF, PB]

**72.047 *Eilema caniola*, Hoary Footman, Notable B**

06/07/19 & 29/09/19, Harcourt Drive, Earley SU735709 [NH]

Identification of the September example, which was unusually late and very worn, was confirmed by dissection. [NH]

**72.049 *Eilema sororcula*, Orange Footman, Local**

Earliest: 11/05/19, Watlington Hill N.R. (VC23) SU7093 [PB[RD]]

Latest: 21/06/19, Kings Barn Farm (VC24) SU813850 [PB]

**72.052 *Macrochilo cribrumalis*, Dotted Fan-foot, Notable B**

06/07/19, Beale Park marsh SU619778 [PB]

13/07/19, Bradfield College watermeadow SU599725 [PB]

**72.063 *Lygephila pastinum*, Blackneck, Local**

03/07/19, Snelsmore Common SU460711 [LF, PB]

04/07/19, Greenham Common, Estovers SU499652 [NH]

05/07/19, Miram's Copse, Bradfield SU578731 [PB[RD]]

**72.066 *Parascotia fuliginaria*, Waved Black, Notable B**

05/07/19, Miram's Copse, Bradfield SU578731 [PB]

13/07/19 & 27/07/19, Red Cow, Cholsey SU592868 [AR]

**72.069 *Laspeyria flexula*, Beautiful Hook-tip, Local**

Earliest: 13/06/19, Harcourt Drive, Earley SU735709 [NH]

Latest: 24/07/19, Hill Green, Leckhampstead SU451767 [PB]

**72.076 *Catocala fraxini*, Clifden Nonpareil (Blue Underwing), Immigrant, now established**

Earliest: 08/09/19, Snelsmore Common SU460711 [LF]

21/09/19, Red Cow, Cholsey SU592868, previously only recorded in 2018. [AR]

Latest: 20/10/19, Snelsmore Common SU460711 [LF, PB]

At least 20+ seen this year at Snelsmore [PB]: 6 were seen there on National Moth Night 26 - 27/09/19 when it was the target species. [NH]

## NOCTUIDAE

**73.002 *Abrostola triplasia*, Dark Spectacle, Common**

Only record: 31/08/19, Hill Green, Leckhampstead SU451767 [PB]

**73.010 *Macdunnoughia confusa*, Dewick's Plusia, Immigrant now established and spreading**

Only record: 17/10/19, Estovers SU499652 [PB[RD]]

**73.036 *Acronicta alni*, Alder Moth, Local**

Earliest: 25/05/19, Snelsmore Common SU460711 [PB]

Latest: 01/06/19, 1, Hardwick (Lower Bec, VC23) SU650780 [NH]

**73.048 *Panemeria tenebrata*, Small Yellow Underwing, Local**

11/05/19, Red Cow, Cholsey SU592868 [AR]

15/05/19, Englefield roundabout SU631708 [JL]

15/05/19, Theale SU631707 [JL]

19/05/19, 2, Lambourn, Crog Hill, The Holloway SU322833 [JL]

21/05/19, 3, Paices Wood, top park SU586636 [JL]

**73.057 *Cucullia lychnitis*, Striped Lychnis, Notable A**

Only record: 21/06/19, Kings Barn Farm (VC24) SU813850 [PB[RD]]

**73.059 *Calophasia lunula*, Toadflax Brocade, Red Data Book, Establishing**

19/05/19 & 13/06/19, Harcourt Drive, Earley SU735709 [NH]

07/08/19, Westwood Road, Tilehurst SU666742, First second generation specimen. [JH]

**73.076 *Helicoverpa armigera*, Scarce Bordered Straw, Immigrant now established**

Only record: 17/10/19, Estovers SU499652 [PB[RD]]

**73.082 *Cryphia algae*, Tree-lichen Beauty, Immigrant now established**

8 records.

Earliest: 22/07/19, Ockwells Park, Maidenhead SU879790 [PB]

Latest: 25/09/19, Red Cow, Cholsey SU592868 [AR]

**73.091 *Elaphria venustula*, Rosy Marbled, Notable B**

Only record: 08/07/19, Snelsmore Common SU460711 [PB]

**0873.100 *Chilodes maritima*, Silky Wainscot, Local**

Only record: 09/07/19, Paley Street farm SU869769 [PB[MF]]

**73.105 *Dypterygia scabriuscula*, Bird's Wing, Local**

Only record: 07/07/19, Harcourt Drive, Earley SU735709 [NH]

**73.107 *Mormo maura*, Old Lady, Local**

26/08/19, Thatcham reedbeds SU502667 [PB]

02/09/19, Red Cow, Cholsey SU592868 [AR]

03/09/19, Harcourt Drive, Earley SU735709 [NH]

09/09/19, Harcourt Drive, Earley SU735709 [NH]

**73.128x *Amphipoea oculea* agg. Ear Moth (aggregate)**

24/07/19, Hill Green, Leckhampstead SU451767 [PB]

28/07/19, Snelsmore Common SU460711 [LF]

15/08/19, Estovers SU499652 [PB]

**73.164 *Apamea sublustris*, Reddish Light Arches, Local**

Earliest: 01/06/19, 37, Hardwick (VC23) SU650780 [NH[RDNHS]]

Latest: 20/07/19, Ashdown House, Ashbury SU286818 [PB]

**73.191 *Agrochola haematidea*, Southern Chestnut, Red Data Book**

Only record: 12/10/19, Snelsmore Common SU460711 [PB]

Second record for Snelsmore, confirmed by dissection. [LF]. It could be a resident species rather than a migrant. When the first British colonies were found in West Sussex in 1990, Brian Baker suggested looking for it at Greenham Common and attempts were made then. [NH]

**73.197 *Conistra rubiginea*, Dotted Chestnut, Notable B**

18/03/19, Snelsmore Common SU460711. [LF]

18/11/19, Winterbourne lane through Snelsmore, on ivy SU460714 [PB]

**73.213 *Ipimorpha subtusa*, Olive, Local**

Only record: 04/08/19, Snelsmore Common SU460711 [LF]

**73.215 *Cosmia affinis*, Lesser-spotted Pinion, Local**

04/07/19, Greenham Common, Estovers SU499652 [NH[PB]]

08/08/19, Maiden Erlegh SU750709 [PB[BMG]]

**73.217 *Cosmia pyralina*, Lunar-spotted Pinion, Local**

13/07/19, Bradfield College water meadow SU599725 [PB]

24/07/19, Hill Green, Leckhampstead SU451767 [PB]

**73.218 *Dicycla oo*, Heart Moth, Red Data Book**

15/06/19, Windsor Great Park SU97SE [PB[M.Botham]]

**73.221 *Parastichtis suspecta*, Suspected, Local**

Earliest: 25/06/19, Snelsmore Common SU460711 [PB]

Latest: 18/07/19, Padworth Common SU617647 [PB[M.Botham]]

**73.223 *Dryobota labecula*, Oak Rustic, immigrant establishing**

Only record: 31/10/19, Harcourt Drive, Earley SU735709 [NH]

**73.243 *Orthosia miniosa*, Blossom Underwing, Local**

01/04/19, Red Cow, Cholsey SU592868, first for site. [AR]

10/04/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

**73.246 *Orthosia populeti*, Lead-coloured Drab, Local**

Earliest: 05/03/19 & Latest: 26/03/19, Snelsmore Common SU460711, 5 individuals seen between these dates [LF,PB]

**73.280 *Hecatera dysodea*, Small Ranunculus, Red Data Book**

Only record: 06/07/19, Harcourt Drive, Earley SU735709 [NH]

**73.294 *Mythimna straminea*, Southern Wainscot, Local**

Only record: 09/07/19, Paley Street farm SU869769 [PB]

**73.295 *Mythimna vitellina*, Delicate, Immigrant**

Only record: 25/06/19, Snelsmore Common SU460711 [PB]

New to Snelsmore.

**73.302 *Leucania obsoleta*, Obscure Wainscot, Local**

01/06/19, 1, Hardwick (Upper Knight, VC23) SU649776 [NH[RD]]

11/06/19, Kings Barn Farm (VC24) SU813850 [NH[RS]]

25/06/19, Whitchurch Hill (Actinic VC23) SU636788 [IE]

**73.307 *Peridroma saucia*, Pearly Underwing, Immigrant**

Only record: 02/09/19, Winterbourne lane through Snelsmore, ivy. SU460714 [PB]

**73.327 *Agrotis ipsilon*, Dark Sword-grass, Immigrant**

Early record: 22/04/19, Westwood Road, Tilehurst SU666742, Earliest of 12 garden records, previous earliest 06/05/15.

15/08/19, Estovers SU499652 [PB]

08/09/19, Snelsmore Common SU460711 [PB]

**73.337 *Cerastis leucographa*, White-marked, Local**

21/03/19 & 18/04/19, Estovers SU499652 [PB[NH]]

**73.355 *Xestia castanea*, Neglected Rustic, Local**

Earliest: 22/08/19 & Latest: 26/09/19 at Snelsmore Common SU460711, 93 individuals recorded in all [LF]

**73.356 *Xestia agathina*, Heath Rustic, Local**

Only record: 26/09/19, Snelsmore Common SU460711 [PB[M.Botham]]

**NOLIDAE**

**74.001 *Meganola strigula*, Small Black Arches, Notable A**

Only record: 05/07/19, Miram's Copse, Bradfield SU578731 [PB]

**74.002 *Meganola albula*, Kent Black Arches, Notable B**

08,18 & 28/07/19, Snelsmore Common SU460711 [PB]

**74.009 *Nycteola revayana*, Oak Nycteoline, Local**

Earliest: 23/02/19, Harcourt Drive, Earley SU735709 [NH]

Latest: 17/10/19, Greenham Common, Estovers SU499652 [PB]

**74.011 *Earias clorana*, Cream-bordered Green Pea, Notable B**

Only record: 25/06/19, Red Cow, Cholsey SU592868 [AR]

**CONTRIBUTORS**

I am grateful for contributions of records from :

**PB** Paul Black; **IE** Ian Esland; **LF** Les Finch; **RG** Renée Grayer; **NH** Norman Hall; **JH** Jan Haseler; **JL** John Lerpiniere & **AR** Tony Rayner. The contributors will have seen the moths they report, and can vouch for their identification, but other people may have actually trapped the moths, or seen the butterflies and their identity is usually given nested inside further brackets. Abbreviations used in this way include **BMG** Berkshire Moth Group, **RD** Roy Dobson, **MF** Martin Finch, **RDNHS** Reading & District Natural History Society & **RS** Roger Stace.

## VERTEBRATES REPORT 2019 by John Lerpiniere

The majority of herpetiles and mammals are secretive and not easily seen but a few are more obvious such as Common Frog or urban Foxes. Sadly most sightings of some are of road kills. Most are not recorded, many are recorded, but just a few are included here.

Few bird records were received but these are well recorded elsewhere, full details of bird sightings for Reading and Berkshire can be accessed online at the Berkshire Ornithological Club website <http://berksoc.org.uk/recording/annual-reports/>. Annual reports for years up to 2016 can be downloaded as a PDF, and while 2000-16 can be purchased as a books, other reports are in the pipeline.

### **BIRDS**

#### **Exceptional local records**

##### ***Athene noctua* Little Owl**

06/07/19 One in Field Cottage, Cholsey SU597872 (TR)

##### ***Falco peregrinus* Peregrine**

01/04/19 - 31/08/19 1st ever recorded nesting attempt in Newbury on the top of BT Exchange building. Eggs were laid, there may have been chicks fed, but failed before juveniles fledged. Still present 31/12/19 and into 2020 (SW), SU473669 see article p.45

15/11/19 juvenile flew over garden carrying prey & pursued by Buzzard; landed in adjacent field. Plastow Green SU537623(KW)

##### ***Emberiza calandra* Corn Bunting**

13/07/19 Six at Cholsey SU596869 (TR)

#### **Seen/heard on local RDNHS field trips or in members' gardens)**

##### ***Egretta garzetta* Little Egret**

05/01/19 Boxford SU429719 RDNHS, leader Lesley Dunlop

##### ***Netta rufina* Red-crested Pochard**

30/04/19 Three at Burghfield, Searles Farm SU688703 RDNHS, leader JL

##### ***Perdix perdix* Grey Partridge**

06/03/19 Two in Cholsey meadow(TR)  
21/07/18 Family flushed from Cholsey meadow (TR)

##### ***Falco subbuteo* Hobby**

08/08/19 One flew past at Cholsey (TR)

##### ***Strix aluco* Tawny Owl**

24/01/19 up to 3 birds hooting and calling early spring and again in the autumn Plastow Green SU537623 (KW)  
09/06/19 Owls with young in Cholsey garden (TR)

##### ***Alcedo atthis* Kingfisher**

14/09/19 Moor Copse SU635741 (JH)

##### ***Certhia familiaris* Treecreeper**

21/01/19 One in garden, Chosley, a rare record (TR)

##### ***Luscinia megarhynchos* Nightingale**

30/04/19 Six singing at Burghfield, Searles Farm SU6870, RDNHS, leader (JL)  
06/05/19 Two singing in roadside at Brimpton gravel pits SU570651 (KW)

##### ***Acrocephalus schoenobaenus* Sedge Warbler**

12/05/19 One singing in Cholsey garden (TR)  
19/05/19 one singing between Padworth gravel pit and Kennet Canal SU608672 (KW)

##### ***Sylvia undata* Dartford Warbler**

19/06/19 Hazeley Heath SU758580, RDNHS, leaders Julia Cooper and Ian Duddle

##### ***Muscicapa striata* Spotted Flycatcher**

06/07/19 Family party of four at Combe SU368607, RDNHS, leader Fiona Brown

***Corvus corax* Raven**

21/06/19 Two adults & 3 juv drifting in easterly direction over Plastow Green at some height (c.500ft) disappearing over the horizon SU537624 (KW)

06/07/19 Over 70 birds near Combe SU8607, RDNHS, leader Fiona Brown

***Poecile palustris* Marsh Tit**

14/11/19 - early December, pair visiting sun flower feeders, Plastow Green SU537624 (KW)

***Pyrrhula pyrrhula* Bullfinch**

22/02/19 - 31/12/19 Plastow Green regular pair in garden feeding on Purple Toadflax and Lemon Balm seedheads. Successfully reared at least 3 young SU537624 (KW)

07/07/19 First garden sighting for years, Tilehurst SU666742 (JH)

**AMPHIBIANS**

***Bufo bufo* Common Toad**

28/05/19 Paices Wood, toadlet SU585640 (JL)

23/06/19 Paices Wood, immature SU585639 (JL)

20/07/19 Paices Wood, toadlet SU584636 (JL)

15/08/19 Tilehurst, allotment, adult SU670748 (JL)

17/08/19 Juvenile, Mortimer,100 Acre Piece SU633648 (JH)

28/08/19 Paices Wood, adult, SU587641 (JL)

22/09/19 Juvenile, Southcote Meadows

SU692711, RDNHS, leader Adrian Lawson

07/10/19 Paices Wood, immature SU583638 (JL)

18/10/19 Hosehill, few disturbed while reed cutting SU646696 (JL)

***Triturus vulgaris* Smooth Newt**

27/05/19 Tilehurst, allotment, separate individual on 15/10/19, SU670748 (JL)

15/10/19 Tilehurst, garden SU665742 (JL)

***Triturus helveticus* Palmate Newt**

18/05/19 Paices Wood, two males and pregnant female SU584636 (JL)

03/08/19 Lousehill Copse, Tilehurst, three males and pregnant female SU682733 (JL)

***Triturus cristatus* Great Crested Newt**

no records

***Rana temporaria* Common Frog**

09/02/19 First sighting in pond, Tilehurst SU666742 (JH)

02/03/19 First spawn, Tilehurst SU666742 (JH)

13/03/19 Spawn, Pamber Forest SU622607 (JH)

08/03/19 Rushall Farm, Bradfield, spawn, one small patch SU584723 (JL)

27/03/19 Paices Wood, immature SU583635 (JL)

12/05/19 Sheepdrove Farm, Lambourn, at least two croaking SU361819 (JL)

15/08/19 Tilehurst, allotment, adult SU670748 (JL)

18/08/19 Paices Wood, and several disturbed on 7/10/19 cutting herbage SU584638 (JL)

18/10/19 Hosehill, few disturbed while cutting reeds SU46696 (JL)

**REPTILES**

***Zootoca vivipara* Common Lizard**

21/02/19 Padworth Common, adult SU618647 (JL)

31/03/19 to 18/10/19 20 sightings of up to four at Cholsey (TR)

27/03/19 Paices Wood, immature SU583636 (JL)

11/04/19 Seven Barrows, two adults SU328828 (JL)

30/04/19 Woodley, allotment SU670748(JL)

07/05/19 Padworth Common, immature SU618645 (JL)

07/05/19 Decoy Heath, adult SU613634 (JL)

12/05/19 Lambourn, the holloway SU322834, also 19/5/19 SU319835(JL)

17/07/19 The Chase, Woolton Hill SU442628 RDNHS, leader Rob Stallard

21/07/19 Broadmoor Bottom, adult SU856629 (JL)

13/09/19 Decoy Heath, adult SU610633 (JL)

25/09/19 Sheepdrove Farm, Lambourn, one adult and two immature SU358819 (JL)

***Anguis fragilis* Slow-worm**

Tilehurst, garden, on six dates, including about six individuals SU665742 (JL)

25/02/19 to 30/10/19 669 sightings at Cholsey with 53 on 25/4/19 (TR)

27/03/19 Paices Wood, The Heath, 2 subsequent

records SU583638 (JL)  
24/06/19 Paices Wood, 4 at The Glade, 3 on 31/7/19 including 2 pregnant SU583638 (JL)  
30/03/19 Hosehill, ginger male SU648694 (JL)  
05/04/19 Tilehurst, adult male at allotment SU670748 (JL)  
21/04/19 Padworth Common 2 SU618647 (JL)  
29/04/19 Juvenile, Tilehurst SU666742 (JH)  
07/05/19 Padworth Common, adult male SU618645, young male SU618646 (JL)  
23/05/19 Two adults and two juveniles in compost heap, Tilehurst SU666742 (JH)

#### ***Natrix helvetica* Grass Snake**

25/02/19 151 sightings at Cholsey with 15 on 20/04/19 and 22/4/19 (TR)  
30/03/19 Hosehill, Meadow, two large adults seen regularly SU651697 (JL)  
1/04/19 Decoy Heath, young one SU611633 (AB)  
29/04/19 Hosehill, adult SU651696 (JL)  
14/05/19 Paices Wood, The Heath, immature SU683637 (JL)  
14/05/19 Paices Wood, The Glade, adult, then up to 2 large adults and 2 immature seen regularly SU583638 (JL)  
14/07/19 Streatley, swimming on Thames SU622776 (JL)  
30/08/19 Two Thames Valley Park SU742740 (DO)  
10/10/19 Kintbury Newt Ponds, adult SU386664 (JL)

#### ***Vipera berus* Adder**

21/02/19 Decoy Heath, juvenile SU611634 (JL)  
21/04/19 Padworth Common, adult male SU618647 (JL)  
07/05/19 Padworth Common, large female SU618644 (JL)  
19/06/19 Large female, Hazeley Heath SU764581 Sue White  
11/07/19 Broadmoor Bottom, black (melanistic) sunning SU856628 (JL)

#### **BATS**

Using an Echo Meter Pro bat detector that records bats automatically, the number of passes made in a Cholsey garden follow:-

#### ***Pipistrellus pipistrellus* Common Pipistrelle**

Various dates up to three in Cholsey garden (TR)  
28/08/19, 25 passes (FR)

03/09/19 Probably this species in Earley garden SU735711 (RG)  
03/11/19 Unusually late record in Cholsey garden (TR)  
05/12/19 One flying in Tilehurst probably this species SU668743 (JL)

#### ***Pipistrellus pygmaeus* Soprano Pipistrelle**

#### ***Nyctalus noctula* Noctule**

28/08/19 Two passes (FR)

#### ***Nyctalus leisleri* Leisler's**

#### ***Myotis nattereri* Natterer's**

#### ***Barbastella barbastellus* Barbastelle**

70 passes (FR)

#### **INSECTIVORES**

#### ***Erinaceus europaeus* Hedgehog**

14/03/19 to 08/09/19 Regular sightings on camera trap with two on 08/06/19 Earley SU737711 (DO)  
06/06/19 Two adults in Earley garden SU735711 (RG)  
03/09/19 One in Earley garden SU735711 (RG)  
20/09/19 Two in Earley garden SU735711 (RG)

#### ***Sorex araneus* Common Shrew**

26/02/19 to 19/10/19 Seven sightings at Cholsey (TR)  
29/04/19 Hosehill SU650694 (JL)  
28/06/19 Paices Wood SU586635 (JL)  
25/09/19 Lambourn, Sheepdrove Farm, dead adult SU359820 (JL)  
18/10/19 Paices Wood SU585640 (JL)  
07/12/19 Hosehill SU650694 (JL)

#### ***Sorex minutes* Pygmy Shrew**

No records received

#### ***Neomys foedens* Water Shrew**

No records received

#### ***Talpa europaea* Mole**

17/12/19 Many fresh hills at Fobney Is. SU704710 (JL)

## **CARNIVORES**

### ***Meles meles* Badger**

13/02/19 Dead on road, Sulham SU642755 RDNHS trip leader Julia Cooper and Ian Duddle  
05/03/19 Streatley SU599795 (JL)  
22/03/19 Tilehurst, Blundells Copse, one hole of sett clearly in use SU674735 (JL)  
12/05/19 Lambourn, Sheepdrove Farm, fresh hole in chalk bank SU361819 (JL)  
22/05/19 Tidmarsh, M4 bridge, dead on road, corpses frequent here SU633735 (JL)  
22/06/19 Aldermaston SU596672 (JL)  
06/09/19 Tidmarsh, Great Bear SU615743 (JL)

### ***Mustela nivalis* Weasel**

27/05/19 and 07/08/19 One at Lollington, Cholsey SU5785 (PC)

### ***Mustela erminea* Stoat**

15/04/19 One crossing Wallingford by-pass SU602881 (TR)  
18/06/19 to 16/10/19 Four sightings at Lollington, Cholsey SU5785 (PC)  
17/08/19 Binfield Heath SU730779 (GC)

### ***Mustela putorius sp* Polecat/Ferret**

No records received

### ***Mustela vison* American Mink**

01/09/19 Goring, below lock SU593802 (JL)

### ***Vulpes vulpes* Fox**

Regular reports of sightings across Tilehurst  
Regular reports from 09/06/19 in Earley garden of two cubs and at least one adult SU735711 (RG)  
Regular sightings on garden camera trap with two on 27/09/19 Earley SU737711 (DO)  
02/02/19 Paices Wood, prints in snow SUSU586635 (JL)  
14/04/19 Welford SU422726 (JL)  
07/05/19 Decoy Heath, fox scat SU613634 (JL)  
16/05/19 Streatley Mills SU600794 (JH)  
21/05/19 Caversham SU713757 (GC)  
23/05/19 Two at Pingewood SU692705 and one on 6/6/19 (GC)  
29/05/19 Pingewood SU69703 (GC)

02/06/19 Shefford Woodlands, dead on road SU358725 (JL)  
03/06/19 Emmer Green SU714759 (GC)  
02/07/19 Emmer Green SU712757 (GC)  
02/07/19 Southcote SU683714 (GC)  
04/07/19 Theale, cub dead on road SU646703 (JL)  
09/07/19 Emmer Green SU718762 and one there 12/7/19 (GC)  
29/07/19 Burghfield SU680707 (GC)  
06/08/19 Reading SU702739 (GC)  
06/11/19 Maidenhead Thicket SU853809 RDNHS trip leader Sue White

### ***Lutra lutra* Otter**

No records received

### ***Rattus norvegicus* Brown Rat**

02/01/19 Kings Meadow SU722739 (JL)  
20/04/19 Combe SU370597 (JL)  
12/05/19 Lambourn, Sheepdrove Fm SU358818 (JL)

## **DEER**

### ***Muntiacus reevesi* Muntjac**

04/01/19 to 01/12/19 One regular in Cholsey garden (TR)  
05/01/19 Winterbourne SU447716 (JH)  
23/01/19 Hosehill SU648694 (JL)  
02/02/19 Paices Wood SU585636 (JL)  
19/02/19 Tilehurst, Barefoot Copse, adult male SU656744 (JL)  
05/04/19 Bradfield, Mirams Copse, adult female SU577730 (JL)  
08/04/19 to 16/7/19 Several sightings at Emmer Green SU713768. More garden records may indicate increased population (GC)  
21/04/19 Lambourn, Sheepdrove Farm, adult SU360820 (JL)  
27/04/19 Shiplake SU762788 (GC)  
29/04/19 Theale, Wigmore Lane, adult SU638706 (JL)  
31/05/19 Pingewood SU684699 (GC)  
03/06/19 Pingewood SU692706 (GC)  
23/07/19 Pingewood SU693705 (GC)  
29/07/19 Emmer Green SU717761 (GC)  
11/08/19 Two Dinton Pastures SU780728 (DO)  
29/08/19 Adult and juvenile at Binfield Heath SU741789 (GC)  
06/09/19 Tilehurst, Cornwell Copse SU657741 (JL)  
19/9/19 Stratfield Saye SU689626 (JH)

### ***Capreolus capreolus* Roe Deer**

07/02/19 Two in Cholsey garden (TR)  
Up to three regular at Lollingdon SU5785 (PC)  
14/02/19 Wokefield Common, adult  
SU5655661 (JL)  
13/03/19 Two at Pamber Forest SU619604  
RDNHS trip leader (JH)  
27/03/19 Twyford, Lea Farm Pit, regular  
sightings SU786735 (JL)  
27/03/19 Lambourn, Pit Down SU332829 (JL)  
28/04/19 and 12/5/19 Dinton Pastures  
SU780728 (DO)  
21/05/19 Paices Wood, adult and immature  
SU587636 (JL)  
16/06/19 buck browsing in Plastow Green  
garden SU573623  
17/08/19 Two at Sheffield Bottom SU647703  
(JL)  
22/10/19 Four at Sulham SU653725 (JL)

### ***Dama dama* Fallow Deer**

24/01/19 29 at Farnborough SU4281 (JL)  
19/06/19 32 adults and one fawn, Hazeley  
Heath SU758580 RDNHS trip leader Julia  
Cooper and Ian Duddle  
06/11/19 Three at Burchetts Green SU832812  
Maggie Bridges and Marion Venners

### ***Cervus elaphus* Red Deer**

No records received

### **RABBITS & HARES**

#### ***Lepus europaeus* Brown Hare**

23/01/19 Englefield SU6170 (JL)  
Regular sightings at Lollingdon, Cholsey (PC)  
17/04/19 Two at Ashford Hill SU556628  
RDNHS trip leader Rob Stallard  
02/05/19 One at Peasemore SU4577, two at  
South Fawley SU389807, one at Brightwalton  
SU423795 (JL)  
26/05/19 Dead on road at East Garston  
Woodlands SU343745 (JL)  
12/07/19 One at Combe SU370587 (JL)  
19/09/19 Stratfield Saye SU689626 (JH)

#### ***Oryctolagus cuniculus* Rabbit**

02/02/19 Englefield, snow prints SU631707  
(JL)

Up to three regular in Cholsey garden (TR)  
04/02/19 Basildon Park, 3 young hopping  
back to burrow under tree stump SU610783  
(JL)  
21/04/19 Eight at Dinton Pastures SU773719  
and five on 28/4/19 (DO)  
12/05/19 Four at Dinton pastures SU773719  
and five on 26/5/19(DO)  
27/05/19 Hampstead Norreys, 75 counted  
along 1km Pang valley SU5375 (JL)  
16/06/19 Dinton Pastures SU782729 (DO)  
11/08/19 Dinton Pastures SU725721 (DO)  
20/10/19 Dinton Pastures SU773719 (DO)

### **RODENTS**

#### ***Sciurus carolinensis* Grey Squirrel**

One or two ever present in Cholsey garden  
(TR)  
16/02/19 Reading, St Marys Churchyard  
SU71447332 (JL)  
07/10 19 Tilehurst, was regular in garden now  
seldom SU665742 (JL)

#### ***Apodemus sylvaticus* Wood Mouse**

21/05/19 Pingewood SU691708 (GC)  
06/06/19 Chewed cherry stones by this  
species SU651696 (JL)  
11/09/19 to 30/10/19 Fourteen sightings  
under refuges at Cholsey (TR)  
25/09/19 Lambourn, Sheepdrove Farm, dead  
one SU358819 (JL)

#### ***Apodemus flavicollis* Yellow-necked Mouse**

No records received

#### ***Muscardinus avellanarius* Hazel Dormouse**

No records received

#### ***Micromys minutus* Harvest Mouse**

No records received

#### ***Microtus agrestis* Field Vole**

12/02/19 Hampstead Norreys, large adult  
SU532755 (JL)  
19/02/19 One Hosehill SU651696 (JL)  
28/03/19 One Paices Wood SU585640 (JL)

06/10/19 to 18/10/19 Nine sightings in Cholsey meadow (TR)

***Arvicola terrestris* Water Vole**

No records received

***Clethrionomys glareolus* Bank Vole**

02/03/19 to 30/10/19 79 sightings in Cholsey meadow (TR)

28/03/19 One Paices Wood SU5858640 (JL)

29/04/19 Large adult Hosehill SU648695 and immature on 1/8/19 (JL)

05/07/19 Dead one Clayfield Copse SU725768 (JL)

31/07/19 Paices Wood Glade SU584638 (JL)

07/12/19 Hosehill SU648694 (JL)

26/12/19 At least 8 under tin, mixed ages, Paices Wood Glade SU583638 (JL)

**CONTRIBUTORS**

With thanks to all those who have contributed to this report. The names of some of the contributors are abbreviated and these include **GC** Gordon Crutchfield; **RG** Renée Grayer; **JH** Jan Haseler; **DO** David Owens; **JL** John Lerpiniere; **FR** Fred Rayner; **TR** Tony Rayner; **RS** Rob Stallard; **KW** Ken White; **SW** Sarah White.



Buck Roe Deer having a relaxing browse in a garden in Plastow Green 16/06/19. After sampling the Ash leaves, the Evening Primrose seemed a preferable choice. © Ken White

# THE WEATHER IN READING DURING 2019 by Roger Brugge

## Department of Meteorology, University of Reading

*Averages and anomalies mentioned in this report refer to the climatological period 1981-2010.*

2019 was a mild, wet and sunny year overall, but with considerable variations during the year. February and March were mild and, after some snow early on 1 February, there was no snowfall for the remainder of the year. All three summer months managed to reach 30 °C on at least one occasion while **only the months of July and August were free of ground frost during the year**. There were frequent dry spells until the autumn, while late September to mid-December was very wet. Despite this, the year was sunny overall with the normal sunshine total for the year achieved by the end of September, helped by sunny conditions in February and in late summer. 2019 was cooler than in 2017 and 2018, the wettest year since 2014, and slightly duller than in 2018.

### January

The year began with a spell of high pressure that lasted from the Christmas Day of 2018 until 6 January. The pressure at 0900 GMT reached 1044.1 mb on the 2nd and the spell of high pressure helped to create an unusual winter drought; by the 14th just 0.2 mm of rain had fallen in 22 days. The month was 0.7 °C colder than normal and was the coldest month of 2019 with -5.7 °C on the 31st being the lowest air temperature of the year. The month was also the driest of the year with snow falling on 5 days. In fact, it was the driest January since 2005 due to the high pressure early in the month which also led to nine sunless days in the first 16 days.

### February

February was a mild month, especially by day; on the 24th the maximum temperature of 17.4 °C equalled the previous highest February air temperature recorded since 1908. On the 26th 19.5 °C was recorded, with 17.9 °C being the highest temperature on the 27th. This warm spell was also very sunny with 9.3 hours of bright sunshine on the 25th and 9.5 hours on the 26th while the 27th was the final day of a five-day long sunny spell during which 43.8 hours of bright sunshine were recorded. Such a sunny spell had not occurred outside the period 5 March - 3 October previously, in records back to 1968. One effect of this sunshine was a large rise in temperature by day; **on the 26th the range of air temperature (20.0 °C, from -0.5 °C to 19.5 °C) was the greatest for any winter day (December-February) on record**. Overall this was the third sunniest February on record – despite a cold and snowy beginning to the month when some local disruption occurred as a result; snow lay 80 mm deep on the 1st.

### March

March was wet and unsettled until the 18th, while the second half of the month was dry and often sunny. Overall the month was 1.7 °C warmer than normal, the third mildest March in the past 20 years. The month was slightly wetter than normal even though no measurable rain fell in the final 13 days. It was also sunnier than normal helped by a very sunny spell during the period 24th-30th.

### April

April had some cold nights in the first half, but some very warm days in the second half. Over the four-day Easter weekend the daytime maximum temperatures ranged from 22.9 °C to 24.4 °C (the latter was higher than any temperature subsequently recorded in May this year). Overall, April was slightly warmer than average, drier than normal (with almost half the rain falling on a single day, the 4th) and sunnier than normal.

### May

May began with an unsettled spell, with the pressure at 0900 GMT down to 991.5 mb on the 8th before it rose to 1040.1mb on the 13th, the latter being an unusually high reading for May. The month was drier and marginally sunnier than usual – but slightly colder than normal due to some cool nights and days during the first half of the month. In the 17 days from the 10th just 2.5 mm of rain fell. There was no air frost, but 16 ground frosts were the most in May for over 50 years.

## **June**

June was a very wet month overall, helped by a fall of 40.8 mm on the 10th – the wettest June day since 1998 – although in the 22 days from the 25th no measurable rain fell. June as a whole was the wettest for seven years. Sunshine and temperatures averaged out close to normal for the month but there was a one-day heatwave on the 29th when 32.3 °C was recorded. Either side of this the 27th recorded a maximum of 24.2 °C while on the 30th the temperature fell back to a high of 22.7 °C.

## **July**

July was the warmest month of 2019, being 1.2 °C warmer than average. The afternoon temperature on the 25th reached 36.0 °C, the highest temperature in the record for July. It was also the equal second highest daily maximum temperature (with 9th August 1911) after 36.4 °C on 10th August 2003 in the entire Reading record dating back to 1908. The 23rd and 24th also rose above 30 °C with the temperature failing to drop below 18.6° C during the intervening night (which also had some vivid lightning displays). Following a dry start to the month, the 19th produced half the month's rainfall while the month was the sunniest of the year with 244 hours of bright sunshine.

## **August**

August was warm, dry and sunny compared to the average with only small amounts of rain after the 16th. For the third month this summer 30 °C was reached with 32.1 °C being reached as late as the 25th. It is rare for each of the three summer months in a specific year to attain 30 °C. The Saturday of the late August bank holiday weekend reached 28.9 °C with the following three days each reaching at least 31 °C. The second half of August was generally dry with just 3 mm of rain in the final 15 days and the associated low cloud cover helped to raise the sunshine total to 226 hours – the third sunniest August of the past 20 years.

## **September**

September was fine, dry and sunny for the first three weeks but a fall of 29.6 mm of rain on the 23rd signalled the beginning of a wet autumn and early winter period. The month was mild overall with the temperature rising to 25.6 °C as late as the 21st, almost a fortnight after the first autumnal ground frost had been recorded. There was little cloud at times; as late as the 17th-21st the daily bright sunshine duration exceeded 10 hours each day, following a clear sky which generated ground frost on some of these mornings. This helped to make September sunnier than normal.

## **October**

October was cloudy, wet and slightly cooler than average overall. Rainfall occurred frequently – there were 19 rain days – helping to make it the wettest October since 2012 and the wettest month of 2019. The 35 days ending on the 26th saw 169.4 mm of rain falling in Reading, equivalent to about two months of autumn rainfall and turning what had been quite a dry soil (in mid-September) into a wet one. As a result of these wet conditions the first air frost of the autumn only occurred on the 28th, while rumbles of thunder were heard on three days.

## **November**

November was unsettled for most of the month, being wetter and cooler than normal, and the dullest month of 2019. Air pressure was very low throughout the month, averaging out as the fourth-lowest in November in 110 years with the average MSL pressure reading at 0900 GMT being 1001.4 mb. As in October, rainfall was frequent rather than heavy – there were 21 rain days.

## **December**

December was a sunny month (the 2nd was sunnier than any day in the preceding November), milder than normal – but still a wet month overall with 21 rain days. However, high pressure for much of the final week led to a dry end to the year. By way of contrast, at 0900 GMT on the 20th the barometer was reading 977.3 mb. Thunder was heard on two occasions during the month – the six days with thunder in the final three months of the year accounted for more than half the year's storms.

This report was compiled using the daily weather observations made at the University of Reading climatological station – many of these being made by our chief observers Selena Zito and Cahyo Leksmono. The University also operates an automatic weather station that gathers weather information continuously. Details can be seen at:

<https://research.reading.ac.uk/meteorology/atmospheric-observatory/atmospheric-observatory-data/>

There is even a mailing list that you can subscribe to in order to have daily weather reports sent direct to your inbox. The history of Reading’s weather since 1901 can be discovered in **One hundred years of Reading Weather** by Roger Brugge and Stephen Burt.

### TEMPERATURE 2019

	Mean Max temp	Mean Max anomaly	Mean Min temp	Mean min anomaly	Mean temp	Mean temp anomaly	Highest Max temp	Date	Lowest Max temp	Date	Highest Min temp	Date	Lowest Min temp	Date	Lowest grass Min temp	Date
	°C	°C	°C	°C	°C	°C	°C		°C		°C	°C	°C		°C	
<b>J</b>	7.1	-0.6	1.2	-0.7	4.2	-0.7	12.8	25	2.5	23	8.1	13	-5.7	31	-12.2	30
<b>F</b>	11.8	3.8	2.2	0.5	7.0	2.2	19.5	26	1.8	1	7.1	21	-5.1	3	-8.6	28
<b>M</b>	12.5	1.7	5.2	1.7	8.9	1.7	18.0	30	9.9	12	9.7	16	-0.1	26	-8.3	21
<b>A</b>	14.8	1.3	4.4	-0.3	9.6	0.5	24.4	22	8.8	4	9.5	24	-2.1	14	-10.0	23
<b>M</b>	17.3	0.3	6.6	-1.1	12.0	-0.4	23.0	30	11.4	4	13.2	25	1.5	5	-5.8	1
<b>J</b>	20.1	0.1	10.6	0.0	15.4	0.1	32.3	29	12.9	10	16.6	25	6.1	9	-1.0	13
<b>J</b>	24.1	1.7	13.4	0.7	18.8	1.2	36.0	25	18.9	30	18.6	24	8.2	4	0.4	15
<b>A</b>	23.5	1.4	12.7	0.2	18.1	0.8	32.1	25	18.0	16	17.1	9	8.8	21	-0.5	11
<b>S</b>	20.0	1.0	10.5	0.2	15.3	0.6	25.6	21	15.1	9	14.7	26	4.4	18	-3.7	25
<b>O</b>	14.6	-0.3	7.3	-0.3	11.0	-0.3	19.7	1	9.7	28	13.5	1	-1.0	28	-6.0	31
<b>N</b>	9.8	-0.9	3.6	-0.8	6.7	-0.8	15.4	1	6.2	30	9.4	2	-2.9	19	-7.8	22
<b>D</b>	9.6	1.7	3.1	0.9	6.4	1.3	12.6	6	6.9	1, 2	8.2	8	-2.9	5	-8.5	14
<b>2019</b>	<b>15.4</b>	<b>0.9</b>	<b>6.7</b>	<b>0.1</b>	<b>11.1</b>	<b>0.5</b>	<b>36.0</b>	<b>25 Jul</b>	<b>1.8</b>	<b>1 Feb</b>	<b>18.6</b>	<b>23 Jul</b>	<b>-5.7</b>	<b>13 Jan</b>	<b>-12.2</b>	<b>31 Jan</b>

### PRECIPITATION 2019

	Total precipitaton	% of mean precipitaton	No. days with 0.2mm or more	No. days with 1.0mm or more	Greatest fall in 24 hrs	Date	No. days with air frost	No. days with ground frost	No. days with snow /sleet falling	No. days with 50% ground snow cover	No. days with thunder	No. days with ice pellets/ small hail	No. days with hail over 5mm diam	No. days with fog
	mm	%	days	days	mm		days	days	days	days	days	days	days	days
<b>J</b>	31.0	51	10	6	7.4	22	13	23	5	1	0	2	0	1
<b>F</b>	31.4	77	11	9	5.5	8	8	21	1	3	0	1	0	5
<b>M</b>	48.8	110	15	10	10.2	9	1	17	5	0	1	0	1	0
<b>A</b>	26.9	56	9	6	12.6	4	4	17	0	0	0	1	0	0
<b>M</b>	28.2	61	12	7	5.8	7	0	16	0	0	1	1	0	0
<b>J</b>	81.9	184	11	10	40.8	10	0	2	0	0	0	0	0	0
<b>J</b>	35.3	77	8	5	18.2	19	0	0	0	0	2	0	0	0
<b>A</b>	35.5	68	14	6	10.8	16	0	0	0	0	1	0	0	0
<b>S</b>	72.9	145	14	10	29.6	23	0	5	0	0	0	0	0	0
<b>O</b>	107.6	149	19	17	14.1	12	1	9	0	0	3	0	0	0
<b>N</b>	90.3	136	21	17	16.5	13	5	20	0	0	1	0	0	2
<b>D</b>	95.1	151	21	16	17.7	12	6	17	0	0	2	0	0	0
<b>2019</b>	<b>684.9</b>	<b>108</b>	<b>165</b>	<b>119</b>	<b>40.8</b>	<b>10 Jun</b>	<b>38</b>	<b>147</b>	<b>6</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>1</b>	<b>8</b>

### SUNSHINE & SOIL TEMPERATURE 2019

	Total sunshine	% of average sunshine	Greatest daily sunshine total	Date	No. of sunless days	Mean 10cm soil temp	Mean 30cm soil temp	Mean 100cm soil temp
	hrs	%	hrs		days	°C	°C	°C
<b>J</b>	53.9	95	7.3	28	12	3.5	5.9	7.8
<b>F</b>	118.1	156	9.5	26	6	4.3	5.8	6.8
<b>M</b>	134.9	124	10.8	25	5	7.4	8.4	8.4
<b>A</b>	186.1	116	12.6	19,20	4	9.4	9.9	9.8
<b>M</b>	197.6	105	14.2	14	0	13.8	12.9	11.8
<b>J</b>	189.0	100	13.8	28	2	16.6	15.7	14.0
<b>J</b>	244.3	124	14.5	4	0	20.5	18.9	16.7
<b>A</b>	226.5	118	12.3	26	2	18.3	18.1	17.1
<b>S</b>	175.6	127	11.6	17	2	15.2	16.0	16.3
<b>O</b>	85.1	80	9.2	2	8	10.5	12.9	14.3
<b>N</b>	49.1	78	5.9	10	8	6.0	8.9	11.0
<b>D</b>	54.5	118	6.1	2	11	4.8	6.9	8.8
<b>2019</b>	<b>1714.7</b>	<b>113</b>	<b>14.5</b>	<b>4 Jul</b>	<b>60</b>	<b>10.9</b>	<b>11.7</b>	<b>11.9</b>

### WIND DETAILS 2019

	No.days with Gales	No. days with <u>Northerly</u> winds	No. days with <u>NE'ly</u> winds	No. days with <u>Easterly</u> winds	No. days with <u>SE'ly</u> winds	No. days with <u>Southerly</u> winds	No. days with <u>SW'ly</u> winds	No. days with <u>Westerly</u> winds	No. days with <u>NW'ly</u> winds	No. days with calm winds at 0900 GMT
	days	days	days	days	days	days	days	days	days	days
<b>J</b>	0	3	1	0	3	0	5	8	7	4
<b>F</b>	0	1	4	2	3	2	10	4	1	1
<b>M</b>	0	2	2	1	0	0	8	16	2	0
<b>A</b>	0	3	8	9	3	1	1	2	3	0
<b>M</b>	0	4	4	5	2	1	5	5	5	0
<b>J</b>	0	1	3	6	0	2	10	6	1	1
<b>J</b>	0	4	1	4	4	3	6	7	2	0
<b>A</b>	0	2	1	1	2	1	13	9	2	0
<b>S</b>	0	4	2	1	2	3	8	10	0	0
<b>O</b>	0	3	3	4	2	3	8	5	2	1
<b>N</b>	0	5	1	5	5	2	5	5	1	1
<b>D</b>	0	0	2	1	3	6	11	5	2	1
<b>2019</b>	<b>0</b>	<b>32</b>	<b>32</b>	<b>39</b>	<b>29</b>	<b>24</b>	<b>90</b>	<b>82</b>	<b>28</b>	<b>9</b>

## Highlights of the Birding Year at BBOWT Moor Copse 2019 by Ailsa Claybourn

No matter what the season, or the weather, there's always something interesting to be seen or heard on a visit to BBOWT's Moor Copse reserve. Here are some of the 2019 highlights.

**January's** highlight was the 85 Redwings, spread across all wooded areas, their "tseep" calls belying their presence deeper in the woods. Robins were singing, there were small, mixed groups of tits, only 2 Siskins, and a host of big, freshly mounded molehills! Hazel catkins added colour to a dull day, with the first tiny crimson female flowers appearing.

**February's** visit could have been in early Summer, with the temperature at 17.5 °C by noon, after a frosty start. Brimstone and Comma butterflies were on the wing, and Primroses and Dog's Mercury in full flower. Great and Blue Tits were resplendent in full, bright breeding plumage, Song and Mistle Thrushes were singing, and a drumming Great Spotted Woodpecker added to the Spring atmosphere. Lest I relaxed too much, 94 Redwings, 8 Fieldfares and 22 Siskins reminded me that Winter might not be over...

**March's** 5 °C degrees was probably more seasonal, but a chilly day didn't stop the mellifluous and plentiful birdsong. I wrote I had to 'deconstruct the layers' to work out who was singing. Chiffchaffs, our first Summer visitors, were very welcome, as were Blackcaps: I heard 15 of each singing! Redwings were down to 7. A group of 8 Buzzards, spiralling over Corner Field, were probably migrating north.

We had some lovely, warm weather in mid-**April**, but my visit was on a cold morning; the reserve was quieter than on March's visit, probably due to parental duties with first broods. Singing Chiffchaffs (9), Blackcaps (12) and Garden Warblers (2) had been joined by Whitethroats (3), with their loud, scratchy song and harsh, scolding call. This month's highlights were my Eric Hosking moment, when a Tawny Owl exploded out of a dead tree, right in front of me, in Horsemoor Copse! Plus, a singing Yellowhammer – a first for me at Moor Copse.

**May** is the month of baby birds at Moor Copse, with the thick foliage hiding who's making yet another 'peep-peep-peeping' call! It's really hard to tell them apart, but the Blue Tits, Nuthatches and Robins all seem to have done very well. 17 Swifts feeding over Moor Copse were a very welcome sight after reports of heavy losses and long delays in southern Europe. And a Skylark, singing over the meadows, was another first for me as the reserve's surveyor.

Insects dominated **June's** visit, as many birds had begun their moult and were keeping a quiet low profile. The meadows resonated with the sound of crickets and grasshoppers stridulating, with the Chiffchaffs, Whitethroats and Wrens struggling to be heard over them! A beautiful Little Egret was feeding by the Pang, and I saw the first Kingfisher for several months dart past me.

My main **July** visit happened after the intense heat wave, which had left the reserve looking brown and tired. Only Wrens were singing, and that was in a pretty half-hearted way, though plenty of birds were calling to their young, or chiding visitors. Chiffchaffs' post-breeding "thweep" calls were common. However, I had visited Moor Copse early in the month, and was thrilled to see 2 or 3 Spotted Flycatchers by Hogmoor Bridge, and a Grey Wagtail near the car park.

**August** brought hints of Autumn : yellowing Hazel and russetting Bracken. Robins were singing their poignant winter songs, Chiffchaffs were thweeping, and tits were gathering into small foraging parties. The crickets and grasshoppers were still noisy, though, and I saw a Kingfisher again.

**September** was 'a tale of two seasons, separated by just one week': on the 19<sup>th</sup>, we were still in Summer, 19 °C under a cloudless blue sky; by the 26<sup>th</sup>, heavy showers made 14° C feel much colder, the Orthoptera were quiet, Jays were busy caching acorns, and there were more, and larger, autumnal mixed flocks of tits. 2 Grey Wagtails near the car park made me feel warmer!

**October's** visit coincided with the first frost of the season. 20 Siskins were a sure sign that winter approached. There were several mixed tit flocks, and a delightful group of Long-tailed Tits flew over and around me in Moor Copse. The first Redwing was another sign of the turning year.

**November** saw a scattering of Redwings, 26 Siskins and 15 Fieldfares. Goldcrests were calling, Robins and Wrens singing. And I saw several Great Spotted Woodpeckers, easy to spot in the now leafless trees.

A gloomy day in **December** was brightened by an abundance of birds, including 139 Redwings and 54 Goldfinches. Blue Tits were very numerous, I heard 6 singing Song Thrushes; and Great Spotted and Green Woodpeckers, Jays, Jackdaws and Nuthatches were calling, and the reserve's regular Grey Heron gave me a baleful look as it flapped heavily up from the river. The countryside may have looked drab, but there was plenty to see and hear.

















