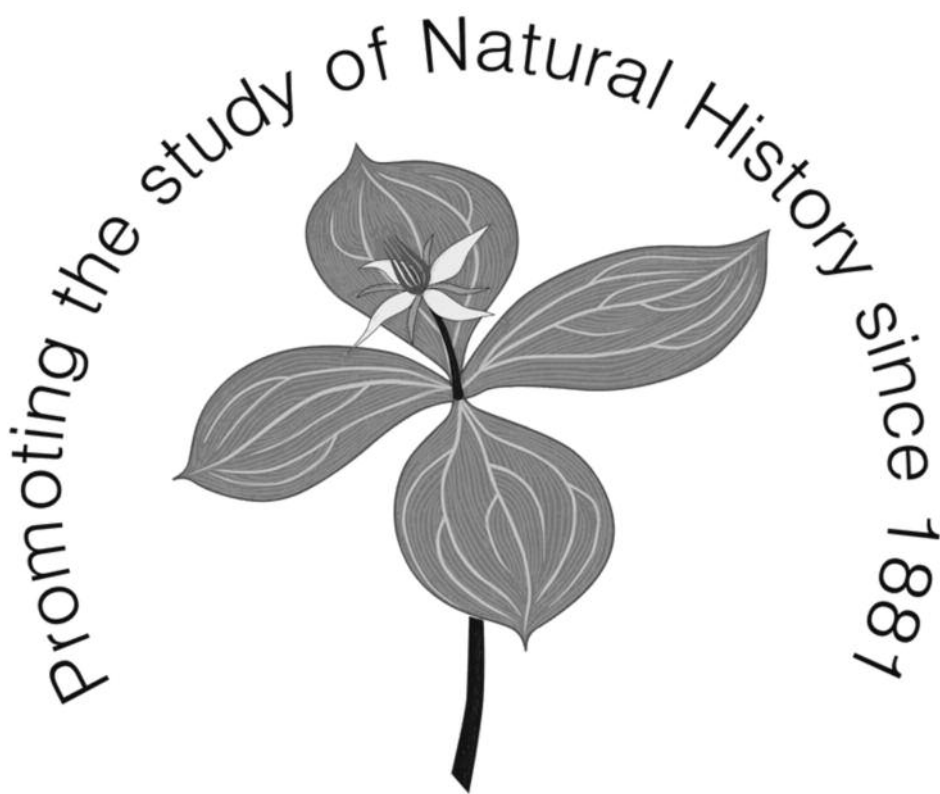


The Reading Naturalist

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Report for 2020

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THE READING NATURALIST
No 73 for the year 2020

The Journal of the
Reading and District Natural History Society

President

Ms Tricia Marcousé

Honorary General Secretary

Ms Fiona Cummins

Honorary Editor

Mr Ken White, Yonder Cottage, Ashford Hill, Thatcham, RG19 8AX

Honorary Recorders

Botany: Dr Renée Grayer, 16 Harcourt Drive, Earley, Reading, RG6 5TJ

Fungi: Position Vacant

Lichens: Position Vacant

Lepidoptera: Mr Norman Hall, 44 Harcourt Drive, Earley, Reading, RG6 5TJ

Entomology & other Invertebrates: Position Vacant

Vertebrates: Mr John Lerpiniere, 14 Pierces Hill, Tilehurst, Reading, RG31 6RB

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Editor's Note:

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 the incredible task of validating and proof reading, in particular Julia Cooper, Jan Haseler, David Cliffe and Fiona Brown without whom the task of producing The Naturalist would be impossible.

PLEASE PLEASE PLEASE can I ask more of the membership to write down their observations, pop them on the taxa report spreadsheets and send them/email them to the appropriate recorder? WE NEED YOUR OBSERVATIONS to record the wildlife of the local area and we need your data.

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

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Presidential Musings on a Presidential Address by Tricia Marcousé

It will be some time before “Presidential address” means something other to me than “Lock Him Up!”, “Fake News!” and “what about injecting bleach to control the Chinese virus?” After clearing the former US President from my mind, and focusing on Society issues, the thoughts go:

.....“Covid”“Peregrines”.....“Otters”

and that a lot of people worked even harder than usual to keep the society active in 2020.

It started pretty quietly for RDNHS. We had four great talks in January and February covering bird migration, climate change impacts on the Gulf Stream, biological control of some varieties of Himalayan Balsam and a standing room only talk by Jill Butler on rewilding at the Knepp Castle Estate. Reports about the virus spreading were worrying, but life continued much as usual for RDNHS.

By March, life had changed. We finished the 2019-2020 winter programme with a talk about TVERC and an AGM given to a tiny audience, and then went into lockdown. The summer programme was amended in the nick of time before printing to warn about cancellations.

During the summer and autumn, much of the walk programme went ahead with restricted numbers. Jan Haseler cancelled some and found extra walk leaders for others to extend the numbers of places available within the “rule of six”. Rob Stallard produced an extended monthly newsletter to keep members up to date with events and share news and photos. The isolation was punctuated by fantastic photographs of the successful rearing and fledging of three Peregrine chicks in Newbury where Ken and Sarah White monitored their every move, and rescued a grounded one from possible disaster.

Your committee moved into action and gazed into their crystal ball. We decided to plan for a winter with and without Covid 19 and Fiona Brown contacted all the people who had agreed to give a talk to see who would be willing to go onto Zoom. At the last possible moment we printed the winter programme and told the membership to prepare for being online until Christmas. Our thanks go to Martin Newman who sorted out the technical issues and helped the speakers and the members to make this a success.

The test victim presenter was Ken White with jaw-dropping photographs of his and Sarah’s tour of Patagonia. Unfortunately, limited broadband speed resulted in sound and vision arriving at different times and a rerun of the Two Ronnies’ Mastermind sketch where Corbett answers the question before last, with Ken providing dialogue to the photo that we would see three screen changes away and everyone desperately trying to hold information in their brains to match the picture to come. I believe this is called brain-training! Luckily for us, Ken was willing to rerun the talk at a later date.

In November we visited Dungeness, a unique landscape in Europe, and learnt about the succession of flora on the shingle banks (and all thought “we must go there for a field trip again”).

December gave us a brilliant talk on the use of DNA for monitoring species in the wild which made me optimistic that there would never be a need to dissect the gonads of an aquatic invertebrate again, and an online Christmas party giving the results of the fully Covid-19 compliant online photographic competition organised by Rob Stallard and Laurie Haseler. No surprises: Peregrines won!

We then went into Tier 4 isolation for Christmas and the New Year as Covid numbers rose rapidly, but let’s finish on a cheerful note: Ailsa saw an otter enjoying the River Pang at Moor Cope this year, and the adult Peregrine pair are still in Newbury ready for another breeding season.

Membership 2020 by Norman Hall & Ian Duddle

Paid up Membership figures as they stand as at the end of December 2020

Single members	68
Family/Couples	36 (x2)
Honorary members	7
	—
Total	147

of whom we welcomed 19 as new members to the group:

Julia & Andy Robertson	Margaret Trafford
Dr Graham & Dordie Ketley	Inge Beck
Diana Ferris	Louise Knight
Viv Rimmer	Ruth & George Uden
Jacinto Villalvilla	Thomas (Tom) Walker
John Corley	Carol Moloney
John, Juliet, Elise & Joseph Hammond	

Members' Observations by Julia Cooper & Rob Stallard

7th January

Ken White – a buff-tailed bumblebee *Bombus terrestris* on Winter Honeysuckle *Lonicera fragrantissima* at Plastow Green on 31/12/19. Ken also reported that the adult male and female Peregrines are still on the BT building in Newbury, he has completed constructing the nestbox and is awaiting permission from BT to install it.

Marion Venners – a male Sparrowhawk perched in a tree about 4ft from her French doors in Purley on 05/01/20.

Lesley Hawker – a Sparrowhawk perched on top of their bird feeder at Brimpton Common on 24/12/19.

Roger Frankum – 5 Corn Buntings on Lowbury Hill on 05/01/20, one of which was singing, and a Muntjac deer on the way to Pangbourne from Upper Bucklebury this evening.

Alan Parfitt – at Otmoor ideal conditions have led to spectacular numbers of birds, with about 10,000 Golden Plover and 12,000 Lapwings today. When a Peregrine flew over the sky was black with birds. There are also smaller numbers of Ruff, Pintail and Wigeon.

Fiona Brown – a Merlin on the Ridgeway north of East Ilsley during our walk on 18/12/19.

21st January

Ken White – a Woodcock was flushed from the middle of a field at Plastow Green at 7.15am on Sunday 19/01/20 during his early morning walk.

Rob Stallard – a Peacock butterfly disturbed from a house airbrick and adopting alarm mode in Tilehurst on Friday 17/01/20.

4th February

Fiona Cummins – a Barn Owl one mile north of Goring on 12/01/20.

Renée Greyer – yesterday evening when it was already dark and she was filling the bird feeder in her Earley garden with seeds, she put out her hand and a Sparrowhawk brushed passed it.

Ken White – brought in a male Dog's Mercury plant in full flower, which is very early. Ken also brought some *Daldinia concentrica* (King Alfred's cakes) on Ash.

Jerry Welsh – an early flowering Common Whitlow Grass *Erophila verna* in Sonning Common on 01/02/20 – also an early record.

18th February

Ken White – 4 'mad' March Hares boxing in the sun early this morning at Plastow Green.

Roger Frankum – a Kittiwake, a Black-necked Grebe and 3 Goosanders at Lower Farm, Thatcham on 11/02/20.

Jane Sellwood – Toads started to move from their hibernation sites to breeding lakes at Farley Hill on 15/02/20.

Rosemary James – a pair of Buzzards at Peppard at 11am on 08/02/20 and 3pm on 18/02/20, and at Elvedon Priory between Woodcote and Cleeve at 3.15pm on 12/02/20. Rosemary only sighted a single buzzard at Peppard last year. (Reported after the talk.)

3rd March

Jerry Welsh – Goat's-beard *Tragopogon pratensis* ssp. *minor* in flower in Kennylands Road, Sonning Common yesterday – about 3 months earlier than expected.

17th March

Tricia Marcousé – Comfrey in flower at Southcote on 16/03/20.

Ian Duddle – 2 Brimstone butterflies in their Tilehurst garden on 17/03/20.

Jan Haseler – 3 Brimstones (male) and 2 Comma butterflies in her Tilehurst garden on 17/03/20. There was also a mass of frogspawn in her garden ponds.

Rob Stallard – Hairy-footed Flower Bees on *Pulmonaria* flowers in his Tilehurst garden on 11/03/20, a week later than last year.

Ken White – at Plastow Green on 04/03/20, a mixed flock of 150 Redwings and Fieldfares singing vigorously from the tops of tall hedgerow trees. Ken has noticed this as pre-migratory activity in previous years – the majority of the birds would be gone in the next few days. (Reported by Ian Duddle.)

Sean O'Leary – over his Wallingford home on 13/03/20, a White-tailed Eagle being mobbed by Red Kites. The Eagle is one of the 6 released on the Isle of Wight last year and has been in Oxfordshire for several months. On Sean's moss walk at Swyncombe on 14/03/20 a species of moss new to Oxfordshire, later identified as *Hennediella macrophylla*, was found. (Reported by Ian Duddle.)

6th October

Ken White – recent observations in Plastow Green:

Full size Toad and Frog in the garden around the ever-growing compost heap on 15/09/20; his first sighting of a Toad there in 13 years.

On 18/09/20, a Grass Snake squashed dead on the road, another first sighting, and 2 Buzzards, 2 Red Kites and 1 Sparrowhawk in 2 hours, passing over barley stubble fields adjacent to the house.

On 23/09/20, 23 Mistle Thrushes on a barley stubble field, and a Woodlark in full song flight also seen on every fair-weather morning since.

On 28/09/20, 35 Skylarks on recently harrowed fields, passing through as they do every year. On the same day and occasionally since, a Roe deer male resting in the back garden.

Six House Martins passing through on 01/10/20, and a Chiffchaff in the garden today.

Sarah White – update on the Newbury Peregrines:

The 3 juvenile Peregrines have now apparently become independent and left the BT building. Ken and Sarah last saw the ringed female juvenile 'Blue YL' on 15/09/20 and her two younger siblings 'Jack' and 'Jill' on 14/09/20. There was also a probable sighting (with a photo) by Mike Taylor of Jack over Ladle Hill on 18/09/20, interacting with the local Red Kites. The juveniles might return to the BT building from time to time - Jack hadn't been seen for over a month before he reappeared on 14/09/20 - but the chance of someone being there to see them is quite small, so please let Ken and Sarah know if you spot them. The adult birds are both still in residence and behaving very much as a pair, demonstrating a renewal of their pair bond with Mrs Newbury begging for food from the male Black 69.

Jenny Greenham – a Magpie moth on raspberries on her allotment in Hampstead Norreys on 27/07/20, the first time she had seen one.

Sally Rankin - a glorious display of Chiltern Gentians in the '85 clearing in Homefield Wood on 18/09/20 and 01/10/20, with the largest and most abundant plants Sally has seen in one place. She thinks they are a plant that fluctuates a lot so they may not be as good next year. The flowers were also good at Swain's Wood on 30/08/20 but BBOWT had already put the sheep in and she hasn't visited since to find out how well the plants fared.

3rd November

Jenny Greenham – a probable Sparrowhawk flew off with a pigeon from her back garden close to the house on 09/09/20, leaving feathers everywhere. The hawk had probably been visiting their garden for a few days as very few birds were coming to the many feeders she has.

Marion Venners –

On the evening of 06/10/20, a Devil's Coach Horse beetle on her back doorstep in Purley (RG8 8DH), the first she had seen for a long time.

On 08/10/20, 2 dead hares within a mile of each other on the road from Newbury to Wantage.

On 14/10/20 at Hosehill Lake (RG7 4BD) at 11.30am, 75 Lapwings, 3 Little Egrets, 4 Herons, and many Cormorants fishing and then drying their wings.

On 15/10/20 at Steventon, Berks (OX13 6AB) at 10.30am on a sunny morning for about 10 minutes, a superb display from 10 House Martins flying over a large pond in fields. They just dipped their beaks into the water and also made a splash dipping their tummies in the water. Marion suggested they might have been northern bred young heading south.

On 26/10/20 west of Long Lane, Tilehurst (RG31 5UG) at 1pm, walking back from a fungus foray in Sulham Woods, 7 - 9 Pied Wagtails drinking and bathing with Meadow Pipits in puddles on the track, and Skylarks singing.

On 30/10/20 at Quicks Green woodland (RG8 8SN) at 2pm, disturbed a Muntjac which had probably been feeding at a pheasant feeder.

Jan Haseler – reported a good season for waxcaps in their Tilehurst garden. For more than 40 years, lawn cuttings have been removed and no fertiliser has been applied. Now every year more fungus species are emerging. So far this autumn there have been green Parrot Waxcaps, white Snowy Waxcaps, conical Blackening Waxcaps, brown Slimy Waxcaps, plus small orange and yellow specimens. This year for the first time there are also ivory-coloured finger-like specimens.

Ian Duddle – on 23/10/20 a watchful Green Woodpecker eating ants on the lawn in their Tilehurst garden for about an hour, and on 29/10/20 a Toad found under a pile of leaves there.

1st December

Jenny Greenham – a dark brown melanistic hen Pheasant visiting their garden in Hampstead Norreys over the last week. A black cock Pheasant has visited in the past and one has joined the hens belonging to someone in the village. They are also quite common in Ashampstead. Ken White noted that melanistic birds are often released by shooting estates.

Fiona Cummins – had a good view of a male Stonechat in a field near Sonning Common last Wednesday 25/11/20, the first time Fiona has seen this species in her local area.

Ken White – the Newbury Peregrines can often be seen on St Joseph's Church tower.

Alan Parfitt – one of the White-tailed Eagles released on the Isle of Wight had been seen over Woodcote and Cholsey recently.

15th December

Ken White – in their garden and on local walks at Plastow Green:

A Brambling in the garden 26/11/20 for 2 days only, and a Woodlark singing and flying over the garden 23/10/20 - 05/11/20. Up to 5 Greenfinches every day, with up to 2 Coal Tits feeding on sunflower seeds, and Tawny Owls hooting at night. Blackbird numbers are increasing from very low early autumn numbers of just a couple.

Barley stubble is a magnet for bird activity at this time of year. At different times in the last 2 days saw 2 Ravens, a flock of 150 Starlings, and another flock of 60 Rooks and 90 Jackdaws all foraging on the stubble fields, and a single Grey Wagtail on the edge of a field puddle.



Norwegian-ringed Black-headed Gull
'Green J0L1'

photo © Ken White 14/11/19

Black-headed Gull 'Green J0L1' was found on 06/12/20 for the 2nd consecutive year as a winter visitor from Oslo, Norway, at The River Kennet Wharf in Newbury, originally observed last November on the 3rd & 14th Nov 2019. It was ringed as a 2nd calendar year bird in May 2016 in a park - very similar to Victoria Park in Newbury - on the east side of Oslo, and therefore hatched in the summer of 2015.

Tricia Marcoué – Tawny Owls heard recently in the centre of Earley, a female in the early evening and a male in the early morning.

Fiona Brown – on 14/12/20 on the Thames near Little Marlow, a pair of Great Crested Grebes making a V shape, swimming into position and diving – courtship behaviour normally seen in spring; and in fields north of Little Marlow, a flock of 100 - 200 Fieldfares and Redwings.

Lesley Hawker – a Starling murmuration at Thatcham reedbeds lasting about 20 minutes twice this week at 3.30 to 3.45pm.

Marion Venners – a Grass Snake about 3 feet long in Purley on Thames on 08/12/20, disturbed from a heap of soil where some work was being done – possibly in a rabbit burrow.

Sheelagh Hill – Sparrows flying in and taking a bite from chard leaves in their vegetable patch in Binfield Heath, leaving jagged holes.

Ian Duddle – up to 5 Redwings stripping the berries on Holly trees in their Tilehurst garden on several days in the last week.

Excursions 2020 by Jan Haseler, Sean O’Leary, Norman Hall, Sarah White and Ken White

Julia Cooper stepped into the breach on **Saturday 11 January**, when the original leader of the geology walk, Lesley Dunlop, was called away on urgent family business. Armed with Lesley’s map and notes and the Berkshire Geoconservation Group’s ‘Geological Sites to Visit in Berkshire’ booklet, Julia led 14 members on a walk around **Winter Hill** and **Cookham Dean** on a mild grey morning. While the group gathered, a mixed flock of Redwings *Turdus iliacus* and Fieldfares *T. pilaris* landed briefly in the trees below, before flying on.

Looking north across the valley of the Thames from the Winter Hill viewpoint, a series of gravel terraces could be seen on the far side. The oldest and highest terrace, the Winter Hill Gravel, was laid down about 500,000 years ago. Lower down, the Taplow and Shepperton terraces could be seen, with the most recent deposits laid down between 20,000 and 100,000 years ago. The gravel terraces were laid down by braided river systems in the warmer interludes between ice ages. During the colder phases, sea level fell and the river cut downwards through the Chalk bedrock. Changes in gradient of the A404 dual carriageway on the far side of the valley mark out the succession of terraces.

The next section of the walk followed a footpath to the Woodland Trust’s **Quarry Wood**. Hazel *Corylus avellana* catkins were fully out and a Song Thrush *Turdus philomelos* was singing. Quarry Wood has deposits of Gerrard’s Cross Gravel, laid down more than 500,000 years ago. The oldest gravel deposits include pebbles of Quartz and Quartzite, originating from a time when the Thames catchment area included parts of the Midlands. These were easily found in places where the gravel was exposed, such as round the roots of fallen trees. Far below, Marlow church could be seen, built on a terrace just above the present floodplain. Other interesting sightings in the wood included a branch of rotting wood which was stained blue-green by the Green Elfcup *Chlorociboria aeruginascens* fungus and an unusual growth of the Turkeytail *Trametes versicolor* fungus on a fallen twig. While the twig was still in the tree, the lower surface of the Turkeytail was pointing downwards. When the twig fell at an angle, the Turkeytail responded by growing a rosette of smaller fungi, all growing with the lower surface pointing in the new downwards direction (viz. *geotropism*). The walk then continued down a narrow lane to Cookham Dean Chalk Pit. The Seaford Nodular Chalk was laid down about 85 million years ago in the Cretaceous period. The Chalk was made from the bodies of microscopic coccolithophores deposited in warm tropical seas and it has been estimated that it took about 1,000 years to deposit a thickness of 10 cm. The quarry face has narrow bands of flints at intervals of about 0.5 – 1 metre. These represent changes in seawater chemistry when more siliceous organisms such as sponges were deposited and under the process of *diagenesis* the silica migrated into regular horizontal bands. The quarry also has small patches of pink material, known as Phosphatic Chalk. The next part of the walk was through the village, then along a footpath which climbed from the Chalk up a slope which was capped with Winter Hill Gravel. On the final stretch back to the Winter Hill viewpoint, Stinking Hellebore *Helleborus foetidus* flowers were noted in the woodland below the road.

Marcus Wheeler led a well-attended walk to look at trees by the River Thames in **Reading on Saturday 1 February**. 20 members and guests assembled at Hill’s Meadow car park on a windy but mostly sunny morning.

First stop was a small Wellingtonia or Giant Redwood *Sequoiadendron giganteum*, planted by the Caversham branch of Waitrose near the river bank close to Reading Bridge. In the background, Greylag *Anser anser* and Canada Geese *Branta canadensis* flew upriver. The walk started out downstream along the footpath on the north bank of the river. Marcus pointed out an Ash *Fraxinus excelsior* tree, with black buds and upward-curving twigs, and a riverside Crack-willow *Salix fragilis*, which was multi-stemmed from the base upwards. Several big old Silver Birches *Betula pendula* were growing beside the path. At the eastern end of the park was an avenue of tall Lombardy Poplars *Populus nigra ‘Italica’*, with some showing scars where large branches had broken off. A footbridge led across to View Island. On a Hazel beside the path, catkins were fully out and a small red female flower was noted. A large rectangular bare area which was surrounded by green-budded Sycamores *Acer pseudoplatanus* had apparently once been a hotel tennis court. A party of Long-tailed Tits *Aegithalos caudatus* flitted through the trees and both Green Woodpecker *Picus viridis* and Great Spotted Woodpecker *Dendrocopos major* were noted. A narrow path led past a pond, where white pussy willow *Salix caprea* could be seen. Marcus pointed out a young Ash which was badly affected by Ash Dieback disease *Hymenoscyphus fraxineus* (formerly known as *Chalara fraxinea*, later identified as the asexual form of *H. fraxineus*). The first Cherry Plum *Prunus cerasifera* was already in flower.

The walk continued across the footbridge above Caversham weir, where the river level was high and the water was flowing fast. A Grey Wagtail *Motacilla cinerea* was perching on a riverside rope. Continuing downstream along the south bank of the river, there was a big London Plane *Platanus x hispanica* (*P.occidentalis* x *P.orientalis*) with the characteristic tassel-like dangling fruits. Marcus pointed out the flaking regenerative bark and smooth leathery leaves which can be washed clean by rainwater, features which enable the tree to grow in polluted urban environments. Closer inspection revealed that a recently fallen tree in King's Meadow was a Corkscrew Willow *Salix matsudana* Tortuosa. Next to it was an Alder *Alnus glutinosa*. Back on the riverside path was another much bigger and healthier Corkscrew Willow. Next came a group of White Poplars *Populus alba* with the round exit-holes of the Hornet Moth *Sesia apiformis* near their bases. On the river beyond, a Great Crested Grebe *Podiceps cristatus* was diving and a Mute Swan *Cygnus olor* flew upstream. A big Horse-chestnut *Aesculus hippocastanum* had spreading limbs and brown sticky buds. New green leaves were already showing on the Elders *Sambucus nigra*. The walk continued away from the river, along the road which crosses King's Meadow. Trees seen here included a Lime *Tilia* sp., an Italian Alder *Alnus cordata* and an Ash which was covered in feathery male flowers. After some head-scratching, a tree with white furry catkins was identified as an Aspen *Populus tremula*. The group then retraced their steps across King's Meadow, back to the weir, past View Island and on to Hill's Meadow.

On **Saturday 14 March**, Sean O'Leary led the annual moss walk at **Swyncombe**. This is a favourite site for the walk, as it combines interesting and varied habitat with wonderful views of rolling countryside. In addition, there is always a good chance of seeing a Raven *Corvus corax* in one of the first areas to experience its recent expansion across the country. Meeting at the lovely 11th century church of St. Botolph, 11 members followed the footpath up Swyncombe Hill through fine sloping woodland. This yielded many mossy delights such as *Orthotrichum stramineum*, *O. pulchellum*, *O. affine*, *O. diaphanum*, *O. lyellii* and *O. tenellum* all growing on a single log. Spectacular *Rhytidiadelphus triquetrus*, *Thuidium tamariscinum* and *Thamnobryum alopecurum* leavened the dough of bryological minutiae with the yeast of their flamboyant beauty. A varied collection of Brown-lipped Snails *Cepaea nemoralis* were seen, together with three specimens of the Two-toothed Door Snail *Clausilia bidentata* on an Ash tree.

However, the most interesting bryophyte was found at the top of the slope as the group emerged near a rather boring looking arable field. On the path, in some quantity was a mysterious moss later identified using the microscope as *Hennediella macrophylla*, confirmed as new to Oxfordshire – a very significant find, and congratulations to the finder. The remainder of the walk through fields and more woods took in lovely views, two Hares *Lepus europaeus*, swirling Red Kites *Milvus milvus* and honking Ravens. Returning to the church, the walkers were treated to a departing slice of Louise's ever-popular muesli crunch.

There followed a gap of more than three months, as **Covid-19 lockdown regulations** forced the cancellation of the field trip programme. But at the beginning of July, walks were restarted cautiously. Group sizes were limited to six and booking became essential. For many of the walks, we were able to double the number of participants by putting on an extra leader and staggering the start times of the two groups.

Sarah White and Julia Cooper led a field trip to **Ladle Hill**, near Kingsclere, on the morning of **Saturday 4 July**. Sarah led the first group of six members, and Julia the second group of five which started half an hour later. It was a mild, damp day with a strong south-westerly wind. The walk started from the crest of the ridge where the Wayfarer's Walk crosses the Sydmonton to Ashley Warren road. While the group were gathering at the start, a Roe Deer *Capreolus capreolus* was spotted deep amongst the corn crop in the field across the road. The walk started out westwards along the Wayfarer's Walk. The track followed a magnificent line of Beech *Fagus sylvatica* trees, before leading into a grassy field where the short turf was dotted with the yellow of Lady's Bedstraw *Galium verum* and Common Bird's-foot-trefoil *Lotus corniculatus*, the white of Hedge Bedstraw *Galium mollugo* and White Clover *Trifolium repens* and the pink of Red Clover *Trifolium pratense*. Wild Teasel *Dipsacus fullonum* and thistles stood tall around the margin of a dried-up pond, while in the damper area, Great Willowherb *Epilobium hirsutum*, Branched Bur-reed *Sparganium erectum*, Gypsywort *Lycopus europaeus* and Water Mint *Mentha aquatica* could be seen. The walk continued through a gateway, then westwards along a track with first oats then barley on one side and wheat on the other. Tall heads of Rye Brome *Bromus secalinus* grass showed above the crops – apparently this is a species which is becoming a problem in arable farmland. Fool's Parsley *Aethusa*

cynapium, Common Field-speedwell *Veronica persica*, Dove's-foot Crane's-bill *Geranium molle* and Scarlet Pimpernel *Anagallis arvensis* were seen beside the track. Skylarks *Alauda arvensis* were singing overhead and several Corn Buntings *Emberiza calandra* flew down deep into the crops. Towards the top of the hill, there was another dried-up pond beside the track. Redshank *Persicaria maculosa* and Silverweed *Potentilla anserina* dominated the bottom of the pond area, while Pyramidal Orchid *Anacamptis pyramidalis*, Meadow Vetchling *Lathyrus pratensis* and Goat's-beard *Tragopogon pratensis* were found around the margins.

Four Corn Buntings were perching on the fence which enclosed the Iron Age Hill fort of Ladle Hill. The short turf within was dotted with a rich variety of flowers, including Wild Thyme *Thymus drucei*, Small Scabious *Scabiosa columbaria*, Common Rock-rose *Helianthemum nummularium*, Squinancywort *Asperula cynanchica*, Eyebright *Euphrasia* sp., Common Milkwort *Polygala vulgaris*, Fairy Flax *Linum catharticum*, Dwarf Thistle *Cirsium acaule*, Red Bartsia *Odontites vernus* and Yellow-rattle *Rhinanthus minor*. The abundant Pyramidal Orchids were at their peak, while many of the Chalk Fragrant Orchids *Gymnadenia conopsea* were a little past their best. The walk continued clockwise round the ramparts. Highlight of the morning were the tiny Burnt Orchids *Neotinia ustulata*, found at about 4 different locations, sometimes alone, but with one bigger group of about a dozen specimens. These attractive little orchids were just a few inches high, with a deep reddish-purple tip, grading to whitish at the bottom of the flower head. A Meadow Pipit *Anthus pratensis* with food in its beak indicated that there was a nest nearby, so the two groups kept well away from the centre of the fort. The original plan had been to circle the ramparts, but the agitated calls of Corn Buntings in the north-west sector led to a revision of the route. Instead, the walk continued lower down the hillside on the outside of the ramparts. This included a struggle through a dense stand of Hogweed *Heracleum sphondylium* and Common Nettle *Urtica dioica*, where many Meadow Brown *Maniola jurtina* and at least three Red Admiral *Vanessa atalanta* butterflies were sheltering from the wind. Emerging from the dense vegetation, the path contoured across a grassy field with short flowery turf which sloped steeply down towards a belt of woodland. This section was more sheltered than the hill fort had been and more butterflies were seen, including Marbled White *Melanargia galathea*, Small Skipper *Thymelicus sylvestris*, Green-veined White *Pieris napi*, Large White *P. brassicae* and Meadow Brown. The markings on the undersides of a mating pair of Marbled Whites were pale brown on the female and pale grey on the male. Flowers seen here included Harebell *Campanula rotundifolia*, Wild Mignonette *Reseda lutea* and Common Spotted-orchid *Dactylorhiza fuchsii*. After crossing a perilous stile and passing through a kissing gate, the route returned to the Wayfarer's Walk. Back at the row of Beeches near the road, the wind was still blowing strongly, but despite this, wild bees were flying in and out of a hole in a dead tree. Six years earlier, on the Society's previous visit to Ladle Hill, the bees had been nesting in the same hole. Some members then went on to Newbury to watch the Peregrine *Falco peregrinus* nest on the BT building.

On **Saturday 18 July**, the annual mothing night was held, with kind permission of wardens Pete Morton and Jade van der Merve, at **Withymead Nature Reserve**, on the east bank of the Thames to the north of Goring. Norman Hall and Paul Black set up traps around the reserve and stayed overnight. Next morning, a number of members came to view the catch. The trappers arrived well before dusk and Pete showed them round the reserve. Norman set up two lights over sheets and a trap in the orchard, the section of the reserve between the bridleway and the railway line. When heavy rain set in at 01:30, he swapped one of the lights over sheets for a second trap. Paul set up his traps on the main part of the reserve. He had a light over a sheet and a trap on the boardwalk next to extensive reed beds, with the trap next to an area with abundant flowers of Yellow Loosestrife *Lysimachia vulgaris*. His second trap was in adjoining area of woodland, next to a big Pedunculate Oak *Quercus robur*, in an area with a ground cover of Red Currant *Ribes rubrum*. One of the target species here was the Spinach *Eulithis mellinata*, a moth whose caterpillars feed on currant bushes and whose numbers are in serious decline, but regrettably, no Spinach moths put in an appearance. As darkness fell, one of the first moths to come to the woodland trap was an enormous female Drinker *Euthrix potatoria*, and dark red Ruby Tigers *Phragmatobia fuliginosa* also put in an early appearance. Over in the orchard, Large Twin-spot Carpet *Xanthorhoe quadrifasiata* was an early arrival on one of the sheets. Next morning, it started to get light before 5am. Light rain was still falling and the sheets and egg boxes were sodden, but the traps were unharmed.

In total, 141 species of moth were recorded, comprising 108 macro-moths, 15 pyralid moths and 18 micro-moths. This was an impressive total, which perhaps might have been even higher without the overnight rain. One of the rarest moths of the night was a single specimen of the nationally scarce Striped Lychnis *Cucullia lychnitis* which was taken at one of Norman's lights. In daylight next morning, a Striped Lychnis caterpillar was found feeding on the seed head of a Dark Mullein *Verbascum nigrum* plant nearby. Another good find was the nationally scarce Dotted Fan-foot *Macrochilo cribrumalis*. Two specimens were taken by Paul at his

reedbed lights. Other interesting wetland moths included Fen Wainscot *Arenostola phragmitidis*, Brown-veined Wainscot *Archanara dissolute*, Balsam Carpet *Xanthorhoe biriviata*, and the nationally scarce Waved Black *Parascotia fuliginaria* whose caterpillars feed on fungi on rotting trees, particularly in damp or boggy woodland. Norman took a particularly dark specimen, probably a female, of Small Scallop *Idaea emarginata*.

One specimen of each species was potted up and kept back for inspection by members on Sunday morning. They were able to compare similar species, such as Common Footman *Eilema lurideola*, Scarce Footman *E. complana*, Buff Footman *E. depressa*, Dingy Footman *E. griseola* and Rosy Footman *Miltochrista miniata*, and Early Thorn *Selenia dentaria*, Purple Thorn *S. tetralunaria*, Dusky Thorn *Ennomos fuscantaria*, August Thorn *E. quercinaria* and September Thorn *E. erosaria*. A particular favourite by-catch was a Great Diving Beetle *Dytiscus marginalis*, which walked rapidly away when released.

Sally Rankin and Alan Parfitt each led a walk round the southern Bald Hill section of **Aston Rowant National Nature Reserve** on the morning of **Saturday 25 July**. Alan started out first as leader of a group of six members, followed half an hour later by Sally in another group of six. It was a grey morning with a strong south-westerly wind and the occasional shower, but also with intermittent brighter periods and even a little sunshine. The walk started from the Cowleaze Wood car park and headed out towards the steep south-west facing side of Bald Hill. Flowers seen at the top of the hill included Small and Field Scabious *Knautia arvensis*, Greater Knapweed *Centaurea scabiosa* and Common Knapweed *C. nigra*, Wild Thyme, Wild Marjoram *Origanum vulgare*, Wild Basil *Clinopodium vulgare*, Lady's Bedstraw, Harebell, Common Bird's-foot-trefoil, Eyebright, Squinancywort, Yellow-wort *Blackstonia perfoliata*, Common Rock-rose, Wild Carrot *Daucus carota*, Wild Parsnip *Pastinaca sativa*, Burnet-saxifrage *Pimpinella saxifraga* and Agrimony *Agrimonia eupatoria*. A thistle clump had tall spikes of Musk Thistle *Carduus nutans* and Spear Thistle *Cirsium vulgare*, with Dwarf Thistle in flower nearby. Six-spot Burnet *Zygaena filipendulae* moths and a few silvery-blue male Chalkhill Blue *Polyommatus coridon* butterflies were disturbed from the vegetation, but then the sun came out briefly and many more appeared. A single Silver-spotted Skipper *Hesperia comma* butterfly was seen here. The wind blowing up the hillside revealed the pale undersides of the leaves of a big Whitebeam *Sorbus aria* tree. Red Kites and the occasional Common Buzzard *Buteo buteo* glided on the wind.

The walk continued through a gateway into the north-west section of Bald Hill. By the gate was a patch of Dewberry *Rubus caesius*, with white flowers and fruits with a dull blue-black sheen. Wild Mignonette, Pyramidal Orchid, Clustered Bellflower *Campanula glomerata*, Hoary Plantain *Plantago media* and Fairy Flax were added to the list of flowers. There were some magnificent ant-hills, covered by a carpet of Wild Thyme, Common Bird's-foot-trefoil and Squinancywort. A large yellowish-brown fungus with a red net-pattern on the stem was identified afterwards as a Lurid Bolete *Boletus luridus*. A few dark brown female Chalkhill Blue butterflies were seen, together with Common Blue *Polyommatus icarus*, Small Skipper and Small Heath *Coenonympha pamphilus* butterflies. The route led past a healthy-looking Juniper *Juniperus communis* covered with blue-green berries in the bottom north-west corner of the field. Heading back southwards, there was a fenced enclosure with more healthy Juniper bushes, including both male and female specimens. The Natural England site managers have been carrying out trials of different grazing and planting regimes over many years, to try to understand and counter the continued lack of regeneration of Juniper. Nearby, a Clouded Yellow *Colias croceus* butterfly flew between scabious flowers. The field edge was sheltered from the wind and several Dark Green Fritillaries *Argynnis aglaja* were seen here. Continuing through the gate at the bottom of the hill, there was a brief glimpse of two Bullfinches *Pyrrhula pyrrhula* in the hedge above the path, a Raven called from across the valley and a Kestrel *Falco tinnunculus* flew overhead. The walk ended with a steep climb to the top of the hill and a stroll back to the car park.

Fiona Brown led a walk at the National Trust's **Watlington Hill** on the morning of **Saturday 15 August**. Fiona is a member of the Friends of Watlington Hill, who help regularly with conservation work at the site. When the pre-walk took place a week earlier, the temperature was in the high twenties, Silver-spotted Skipper and Chalk Hill Blue butterflies were seen in good numbers and the view from the hill stretched across a significant portion of Oxfordshire and over to the Berkshire Downs. On the morning of the walk, the temperature was ten degrees lower, light drizzle alternated with heavier bursts of rain, the rare butterflies were sheltering out of sight and the view barely stretched beyond the town of Watlington at the foot of the hill.

Nevertheless, the participants had a productive morning exploring the hillside. The walkers were split into two groups, with Fiona leading the first group and Jan Haseler following half an hour later with the second group. The walk started from the National Trust car park at the top of the hill and headed out through a small sheltered meadow area where flowers included Corn Mint *Mentha arvensis* and Red Bartsia. The main reserve access road led westwards towards the open hillside. Vervain *Verbena officinalis*, Perforate St John's-wort *Hypericum perforatum*, Wild Basil and Wild Marjoram were in flower beside the track and a Crab Apple *Malus sylvestris* tree had a prolific crop of small, acid-tasting fruit. The route led out onto rich flowery chalk grassland on the north-facing slope of the hillside. It was interesting to see what was present and what was missing, compared with similar habitat seen two weeks earlier at Aston Rowant National Nature Reserve. One big difference between the two sites is that Aston Rowant is grazed for part of the year by sheep, while Watlington relies on Rabbits *Oryctolagus cuniculus* for grazing, together with brush cutting and raking to keep the scrub under control. Flowers seen at the top of the hill included Field and Small Scabious, Greater and Common Knapweed, Wild Thyme, Yellow Rattle, Dwarf Thistle, Lady's Bedstraw, Harebell, Eyebright, Yellow-wort and Common Centaury *Centaureum erythraea*. Small patches of Gorse *Ulex europaeus* marked out areas of acid wind-blown sands on top of the chalk. In the next short turf area, Common Rock-rose, Hoary Plantain, Squinancywort, Blue Fleabane *Erigeron acer* and Autumn Gentian *Gentianella amarella* were added to the list and a few tiny Frog Orchids *Coeloglossum viride* were spotted by a sharp-eyed observer. Slim rose hips with glandular pedicels were later identified as Small-flowered Sweet-briar *Rosa micrantha*. Meadow Browns and a Small Heath butterfly were disturbed from the vegetation, a Common Blue was roosting in the grass and three Ravens and a small flock of House Martins *Delichon urbica* were seen.

Continuing westwards along the ridge, an area to the side of the path which had recently been cut and raked had plentiful Wild Candytuft *Iberis amara*, a plant which had not been seen at Aston Rowant. Pale Toadflax *Linaria repens*, Bladder Campion *Silene vulgaris*, Wild Mignonette and Common Gromwell *Lithospermum officinale* were found nearby. A short diversion led down the slope to the Watlington White Mark. This is a 270 foot high spire-shaped triangular mark in the chalk which was excavated for the local squire in 1764. He thought that the view from his home across the parish church to Watlington Hill would be more impressive if the church had a spire. A former National Trust Ranger was able to refresh the spire using a load of chalk from a new road cutting and volunteers now look after it to keep it white. The walk continued along the west-facing slope. The sheltered stretch below a line of trees had good quantities of Clustered Bellflower. This had been one of the best sections for Chalk Hill Blue on the pre-walk. The path then led into a dark area of Yew *Taxus baccata* woodland, before crossing a sunken drove road and emerging towards the bottom of the south-facing side of the hill. The final part of the walk was a long slow climb back up the hill. Several enclosures had been constructed beside the path to protect the Horseshoe Vetch *Hippocrepis comosa*, the caterpillar food-plant of the Chalk Hill and Adonis Blue *Polyommatus bellargus* butterflies. Hawkweed Oxtongue *Picris hieracioides* was spotted in one of these enclosures and Ploughman's-spikenard *Inula conyzae* was in flower nearby. Several tiny Brown Argus *Aricia agestis* butterflies were roosting on the grass beside the track. Sanicle *Sanicula europaea* was found in the final stretch of woodland before returning to the cars.

Laurie and Jan Haseler led 2 walks, each with 6 people, at **Greenham Common** on **Saturday 5 September**, starting from the Control Centre car park. It was a sunny afternoon, following a week with significant amounts of rain. The top of the Common is covered by Plateau Gravels, laid down about 500,000 years ago, some of the oldest gravels in the region. They overlay the acid sandy clays of the Bagshot Formation, with these in turn lying above heavy impermeable London Clay. The concrete from the runways of the former air base was removed from the site and used in the construction of the Newbury Bypass, but lime leached from the concrete still leaves its traces in the bright green grass and lime-loving plants of the former runways.

The walks started out across the northern runway, where Field Mushrooms *Agaricus campestris* were pushing up through the grass and Slender Trefoil *Trifolium micranthum* was found. On the heathland beyond, Bell Heather *Erica cinerea*, Heather *Calluna vulgaris* and Dwarf Gorse *Ulex minor* were in flower. A Wheatear *Oenanthe oenanthe* was spotted by one of the groups and other flowers seen here included Eyebright, Blue Fleabane, Heath Milkwort *Polygala serpyllifolia*, Fairy Flax, Wild Carrot and Musk-mallow *Malva moschata*. On the southern runway, hundreds of delicate white spiral flower-spikes of Autumn Lady's-tresses *Spiranthes spiralis* orchids poked up through the grass. A large pale spherical puffball whose cap had a net-like pattern was tentatively identified as a Mosaic Puffball *Lycoperdon utriforme*. The walks continued across an open stony area where a few Small Heath butterflies were seen, together with flowers

of Viper's-bugloss *Echium vulgare*, Carline Thistle *Carlina vulgaris*, Field Madder *Sherardia arvensis*, Common Stork's-bill *Erodium cicutarium* and Common Bird's-foot-trefoil. A family of Pied Wagtails *Motacilla alba* flew up from the base of a rusty metal model of a bomber plane which had formerly been used for fire fighting simulations.

The route then led down off the top of the Common to a line of ponds. New Zealand Pigmyweed *Crassula helmsii*, an alien invasive plant which blights many of the Common's ponds, was the dominant species, but also seen here were Water-plantain *Alisma plantago-aquatica*, Lesser Spearwort *Ranunculus flammula* and the tiny flowers of Pink Water-speedwell *Veronica catenata*. Scarlet Pimpernel and Trailing St John's-wort *Hypericum humifusum* were flowering on the bare gravel above the pond. The distinctive seed spikes of Heath Speedwell *Veronica officinalis* were found beside the path below the ponds. One Slow-worm *Anguis fragilis* was found under a log and two more were sheltering under a metal sheet. The path then led through a thicket of Silver Birch, where pink *Russula* fungi were seen. A side turning led to a boggy valley where a number of plants of damp places were found, including Lesser Skullcap *Scutellaria minor*, Bog Pimpernel *Anagallis tenella*, Cross-leaved Heath *Erica tetralix* and Tormentil *Potentilla erecta*. There was a single Common Blue butterfly and a Green Woodpecker flew up, calling loudly. On the walk back across the top of the Common to the Control Centre, a ring of Fairy Ring Champignons *Marasmius oreades* was found in a grassy area and a family of Stonechats *Saxicola torquata* were moving through an area of Gorse.

Rob Stallard organised a circular walk around **Tilehurst** and **Sulham** on the morning of **Sunday 27 September**, starting from the Cornwell Centre on the western edge of Tilehurst. Rob led the first group of 6 walkers and Jan Haseler followed half an hour later leading another group of 6. There was a cold northerly wind, but conditions improved as the cloud cover dispersed.

The walk started out down through Cornwell Copse, where Soft Shield-fern *Polystichum setiferum* was found on the steep banks of a small dried-up stream. After crossing Sulham Hill, the route continued through the thin strip of copse on the west side of the lane. The damp clay conditions are ideal for Wild Service-tree *Sorbus torminalis*, which is surprisingly common in this little patch of woodland. It is one of the first trees to change colour in the autumn, and looking upwards, it was possible to see patches of bright red in the canopy, and the distinctively-shaped bright red leaves were easy to spot on the woodland floor. At the end of the wood were a row of Hornbeams *Carpinus betulus* and a number of clumps of Butcher's Broom *Ruscus aculeatus*, some with berries. After re-crossing Sulham Hill, the route continued westwards through Vicarage Wood and Vicarage Copse. There was a brief diversion into the open fields to the north for a glimpse across the valley of the River Thames and north into the Chilterns. At the main Sulham Woods car park, the walkers recrossed Sulham Hill for the third time and headed south across a stony field. The large area to the right of the track had been planted with a bird-seed mixture and plants identified here included Phacelia *Phacelia tanacetifolia*, Common Poppy *Papaver rhoeas*, Field Pansy *Viola arvensis*, Mugwort *Artemisia vulgaris*, Black Nightshade *Solanum nigrum* and Scarlet Pimpernel. Two Roe Deer were seen. On the left of the track were a series of dried-up ponds. Finds in the first pond, which was under a group of Oak trees, included Trifid Bur-marigold *Bidens tripartita*, Branched Bur-reed, Water-pepper *Persicaria hydropiper*, Marsh Cudweed *Gnaphalium uliginosum* and the seed spikes of Purple-loosestrife *Lythrum salicaria*. The walk continued along a path which dropped steeply down through the southern section of Sulham Woods, passing through a conifer plantation at the top of the hill and a narrow strip of broad-leaved woodland at the bottom. A few clumps of Sanicle leaves survived under the darkness of the conifer canopy. The path emerged in an open grassy area on the Chalk which lies below the Reading Beds. A Green-veined White and a Speckled Wood *Pararge aegeria* butterfly were seen flying in the sheltered sunshine at the woodland edge. Flowers seen here included Wild Basil, Common Centaury, Blue Fleabane, Vervain and Red Bartsia. On the pre-walk, two tractors ploughing the big field further along the valley had attracted a flock of about 20 Red Kites, with at least a dozen down on the ground behind the ploughs. Once upon a time, it would have been gulls which followed the plough.

At the bottom of the field, a Buckthorn *Rhamnus cathartica* in the hedge had a heavy crop of glossy black berries and a very fresh Red Admiral butterfly was resting nearby. The route dropped down to Nunhide Lane and followed it southwards. Amongst the flowers on the bank at the side of the track were Black Horehound *Ballota nigra*, Field Scabious, White Champion *Silene latifolia* and Bladder Champion. This is where the rarest plant of the morning was found – 2 specimens of *Linaria x sepium*, the rare hybrid between Pale Toadflax *Linaria repens* and Common Toadflax *L. vulgaris*. Compared with Pale Toadflax, it has an enlarged yellow 'palate' combined with faint purplish-veined lobes. Amazingly, it was reported 60 years ago from the same location in *The Reading Naturalist*. Further along the track, first Pale Toadflax and

then Common Toadflax were found.

The route then climbed back eastwards along a footpath which followed the hedge line up to Beal's Wood. There were bright pink Spindle *Euonymus europaeus* berries and Hemlock *Conium maculatum* in the hedge and a small flock of House Martins flew overhead. Flowering Ivy *Hedera helix* had attracted Ivy Bees *Colletes hederæ*, Honey Bees *Apis mellifera*, wasps, hoverflies and flies. A big old Field Maple *Acer campestre* marked the entrance to the wood. Climbing back up through the woods, sightings included the leaves of Bugle *Ajuga reptans*, Greater Bird's-foot-trefoil *Lotus pedunculatus*, Hedge Woundwort *Stachys sylvatica* and Wood Spurge *Euphorbia amygdaloides*. The path emerged at the edge of the fields and then crossed to Clay Copse, where one group examined a large, mature Wild Service-tree before crossing Sulham Hill for the fourth time. The final part of the walk led through Cornwell Copse and back to the start.

Mike Waterman kindly led two fungus identification walks, the first in the morning and the second in the afternoon, on **Saturday 17 October** at **Heath Lake** local nature reserve at **Crowthorne**. The site is a SSSI and is managed by Wokingham District Council. The walks started in the north-east corner of the reserve in an area of woodland dominated by Scots Pine *Pinus sylvestris* and Sweet Chestnut *Castanea sativa*.

Progress was slow, since there were a wide variety of fungi on the woodland floor, including Poisonpie *Hebeloma crustuliniforme*, Snapping Bonnet *Mycena vitilis* and Candlesnuff *Xylaria hypoxylon* on a dead branch. Mike demonstrated that the Milking Bonnet *Mycena galopus* exudes milk-like droplets when the stem is snapped. Common Rustgill *Gymnopilus penetrans* was found on rotting conifer wood. Good numbers of the tiny Conifer Conecap *Baeospora myosura* were growing on pine cones. Several specimens of rotten broad-leaved wood were found to have been stained turquoise by the Green Elfcup. One of the fungi which was seen repeatedly throughout the walk was the Brown Rollrim *Paxillus involutus*. Its gills stain darker brown if bruised and it is associated with birch. Other birch-linked fungi included the Birch Polypore *Piptoporus betulinus* and the bright red Fly Agaric *Amanita muscaria*. Also seen here were Amethyst Deceiver *Laccaria amethystina*, Ugly Milkcap *Lactarius turpis*, Ochre Brittlegill *Russula ochroleuca* and Spotted Toughshank *Rhodocollybia maculata*. Several bracket fungi were found, including the Blushing Bracket *Daedaleopsis confragosa*, which stains pink when bruised and the Purplepore Bracket *Trichaptum abietinum* which grows on the dead wood of coniferous trees. The distinctive galls of the midge *Hartigiola annulipes* were found on the leaves of a small Beech. The walk continued across an area of open heathland, dotted with young birches. Mike found a specimen of Club Foot *Ampulloclitocybe clavipes* growing on moss under a big clump of Heather. The Tawny Grisette *Amanita fulva* had a grooved margin and was growing out of a sheath at the bottom of the stem. Mike said that it was associated with birch, as was the Grey Milkcap *Lactarius vietus*, whose milk turns grey. Other finds here included Scurfy Twiglet *Tubaria furfuracea* and Veiled Poisonpie *Hebeloma mesophaeum*.

The route led downhill into another area of woodland dominated by birch. This is where the rarest find of the day, *Plicatura crispa*, was discovered. This is a species which, until about 10 years ago, was known only from Scotland and the north of England. The first Berkshire specimen was found by Mike about 5 years ago. It is a small bracket-shaped fungus with gill-like folds on the underside which is found on the rotting wood of broad-leaved trees. The specimens here, a new site record, were growing on Silver Birch. Other species found here included Clouded Agaric *Clitocybe nebularis*, Blackening Brittlegill *Russula nigricans*, Root Rot *Heterobasidion annosum* at the base of a Rowan *Sorbus aucuparia* and the tiny *Crepidotus cesatii* on a birch twig.

The path came out beside the lake, where Cormorant *Phalacrocorax carbo*, Moorhen *Gallinula chloropus*, Mallard *Anas platyrhynchos*, Gadwall *Anas strepera*, Tufted Duck *Aythya fuligula*, Coot *Fulica atra* and Black-headed Gull *Chroicocephalus ridibundus* were seen. A fine specimen of Brown Birch Bolete *Leccinum scabrum* was found, followed by Purple Brittlegill *Russula atropurpurea* and Common Bonnet *Mycena galericulata*. Mike cut open a specimen of Common Earthball *Scleroderma citrinum* to demonstrate that it has a thick skin, compared with Puffballs which have thinner skins. The pores of the Common Earthball turn first pink, then grey, then black. At the far end of the lake is an area of boggy woodland, where Marsh Horsetail *Equisetum palustre* and Marsh Pennywort *Hydrocotyle vulgaris* were seen. In the slightly drier woodland nearby were Primrose Brittlegill *Russula sardonica*, Blackening Brittlegill and Birch Knight *Tricholoma fulvum*. The tiny yellow tooth-like spikes of Small Stagshorn *Calocera cornea* were found on a piece of dead wood and the Beechwood Sickener *Russula nobilis* was found in an area where there were some small Beech trees. It showed a strong contrast between the bright red upper side and the pure white stem and gills. It reputedly has a hot taste, but nobody was willing to put the theory to the test. Jelly Rot *Phlebia tremellosa* was on a fallen birch trunk. The final section of the walk was back through a pinewood. Sightings here included False Chanterelle *Hygrophoropsis aurantiaca*, Deer Shield *Pluteus cervinus* on a fallen trunk, Dusky Puffball *Lycoperdon nigrescens* and Turkeytail. A young

specimen of Tawny Grisette showed its veil well and there was a big patch of Spotted Toughshank in the dark area under a spreading Laurel. The second group took a slightly different route and added a number of species to the tally, including False Deathcap *Amanita citrina*, Sulphur Tuft *Hypholoma fasciculare*, Deceiver *Laccaria laccata*, Fragile Brittle Gill *Russula fragilis*, Sulphur Knight *Tricholoma sulphureum*, Smoky Bracket *Bjerkandera adusta*, Common Puffball *Lycoperdon perlatum*, Yellow Stagshorn *Calocera viscosa*, Variable Oysterling *Crepidotus variabilis* and Bracken Map *Rhopographus filicinus*. Their final sighting, on the edge of the woodland by the path, was a pale brown cup fungus with a diameter of about 3.5cm which was later confirmed as Blistered Cup *Peziza vesiculosa*.

Ken and Sarah White kindly led three walks, one on Friday 4 December and two more on **Saturday 5 December**, all starting from the Rowbarg Inn at **Woolhampton**. While the groups were assembling in the car park, a Great Spotted Woodpecker called loudly and flew between trees. In order to comply with Covid-19 regulations and gain the benefit of an early start, two groups of five members set off in opposite directions on the Saturday morning. Both groups saw a similar suite of birds.

One walk started by crossing the road and following a short stretch of track north-eastwards to the bank of the River Kennet, before turning back westwards along the tow-path and continuing in an anticlockwise direction; the other set off to the south going clockwise. Mixed flocks of small birds included Great Tits *Parus major*, Blue Tits *Cyanistes caeruleus* and Long-tailed Tits, and a thick hedgerow had a noisy group of House Sparrows *Passer domesticus*. They were probably all being attracted by the bird feeders in the garden of a nearby house. Several large flocks of Wood Pigeon *Columba palumbus* flew high overhead and Redwings were both heard and seen. Soon after re-crossing the road, the river and the canal divide, with the route continuing along the canal towpath. A lush growth of Hart's-tongue Fern *Phyllitis scolopendrium* was prominent amongst the varied collection of plants which were growing on the lower gate of Woolhampton Lock. Continuing westwards along the tow-path, sightings included Nuthatch *Sitta europaea*, Buzzard, Sparrowhawk *Accipiter nisus* (seen here on all three walks) and a number of Red Kites. Song Thrush *Turdus philomelos* and Robin *Erithacus rubecula* were singing nearby. The next track led southwards past a fishing lake which had recently been protected against Otters *Lutra lutra* by a tall wire fence with an overhang at the top. Sarah's group found a small and distant flock of Tufted Duck on this lake. The track led to the largest of the local gravel pits – Rowney Predator Lake. Unfortunately recent wildfowling here had scared away most of the water birds. Sightings here included a pair of Great Crested Grebes, together with a few Coots and Cormorants. The track immediately alongside the River Kennet offered good views of mixed flocks of tits plus two Treecreepers *Certhia familiaris* foraging up a large leaning willow tree. Unseasonal flowers beside the track included Hogweed, Wild Angelica *Angelica sylvestris*, Herb-Robert *Geranium robertianum*, Yarrow *Achillea millefolium* and White Dead-nettle *Lamium album*.

The track led out onto open farmland on restored gravel workings, with a dense growth of *Miscanthus* for bio-fuel on one side and an array of solar panels on the other. A particular highlight of all three walks was finding a pair of Stonechats which were actively chasing insects from the solar panel farm perimeter fence, flying down into the long grass in front of the fence, then back up again; a notable sighting, these birds have moved here from the north or places of higher elevation to find a suitable lowland wintering habitat. A mixed flock of Starlings *Sturnus vulgaris* and Jackdaws *Coloeus monedula*, together with a number of Carrion Crows *C. corone*, was flying over the next field, but Rooks *C. frugilegus* were noticeably absent. On the other side of the track, a Pied Wagtail *Motacilla alba yarellii* flew up from a field where sheep were feeding on Swedes. Leaves plus seed heads of Cowslips *Primula veris* and the bright green leaves of Bush Vetch *Vicia sepium* were found growing in the verge. The route then double-backed for a short distance, before turning eastwards. A small flock of Linnets *Carduelis cannabina* flew up from a fallow field beside the track. The next field looked as if it had been sown with a wild bird mix. At its far end was a good un-flailed hedge, with berry-laden trees and bushes. It soon became apparent that the hedge and field were alive with small birds, including a big flock of Chaffinches *Fringilla coelebs*, together with Dunnocks *Prunella modularis* and a few Reed Buntings *Emberiza schoeniclus*. Goldfinches *Carduelis carduelis* were feeding on Teasel heads in the field. Then an enormous flock of Linnets, estimated to contain well over a hundred birds, flew up out of the crop and into the trees.

Turning north, the next path led across a grassy field. This is where the Friday group watched a female Peregrine fly fast and low across the field and then onwards over the adjacent gravel pit. The path led back to the lane just south of pub. On one side was a Spindle bush which was heavily laden with bright pink berries. Finally, back at the car park, an obliging Fieldfare and Redwing gave excellent views as they fed on Hawthorn *Crataegus monogyna* berries at the top of the adjacent hedge. In total 51 species of birds were found, with the special highlights described above.

Mid-week Walks 2020 by Jan Haseler

The first midweek walk of the year was on **Wednesday 22 January**, when Rob Stallard led a group of 12 members on a circular walk, starting from the Rectory Gardens at **Goring-on-Thames**. Some of the Lime trees in the churchyard had big clumps of Mistletoe which were covered in white berries and a Song Thrush sang nearby. It was a still, damp and misty morning. The walk started out through the village, over the railway bridge, past the tennis courts and along a footpath which ran eastwards up a grassy slope. Sweet Violet and White Campion were found in flower at the base of the hedge beside the footpath. Also seen here were the orange berries of Stinking Iris and newly-formed leaves of the Wayfaring-tree. Redwings and at least one Fieldfare were feeding on berries at the top of the hedge and a Hare ran across the ploughed field to the right. Before the path entered Great Chalk Wood, Rob commented that, had it not been so misty, there would have been a fine view back across the valley of the Thames to the National Trust land at Streatley. New Bluebell leaves were poking up through the leaf litter in Great Chalk Wood, Dog's Mercury was in flower and leaves of Brooklime were found in a puddle on the path. Several Jays flew up, calling loudly.

The next path led through part of the wood where the Chalk bedrock was close to the surface. The leaves of Woodruff and Wood Spurge were seen here and there were a number of clumps of Butcher's Broom with bright red berries and creamy white flowers. Several big old multi-stemmed Field Maples were growing on the bank beside the path. There followed a short stretch of road, then the route turned onto a track towards Elvendon Priory.

A fine display of Snowdrops was on the verge of Elvendon Lane. On the other side of the lane, another footpath led steeply up across a grassy field where leaves of Common Rock-rose and Salad Burnet indicated that it was fine chalk grassland. The next path led along the top of the field and into Wroxhills Wood. Beside the path were many specimens of a creamy, sparsely-branched club-like fungus, tentatively identified as Wrinkled Club *Clavulina rugosa*. The catkins were fully out on the Hazels and a few of the red female flowers were also seen. There was a lot of Honeysuckle, the caterpillar food-plant of the White Admiral butterfly. One of the party reported that they had seen a White Admiral here the previous summer; it had been down on the ground on a muddy section of path. The final section of the walk followed footpaths down through woodland, across a grassy field and through a very muddy gateway, before emerging on a residential street in Cleeve. Stinking Hellebore was in flower on the west-facing bank above the railway line. The walk was followed by lunch at the Catherine Wheel pub in Goring-on-Thames.

Fiona Cummins went to some trouble to organise a walk at Dinton Pastures Country Park on **Wednesday 19 February** but, following storms Ciara and Dennis, much of the proposed route was under water and all the bird hides were inaccessible. With the help of Rob Stallard, the walk was moved at short notice to higher ground at **Ashampstead**. After gathering next to the village sports ground, first stop for the 13-strong group was the early 13th Century church of St. Clement. Built into the north wall are the remains of a Yew tree. Inside the church are 13th Century wall paintings, thought to have been created by a monk from Reading Abbey. Snowdrops, crocuses and hellebores were flowering in the churchyard, a flock of Greenfinches was seen and a Song Thrush was heard nearby. The walk continued westwards along a footpath before turning left into a bridleway. Bluebell leaves were showing well in the strip of woodland beside the track. Further on Chaffinches and a Bullfinch were seen in an adjoining hedge. There followed a short stretch of road which ran next to a ploughed field. Just appearing were the feathery green leaves of Shepherd's-needle, remembered by a botanist with a good memory from a visit to that location in 2015. The route then led back eastwards through Beche Park Wood. Outlined clearly in muddy patches of the path were a number of different sets of deer tracks. The biggest ones were thought to have been made by Fallow Deer, while smaller ones were from Roe Deer. Bright red Scarlet Elfcup fungus was found beside the path. Blue Tits, Great Tits, a Green Woodpecker and a Nuthatch were heard calling. The track emerged at Ashampstead Green. After a short stretch along a quiet lane and another footpath, the route continued down a steep lane through woodland. Growing on the high banks at the side of the road were Woodruff, Dog's Mercury, Wild Strawberry and Bush Vetch.

At the bottom of the hill, another footpath led south-eastwards through the wood. A number of big trees had fallen recently, including an Ash with a rotten core. A Raven flew calling below the wood. The first Primrose was found in flower and the leaves of Wood Spurge were seen. The final section of the walk was along a track through open farmland back to Ashampstead. House Sparrows were chirping in one of the back gardens and there were Goldfinches and a mixed flock of tits in the trees and bushes on the south side of the sports ground. The walk was followed by lunch at the Four Points pub near Aldworth.

Jan and Laurie Haseler organised a very hilly walk on **Wednesday 18 March**, starting from the National Trust car park at the top of **Streatley Hill**. On a grey but fairly mild morning, the eleven members who turned out for the walk spread out across the car park in an attempt to maintain social distancing and keep the Covid-19 virus at bay.

The walk started out along the track towards the Holies and soon a woodpecker was heard drumming nearby. Turning westwards up a footpath which leads to Checkendon Wood, the vegetation under-foot changed abruptly from brambles on the Clay-with-flints which over-lies the Chalk bedrock to bare soil on the Westland Green sands and gravels, one of the highest and oldest of the Thames river deposits. The leaves of Three-nerved Sandwort were spotted by the path. A crooked stick was used to pull down a branch on a Wych Elm, so that the flowers and developing seeds could be inspected more closely. The woodland was looking very spring-like, with Primroses, Early Dog-violets, sheets of Wood Anemones and even a few Bluebells in flower. The walk continued along the south-facing bank which runs along the boundary between the Clay-with-flints and the Chalk. Barren Strawberry, Hairy Violet and white Sweet Violet were seen here. The route then ran through an area of Gorse and crossed into a grassy field where the hedge line was yellow with Sallow blossom and a Chiffchaff was singing. The path continued through a kissing gate and out onto chalk grassland. The turf was dotted with Hairy Violets and the first Cowslips were just beginning to come into flower. Along the track at the bottom of the valley, tiny white flowers with oval green seed pods were identified as Common Whitlowgrass – not a grass, actually *Erophila verna*, family Brassicaceae, while a little further on, equally tiny white flowers with long seed pods were seen on Hairy Bitter-cress. Growing on the path nearby was another plant with small white flowers - Rue-leaved Saxifrage.

After leaving the National Trust grassland at the gate at the bottom of the valley, there was a long climb westwards up a sunken trackway, followed by an equally long descent down a quiet lane into the next valley. Skylarks were singing high above and a number of plants of Stinking Hellebore were in flower at the side of the road. The walk continued up the lane on the other side, where a few flowers of Greater Stitchwort were growing on the bank. The route then followed a footpath down through a copse. It was estimated that there were several hundred Green Hellebore plants in the lower part of the wood, with many of them in flower. The footpath continued down to the bottom of the valley, after which there was a long steep climb back to the top of the Holies. Some of the group were relieved to discover that the return track back towards the start was mostly on the level. Visibility was good and at one point, the Hannington TV mast on the Hampshire Downs could clearly be seen to the south. A few clumps of Soft Shield-fern were found at the side of the track as it ran through the final stretch of woodland.

After a two-month Covid-19 Lockdown break, mid-week walks resumed on **Wednesday 17 June** when Rob Stallard led a walk at **Bramshill** in the Blackwater valley near Eversley. Following the Covid-19 regulations, numbers were limited to a maximum of six and strict social distancing was maintained. It was a sunny but humid morning, with cloud increasing as the walk progressed.

The walk started out westwards from the car park at the south-west corner of Bramshill Plantation. A massive Wood Ants' nest was found nearby, close to the path. The track passed through an extensive open area where conifers had been clear-felled and replanted. Flowers here included Common Bird's-foot-trefoil, Creeping Cinquefoil, Heath Bedstraw, Slender St John's-wort, Bell Heather, Wood Sage, Sheep's Sorrel, Heath Speedwell, Common Centaury, Tormentil and Goat's-rue. A Stonechat called from the top of a young pine and Marbled White, Large Skipper and Meadow Brown butterflies were seen. A short detour along a side-track led to an area where piles of sand and gravel are stored. Yellow Biting Stonecrop and Common Stork's-bill were found here, together with Hard Rush and Remote Sedge in a damper area on the other side of the track. The route continued westwards, passing tall spikes of Weld and a single Bee Orchid, before turning northwards up another track which had an interesting damp ditch along its eastern side. Gypsywort, Common Fleabane, Marsh Thistle, Water Mint, Greater Bird's-foot-trefoil, Water-plantain, Hemlock Water-dropwort, and Lesser Spearwort were found here, together with False Fox, Smooth-stalked, Oval and Hairy Sedge and Heath Wood-rush. A striking Mullein moth caterpillar was feeding on a well-chewed Water Figwort plant, which is in the same family Scrophulariaceae as Mullein, the species on which this caterpillar is more usually found. There were many Common Spotted-orchids, a few Southern Marsh-orchids and a number of intermediate forms. Several fresh Dark Green Fritillary butterflies were nectaring on Bramble blossom on the sunny side of the ride.

The route continued northwards to the next ride junction, turned westwards for a short distance, then doubled back southwards along a ditch line which had been cleared of vegetation and then re-excavated

about 18 months ago. Walking along the bottom of the ditch, it was interesting to see how wetland plants were recolonising the habitat. They included Creeping Forget-me-not, Cyperus Sedge, Skullcap and many of the plants which had been noted in the previous ditch. Up on the bank above the ditch, a Common Lizard scurried under cover, several Common Blue Damselflies were resting on the vegetation, a female Common Blue butterfly was seen and Heath Milkwort and Ragged-robin were found. Next stop was a big pond which was occupied by some very noisy frogs of the 'green frog' species – Pool, Marsh or Edible Frog ? A pair of Coots had two large youngsters. Also seen here was a family of Little Grebes. One adult, carrying two youngsters on its back, skulked under the bankside willows, while the other called loudly as it swam on the open water, diving frequently. A number of dragonflies flew across the water, including a Four-spotted Chaser which perched obligingly on a reed stem. Continuing eastwards along the next ride, Small Skipper, Speckled Wood and Ringlet were added to the butterfly tally.

The next destination was an open grassy area which is mown occasionally. Here there were many Pyramidal Orchids, plus a few Bee Orchids and Southern Marsh Orchids. An attractive pink rose whose crushed leaves smelled of apple was identified afterwards as Sweet Briar *Rosa rubiginosa*. A minor track led north then east to a relatively open area where there were many flowering plants of the rare Yellow Bartsia in two main blocks. A female Black-tailed Skimmer dragonfly perched on a stick down on the path and a Comma flew up onto the trackside vegetation. The final section of the walk followed the line of pylons back southwards along the eastern edge of the plantation. Lousewort, Cross-leaved Heath and Common Yellow-sedge on the damp side of the clearing were added to the plant list here. Finally, back at the car park, a Buzzard flew overhead.

On **Wednesday 15 July**, Fiona Brown organised a circular walk, starting from the Vine pub at **Hannington**. One person came on the pre-walk, five members set off at 9:45 in a group led by Fiona and another six, led by Julia Cooper, followed at 10:15.

The route led north-eastwards along a track through fields with distant views, including recognisable landmarks such as AWE Aldermaston and the Green Park wind turbine. Beside the track were Chicory plants with striking blue flowers, together with tall flower heads of Wild Carrot and Hogweed. The Hogweed flowers were predominantly white, but there were a significant number of pale pink specimens and one striking purplish flower head. Other sightings included Red Bartsia and Musk-mallow. Skylarks and Linnets flew over the fields and three Hares were seen. There was a short diversion along a track to one side to admire particularly flower-rich verges, with Common Knapweed, Lady's Bedstraw, Field Scabious, Common Bird's-foot-trefoil and Hoary Plantain, together with Marbled White and Meadow Brown butterflies. The route then turned south-eastwards. Gatekeeper, Red Admiral, Peacock and Small White butterflies flitted across bramble blossom beside the path, wild honeybees flew in and out of a nest in a tree and a swarm of bees was spotted by the second group. The path ran through a stretch of woodland where flowers of Yellow Pimpernel and Enchanter's Nightshade were seen.

Emerging from the wood, rich purple spikes of Marsh Woundwort attracted the group's attention to an interesting collection of plants in the field beside the path, perhaps sown as a mix for pollinators and birds. They included the rare Field Woundwort, plus Sun Spurge and a number of other plants. There was much activity in the fields on the other side of the path. One tractor was cutting grass for silage, another gathered it up into long rows and a third scooped it up into a big trailer. 13 Red Kites were flying over the field. The path continued to **lbworth**, where House Martins were nesting on farm buildings. A Greenfinch was singing from the top of a tall Ash tree and it was joined by a significantly smaller Goldfinch. The walk continued southwards along a quiet lane, with Wayfaring-tree, Guelder-rose and Spindle in the hedge, and Wild Basil, Hedge Bedstraw, Upright Hedge-parsley and Bladder Champion on the verge. Delicious cherries on the tall trees beside the lane were sampled and a Robin's Pincushion was inspected.

The next track led south-westwards through a narrow strip of woodland, with trees including Beech, Ash, Hazel and Field Maple. An enormous old multi-stemmed Ash was growing beside the path. Tall pale blue spikes of Nettle-leaved Bellflower grew up through the ground cover of Dog's Mercury and there were a number of plants of Solomon's-seal, with berries dangling below the arched stems. The next path ran north then north-west through Warren Bottom Copse, where Wood Millet, Wood Mellick and Wood Sedge were identified.

The path emerged at a wide open ride with wonderful chalk grassland vegetation. The initial impression was of yellow, with a carpet of Rough Hawkbit, plus Wild Parsnip and Square-stalked St-John's-wort. On the south side of the ride were many Pyramidal Orchids, plus tall spikes of Common Valerian. Salad Burnet, Common

Rock-rose, Field Scabious, Eyebright, Goat's-beard and Dwarf Thistle were amongst the other sightings here. As the clouds thinned a little, Ringlet and Marbled White butterflies took to the wing. Towards the end of the ride, Greater Knapweed, Knapweed Broomrape and Hairy St John's-wort were found. The next track climbed gently next to a field of oil seed rape. In the field margin were an interesting collection of arable weeds, including Dwarf Spurge. Conditions continued to brighten, and in the final section of track around the edge of another field, Large White, Essex Skipper, Red Admiral, Green-veined White and a mating pair of Common Blue butterflies were seen. Rough Chervil was in flower beside the path.

The route then led along a short stretch of lane to the pub, where tables were reserved in the garden. After lunch, some members of the group drove to a nearby farm where an arable field margin had a wonderful collection of flowers, including Small Toadflax, Large Venus's-looking-glass, Field Madder, Round-leaved and Sharp-leaved Fluellen and Common Poppy.

On **Wednesday 19 August**, Maria Newham organised a circular walk, starting from the Bird in Hand pub at **Sonning Common**. On a morning of drizzle and light rain, six members set off at 9:45 in a group led by Maria and a second group, led by Jan Haseler, followed half an hour later.

The walk started out north-eastwards along the Chiltern Way Extension. The path led downwards through a grassy field which was slowly being taken over by bramble bushes. Red Bartsia and Perforate St John's-wort were amongst the sightings here. The path then climbed up the other side of the valley across a horse-grazed pasture. Towards the top of the field, there were a few flowering clumps of Common Poppy and White Campion. The next section of the walk was along quiet lanes past attractive cottages at **Crowsley**. Several plants of Nettle-leaved Bellflower were in flower on the verge at the side of the road. Impressive metal gates, with a small side gate for walkers, guarded the entrance to Crowsley Park. The verges beside the access road were colourful with Lady's Bedstraw, Common Bird's-foot-trefoil and Agrimony. There was a brief diversion to inspect the BBC's satellite dishes. In the open area outside the security fence were several clumps of Viper's-bugloss. In the surrounding woodland was an enormous old oak with fallen limbs and a Chicken of the Woods fungus high up on the trunk. A Hawthorn which had had its road-side branches cut back had grown an unusual collection of vertical branches to compensate.

Returning to the planned route, the next footpath led out into the park. A flock of House Martins skimmed low over the wet grass and a few Small Heath and Meadow Brown butterflies were disturbed from the vegetation. Harebells and Yarrow formed drifts of blue and white. A spreading tree covered with masses of creamy pea-like flowers was tentatively identified as a Japanese Pagoda Tree. The top of the park is on acid soil, with typical plants including Bracken and Tormentil. Descending the steep slope to the north, the transition to the underlying Chalk was marked by plants such as Dwarf Thistle, Burnet-saxifrage and Field Scabious. At this point, the second group turned back towards the start, while the first group continued round a loop of tracks and quiet lanes to the north. Highlight of the longer route was the margin of a field of Quinoa, where finds included Dwarf Spurge, Common Poppy, Field Madder, Field Pansy and Scarlet Pimpernel. The return route was mostly along footpaths around field margins, together with a few stretches along quiet lanes. Blue-flowered Chicory was noted in one field corner, Wild Clematis draped the hedge to mark where one field dropped down to the level of the Chalk and Woody Nightshade carried both flowers and berries. Another field margin with a wild bird seed mix had an interesting collection of plants, including Shaggy-soldier and Common Cudweed. Finally, back at the Bird in Hand, lunch was consumed under a collection of gently dripping umbrellas out in the garden.

On **Wednesday 16 September**, Maggie Bridges and Marion Venners led two separate groups of walkers on a circular walk, starting from the Old Boot Inn at **Stanford Dingley**. It was a hot sunny morning, with the temperature starting at 20 °C and rising to 26 °C. The walk started out northwards through the village, crossing the River Pang at the back of the mill and pausing at the church for a quick look round. St Denys church is one of the oldest in Berkshire, with wall paintings, a simple Norman font and an 800-year old wooden door. In the churchyard are several big old Sweet Chestnut trees.

Crossing the road, the next footpath led westwards through grassy fields. The hedges were heavy with fruit – sloes, rosehips, blackberries, small apples and berries of Hawthorn and Guelder-rose. Several Green-veined White butterflies and a small yellow waxcap fungus were seen here. The path led through a strip of woodland where sightings included a Solomon's-seal plant with dangling dark blue berries, a small Toad, a Speckled Wood butterfly and a Frog. Leaving the wood the path crossed a bridge over a small stream, which

was choked with the leaves of Fool's Water-cress, and led into the next grassy field. A Little Egret flew up, a small, bright orange Vapourer moth was flying fast in the sunshine and a number of Shaggy Inkcap fungi were spotted.

The route then turned briefly northwards along a track before continuing westwards along another footpath which ran along the north bank of the Pang. A wet area beside the track had Comfrey, Great Willowherb, Water Mint and Meadow-sweet. Common Poppies brightened the side of the footpath, a Green Woodpecker flew up, several Small Copper butterflies were seen and a Red Admiral butterfly flew past. A flock of about 25 Lapwings was seen on the other side of the river. Although the path ran beside the river, for most of this stretch the water was completely hidden by the lush bankside vegetation, which at one point included Orange Balsam. After crossing a bridge over the Pang, the route continued south around the edge of a field of maize.

Turning back eastwards, the next footpath led into another big field of maize which was being harvested for fodder. Two tractors progressed side by side, with the first one cutting and shredding the maize and transferring it to a trailer pulled by the second one. A third tractor and trailer followed closely, ready to take over when the first trailer was full. Five Red Kites and several Buzzards circled overhead and an observer at the back of the group spotted a Peregrine. Two Hares emerged from the crop and came out into the open field. After a brief stretch of road, the next footpath led into the welcome shade of a stretch of woodland. A mixed flock of tits, together with a Nuthatch, was passing noisily through the woodland. The route continued through a series of grassy fields, some with grazing sheep. Further sightings included Meadow Brown and Holly Blue butterflies, another Vapourer moth, Parasol Mushrooms and Black Bryony berries. Flowering Common Fleabane and a Comma butterfly were seen beside the final stretch of track which led back to the village. One of the walkers had taken a short-cut back to the pub, and she reported seeing three Giant Puffballs. Final sighting of the day was a Migrant Hawker dragonfly in the garden of the Old Boot Inn, where most of the group stayed for lunch.

The October mid-week walk around **Pamber Forest**, led by Jan and Laurie Haseler, took place a record-breaking three times. It was originally scheduled for **Wednesday 21 October** but, following a forecast of heavy rain, the majority of participants opted to go round in sunshine on the following morning. However, a hardy group of five set out regardless of the weather on the original date.

The walks started from the Impstone Road car park at Pamber Heath and headed down the track on the west side of Lord's Wood. This is part of the extensive cattle-grazed wood-pasture adjacent to Silchester Common. The first of many Wild Service-trees were soon spotted in the wood beside the track. Clumps of Hard-fern on the bank beside the track showed the finer fertile fronds standing up in the centre and the infertile fronds round the base. At the bottom of the hill, a gate leads into Pamber Forest, which is managed as a nature reserve by the Hampshire and Isle of Wight Wildlife Trust. At this point, the Wednesday walkers were faced with an extensive area of floodwater, making the bridge over what is normally a small stream unreachable. Fortunately, after a short diversion via the next bridge, the walk was soon back on course. By the next morning, the floods had receded and the original bridge was crossable.

The next section of the walk was along a wide grassy ride, with tall woodland on one side and a succession of coppiced plots on the other. A number of Wild Service-trees were found along the woodland edge. The Wild Service-tree is one of the first trees to change colour in autumn. For a few weeks in early to mid October, the glorious yellow, orange and red tones of their leaves stand out in contrast to the predominantly green tones of the other trees, making them easy to spot. Finds along the grassy ride included several seed heads of Broad-leaved Helleborine, a few Betony plants still in flower and the glossy black berries of Tutsan. The route then turned southwards along the main ride which bisects Pamber Forest. Nearby were a number of plants of Wood Horsetail with distinctive drooping branches which are in turn branched themselves. One of the participants on the walk, Jan Welsh, had originally found the colony back in 1973. According to the Hampshire Rare Plant Register, Pamber Forest is its stronghold in the north of the county. Much of the Forest lies on London Clay, but this is overlain in places by the acid sands of the Windlesham Formation. Here, the vegetation is dominated by Bilberry, Heather, Gorse and Bracken. An oak overhanging a particularly sandy stretch of path showed the characteristic long-stemmed leaves of the Sessile Oak, in contrast to the almost stemless leaves of the Pedunculate Oak which had been inspected earlier in the walk. A Sparrowhawk flew across the open heathy area and into the adjacent woodland.

The track then turned southwards and re-entered woodland, where three specimens of the White Saddle fungus *Helvella crispa* were found beside the path. Continuing parallel with the western edge of the forest,

there were several more clumps of Wild Service-tree. The route then turned eastwards along a narrow path with yet more Wild Service-trees before coming to an open recently-coppiced area where the deer fence was broken. Under a Birch tree at the side of the path were a number of red and white Fly Agaric fungi. The path led into a little meadow area, where there were abundant seed heads of Betony, together with a few plants which were still in flower. Several Common Carder bees were nectaring on the flowers of Devil's-bit Scabious. The leaves of Bitter-vetch and Yellow Stag's Horn fungus were other finds here. The walk continued eastwards along a ride with flowery margins, where the trees had been cut back in places to form sheltered scallops on either side of the path. Flowering Wood Spurge in one of the scallops was a surprise find. A Crab Apple had dropped an abundant crop of small yellow fruit and a Speckled Wood butterfly flew in the sunshine. The route led back to the main ride, then turned northwards. A little way back from the track were three big Wild Service-trees, with smaller suckering trees nearby. The track was fringed by a dense thicket of Alder Buckthorn, some with black berries.

At the next junction, the group turned eastwards along another wide ride with several more clumps of Wild Service-trees. The track climbed uphill and crossed the cattle grid into the wood pasture, which here is an open heathy area with scattered trees. The Wednesday walkers saw about seven of the cattle (which are surprisingly hard to spot amongst tall Bracken). The yellow flowers of Tormentil were abundant, and there were unseasonal flowers of Heath Speedwell and Heath Milkwort. After re-crossing the Silchester Brook, the walk continued back through Lord's Wood. A fallen oak log had round black fungi which at first glance looked like King Arthur's Cakes, but which on closer inspection turned out to be the jelly-like Black Bulgar. Finally, another clump of Wild Service-trees was spotted, bringing the combined total to 42 trees.

On **Tuesday 15 December**, Rob Stallard led two circular walks, one in the morning and one in the afternoon, each with five participants. They started from the car park at **Padworth Common**, on a mild day with intermittent sunshine and the occasional shower. The afternoon walkers started out in a light shower, but were compensated soon after by a double rainbow.

The Heather had long finished flowering, but there were still a few pale pink flowers on the Cross-leaved Heath plants. Creeping Willow was found on the open heathland, Pixie-cup Lichens were abundant and there were a few clumps of the Yellow Stagshorn fungus. The footpath led across a busy road and onto the southern section of the Common, turning eastwards to follow the southern boundary of the reserve. The Common is dotted with Silver Birch trees, a few of which sprouted ladders of the Birch Polypore fungus. Amongst the birches were a number of Aspens, with smooth dark grey trunks and shiny brown pointed buds. The drainage ditch along the edge of the reserve was brimming full, overflowing in places to flood sections of the track. After re-crossing the road, the route continued northwards, following a track which led through farmland to the edge of a wooded area. The track crossed a small stream, then climbed to the wide bank and ditch of Grim's Bank, before following the high metal fence of the oil storage depot. Sightings beside the track included tall Common Figwort plants, and Dog's Mercury and Rough Chervil in flower. The next footpath led across a grassy field towards Old Farm. A few Redwings and Fieldfares perched in the tops of nearby Ash trees. The roof and tall chimneys of Ufton Court could be seen emerging above the woodland to the east. Continuing through the farmyard, wide views opened up across the Kennet valley, with the grey buildings of Englefield House visible in the distance. Flowers in the farmyard included Red and White Dead-nettle, Scentsless Mayweed, Common Field-speedwell and Groundsel. The next track descended north-westwards, with changes in gradient marking out a series of gravel terraces. A short stretch of road, where Black Horehound still had a few flowers, led to a bridge over the River Kennet, which was flowing fast and full. The walk continued south-westwards along a footpath which ran between the river and a large gravel pit, where Great Crested Grebes, Little Grebes, Gadwall, Wigeon, Tufted Duck, Coot, Cormorants and Mute Swan were seen. A Great White Egret shone white on the far bank of the lake, identifiable by its large size, massive yellow beak and yellow legs. Apparently, it had been recorded from the same location a few days previously. A Moorhen swam jerkily across the river and a flock of Canada Geese were grazing in the fields to the south of the river.

The path led to Padworth Mill. Rob informed the group that the first records of the mill date back to 956. By the time of the Domesday Book, there were three mills here, one of which was a fulling mill. The next footpath led southwards, re-crossing the Kennet and a series of mill leats, one of which now accommodates a salmon ladder. Common Polypody fern flourished on some of the bridges. The footpath continued south-eastwards across the fields and up to Padworth Church. This is a small Norman building, dating back to 1130, with a rounded apse and decorated arches above the south and north doorways. A big old Yew stands in front of the church and a clump of flowering Primroses was found in the churchyard. The route

back led across fields, and then south along Rectory Road where a large flock of Starlings with intermingled Linnets landed on telephone wires. Two Roe does and a fawn were seen in a nearby field. Finally, ivory-white Snowy Waxcaps and a single small orange waxcap were spotted on a closely-mown mossy lawn adjoining the Common.

Away Trips 2020 by Fiona Brown

Suffolk in Winter 9th- 13th February 2020

Sarah and Ken White organised a winter birding trip to Suffolk, starting with a rendezvous on Sunday 9 February at The White Hart Inn at Blythburgh where most of the party of 10 people were staying. During the afternoon the first few members to arrive walked beside the nearby tidal lagoon of **Blythburgh Water** to a small hide. It had been a stormy day thanks to Storm Ciara, with winds gusting to over 50 mph and the rain occasionally becoming torrential. At least 300 Avocets and hundreds of Redshank were feeding on the intertidal mud and many of them were seen sidestepping to avoid being blown over. It looked just as if they were doing a line dancing step known as The Grapevine. Some of the Redshank were waving their heads from side to side with their bills in the water presumably because the mud was not very thick. A flock of about 30 Curlew flew past the hide and hundreds of Black-headed Gulls were seen flying in the middle distance.

On the following day the group met at the **RSPB Minsmere Reserve** (Royal Society for the Protection of Birds) (www.rspb.org.uk). In front of the Visitor Centre lots of hungry passerines including a Coal Tit were enjoying the bird tables. It was a calmer, drier day with very good light. Both the East and South hides gave excellent views of the many wildfowl on The Scrape, including good numbers of Shelduck, Teal, Wigeon, Gadwall and Shoveler. There were also two brief sightings of a Redhead (female Smew).

After lunch in the Visitor Centre the group headed for the Island Mere Hide, spotting a Muntjac among the trees *en route*. The lake seemed quite deserted but there was a group of three Mute Swans swimming on the far side and some Great Crested Grebes diving busily. A Buzzard and a Red Kite were fighting near the hide and several Marsh Harriers, some Greylag Geese and a flock of Golden Plover, showing their silvery undersides as they turned, flew past. A Kestrel was spotted sitting in a distant tree and on the way back a flock of Siskins were twittering in an Alder tree.

The next destination was **Dunwich**. Whilst walking along the shingle behind the beach a Great White Egret was seen flying off into the distance, its large size and black feet showing that it was not a Little Egret. A couple of Common Snipe were sitting in amongst the reeds at the edge of a small pond and Meadow Pipits and Skylarks were flying about in between the scattered flowering gorse bushes. Stonechats were also there, occasionally perching on the gorse. Where the shingle gave way to grass a flock of about 15 tiny Twite were alternately hiding behind banks of shingle and flying together in arcs above the nearby ponds. Returning along the beach an Atlantic Seal was spotted bottling in the sea and many gulls, mostly Black-headed, were flying along the shoreline. Amongst them was a single Mediterranean Gull with its black head and uniform pale grey wings.

The day concluded at dusk with a walk on **Dunwich Heath** (National Trust) in the hope of seeing Woodcock. Unfortunately, however, the weather had deteriorated somewhat and the visit was abandoned.

Tuesday began with a trip to **Breydon Water**, Great Yarmouth, arriving about one hour before high tide. With the tide coming in impressive numbers of Wigeon, Pintail, Avocet, Cormorant, Curlew and Black-tailed Godwit were concentrated on or near the few strips of sand not yet covered by the water. Two Common Snipe flew past battling against the strong winds and the other birds became increasingly restless and began circling in groups above the water. However, surprisingly there was not a mass exodus at high tide as the very strong



Some of the wildfowl on Breydon Water for the spectacular high tide roost 11/03/20 Photo © Ken White

westerly wind prevented the full high tide entering from the sea to the east.

The second destination was **Ness Point** at Lowestoft, the most easterly point in the UK. A row of giant, igneous rock boulders (mostly Larvikite from Norway) positioned to help prevent erosion from longshore drift was occupied by 10 dumpy, short-legged Purple Sandpipers which spent most of their time on the seaward side but popped up in full view whenever a large wave hit the rocks. Two Turnstones sat at the far end hunkered down against the wind and waves.

Late afternoon was spent walking along the cliffs at **Dunwich** to a small wood containing a good display of Snowdrops, many of which had double flowers, and we returned via the ruins of a 13th century Franciscan Priory (Greyfriars). After a pleasant tea-break in the Ship Inn the day was rounded off by returning to the clifftop for some sea-watching. At least 6 Great Crested Grebes and a raft of 7 Common Scoter were spotted, and a good many Common Gulls were flying past, all heading South.

Wednesday began with a trip to the **Benacre National Nature Reserve** from Covehithe. The sun shone on the saline lagoon surrounded by reedbeds and it wasn't long before a Little Grebe was spotted close to the hide. Soon afterwards a Great Northern Diver was seen at the opposite side of the lake. It was actively fishing, diving frequently and several times coming back up with a fish in its bill, although the fish were consumed below the surface. Returning past a pig farm, a mixture of gulls was observed including several Common Gulls with their yellow green legs and white spots in their wing tips. There was also one much larger Lesser Black-backed Gull which helped to give a sense of scale.

The next stop was at **Walberswick** at the mouth of the River Blyth. Sweet Violets *Viola odorata* giving off a glorious fragrance were found on a grassy bank beside the river and a Skylark flew up singing as it went. Several Oystercatchers were sitting on the seawall.

Following lunch in the tearooms at Walberswick the group moved further south to the beach at **Sizewell**. Three Pied Wagtails were noticed below the carpark and a Tree Lupin *Lupinus arboreus* was found amongst the gorse bushes behind the nuclear power station. Out at sea the two cooling rigs were occupied by about 20 Kittiwakes roosting on the ledges and accompanied by 50 or more Cormorants. Below them were a mixture of Herring Gulls and Great Black-backed Gulls floating in large numbers on the seawater which was disturbed by the rigs' outflows.

At dusk the final delightful visit of the day was to **Eastbridge**. A Marsh Tit was alarming in a tree beside the road, at least two beautiful Barn Owls were quartering the fields nearby, one carrying its prey, and a Water Rail came out of the reeds on the river remaining clearly visible for quite a long time whilst a Bittern boomed in the undergrowth.

A total of 93 species of birds were seen during the trip, which concluded on Thursday 13 February with a very interesting guided tour by parishioner Colin Huggins of Holy Trinity Church at Blythburgh which is known as the Cathedral of the Marshes. A summary of its history is on its website :

<https://www.holytrinityblythburgh.org.uk/home/history>



Snowdrops in Dunwich 12/02/20, Photos © Fiona Brown

Indoor Meetings 2020

Reports by Rob Stallard, Renée Grayer, David Cliffe, Tricia Marcousé & Ken White

15th January

Bird Migration by Ken White (RDNHS)

As early Western civilization grew in the sheltered waters of the Mediterranean basin, the early Greek mythologies - conjured up around 1700 BC - had Hercules (Heracles in Greek) perform 12 labours, and one of them was to fetch cattle from the far west and bring them back from Eurytheia, one of the Hesperid Islands. He came across the mountain of Atlas and decided that instead of climb the great mountain he would use his superhuman strength to smash through it to connect the Mediterranean to the Atlantic Ocean. He thus created the narrow Straits, one side of the mountain being **Gibraltar** (north side) and the other **Jebel Musa** (south side), and they have since been known as the **Pillars of Hercules**, as the westernmost extremity of the known world; they carried the motto *ne plus ultra*, meaning "nothing more beyond." In the times of the Minoans and Phoenicians it was not safe to venture further westwards than here into the grip, power and unpredictability of the Atlantic Ocean. For thousands of years of early nautical navigation by merchant traders, this made a lot of sense.

But for birds on migration here these monumental structures are the milestones of the most important navigational achievements of their lives - they represent the easiest crossing and gateway for accessing the vast continent of Africa, in which they will ultimately spend their winter vacations and avoid the northern hemisphere winter. In our spring they represent the gateway back to Western Europe, the place they need to get to for the summer in which to breed.

These two Pillars of Hercules are colossal natural monuments resulting from the unimaginable forces of continental drift and crustal collision. The giant tectonic plate of Africa has smashed into southern Europe, creating huge and extensive mountain ranges from Cape Trafalgar near Barbate, just south of Cadiz, on the west side, all across the northern Mediterranean, and right down through to Turkey on the east side. The clash of these two continents is called the Alpine Orogeny - it has been going on for at least 25 million years and continues to this day.

As the stork or the crane flies, the Straits of Gibraltar are only 9 miles (14.5 km) wide at the narrowest point. But for birds it must be only on very rare occasions that this shortest of routes is possible, for the Straits of Gibraltar are a meeting place of differing air masses, each having completely different characteristics: cool moist air off the Atlantic, dry hot air from Africa, cool humid air off the Mediterranean and warm humid air off Spain, the interaction of which results in a very windy place.

The actual Mediterranean Sea is of fairly recent geological occurrence. It is a deep basin which has repeatedly been filled by Atlantic seawater and then completely dried out. There must have been a continuous land bridge at various times because southern Spain shares a lot of fauna and flora with the northern African continent. The most recent seawater infilling is thought to be within the last 5 to 6 million years.

Nocturnally migrating passerines fly to Africa on a broad front - recent radar tracking studies show this happening - and we now know from recent data-loggers that species such as Sedge Warbler undertake (as was suspected) a 2,000 mile migration in one go, which gets them south of the Sahara. However daytime migrating passerines like hirundines and larger migrating birds such as storks and raptors need to take the shortest possible sea crossing. Hirundines feed while they are migrating, but there are far fewer flying insects over the sea, and soaring birds - the raptors and storks - need *terra firma* to fly over as it generates the thermals they need for soaring. Seawater has nothing in the way of thermals, so the sooner they can cross the seawater and get back to land the better. Most adult migrating raptors and storks seem to know they need the advantage of altitude and many will be seen thermalling above the last patch of land in large ascending groups called kettles, before they level off and take on the seawater crossing. But many juveniles - that have been identified by plumage - undertake the sea crossing more or less at sea level which is not such a good idea, especially in adverse wind conditions, as they have no advantage of height to aid their recovery back to land should they misjudge this life-threatening sea crossing. The total number of soaring birds migrating south in the autumn over The Straits often comes as a surprise, especially for birders experiencing this amazing phenomenon for the first time. In 2011 during the limited count period by Fundacion Migres recorders, 497,298 soaring birds were counted; 189,243 storks and 308,055 raptors. In one weekend on group trips that I organise, we witnessed 25,000 Honey Buzzards pass through and have found a total of 21 species of raptor in one week in 2016.

186,932	White Stork		
2,311	Black Stork	189,243	Total Storks
181,924	Black Kite		
63,460	Honey Buzzard		
22,358	Short-toed Eagle	308,055	Total Raptors
37,375	Booted Eagle		
2,938	Other raptor species		
TOTAL for Autumn 2011		497,298	Total Soaring birds

Counts of soaring birds across The Straits of Gibraltar Autumn 2011

Data from Fundacion Migres, Tarifa (www.fundacionmigres.org)

Another route in the Mediterranean to avoid a wide sea crossing is for migrating birds to go down through Italy and across Sicily into Africa in a series of stepping stones, including Malta. Of course, this proves disastrous for tens of thousands of birds every year as they get gunned out of the sky or trapped on sticky lime sticks by the ignorant and selfish hunters who are allowed to do it because they say it is their tradition.

Modern satellite tracking is confirming the migratory routes taken by raptors to get to their wintering grounds, and these routes are mirrored on the return journey back to the breeding grounds the following year. Satellite tracking by researchers such as Meyberg have demonstrated this with Black Kites nesting in Eastern Germany.

But the Straits of Gibraltar are not just about being the shortest sea crossing available on the western Mediterranean. Another fact is that the coastal mountain ranges created by the Alpine Orogeny here for the most part run in a unbroken line from the southwest to the northeast almost continuously as far as Slovakia; only here does the mountain range curve southeastwards into the Carpathians. This gives soaring birds a superhighway all the way down to the Straits from as far away as northern Norway and Finland!

Close to the Straits, the coastal mountain ranges turn dramatically into a north-south orientation, and peaking around 2,600ft high they provide an amazing natural springboard of rising thermals for the migrating soaring birds to launch across the Straits to Africa.

On the return spring migrations, reciprocal high mountain peaks exist on the Moroccan side with Jebel Musa, Monte Hacho and the high Atlas Mountains to the south. We have seen adult Griffon Vultures (with their 10 ft wingspans) making landfall in southern Spain from Morocco, and they have been pinpricks in the sky, so high were they still flying as they came in northwards over the sea.

In springtime it is very exciting to be on the Spanish south coast between Algeciras/Gibraltar and Tarifa watching and waiting for the raptors to make the journey across the Straits. The cliffs here are quite high, probably 200 ft, and the majority of raptors come in at cliff top level having lost height all the way from Morocco. One spring day we witnessed another passage of Griffon Vultures, this time all immatures, and it was very sad to see three end up in the sea because they misjudged the distance to the shore in terms of height, and were not expecting the unpleasant and vicious reception committee of local Yellow-legged Gulls, who instinctively mob them and force them down into the water. One sadly drowned, but another made it to the shore exhausted, and a third lucky individual made it to a small offshore Island and managed to dry off cormorant-style before lifting off just as the tide came in and submerged the island. The attentive group of birdwatchers cheered it as it circled victoriously over our heads before gliding off over the nearby hills.

In the spring between March and early May, if you gauge the wind direction correctly and choose a favourable spot, you can be treated to a fabulous show of raptors making landfall, circling unavoidably past you on their way inland; you can literally see thousands of raptors in one morning.

One great sadness that I have witnessed since my first visit to southern Spain in 1987 is the prolific spread of

wind turbines on the mountain tops and ridges all around the Straits of Gibraltar - on both sides. It is an astonishingly cruel and bad decision to permit these monsters to be built in such an important migration area. We have recently (2019) been to Falsterbo in Sweden where hundreds of thousands of birds migrate across to Denmark and down to Germany, and there's not a wind turbine in sight - it is such a relief. The worst part about the installations in and around southernmost Spain is that they are subsidised by the EU; this is all the more upsetting because the bureaucrats who make the decisions to finance these projects here are detached from and have no understanding of the importance of the landscape to the wildlife that live and pass through this area for their very survival.

These turbines have recently been REPLACED with next generation larger size installations, and rather pathetically there is supposed to be an arrangement between nominated observers and the company that operates the turbines, such that when there is a period of visible migration the turbines are shut down to avoid lethal interaction between the migrating birds and the blades. But we have yet to find the observers or see the shutdown of the turbines during times of high passage. Plenty of birdwatchers have witnessed the destruction of innocent raptors and storks passing through this area on their annual migrations. Sometimes it is foggy or there is low cloud, and yet the birds still instinctively migrate, and then for sure they have no way of avoiding the turbines which are still operating in the ever-present wind. Even when there is no fog and conditions are clear, when a Levante wind from the southeast is humid, on ascent up Gibraltar Rock itself and the nearby mountain tops the Levante cloud forms and creates a broad-brimmed hat smothering the tops, and the migrating birds continue to pass through presumably using their ability to read the invisible magnetic force fields of the earth. This can and does have lethal consequences.

While we blatantly destroy migrating birds with turbine blades on the one hand, on the other recent technical development of small computerised data-loggers is revealing more and more about smaller bird migration feats. Location data-loggers can now be downloaded remotely, so once fitted to a bird, a whole year's data can be obtained for analysis without disturbing the bird. One great success was data from a Swift *Apus apus* that was removed from its nestbox in southern England in mid-July 2010 (under BTO licence), fitted with a data-logger device and released. On 8th May 2011 this same Swift returned to the very same nestbox and the data was downloaded. It revealed a most astonishing flight path of this bird over the intervening 10 months. The Swift left southern England on 23rd July 2010 and headed straight for central Spain where it spent a couple of days and then departed in a southwesterly direction arriving at Senegal by 1st August. It lingered there for a while, then flew down through Ghana and Nigeria, and by 12th August it had arrived in the northeast corner of the Congo where it stayed for nearly 4 months. By 9th December it had moved on in a southeasterly direction, stopping over Lake Malawi for a few days, then by 22nd December our Swift had arrived on the coast of Mozambique overlooking the Indian Ocean where it stayed for just over a month. On 24th January the Swift started returning in a northwesterly direction and returned to the Congo arriving there on 5th February; this is clearly a favoured spot as it stayed until 6th April. It then departed in a westerly direction for the coast, continued west and then in a northwesterly arc took 3 days and nights to cover a 1,000 miles sea-crossing over the Gulf of Guinea, and arrived in Liberia on 17th April. After staying just 10 days in Liberia it then took a northerly route straight across the Sahara ending up in Morocco on 3rd May. Two days migrating later it was back in Cambridgeshire in its nestbox. It took just 9 days of migrating to get back to its nestbox from the Congo Atlantic coast, our humble town-nesting Swift.

At the eastern end of the Mediterranean there are a number of famous migration watch points and until recently the most famous was the **Bosphorus** - a narrow channel of seawater connecting the Marmara Sea and the Dardanelles to the Black Sea from the Mediterranean. Istanbul is on the narrowest gap nearest the Black Sea coast. Soaring birds do not like to fly across water so on the autumn migration south from the watershed of western Russia the birds meet the Black Sea coast and then turn southwest passing through Romania and Bulgaria, crossing the Bosphorus, Marmara Sea and the Dardanelles to continue the journey southwards along the Pontica flyway on their way to Africa.

Numbers of White Storks migrating on this route in the autumn exceed 170,000 together with a respectable raptor count of 20,000. Many birds make it through here and satellite-tracked Lesser Spotted Eagles nesting in eastern Germany have been recorded flying through the Bosphorus all the way down to northeastern South Africa to winter there.

When Georgia became an independent state from Russia in April 1991, the iron curtain rolled back a little and it didn't take long for birdwatchers to discover *the* best kept migration secrets in the Palaearctic. Situated in the southeast corner of the Black Sea, **Batumi** shattered the western Palaearctic migration counts by having over 1 million raptors annually migrating overhead in the autumn. The watershed of the vast areas of Russia to the north support huge numbers of raptors; on their southward journey they come across the lofty Caucasus

Mountains. These mountains exceed the highest peaks in Europe with Mt Elbrus reaching 18,500ft. Raptors flying south see these massive snow-topped mountains and divert around the western edge to avoid the unnecessary high ascent, and therefore they end up in a concentrated stream of birds flying southwards over Batumi.

Once again there is the severe and significant problem of uncontrolled numbers of hunters shooting at the passing birds, killing them indiscriminately with an estimated 30,000 raptors destroyed EVERY autumn. It is a disgrace to humankind, let alone insulting modern international conservation aims and policies.

The 2019 Batumi migration counts totalled 1,138,891 raptors, including 513,000 Honey Buzzards, 300 Steppe Buzzards, 238,000 Black Kites, 4,000 Lesser-spotted Eagles, 2,500 Montagu's Harriers, as well as 1,800 Black Storks, 300 White Storks (cf. Bosphorus counts of 170,000), 350 Common Cranes and lots more. The organised counts are managed by the BRC, website below:

<https://www.batumiraptorcount.org/>

Another world record that hit the news headlines was set in 2007 when a Bar-tailed Godwit that was satellite-tracked was recorded flying from Alaska to New Zealand 7,145 miles (11,500km) non-stop; this study was on the race *Limosa lapponica baueri*. After a winter stay in New Zealand, it then set off on its return route on a loop migration through the Gulf of Carpentaria in northern Australia, on to Korea for another stop, and north eastwards to stage at Kamchatka, before finally returning to Alaska in the spring of 2008.

However, so fickle are the journalists and media organisations that when a humble Turnstone managed a similar feat in 2011 with a location data-logger, hardly anyone got to hear about it. The data for this individual bird was downloaded for 2 years running on return to its breeding site, revealing a 16,200 mile (27,000km) round trip twice from the Bering Straits between arctic Russia and Alaska, down to the Flinders in southeast Australia. This Turnstone also accomplished a loop migration in the following spring via northern Australia, the Philippines, the Chinese coast and Kamchatka. All this has been going on for millennia and research scientists have only just discovered it!

In 2014 we decided it was time to go to **Florida** to see Nearctic birds in abundance and where they belong, instead of seeing the odd lost vagrant doomed to die due to the lack of the right food and being chased by hordes of obsessive twitchers in the UK. We arrived in Orlando mid-October for a week. We explored the area around Merritt Island, Cape Canaveral and then wandered southwards towards the Everglades via Lake Kissimmee. While touring the Everglades and nearby reserves we became aware of raptors passing through southwards. The Park Warden recommended a visit to the **Florida Keys Hawkwatch at Curry Hammock State Park**, and so on our last full day that is where we went. Basically, it's a Recreational Vehicle (dormobile) car park with a WC and shower facilities building on stilts (to avoid the storm surge which is the regular feature in these parts). We saw hundreds of raptors including over half a dozen Peregrines, and twice as many Merlins. The team counting the bird passage were very welcoming and very inclusive, and we wished we could have stayed longer. When the raptors fly southwards through Florida the east and west coast rapidly converge and taper into the archipelago of the Florida Keys. Today the islands are connected by a major road highway, and the road and Keys combined offer thermal lift which undoubtedly assists the passing migrants. In this way the migration is concentrated into a very narrow corridor where the counting really couldn't be easier.

The count team promised that the observation data was put on the internet daily, and they were true to their word by submitting daily totals onto the national migration network website:

<https://www.hmana.org/> (Hawk Migration Association of North America)

On return home I accessed the website and was astonished at the totals for the species passing through; without doubt the Curry Hammock Florida Keys Hawkwatch is the No. 1 place in the world to witness Peregrine migration.

On 5th October 2014 the counters had a passage of 199 Peregrines, but the raptor total for the day was 1,729 and that included 19 Ospreys, 3 Bald Eagles, 41 Northern Harriers, 512 Sharp-shinned Hawks, 125 Cooper's Hawks, 184 Broad-winged Hawks, 39 Merlins and 513 American Kestrels. However, the autumn (fall) count season ended at the end of October with a grand total of 2,505 Peregrines. The next year the funding and count period was extended, and the numbers of Peregrines exceeded all previous counts with a staggering **one-day total of 1,506 Peregrines on 10th October 2015**, and the total for the full migration count period of 2015 was a staggering 4,559; nowhere else in the world can match Peregrine counts of that order. Satellite tracking has revealed the different choices that individual Peregrines made from year to year, even demonstrating that

Peregrines have a loop migration across North America. Birds were caught in central Chile in their wintering grounds to have a satellite tracker fitted; one of the birds then returned in the spring all the way back to Baffin and Ellesmere islands. The start of the route not surprisingly was up the mountain chains of the Andes and Central America, continuing into Mexico and virtually to the Canadian border along the east side of the Rockies. The bird then took a sweeping arc round the west side of Hudson Bay and across to the Canadian arctic islands to breed. Later on in the autumn the same bird then flew due south passing on the east side of Hudson Bay, east of the Great Lakes, straight across the Appalachians down to Florida, flying straight over Cuba and into Central America, picking up the central mountain belt somewhere in Panama, down to the Andes and back down to the Chile wintering ground. It is the same feat as flying from Svalbard down across Scotland and Ireland, Portugal, Spain, and West Africa down to winter in South Africa, and then flying back to the eastern Mediterranean coast and through Turkey and Russia to get back to Svalbard. The navigational skills of birds is phenomenal, and that's just the Peregrines!

While I was checking out and recording the data for Florida on the HMANA Hawkwatch website, a message popped up announcing the highest count of raptors ever recorded in one day. It was made on 2nd November 2014 over the city of Panama. Over 2,105,000 raptors were counted in one day. We decided we had to go and sample this incredible migration that occurs every year in Panama, so we went in October 2015. On one day the count was 1,141,000 raptors; the vast bulk of the birds consisted of two species, Swainson's Hawk, a species of Buzzard, and Turkey Vulture, but we did also see 13 raptor species that day, all wrapped and woven together in the sky making a meandering **river of raptors**, and I think it's a very appropriate description. The Panama autumn (fall) count total for 2014 was 3,205,000 raptors; an amazing migration - an understatement for sure.

21st January

The day after tomorrow – is the Gulf Stream set to shutdown?

by **Dr. Jon Robson (University of Reading)**

Jon works with the National Centre for Atmospheric Science and the University of Reading on climate monitoring and modelling of the oceans. He first described the Gulf Stream that emanates from the Caribbean before it heads north hugging the Atlantic coast and then east over the ocean towards the UK. The oceanic stream was first mapped by Benjamin Franklin in 1769 to explain the faster west-to-east travel time of ships. Ships take advantage of the fast current (1ms^{-1}) in a channel just 50 km wide. There are in fact several such ocean currents along the western edge of large ocean basins. It is explained by differential wind stress over high latitudes and the conservation of angular momentum that makes ocean waters circulate clockwise in the northern hemisphere. Models predict that a fast-flowing current will always develop along the western coast. As the Gulf Stream is driven by geography and physics it would only stop if the Earth stops spinning and so it is not a cause for alarm.

The effect of the Gulf Stream is dwarfed by the Atlantic basin-wide circulation. This is called the Atlantic Overturning Circulation (AOC) and is driven by warm, salty water that flows north on the surface before sinking as it cools at about 60°N ; the water then flows south along the ocean bed towards the equator. It transfers about 1,000,000 GW of thermal energy from south to north and has a significant warming effect on northwestern Europe. The history of the circulation has been studied using deep sea cores of the ocean bed rock and then measuring the relative abundance of radioisotopes. The studies show that overturning did shutdown around 16,000 years ago and this correlates well with known temperature changes when the northern Atlantic became much cooler. This event occurred when the huge Lake Agassiz in Canada emptied its cool, fresh water into the Atlantic. If the AOC were to stop, models predict southern England would see an average temperature drop of 3°C with sea ice reaching as far south as Scotland. There would be less rain, less food production and increased sea levels. Models and records show that should it stop it would take more than a lifetime before it restarted. Extensive modelling of the effects of increased temperature show that the circulation should remain stable with <5% chance of it stopping, however it has weakened by 30% already and the models probably overestimate the stability of the system to increasing temperatures.

Jon then described how measurements are made of the oceans. Only the north Atlantic had extensive monitoring equipment prior to 1960 and so there is not much data to compare the predictions of computer simulation models against. In 2007 a network of 3,000 Argo floats were installed across the oceans. These are robotic instruments that take measurements at various depths before coming up to the surface to transmit data in a ten day cycle. They measure temperature and salinity. Across the North Atlantic a 'RAPID' array of 15 measuring instruments has been installed. These have a series of instruments strung on a line up from the ocean

bed and can measure flow rates as well as temperature and salinity. The measurements show that in the period since 2004 the AOC was fairly constant in strength until about 2012 when it dipped 30% in strength, but has not shown further reduction since then.

Jon showed a chart of average sea temperature changes. These show a marked rise in temperature in all the oceans except for a small patch south of Greenland. But absolute confirmation that this is due to climate change rather than natural variation would require long term monitoring data, which we do not have.

He concluded that although the north Atlantic circulation had collapsed in the past it may take decades for it to come to a halt. If current models are correct then imminent collapse is unlikely and UK winters will continue to be relatively mild.

4th February

Can biological control bring an end to 'Balsam bashing'? by Dr Carol Ellison (CABI)

CABI was established in 1910 as the Commonwealth Agricultural Bureau. From the 1980s, it became international in scope, and is now owned by 48 member countries. It is a not-for-profit organisation specialising in agriculture and the environment.

Himalayan Balsam *Impatiens glandulifera* is a tall annual which was introduced to this country from 1839 onwards as a garden plant. It came from the foothills of the Himalayas and spread rapidly by its explosive seed-dispersal mechanism. It is estimated to produce 5-6,000 seeds per square metre, and is now considered a menace. It out-competes other plants for light and space, reducing species diversity and preventing the regeneration of woodland, it attracts pollinators away from native species, and in winter it is killed by frost, causing problems from erosion and the increase of sediments in watercourses. Despite the fact that it is recognised as a late source of nectar for bees, the British Beekeepers' Association has come to the conclusion that control is desirable.

The aim of the CABI programme is to reduce the density of the plant, rather than attempt to eradicate it, the cost of which would be prohibitive. Photos of Balsam growing in this country compared to those of it growing in its native habitat showed that in Asia it tends to be shorter and not so dense, because it has a suite of other organisms that feed on and are naturally dependent on it.

Classical biological control, using pathogens of the plant native to the areas where it originated, can be shown as a line on a graph, where the numbers of plants oscillate over time, and eventually fall below an ecological or economic threshold. The cost/benefit ratio of such a programme in the UK could be enormous.

A control programme by CABI began in 2006 with a study of the pathogens of the plant in its native range. Insects proved not to be specific enough, but a fungal rust pathogen *Puccinia komarovii* var. *glanduliferae* was found to be the safest agent. It reduces the ability of the balsam to compete with other plants and to set seed. Its effects on other plant species, including other *Impatiens* species, were tested in this country in greenhouses under quarantine. The rust, having co-evolved with its host, proved highly host-specific - a co-evolved biotroph.

Having obtained consent from DEFRA and the European Standing Committee on Plant Health, tests began in 2015 in greenhouses and then in the field. The initial results were disappointing. It was then realised that there were two strains of *Puccinia* coming from different sides of a mountain range in India and Pakistan and both strains needed to be tested. A molecular analysis of *I. glandulifera* in the UK actually showed that three strains were present, suggesting that it had been introduced on at least three different occasions; this DNA testing had been carried out on Victorian herbarium specimens as well as living plants. It was found that one genotype of balsam predominated in each of the test sites. It was important to find rusts that would attack all three groups: the two available strains of *Puccinia* came from India and Pakistan. They are not effective against all three groups of balsam, and more research is needed in Kashmir and the India/Nepal borders. For the tests in the UK, it was important to choose the most appropriate strain of the rust to be used on each test site.

A licence from the Health and Safety Executive was obtained to allow the tests in the field, which are carried out by local action groups. They are supplied with the *Puccinia* rust spores, in water, which are sprayed onto plants in the test area. Then later, at least twice during the growing season, the numbers of pustules on the leaves are counted, and the results sent back to CABI.

Initially it was uncertain whether the rust spores would overwinter, so the groups also monitor the rates of infection in the following spring. The rust infects the hypocotyles (the stems below the seed-leaves) of the seedling plants, causing an obvious deformity. There are currently 33 test sites, with the rust overwintering at eight of them.

The programme is succeeding: it is expected that over time, the biological control will build up and spread beyond the test sites, and that “balsam bashing” will become a thing of the past.

During question time, various related topics arose - such as the status of Himalayan Balsam in continental Europe, whether the *Puccinia* was likely to cross the Channel and whether it could attack other plants. There was particular interest in the work of CABI in controlling other invasive alien plants - such as Japanese Knotweed *Fallopia japonica*, New Zealand Pygmyweed *Crassula helmsii*, Floating Pennywort *Hydrocotyle ranunculoides* and Water Fern *Azolla filiculoides*.

18th February

Knepp Wildland – is “wilding” good for wildlife? by Jill Butler (Ancient Tree Forum)

Jill Butler is an ancient tree specialist who has worked with the Knepp re-wilding project in West Sussex since it began in 2001. Knepp’s owners, Charlie Burrell and Isabella Tree, inherited a 3,500 acre farming estate that struggled financially because the soil is thick Weald clay. Twenty years were spent maximising the profit from the herd of dairy cows, with sidelines such as making ice cream and yoghurt. Intensive ploughing utilised all the land up to the family home and up to the trunks of parkland trees; even so less than half of the normal yield for livestock feed was achieved compared to prime farmland. The end of milk quotas sent the price of dairy cows plummeting and bankruptcy looked inevitable. Charlie brought in Ted Green (*who was in the audience*) to advise on one ancient tree that Charlie was particularly concerned about. Although that tree was healthy, Ted showed how the ploughing was affecting the health of many parkland trees. Charlie and Izzy then visited a wilding site in the Netherlands and came back determined to do something similar at Knepp.

Jill then explained the significance of ancient trees in the UK. The UK has more of them than the rest of Europe put together. This is because the trees grew short and stout in an open deer park environment. This makes them more stable and healthier than those growing with other trees in woodlands. In fact the term ‘forest’ is derived from a much more open environment than a dense concentration of trees. It is the Saxon and Norman love of deer hunting in the UK that is the reason for the number of ancient trees. The presence of deer, when properly managed, does not have a negative impact on woodlands. The landscape was diverse with open pastures and groves of trees. It is little known that oaks have a low tolerance for shade and so need open areas for saplings to grow to become mature trees. In contrast Beech are much more shade tolerant. Oaks in particular grow up from scrub (typically bramble) so it is important to leave areas of scrub as natural nurseries for oak trees.

Jill outlined the status of wilding at Knepp which after only 20 years is showing encouraging signs of increased wildlife diversity. To be successful it has to be planned for the long term and large herbivores must be allowed to roam freely. Initially the whole estate was reseeded with various grass mixtures. A combination of Longhorn cattle, Exmoor ponies, Tamworth pigs and Fallow deer all provide a distinct role in the process. This new management regime has seen the gradual spread of scrub and wetland along with the doubling of soil depth and quality. The project has been closely monitored with over 25,000 individual records of 2,630 species, of which 75 are nationally scarce. Birds such as Nightingale, Turtle Dove, Hobby and Cuckoo have increased significantly in number. One of the biggest successes has been the Purple Emperor butterfly. It was studies at Knepp that revealed that Sallows *Salix* spp. as well as oaks are essential for the butterfly’s life cycle. Knepp is now the top venue for people to see them with over 100 seen on peak days.

The wilding scheme has to be financially viable and a block of funding came initially from Higher Level Stewardship and the Rural Payments Agency. With so little management required, farm buildings have been converted to office use or sold off. A significant income stream of £120,000 p.a. comes from the organic meat from culled cattle, deer and pigs. Various camping and wildlife safari schemes bring in £230,000 p.a.

Jill’s talk attracted the largest attendance in recent years of 117 and she answered many questions from a very attentive audience.

3rd March

TVERC – Using Data to Enhance and Protect our Natural Environment by Dan Carpenter

Dr Camilla Lambrick was unable to be with us for the advertised talk on 'Rare Plants I have Known', so we were fortunate to have Dan Carpenter to talk about the Thames Valley Environmental Records Centre, where he is Projects Manager. His talk was in two sections: (1) about the work of TVERC, and (2) about Nature Recovery Networks.

Dan firstly explained that the organisation he works for is usually pronounced 'tee-verk,' with the stress on the first syllable, for short. It operates in Berkshire and Oxfordshire, and most counties now have similar organisations. It is funded by local authorities and the Environment Agency. Charities such as the RSPB, the Wildlife Trusts and the National Trust, have free access to the information; commercial firms must pay for access. Councils need it in drawing up local plans and in determining the outcome of planning applications, and the Environment Agency in planning river management and flood prevention.

There are 10 members of staff, and over 180 volunteers - some of them in the office, but most involved in recording in the field. In the office, they are mainly involved in converting old paper records to digital data. Increasingly, records arrive electronically, and around 8 million records are held.

Aerial photography is used in producing habitat maps showing every parcel of land over the two counties, and the data is backed up by field surveys. In addition, TVERC runs a Local Wildlife Site Project, in which 700 sites are surveyed on the ground, around once every 10 years. Archival research is carried out, useful especially when identifying ancient woodlands.

The concept of 'biodiversity offsetting' was explained, whereby property developers pay local authorities to offset the impact of their developments. The money is then used to invest in nature conservation on other sites.

Then the concept of valuing trees in cash terms was introduced: their value in sequestration and removal of carbon dioxide, mitigating global warming and providing humans with cleaner air to breathe. Such an evaluation has been carried out for Slough.

We then looked at 'habitat networks' - how habitats can be linked together. A series of maps of Oxfordshire was shown, where it was obvious that the major links were along river valleys. TVERC can also provide more detailed 'neighbourhood plans', either in summary or in full, with lists of species.

In summary, TVERC holds information to help in decision making, and no-one else holds this information.

Dan then mentioned the Recorders' Conference, to take place in March at Oxford, and the informal field days, when new recorders work alongside experienced recorders to learn from them. Organisations and individuals are encouraged to come to agreements with TVERC over the sharing of data.

He then went on to consider Nature Recovery Networks, which are part of a 25-year plan to promote biodiversity which is currently before Parliament. We were able to see draft maps of an Oxfordshire County Council plan in which Nature Recovery Networks would be an integral part.

Then came 5 questions for discussion:

- (1) What should the overall ambition of Nature Recovery Networks be for the environment and people?
- (2) What spatial representation should key natural assets have in the Networks?
- (3) What specific environmental targets should they have for key national assets?
- (4) Should they have targets or criteria for the acceptable loss of natural assets, acknowledging that development and offsetting will be occurring during the next 30 years?
- (5) What specific targets should they have?

These gave rise to a number of different ideas from the audience. In Berkshire, Dan explained that TVERC is involved in a long-term plan, on which a public consultation will be held. It aims to ensure that existing habitats survive, and should create new habitats where wildlife can spread to increase biodiversity.

17th March

AGM and Members' Talks

Gardening for bugs by Rob Stallard

Rob Stallard presented a slideshow of the many insects he had photographed in his Tilehurst garden over the last ten years. His survey included a good number of bees, butterflies, moths, flies, beetles, other insects and spiders. He explained how he had planted shrubs and perennials to give food for the invertebrates throughout the year.

Reading's Climate Action Plan by Tricia Marcousé

Tricia put out a plea for members to send in their response to Reading Borough Council's Climate Action Plan and the Biological Action Plan. The Council is putting together a strategy for the future management of the town's green spaces and biodiversity. Consideration was to be made for future flood defence, planting of trees and shrubby undergrowth for wildlife; there may, however, be considerable local pressure to leave things as they are. Members with specialist knowledge were encouraged to contribute to the action plan. The BAP includes records of wildlife species from TVERC that need checking for errors and omissions, in particular to update the 'last seen' column. The plans are on www.reading.gov.uk/consultations.

6th October

Presidential Address a talk given by Ken White on behalf of Tricia Marcousé

First impressions of Patagonia by Ken White (RDNHS) see p. 38 for the feature

3rd November

Vegetation patterns on the Dungeness shingle by Dr Brian Ferry (Royal Holloway College)

The Dungeness promontory is the largest shingle landscape in Europe, with a sequence of several hundred shingle ridges and troughs extending several kilometres inland. Over 600 plant species have been recorded here. Shingle is constantly removed from the southern edge and deposited on the eastern side, with very high tides forming this into shingle ridges. Natural colonisation of the ridges by plants and lichens follows a continuous pattern related to the age of the ridge, with an average time of ten years between each. Much of the landscape has been disturbed by man, through road, railway and building construction (including the power station) resulting in a rich secondary flora. Scattered over the area are wetlands, some natural and others man-made (e.g. gravel extraction), which add further to the diversity. These various elements make Dungeness one of the richest sites for plants in Kent.

The first shingle ridge has a covering of Babington's Orache *Atriplex glabriuscula*, followed by 3 ridges showing the much taller Sea Kale *Crambe maritima*, and both of these plants are very tolerant of salt spray. The pH of any soil in this area is the same as sea water, pH 8. From ridge 5 (50 years old) to ridge 16 (160 years old), the dominant growth is False Oat-grass *Arrhenatherum elatius*, interspersed with Curled Dock *Rumex crispus*, Mouse-ear Hawkweed *Pilosella officinarum*, and several Vetches to begin with, and with more and more species such as Sea Campion *Silene uniflora* coming in as the age of the ridges increases and successions of vegetation have formed a soil layer that almost covers the pebbles. Mosses colonise at around 100 years.

Around ridge 16 there is a complete change with Prostrate Broom *Cytisus scoparius* ssp. *maritima* becoming the dominant species. This is the only shingles system in Europe where this succession is seen. Broom has a lifespan of around 20 years and provides a large amount of organic material when it dies.

At around ridge 25, 250 years old, the broom dies out and the final stage of the succession arrives: lichen-rich shingle heath. Again, this is the only site with this vegetation type in Europe. Lichens are mainly *Cladonia* species including *C. portentosa*, *C. ciliata*, *C. floerkeana*, *C. ramulosa*, *C. furcata* and *C. squamosa*. Soils here have been washed through by rain, do not receive any salt spray, and are around pH 3.5. Acid loving plants seen are Sheep's Sorrel *Rumex acetosella*, Sheep's-bit *Jasione montana* and the Nottingham Catchfly *Silene nutans*, a national rarity with the largest UK colony at Dungeness. The lichen-rich heath gets more salt spray towards the southern end of

each ridge where the sea is gradually eroding shingle, and lichens such as *Cladonia rangiformis* and *C. foliacea* that tolerate a higher pH can be seen.

Finally, Brian showed some of the plants restricted to disturbed shingle such as Viper's-bugloss *Echium vulgare*, Red Valerian *Centranthus ruber* and Yellow Horned-poppy *Glaucium flavum* and touched on the mysterious Holmstone holly beach and the Open freshwater pits that are the largest natural water bodies in shingle beaches in Europe. Hopefully he will return to give us a second talk on those.

1st December

What has DNA ever done for us? by Dr John Thacker (RDNHS)

Knowledge of the structure and function of DNA, the hereditary material, has given new ways to analyse living organisms, and potentially assist with the recording and conservation of species. The talk was given in three parts: (1) Description of important DNA techniques, (2) Application to species identification and evolution, and (3) Impact of using environmental DNA.

DNA is composed of four different components (bases): adenine (A), cytosine (C), guanine (G) and thymine (T), and the order of these bases in a given piece of DNA determines its function. Two technical advances were crucial to allow biological samples to be used for species analysis; the development of methods to sequence DNA and the use of the Polymerase Chain Reaction (PCR) to amplify the DNA from samples. In addition, a 'target' sequence had to be identified that could be used as a marker to distinguish between species – this had to be sufficiently variable to pick up fine differences between related species but not so variable that individuals *within* a species show differences. In animals, the 'Cytochrome-c-Oxidase-I' gene (COI) in mitochondrial DNA was found to be ideal for this purpose, although not for plants, where different genes are used. This gene can be represented as a 'barcode' where one strand of the DNA of this gene is shown as a strip with each of the 4 bases given a different colour, which speeds up analysis and simplifies comparisons between the COI genes of different species. An on-line resource called the 'Barcode of Life' was set up by Canadian scientist Paul Hebert, as a freely accessible database of wildlife barcodes; currently this has >11 million records for >315,000 species. For Lepidoptera, for example, there are now >1 million records for >120,000 species from 215 countries. Additionally, recently in the UK a project known as 'The Darwin Tree of Life' has been started with the aim of barcoding (and ultimately completely sequencing) all 66,000+ described UK species, as a collaborative effort between leading British scientific institutions.

Taking examples from moth species that are difficult to separate from external features (such as the Uncertain vs. the Rustic, or Grey Dagger vs. Dark Dagger), it was shown that their barcodes could readily be separated at specific DNA sites in the COI gene, giving overall about 3% difference (while differences between individuals of the same species were at least 5-fold less). Greater differences between species' barcodes are found within families of moths and butterflies (e.g. in a study of Germany's Lepidoptera, >90% of the 1,264 species showed diagnostic barcodes, and the average difference within families was about 12%). Those species showing equivocal results were already known from other criteria to be taxonomically uncertain. Further, these barcoding studies have led to the identification of 'cryptic' species; an example is the Australian Pink-bellied Moth *Oenochroma vinaria*, where a consistent barcode difference of 3% was found for some samples. Analysis of the distribution of these moths showed that one species, now named *O. barcodificata*, was restricted to Tasmania and New South Wales, while the other was all over mainland Australia.

Use of DNA analysis combined with fossil evidence has allowed the previously poorly-understood evolutionary relationships between different Lepidoptera families to be defined, and to indicate that butterflies are more closely related to micro-moths than macro-moths. Also some insects once classified as moths are actually more closely related to butterflies. A striking example of the use of DNA analysis is the vindication of evolutionary studies of 'blue' butterflies in the Americas by Vladimir Nabokov (best known as a novelist) in the 1940s, whose work was not taken seriously by professional lepidopterists during his lifetime. When recently re-examined using DNA sequence data, his predictions of the timing and relationship between waves of colonization by these butterflies from the 'Old World' to the 'New World' turned out to be remarkably accurate.

The ability to analyse tiny quantities of DNA by PCR and sequencing has allowed the use of 'environmental DNA' (e-DNA) to indicate the presence of species in the wild using sources such as carcasses, shed skin, hair, faeces, mucus and sperm. This can be done for single species, such as detecting newts in a pond or fish in a lake or even the sea, and for multiple species (metabarcoding) by the development of high throughput DNA sequencing. Two requirements must be met for this to be successful: the environment must be conducive to the survival of DNA

(dependent on temperature, acidity, etc.) and a comprehensive barcode library must be available for comparison of multiple e-DNA samples. Studies in a number of different environments, e.g. Peruvian river systems and deep sub-arctic seas, suggest that DNA metabarcoding can be a less invasive, more comprehensive and efficient method of assessing the presence of species and potentially their abundance. Also novel sources can be used, e.g. carrion flies used to indicate presence of tropical mammals and the gut contents of grasshoppers used to indicate which plant species are eaten.

DNA from fossil sources can also sometimes be used – although claims that insects preserved in amber up to 50 million years old can yield meaningful e-DNA samples have been disproved. This highlights one potential difficulty; because any DNA present can be strongly amplified by PCR, great care is needed to ensure that unwanted sources of DNA (e.g. from contaminants such as bacteria and parasites, and DNA from the scientists) do not get detected overwhelmingly. Recently, however, it has been found that 2 km-deep ice cores from Greenland >450,000 years old can yield DNA from both ancient plants and insects (beetles, flies, butterflies and moths) even though no structural evidence is present.

In summary, DNA analysis can be a quick and potentially non-destructive means to identify organisms, both in prepared samples (such as museum specimens) and in the wild (e-DNA). Generally the cost of DNA analysis has dropped greatly over the last decade, although this has been achieved mainly by high-throughput sequencing, so that it should become competitive with other methods of identification.

15th December

Christmas Party

The 2020 Christmas party was of necessity very different from our usual gathering, being held as a Zoom meeting hosted by Ian Duddle and led by Tricia Marcousé; 29 members attended on 24 screens. To begin proceedings Laurie Haseler gave an entertaining presentation on the results of the photographic competition (see below), and some of the winning entrants talked about their pictures. We had a variety of quizzes as usual: Lesley Hawker's were mailed out in advance and at the meeting participants were divided into six 'breakout rooms' to confer before reconvening to run through the answers, solutions to Ailsa Claybourn's 'chainword' from the December newsletter were given, and Tricia Marcousé presented her 'European winter's tale' for us to fill the gaps with mammals. The quizzes were interspersed with poems read by David Cliffe and Julia Cooper, and a highlight of the party, Ken White's presentation on the importance of colour ringing of birds. This featured some of Ken's spectacular photos including the overall winner of the photographic competition. A pleasant evening was enjoyed by all, and we look forward to meeting together next year with refreshments and a glass of mulled wine.

Photographic Competition by Laurence Haseler

The 2020 photographic competition had restrictions imposed because it was an on-line event. Members were allowed to submit only one, not two, pictures in up to six categories. Also, in addition to the eight categories used in previous years, an extra category, "Local in lockdown" was introduced, for pictures taken within (roughly) 5km of members' homes. Submission of pictures by e-mail was relatively straightforward, encouraging several members who had not previously taken part to do so. The total number of entries, 65, was similar to that in previous years, despite the reduced number of photos allowed per entrant. The categories and the number of entries in each are shown in the table below.

On-line voting involved scrolling through every photo one at a time, which benefitted from there being fewer photos per category. Rob Stallard modified some of his existing software to produce a voting system which was easy for members to use: it also counted the votes. One complication was a significant number of entries not meeting the entry criterion of "natural history", such as pets or farm animals, or non-native plants in parks or gardens. To be fair to the majority who had read the rules, non-compliant entries were transferred to a new category "Extra in lockdown", except for one or two put in "Something to make you smile". The only disappointing feature was that fewer members than normal voted, but nevertheless in most categories the margin of votes for the winner was clear. There was less clarity in the runners-up votes, so in several categories, there was more than one photo coming second, as shown in the tables below. In the one case where there was a tie for first place, the winner was chosen based on the society President's vote.

Photographic Competition 2020 Winning Photographs

(for article, see page 32)



Overall Winner & Winner: Nature in Action Newbury Peregrines Playing

2 of the 3 juvenile Peregrines from Newbury BT Exchange 03/07/2020 © Ken White



Small Blue *Cupido minimus* The Ridgeway
Winner: **Small is Beautiful** © John Thacker



Six-spot Burnet Moth *Zygaena filipendulae* Moor Cope
Winner: **Colour Prejudice** © Dorothy Marshall



Puffins *Fratercula arctica* Lunga Island., Mull
Winner: **Three of a Kind** © Jenny Greenham



Merveille du Jour *Dichonia aprilina* Brimpton Common
Winner: **Pattern Perfect** © Grahame Hawker

Photographic Competition 2020: Winning photographs and Runners Up



Feral Goats *Capra aegagrus hircus* Castle Hill, Mere
Winner: **Something to make you smile** © Dorothy Marshall



Collared Earthstars *Geastrum triplex* Whiteknights, Reading
Winner: **Floral-Fungal UK & Overseas** © David Owens



King Penguins *Aptenodytes patagonicus* Falkland Islands
13/12/20 Winner: **Fauna UK & Overseas** © Ken White



Poppy field in Brimpton
Winner: **Local in Lockdown** © Lesley Hawker



Autumnal *Acer* foliage Westonbirt Arboretum
Winner: **Extra Lockdown** © Sheelagh Hill



Cider Apples Gloucestershire
Joint 1st Winner: **Colour Prejudice** © Lesley Hawker

Photographic Competition 2020: Runners Up



Rose Chafer on Cosmos *Cetonia aurata* Sonning Common
 Runner Up: **Small is Beautiful** © Fiona Cummins



Caterpillar (unknown) Hampstead Norreys
 Runner Up: **Small is Beautiful** © Jenny Greenham



Oak Galls *Neuroterus quercusbaccarum* & *N. numismalis*
 Plastow Green 07/10/20
 Runner Up: **Small is Beautiful** © Ken White



Ringlets *Aphantopus hyperantus* on Hogweed
 The Ridgeway 26/07/87
 Joint Runner Up: **Three of a kind** © John Thacker



Large Venus's-looking-glass *Legousia speculum-veneris*
 North Hampshire 15/07/20
 Joint Runner Up: **Three of a Kind** © Laurie Haseler



Silver-studded Blue *Plebejus argus* Silchester Common
 Joint Runner Up: **Nature in action** © Grahame Hawker

Photographic Competition 2020: Runners Up



Gt Spotted Woodpecker *Dendrocopos major* Binfield Heath
Joint Runner Up: **Nature in Action** © Chris Ash



Marsh Fritillary *Euphydryas aurinia* 7 Barrows, Lambourn
Joint Runner Up: **Pattern Perfect** © Laurie Haseler



Mallard & ducklings *Anas platyrhynchos* R.Thames at Marlow
Runner Up: **Something to make you smile** © Rob Stallard



Water Avens *Geum rivale* BBOWT Moor Copse
Runner Up: **Flora UK & Overseas** © Rob Stallard



Beautiful Demoiselle *Calopteryx virgo* Pangbourne
Runner Up: **Fauna UK & Overseas**
© Dorothy Marshall



Globe Thistle *Echinops ritro* Binfield Heath
Runner Up: **Extra in Lockdown** © Chris Ash

A major benefit of the on-line competition was that a presentation could be prepared for the Christmas party, showing pictures with their title and photographer's name. The downside was that multiple prizes could not be handed out as normal at the party, though the voucher for the overall winner was still awarded. That went to Ken White's picture of the aerial manoeuvres of a pair of juvenile Peregrines near their nest in Newbury town centre.

Category	No.	Winner	Subject
1. Small is Beautiful: (UK)	10	John Thacker	Small Blue on a grass stem, The Ridgeway
2. Three of a Kind: (UK)	6	Jenny Greenham	Puffins on Lunga Island, Mull
3. Nature in Action: (UK)	7	Ken White	Newbury Peregrine juveniles playing
4. Colour Prejudice: (UK)	4	Dorothy Marshall	Six-spot Burnet Moth, Moor Copse
5. Pattern Perfect: (UK)	6	Grahame Hawker	Merveille du Jour, Brimpton Common
6. Makes You Smile: (UK)	5	Dorothy Marshall	Goats on a bench, Castle Hill, Mere
7. Any Flora or Fungus:	5	David Owens	Collared Earthstar, Whiteknights, Reading
8. Any Fauna:	5	Ken White	King Penguins, Falkland Islands
9. Local in Lockdown: (UK)	9	Lesley Hawker	Poppy field, Brimpton
10. Extra in Lockdown: (UK)	8	Sheelagh Hill	Autumn colours of an <i>Acer</i> , Westonbirt Arboretum
OVERALL WINNER		Ken White	Newbury Peregrine juveniles playing
Runner up to Overall Winner		Ken White	King Penguins, Falkland Islands

Category	Posn.	Runner Up	Subject
1. Small is Beautiful: (UK)	= 2nd	Fiona Cummins	Rose Chafer on Cosmos, Sonning Common
1. " "	= 2nd	Jenny Greenham	Caterpillar (unknown sp.), Hampstead Norreys
1. " "	= 2nd	Ken White	Oak Galls, Plastow Green
2. Three of a Kind: (UK)	= 2nd	John Thacker	Ringlets on Hogweed, The Ridgeway
2. " "	= 2nd	Laurie Haseler	Large Venus's-looking-glass, North Hampshire
3. Nature in Action: (UK)	= 2nd	Grahame Hawker	Silver-studded Blues, Silchester Common
3. " "	= 2nd	Chris Ash	Great Spotted Woodpeckers, Binfield Heath
4. Colour Prejudice: (UK)	= 1st	Lesley Hawker	Cider Apples, Gloucester
5. Pattern Perfect: (UK)	2nd	Laurie Haseler	Marsh Fritillary, BBOWT Seven Barrows
6. Make You Smile: (UK)	2nd	Rob Stallard	Mallard with ducklings, R. Thames at Marlow
7. Any Flora or Fungus:	2nd	Rob Stallard	Water Avens, BBOWT Moor Copse
8. Any Fauna:	2nd	Dorothy Marshall	Beautiful Demoiselle, Pangbourne
9. Local in Lockdown: (UK)	2nd	Dorothy Marshall	Baby Blue Tit, Pangbourne
10. Extra in Lockdown: (UK)	2nd	Chris Ash	Globe Thistle, Binfield Heath

Presidential Address by Ken White, on behalf of Trish Marcousé

(from indoor meeting on 6th October)

As a schoolboy obsessed with nature I read books on voyages like those of Cook, Banks, Wallace and Darwin with great enjoyment. The detailed descriptions of Australia by Banks and Patagonia by Darwin took my imagination to places it had never been before.

On my bucket wish list for decades, the chance of going to **Patagonia** with Sarah suddenly became reality in December 2019 as part of our retirement travelling. We both wanted to visit and explore where Darwin had witnessed the unique floral and faunal biodiversity of a then remote and largely uninhabited landscape. Here, endlessly unfamiliar examples of wildlife provided some of the evidence that ultimately led to Darwin's famous publication confirming natural selection as the process of speciation and mechanism of evolution.

Patagonia is the name of the southern region of South America first explored and discovered by Magellan in 1520; the native tribe, the Tehuelches, at that time were much taller than the Portuguese and appeared as giants to them. This reminded him of the fictional Patagons, a race of mythical giants in a book he was known to be reading at the time, hence the name Patagonia. By 1535 the area had become a Spanish colony.

As lifelong students of natural history and evolution, and more recently of geology, we went to Patagonia with the knowledge that South America had been an isolated continent for over 40 million years after separation from Africa by the process of continental drift, and currently contains 1/3 (3,300) of all the species of birds in the world, over 50,000 plant species, 2,000 species of fish and in excess of 400 species of mammals. Of those impressive totals further research revealed that **Chile** - the main destination of our trip - in spite of its incredible latitudinal range of 38.5 degrees and 3,600 miles of coastline running north to south, only has just over 5,000 species of plant and only 417 species of bird. How come Chile is the biodiversity poor relation of the South American continent? Various naturally occurring barriers impose severe problems for the colonisation of all taxa: (1) the hot and dry desert conditions in the north of Chile on the Peru border, (2) the Andean mountain chain with an average height of 21,000 ft along virtually the whole length of the country, and (3) the omnipresent cold Humboldt current, sweeping north from the Antarctic all the way up the west coast, even reaching as far north as the Galapagos Islands. This results in a place that is very difficult for nature to get to from other parts of the world, let alone neighbouring countries.

Our plan was to fly to Santiago, have a few days to look around the area and then board a cruise ship which was going to head due south, stopping at various ports on the Pacific coast of Patagonia all the way down to Cape Horn, around the corner into the Atlantic and to sail north stopping at the Falkland Islands, and then continuing north to Montevideo in Uruguay and finally Buenos Aires in Argentina.

We arrived in Santiago on 29th November and for the first full day we visited Santiago Botanical Park, called Jardin Mapulemu, up in the nearby hills. In these beautifully landscaped gardens of a former rock quarry, we were introduced to many of Chile's endemic plants including the Chilean Palm tree *Jubaea chilensis*, Algarrobo *Prosopis chilensis*, and Tobacco del Diablo *Lobelia excelsa*. The streets were lined with *Jacaranda mimosifolia* in all their floral beauty. Santiago enjoys the same latitude in the southern hemisphere as Tunis in Tunisia enjoys in the north, at 33.3 degrees from the equator. We then discovered the Bicentennial Park (Chile became independent from Spain on a memorable date, 18/10/1810). An extensive series of ornamental ponds were stocked with captive Black-necked Swans *Cygnus melancoryphus* and Chilean Flamingos *Phoenicopterus chilensis*, but there were plenty of native birds keeping them company such as the very attractive Spot-flanked Gallinule *Gallinula melanops*. The next two days were spent in the company of local bird-watching guide Edwin French, a very enthusiastic and knowledgeable birder, who on the first day took us to a Santiago ski resort in the Andes to find the mountain specialities including Andean Condor *Vultur gryphus*. We were struck by the aridity of the mountainsides in which only specialist drought resistant plants could survive; amongst the cacti and deciduous shrubs already defoliated by the heat and dryness there were curious-looking birds like the Moustached Turca *Pterotochos megapodius* family Rhinocryptidae, and various Cinclodes of the family Furnariidae, not just genera and species found nowhere else, but whole families endemic to the Neotropics. Eventually we got to the ski resort of Val Gardena at 11,000 ft, on the way enjoying several raptor species as well as the Magellanic Horned Owl *Bubo magellanicus*. The next day we were based on the Pacific coast near San Antonio, the modern-day port for Santiago. The first stop was a beach area called Marbella. It's always reassuring to catch up with those long distance migratory Arctic-breeding waders, Ruddy Turnstone and Sanderling on the shore enjoying their winter holidays, but as is so typical of the coast here, the fog rolled in off the cold sea and we had to beat a hasty retreat inland to get away from zero visibility. Behind the sand dunes there were grassy fields for grazing livestock. The paddocks supported Burrowing Owls *Athene cunicularia*, and the formidable-

looking Southern Lapwing *Vanellus chilensis* complete with scary-looking spurs on their wings. Tyrant Flycatchers and ground doves were easy to find, and in between them we found the amazing Rufous-tailed Plantcutter, a vegetarian leaf-eating bird that is a member of the Cotinga family. Wintering gulls included Franklin's *Leucophaeus pipixcan* and Brown-hooded *Chroicocephalus maculipennis*, and the raptors included White-tailed Kite *Elanus leucurus*, looking and behaving exactly like our Western Palearctic Black-winged Kite. Reeds lining the intertidal pools held several pairs of the spectacular Siete Colores *Tachuris rubigastra*, the Many-coloured Rush-Tyrant. More seabirds included the wonderful Black Skimmers *Rynchops niger* with their weird extended lower mandibles, and the huge Peruvian Pelicans. On the freshwater pools there was a dazzling array of Coot species and the gorgeous White-tufted Grebe *Rollandia rolland*. Interesting ducks included Red Shoveler *Anas platalea*, Yellow-billed Pintail *Anas georgica*, Silvery Grebe *Podiceps occipitalis* and Lake Ducks *Oxyura vittata*.

On 5th December we boarded the Holland America cruise ship Zaandam. Various gulls and terns adorned the harbour waters including the Inca Tern *Larosterna inca*, eventually found with the help of other birders. Within a few hours we were on the open and vast Pacific Ocean heading southwards. Adjusting to the scale of the ocean takes a while, and even when you think you've got your eye in you find yourself shocked to find out that what looked like a distant gull turns out to be an albatross with a 12 foot wingspan. Adjustment indeed. After seeing several such albatrosses we concluded that we were looking at Northern Royal Albatross *Diomedea epomophora*, but the taxonomy of all the big albatrosses is in a state of flux, so we weren't too worried about final species identification. The task then was to find some of the smaller birds - because everything IS smaller than the microlight-sized albatrosses - and the prospect was suddenly quite daunting. However, patience is a virtue and eventually we had good views of perhaps the most common sea bird in the Pacific, the Sooty Shearwater *Ardenna grisea*, with a wingspan of 3.5 ft, but it wasn't long before we suddenly noticed a much paler shearwater which turned out to be the Pink-footed Shearwater *Puffinus creatopus*, not that you see the pink feet when they are in normal sea-going flight. On the second day at sea it didn't take long to find a new species of albatross, this time it was the Black-browed Albatross (or Mollymawk) *Thalassarche melanophris* with a wingspan of nearly 8 ft, this was a bird with which we were going to become very familiar as it is one of the most common of the mollymawk albatrosses in the coastal regions of Patagonia. At the smallest end of the size spectrum, we started finding flocks of small and very pale grey birds flying southwards in between the waves. With only an 18" wingspan they turned out to be Grey Phalaropes *Phalaropus fulicarius* (winter plumage), aka Red Phalaropes (northern hemisphere breeding plumage). With each day that we were sailing southwards, we were able to distinguish finer differences and of course, enter latitudinal ranges of other species. This included the White-chinned Petrel *Procellaria aequinoctialis*, a ridiculous vernacular name as you never see the tiny white chin, but with its all-dark plumage and white tubular bill it is an impressive-looking stocky bird with a 5 ft wingspan. Another distinctive sight was the Salvin's Albatross *Thalassarche salvini*, and the distances these sea birds travel was brought home to us by reading that Salvin's nest in New Zealand. The seabird spectacular was rounded off with finding the diminutive Stejneger's Petrel *Pterodroma longirostris*, one of the many 'gadfly' petrels.

Our first port of call was **Puerto Montt**. This is a centre for salmon farming and regional centre for the area. Here a professional ecologist named Carlo met us off the boat and took us into what we can only describe as the Garden of Eden - the **Valdivian Temperate Rain Forest**. 20% of Chile is designated as national park, and we went to one called Alerce Andino. Here we met up with the monotypic conifer *Fitzroya cupressoides*, in Spanish - El Alerce. Sadly the vast majority of trees were extensively logged in the 19th and 20th centuries. In the 1830s Darwin reported trees with a 12.6 metres (41 ft) diameter base up to 100 metres (300 ft+) tall, but they have only one tree left of 4.2 metres (13.8 ft) diameter and 60 metres (195 ft) tall. Another important group of gymnosperms are the Podocarps, with only 5 species in the whole family. Being temperate, these trees are tricky to grow in cultivation in northern Europe and the USA as they just cannot take the frost. However, it was a delight to stumble across so many understory plants with which our gardens are so familiar: *Fuchsia magellanica*, *Crinodendron hookerianum*, *Pernettya/Gaultheria*, *Gunnera tinctoria*, *Embothrium coccineum*, and *Chusquea* (bamboos). The dense growth of the latter is a characteristic of these forests. In the resulting tangle are some very specialist birds: Patagonian Sierra-Finch *Phrygilus patagonicus*, and best of all the Chucao Tapaculo *Sclerochilus rubecula*, so Robin-like in appearance and behaviour and specific scientific name, yet another example of convergent evolution.

We set sail southwards again, past the east side of Chiloé Island and down through the Los Lagos channel to the next destination of **Puerto Chacabuco**, another delightful port tucked away in the safety of convoluted fjords. But our stay here was very brief and there was not enough time to meet up with a local guide, so we wandered around the small town by ourselves. Remember that while we were there in December it was their austral summer. It was interesting to watch fellow passengers proudly standing in

front of flowering European Broom *Cytisus scoparius* and Lupins to have their photos taken, little did they know that these plants are as alien there as Japanese Knotweed is here. My eye was taken by a new town square that was being constructed, La Plaza Mayor. To decorate the tops of the walls they were using large lumps of porphyritic igneous rock picked up from the foreshore, no two the same, a reminder of the origin of the ground beneath our feet and the power of water to round them all off into pebbles. We had lunch in the Hotel Loberias del Sur and enjoyed the fabulous view of two very fine planted specimens of Monkey Puzzle trees, *Araucaria araucana* which occur naturally here a bit further north; fossils of their ancestors are globally widespread (e.g. Whitby, the source of Jet!) and date back more than 200 million years. The spread of town houses around the port area sported the usual mosaic of mown lawns and roadside grass verges in various states of upkeep. It was on these that we finally caught up with the Austral or Magellan Thrush *Turdus falklandii*, whose likeness to the North American Robin was all too clear to see. This Patagonian endemic was as confiding as any British garden Blackbird, and indeed was in the process of collecting beakfuls of worms for its hungry family, tucked away in a nest hidden in the garden shrubs and small trees around the houses. Also very confiding were the small and gregarious raptors called Chimango Caracaras *Milvago chimango*. They have evolved to take the role of Carrion Crows, scavenging and opportunistically feeding in small groups, not typical raptor behaviour at all. Despite finding one House Sparrow here brought in by the European settlers, the most widespread bird in all the ports and nearby habitats was the Rufous-collared Sparrow *Zonotrichia capensis*. One scary road sign dotted around the streets was to be aware of Tsunami, and indicated the direction in which to run if one occurred.

We soon headed southwards on the cruise ship again out into the Pacific, hugging the western Chile coastline, passing through many narrow channels and Chilean fjords including one called the Canal Sarmiento. The mountainsides were clothed in forest mile after mile, which appeared to be mostly Southern Beech *Nothofagus* spp., no relation to the northern hemisphere ones! Near-vertical walls of rock were attractively dotted with small clusters of trees growing wherever there was a handful of soil.



Valdavian Rainforest near Puerto Montt, Chile

Photo © Ken White

Some bare patches were clearly the result of recent landslides, cross-sectioning mature woodland in textbook examples revealing their storeyed structure, and natural clearfells where the falling rocks had removed all the vegetation in the way of their descent into the valley bottom. Newly colonised slopes supported huge areas of Gunnera and bamboos, rushing in before the tree seeds could get going. But even the narrowest of the fjord channels were marine, and here we were surprised to find foraging seabirds as if it were open sea. Now we had juvenile Wandering Albatrosses identified by their immature plumages, more Black-browed Albatrosses, and finally some closeup views of the southern hemisphere breeding South American Terns *Sterna hirundinacea*, in full breeding plumage catching and carrying food for the young in their nests.....on wrecked ships!

Bare vertical rock walls were polished smooth by the passage of the not-so-long-ago glaciers, and as the mountains got higher the permanent snows on the tops became more extensive, until finally glaciers were calving their loads into some of the fjord headland seawater, and the ship was skilfully navigated up a narrow fjord for us to admire the multi-coloured ice so typical of glaciers.

We returned to sailing southwards and during the night we passed through a stormy spell of weather. The next morning we were out on deck early, sunrise around 4.30 am. Every morning the decks were hosed down by cabin staff, and I have to admit I found this tiresome and unnecessary. There we were with all our tripods and optics waddling around on wet and slippery floors every morning, and yet not once were the restaurant and indoor sitting area windows cleaned at all. But the delight of this particular morning was to find another birdwatcher asking for help to rescue a tiny 8 inch long Magellanic Diving-petrel *Pelecanoides magellani* that presumably had come onto the illuminated ship during the storm and hid behind some deck furniture which the staff then wanted to hose down. As luck would have it, it came my way and I carefully picked it up. It was cold and wet, and it seemed to snuggle down in my warm hands as I cradled it; it actually relaxed and began to go to sleep, it certainly didn't struggle and try to escape; so I let it be. About 20 minutes later it suddenly came to. It had dried

out and I could now feel its warmth in my hands. I then showed it the sea and it seemed ready, and I launched it overboard and it dropped like a stone, but at the last moment its diminutive wings started whirring and it whizzed off towards the shore just above the wave tops. A wonderful close encounter of the feathered kind. I never thought we'd see one, let alone hold one!

Later that day we did see very distant Andean Condors flying in the mountains, and our first sea-going Skuas along with Imperial Cormorants *Phalacrocorax atriceps* and Giant Petrels *Macronectes giganteus* together with the ever present Black-browed Albatrosses.

Overnight the ship made its way up the Strait of Magellan, so that early in the morning we were docking at **Punta Arenas**....the sandy point; it is the most southerly populous place in the world. Here we met local guide Jurgen and he whisked us off on a tour of the local habitats. East of the now distant Andes, the area can only be described as a low plateau of mostly grassland and scrubby woodland due to the summer highs rarely getting above 14 °C. The wildlife here is largely one of Patagonian endemism, and

started with the fabulous Long-tailed Meadowlark *Leistes loyca*, with stunning blood red plumage from chin to belly. Moments later Cinereous Harrier *Circus cinereus* floated by in the persistent and strong wind, families of Upland Geese *Chloephaga picta* barked nervously at us while we looked for the near-threatened Magellanic Plover *Pluvianellus socialis*, Guanacos *Lama guanaco*, Darwin's Rhea *Rhea pennata*, Patagonian Crested Duck *Lophonetta specularoides* with ducklings, and Rosy-billed Pochard *Netta peposaca* which, despite being a diving duck has turned to dabbling in the shallow waters of this area. Although Coscoroba Swan *Coscoroba coscoroba* is monotypic and considered by some to be the smallest swan, just take one look at the juveniles and you will see that in my opinion they are shelducks. At a distance a flock of Chilean Flamingos, wild this time, were feeding and showing off to each other, with Red Shoveler in attendance cashing in on the disturbed zooplankton dislodged by the activity. The morning session was completed by a pair of Andean Condors, miles away from any hills, foraging along the lake shoreline, using the keen wind to maintain height, and unbelievably they just kept coming towards us and soared low overhead as if we were not there.

The afternoon started with a close look at the Southern Beech *Nothofagus antarctica*, the most southerly growing tree in the world, which was found recently growing on Cape Horn. The endemic Austral Parakeet *Enicognathus ferrugineus* is the most southerly occurring parrot in the world, and entirely dependent on the seeds of Southern Beech. Other birds included Thorn-tailed Rayadito *Aphrastura spinicauda* behaving like a Whinchat, Grey-hooded Sierra-Finch *Phrygilus gayi* behaving like Greenfinches and Southern Caracara *Caracara plancus* behaving like Red Kites.

We returned to the coast after lunch and found pairs of the extraordinary Steamer Ducks *Tachyeres patagonicus*; they are remarkably Eider-like in build and behaviour, but sport sombre greys and buffs in their plumage matching the shoreline pebbles. The Magellanic Oystercatchers *Haematopus leucopodus* are just as noisy and demonstrative as ours but as the species name implies the legs and feet are very pale and look like they have white tights on. Nearer the harbour there was a freshwater kindergarten lake with families of Chiloé Wigeon *Anas sibilatrix*, White-tufted Grebe, Southern Lapwing and even the 'Schoolboy' Austral Negrito *Lessonia rufa*, a Stonechat-like Tyrant, patiently waiting with a beakful of invertebrates to feed a hungry brood somewhere near where we were standing! This was the southernmost point where we saw wintering Barn Swallows *Hirundo rustica erythrogaster* from North America. The day ended with a delightfully confiding juvenile Black-crowned Night Heron *Nycticorax nycticorax* on the stream meandering from the lake down to the harbour, which also provided a freshwater bathing area for a group of gulls including our first of the strange-looking Dolphin Gulls *Leucophaeus scoresbii*. The harbour is famous for having full size replicas of the Nao Victoria (Magellan's ship), the Beagle (Captain Fitzroy's & Darwin's ship), the Endurance (Shackleton's ship) and the James Caird (an Endurance lifeboat that was famously rowed to the South Georgia Islands from the stricken Endurance).

Our cruise ship the Zaandam continued south along channels through the snow-topped mountains, nicknamed



Magellanic Diving-petrel *Pelecanoides magellani*
warming up in Ken's hands Photo © Sarah White

Glacier Valley, and then along the **Beagle Channel** through the Darwin Cordillera, with peaks topping 8,000 ft (2,500 metres). That it was breath-taking and awe-inspiring is a gross understatement. Many of the passengers like us were spellbound, and yet passing through the ship to change decks to get a better view, there were still passengers inside playing cards and chess! Long-standing disputes between Chile and Argentina as to who has what patch of Patagonia have largely been resolved, and this has resulted in a convoluted pattern of their national boundaries. As we approached the port of **Ushuaia** (pronounced oosh-wire) Argentinian flags seemed

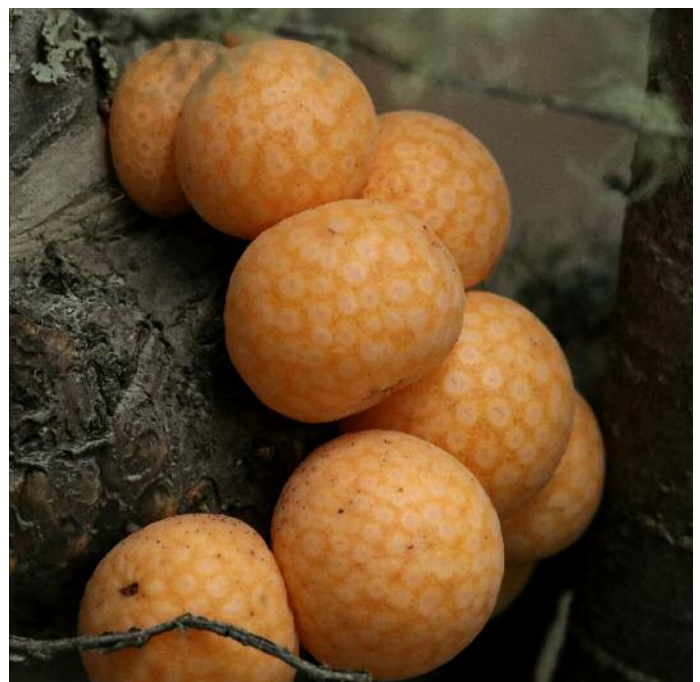


The breath-taking views along the Beagle Channel lined with peaks of the Darwin Cordillera in southern Chile Photo © Ken White

to be on almost every post. We did at last get some close encounters with Dolphin Gulls including adult birds in breeding plumage. We stopped here for the day and met up with local expert guide Gaston Bretti, who took us straight up into the Tierra del Fuego National Park Southern Beech forests. There were plenty of venerable trees and an understorey variety here supported a very special fauna. Gnarled, broken and rotting trees included three species of *Nothofagus*, viz. *N.antarctica*, *N.pumilio* and *N.betuloides*. Understorey plants included *Berberis ilicifolia*, *B.buxifolia* and carpets of Dog Orchid *Codonorchis lessonii*. In the woodland openings alarming Tufted Tityrants *Anairetes parulus* announced our presence, and then Gaston pointed out the star bird we were hoping for, the huge Magellanic Woodpecker *Campephilus magellanicus*, the female so much like the European Black Woodpecker in size (up to 18" [45cm]), coloration and behaviour, but a close relative of the famous Ivory-billed Woodpecker *C. principalis* from the

southern USA, now sadly considered extinct. The convergent evolution theme continued for us with the White-throated Treerunner *Pygarrhichas albobularis*, a Nuthatch in shape and habit, and a Treecreeper in coloration. The woodland Austral Pygmy Owl *Glaucidium nana* made no effort to conceal itself, given away by the many woodland birds alarming and cursing it due to its bird-hunting habits. Remarkably bright and plastic in appearance, we couldn't help but notice the many clumps of orange blobs growing on the sides of the Southern Beech trees of Darwin's Fungus *Cyttaria darwinii*, an ascomycete obligate parasite on *Nothofagus pumilio* and *N. antarctica* and hence endemic to Patagonia. It is edible and formed about the only vegetable part of the native tribe's diet. More information on this link....

<http://powo.science.kew.org/taxon/urn:lsid:indexfungorum.org:names:141158>



Darwin's Fungus *Cyttaria darwinii* growing on *Nothofagus* Photo © Ken White

In the afternoon we wandered down to the shore. We found an attractive dwarf daisy-flowering bush Mata Verde *Chliotrichum diffusum*, similar to *Olearia haastii*, both Asteraceae on different continents in the southern hemisphere. Another familiar sight, a snipe,

this time Magellanic (Puna) Snipe *Gallinago paraguaiæ*, and another Oystercatcher, the Blackish *Haematopus ater*, this time lacking any white plumage so that the birds blend in with the bare dark volcanic rocks along the shore. We finished here with a small flock of LBJs, tiny but confiding waders revealing themselves to be the Arctic tundra-breeding Baird's and White-rumped Sandpipers *Calidris bairdii* and *C. fuscicollis* also on their winter holidays.

We set sail southwards for the last time, heading for the southernmost tip of Patagonia, **Cape Horn**. It was named in 1616 by a Dutch explorer who called it Kaap Hoorn (after a town in the Netherlands which I guess it doesn't bear any resemblance to this imposing landscape). We rounded the Cape very early in the morning and it was incredibly calm, and difficult to comprehend the thousands of souls who have tragically lost their lives here. The mixing of the Pacific and Atlantic waters here is marked by numerous seabird colonies on the many islands, and the abundance of seabirds passing the ship. We were graced by the 'usual' Black-browed Albatrosses, Giant Petrels and Sooty Shearwaters, and then as if by magic as we headed north an endless stream of Cape Petrels came past, showing to the full their impromptu pattern of black and white splotches giving them the name 'Pintado' in Spanish, I'm a painter! Also in these waters we saw our only definite Chilean Skua *Stercorarius chilensis*, and then some grey apparitions across the water looking a bit like the phalaropes reported earlier, but as usual a reasonable photo of a closer bird revealed their identity - Thin-billed Prions *Pachyptila belcheri*, which with only a 22" wingspan is just a bit bigger than a Collared Dove.



Rounding the infamous Cape Horn on a calm morning 12/12/19
Photo © Ken White

We arrived at Port Stanley early on 13th December. The Falkland Islands have been a British Overseas Territory since 1833, and were named by Captain John Strong to honour the sponsor of his trip, the 5th Viscount of Falkland. The islands' landscapes look like the most remote, barren and bleak parts of Exmoor; incredibly poor soils from a quartzite bedrock yielding a homogenous brown vegetation of grasses and sedges, eaten to death by half a million sheep. 163 species of plant manage to survive here (about 1/5th of the species count for our Ashford Hill Meadows LNR near Kingsclere) and only 63 species of birds are here, but 16 of which are endemic. Despite this poor tally of diversity, the books and websites promise a fabulous wildlife experience because some of the birds are seabirds and they nest here in huge numbers, e.g. an estimated 1 million penguins nest here, and the 500,000 pairs of nesting Black-browed Albatross make the Falklands the epicentre of its distribution. Sadly we only had time to visit one nesting colony, so we opted for the penguin colony at Volunteer Point. Tourists' visits to the penguin colonies are an important part of the local economy and are very well organised from the moment you step off the boat. We climbed aboard a squad of 4 x 4s and hung on as the vehicles bumped and skidded their way across the gently undulating hilltops and boggy dips to the designated Volunteer Point carpark. There were large groups of penguins standing around in the delightful sunshine making a strange blend of noises ranging from deep braying to high pitched whistles. Markers defined where humans were not to go - though of course some did not take any notice - so off we went to be nearer to them, and the penguins took no notice of us at all. One problem for me was being too near with a 500mm telephoto lens, a mobile phone camera was just as, if not more, useful than a telephoto.



Black-browed Albatross *Thalassarche melanophris*
a constant companion for the duration of the cruise
Photo © Ken White

Without doubt the most impressive was the King Penguin *Aptenodytes patagonicus* colony. At over 3 ft (1 metre) tall and up to 38 lb (17 kg), this is a lot of bird. Looking very smart in their velvety dark grey and pure white body lycra suits, and contrasting black and yellow heads, a flock of several hundred birds is an imposing sight and sound. As they amusingly and slowly waddle along, it's very difficult to appreciate that these birds

swim thousands of miles every year and dive down to depths in excess of 300 metres in search of their marine prey. In amongst the adults were the well grown and delightful milk-chocolate brown juveniles; their breeding season had started in September, and the single egg was incubated between the feet and a fold of abdominal skin, taking 55 days. Barrel shaped with fat, from half size to the same size as the adults, the juveniles too waddled around enjoying the sunshine, challenging the sheep and making the higher pitched calls. Only after a while did we realize that there was another penguin species nesting here, the Gentoo Penguin *Pygoscelis papua*. At only 2.5 ft tall (0.75m) and 14 lb (6 kg) these birds have only 1/3rd of the bulk of the Kings. None the less, they have been recorded diving up to 450 times a day, up to 650 ft deep, staying under water for up to 7 minutes and reaching speeds of 22.5 mph! the fastest of all the penguins

They construct conventional nests in classic rookeries, depressions in the soil with raised edges, in which 2 eggs are laid and hatch after a 36 day incubation. To our delight we found a third penguin species here in the Volunteer Point penguin rookery, the Magellanic or Jackass Penguin *Spheniscus magellanicus*, the latter name describing its habit of braying loudly. About the same size as the Gentoo, these Magellanic Penguins have quite a different bill structure indicating that they have a different range of marine prey in their diets. They also tend to nest in burrows or under bushes and thick vegetation, not in the regimented pattern of the Gentoos.

After being wowed by our first ever visit to a wild penguin colony, we began to notice differences between individual birds of the same species. We soon realised that quite a few of the King Penguins were looking rather untidy, indeed, they could be described as looking shabby. The reason was because they were undergoing a moult. It seems that once the moult has started the birds are unable to go swimming, presumably because the feathers have to be 100% intact and watertight. Then we realised that some of the juveniles were beginning to lose their milk chocolate down and were sprouting their first adult feathers. It was impossible to say how quickly the moulting process occurs, but it seemed likely that these birds must accumulate enough food reserves in fat to undergo lengthy periods of not feeding while moulting.



The gentle-faced Gentoo Penguin *Pygoscelis papua*
the 3rd species of penguin breeding at Volunteer Point
Photo © Ken White

The problem with breeding colonies is that they attract scavengers and predators. Penguin colonies are no exception. We were surprised to find Turkey Vultures *Cathartes aura* and Dolphin Gulls scrounging around the edges of the colonies – but by far the worst pressures came from the marauding Brown Falkland Island Skuas *Stercorarius antarcticus antarcticus*. Skuas are famous for their kleptoparasitic habits of chasing other sea birds in flight until the unfortunate victim regurgitates its last meal, but they are also predatory, especially when they have their own families to feed. At the penguin colonies the opportunities to grab eggs and baby penguins from the caring parents are too good to miss. The skuas hover several at a time over the nesting penguins, and as one earnest parent attempts to shoo off one skua another drops down and grabs the unguarded eggs and/or helpless chicks.

All too soon it was time to return to the cruise ship and leave the Falklands knowing that, like the rest of the trip, we had barely scratched the surface of Patagonia in terms of what there is to discover, see and admire. There is so much spectacular wildlife and scenery here. We are only ten years away from the 200th anniversary of when Darwin first went to Patagonia in 1831. We have accumulated a vast amount of scientific knowledge and technology since those early pioneering days, and yet, and YET it is still possible to silently sail in the comfort of a modern cruise ship down the magnificent Patagonian fjords, framed by the glacier-clad mountains, the whole landscape dripping with unfamiliar fauna and flora, an experiment of nature like no other; I think that you can still find that feeling of awe here of a pristine wild place not mashed, spoiled or defaced by the hand of modern man. Long may it remain so.

Ou est le garlic? by Jerry Welsh

Those of you expecting a thrilling account of Len Deighton's culinary adventures in the Soho of the 1960s with recipes from Bistro Bistingo, Chez Solange and Trattoria Terrazza should turn away now. This story, although an adventure, is much more mundane, starting on a rainy Thursday in July 2012. We had had a long day searching field margins for arable plants, in the morning around the Binfield Heath area, the afternoon around South Stoke (SU58). It was raining, I was on the field edge, and Jan was walking on the road below by the verge. As nothing of interest had been seen I decided to join her. As I carefully made my way down the slippery roadside verge I noticed an unusual plant. 'Let's not sort it out now, we're tired and it's raining' I said, 'I'll bike down after the weekend with a book and collect a specimen if necessary'.

The following Tuesday, a fine warm day, I biked over. The roadside verge had been cut.

Those interested in the countryside have a well deserved reputation for eccentricity. A cyclist passed me three times as I raised the cuttings around the area where the plant had been seen, eventually finding a garlic-type head with a pair of long bracts. This was taken home, put into water, and a pair of bulbils slowly developed. These were planted when they appeared to be ready.

The following year a specimen was taken to Oxford where the county recorder, John Killick, said it was Field Garlic *Allium oleraceum*, only previously found in Oxfordshire in a hotel garden and thought to be introduced.

Subsequently, searches were made but without success as the county seems to have an obsession with the tidiness of verges on little-used roadsides. But the bulbils in the garden flourished, set seed, and we now have a thriving colony of a rare weed. As with all weeds, growing in the wrong place.

However, this year it was found again and its location recorded and reported. For the record, it is not found in Berkshire; it was last recorded in Buckinghamshire in 1955 and has only been recorded in the far west of Wiltshire. Not a bad find.



Field Garlic *Allium oleraceum*

Photo © J.Welsh

Nuthatch nestbox observations over the years by Tim & Sue Higgs

For a number of years the Nuthatch was not our favoured bird; this might sound a bit odd as this is the main subject of this report. Let me explain by going back to our first bird nestbox, called 'BlueTit 1', because for the first couple of years there were Blue Tits nesting in it. We have a range of birds coming in to feed in the garden, and we were aware that Nuthatches were nesting in the woods in our local area of Baughurst. Then one year Great Tits decided to nest in 'BlueTit 1' box and we got very excited when chicks arrived. Then over time the number of chicks started to diminish. Oh well, that's nature's way we assumed, but no, because as we watched through a nestbox camera a Nuthatch came in and stabbed the chicks with its beak and then flew off. This was repeated over a number of days until no chicks remained. We did read somewhere that Nuthatches are territorial and did not like sharing with similar sized birds.

The next year the Blue Tits were back and we feared the Nuthatches would do the same, but they ignored them. Nothing changed for a number of years and then one spring the Nuthatches started to show interest in the box. We then thought nothing was happening as all we could see was what looked like leaves in the bottom of the box. That was until my wife noticed something small and round in amongst the leaves: the Nuthatches had laid eggs. We now know that a Nuthatch nest is just a pile of leaves and bark. Everything went smoothly and we watched and videoed the Nuthatch chicks fledging one sunny Saturday morning. The following year it was Nuthatches that nested again, but last year (2019) both the Nuthatches and a pair of determined Blue tits competed for the same nestbox. We watched the drama play out over weeks. A Nuthatch would take in leaves and bark then fly away, and then in would come the Blue Tits and turf out what the Nuthatches had just brought in. Sometimes the Blue Tits were just feet away watching the Nuthatches at work. A Nuthatch would roost in the box overnight, bring in material and fly off, and then in would come the Blue Tits.

We knew there was only going to be one winner, not the plucky and determined Blue Tits, but the more powerful Nuthatches. So we hastily made another bird nestbox and placed it on the other side of the garden, in sight of the current box, with the hope that the Blue Tits would relocate to this. The Nuthatches won out of course, so where did the Blue Tits go, into the new purpose built nestbox? No, they decided to go into our Swift nestbox (never occupied) on the house wall opposite nestbox BlueTit 1. They both coexisted together.

This brings us to 2020, and once again nothing is straightforward. The new nestbox was replaced with a bigger box with a larger hole, called 'BiggerHole' box. A Nuthatch was attracted to this and started bringing mud to seal the entrance edges and make the hole smaller; it spent so much time on it or near it. But it also started bringing material into nestbox BlueTit 1 again. It turned out he wanted both boxes and he defended them both. In the end Bigger Hole box was the one the Nuthatch pair chose to raise the brood, but they still stopped any birds from using the other box, and here we are back again with them preventing other birds from using the other box. We have no camera in BiggerHole box but we know the Nuthatch chicks fledged successfully.

With lockdown going on we have been walking our local area much more and we are sure this is a Nuthatch hot spot. We have seen other nests nearby and Nuthatch calls seem to emanate from everywhere.

We now love our Nuthatches; it is after all an elegant, beautiful bird.



The indomitable Nuthatch *Sitta europaea*
Photo © Tim & Sue Higgs

Musings on the Winter Moth by Andy Bolton

Late one afternoon in early December I took a walk in Smithley's Copse, Axmansford as it got dark, and started noticing several Winter Moths *Operophtera brumata*. I had recently had a hunch that it was an above average year for Winter Moths, and walking the woods I started seeing more and more of them rising from the clumps of brambles at the ride side.

As it became really dark and I moved into an area of oak and hazel I noticed literally hundreds clustered on tree trunks; and a close look using the torch on my phone revealed that among them there were wingless females climbing quite rapidly up the bark. Some were met and intercepted by the males as they continued their climb and several pairs were already mating.

The light rain now falling did not seem to deter the Winter Moths. There were already some dead males low on the oak bark and when I revisited the scene the next day there were many more dead male littering the area. This suggests that the mating process marks the rapid end of the life cycle, certainly for the males, rather akin to the mayfly on a chalk river. A rough count on an oak tree trunk up to about 12 feet was at least 160 males, and 31 females including 7 in mating pairs. A bonus was finding a female Mottled Umber *Erannis defoliaria*. Altogether quite a mothing spectacle, especially this late in the year.

Lockdown by Jan Haseler

My over-riding memory of the spring lockdown is of sunshine, Bluebells and early butterflies. We were pleasantly surprised by the number of Bluebell woods within easy walking distance of our Tilehurst home. Some, we have visited regularly in the past – Barefoot Copse, the Wild Service-tree Copse, Cornwell Copse, Sulham Woods, Beal's Copse and Boxgrove Wood. Others we hadn't visited for many years – such as Withy Copse and Oliver's Copse on the south-facing hillside above Calcot. As time passed, we started to walk further afield – BBOWT's Moor Copse Reserve was reachable with a 7-mile round trip. We saw deer regularly – Roe Deer in Boxgrove Wood, Withy Copse and Moor Copse; Muntjac in Boxgrove Wood. The spring butterflies emerged in their expected order: Brimstone, Comma, Peacock, Holly Blue, Small Tortoiseshell (only 2), Orange-tip, Speckled Wood and Small and Green-veined White. Moor Copse produced its regular complement of spring flowers – Cowslips, Water Avens, Marsh Marigolds,

Large Bittercress, followed a little later by Ragged-Robin and a profusion of Early-purple Orchids, then Peppersaxifrage, Great Burnet and Betony. By mid-May, Sulham Woods put on a splendid show, with more than a hundred White Helleborines and three Bird's-nest Orchids (with thanks to Rob Stallard for the tip-off). Visitors to the garden moth trap included a Sexton Beetle, the usual Cockchafers and then a record number of Stag Beetles.

Newbury Peregrines Update 2020 by Ken & Sarah White

We are pleased to say that overall 2020 was a great success with the established pair, male 'Black 69' and female 'Mrs Newbury'; they have now been in residence since April 2019 and are very much underway with the 2021 breeding season as we write (18/03/21). The 2020 storyline was somewhat convoluted, not least because of the Covid-19 pandemic restrictions imposed on us all in the interests of wellbeing and straightforward survival !

For clarity here are the main important observations of them and what happened on the BT Exchange building when observing from our usual upper deck spot on the Sainsbury's car park.

- 1) The nestbox I constructed using a Nick Dixon design was installed by BT engineers 06/03/20.
- 2) Jason Fathers installed a 4G Trail camera with antenna to send photos over the mobile phone network 07/03/20.
- 3) We saw the Peregrine pair on the day before the first Lockdown that started on 23/03/20 and Black 69 (B69) brought in breakfast early for Mrs Newbury (Mrs N) as per usual. She was on the radio mast girders awaiting his return.
- 4) The camera failed to send any images over the mobile network, so we could not monitor what was going on at the nestbox. Under the Wildlife & Countryside Act, Jason was unable to visit the Peregrine nesting area to fix the camera fault.
- 5) We all had to stay at home from 23/03/20 to 14/05/20 inclusive. On 15th May we resumed our usual observations from Sainsbury's car park. The Peregrine routine was the same as usual. B69 brought in breakfast early and Mrs N emerged to receive it, but she did not come off the nestbox but appeared from behind the High Ledge, indicating that she was nesting on the flatroof as she had the previous year - and that ended in disaster due to heavy rain at the end of May and beginning of June. From this we deduced that the nestbox was installed too late and earlier on Mrs N had already made her mind up where to nest before the nestbox arrived; we were then quite worried about the outcome of this breeding attempt.
- 6) But we needn't have been worried at all. The Mediterranean weather that set in at the end of March continued for weeks. It was an astonishing run of dry warm weather, chilly at night, warm by day but DRY; do please look at the Weather 2020 report (p. 70).
- 7) At the beginning of the 2nd week of June we thought we could hear the sound of young birds calling coming from the top of BT. Then we saw Mrs N taking prey down to the nesting area behind the High Ledge. Dozens of hours of observations were finally rewarded when a white fluffy Peregrine chick appeared on the High Ledge in the early morning sunshine 13/06/20. Moments later there was a 2nd chick, and then to our delight a 3rd chick appeared.
- 8) The hunting and feeding rate increased as Mrs N finally went hunting as well; she also brought back prey to feed the chicks that grew so fast. The chicks feathered up into juveniles and lots of wing-flapping ensued. They found the nestbox and used it like a kiddies climbing frame to launch into their first short flights on the rooftop. Mrs N used the nestbox as a larder to store surplus prey. The juveniles helped themselves to the cached food.
- 9) Early on 23rd June we arrived to find a juvenile on the ground of the BT car park. I caught it and put it in a box. Jason - also a BTO-licenced ringer - whizzed up to Newbury, checked it out and colour-ringed it 'Blue YL'. Site manager Dean Cleall then met us and took Blue YL up to the main roof and safely left her there. All completed by 09:30 hrs!
- 10) The other 2 juveniles learnt to fly without the danger or indignity of a maiden flop to the ground, and within a week all 3 juveniles were flying all around. For the next 11 weeks there were 5 Peregrines flying around Newbury town centre. An historic achievement for Newbury.
- 11) All 3 juveniles had naturally dispersed by the middle of September - that is the normal sequence of events. Adults B69 and Mrs N stayed all through the winter months and are now earnestly courting, mating and preparing for the laying of eggs. Are they going to use the nestbox or is she going to stubbornly use the flatroof? we shall see!

An update on Tidgrove in 2020 by Andy Bolton

In my 10 years plus of involvement at Tidgrove I have seen substantial improvements at what was already an important site for biodiversity, and one that forms a significant stepping-stone for nature in this part of the north Hampshire landscape. The focus for many years now has been one of long-term habitat restoration, however this has really stepped up a gear since the inception of the 10 year HLS plan in 2014.

With the site then being fenced, the introduction of light cattle grazing on rotation in different compartments has really enabled the aims of chalk grassland restoration to be met. This has led to the development of a more 'open' sward, together with patches of bare ground due to livestock trampling. This has enabled both the natural spread and colonisation of appropriate grasses and flowers and also the successful introduction by the use of species-rich seed mixes, such as that of local provenance from the nearby Highclere estate.

Fine-leaved grasses such as Sheep's Fescue *Festuca ovina* have spread substantially across the site thanks to low nutrient status soil and the control of competitive coarse grass such as Cocksfoot *Dactylus glomeratus* and Yorkshire Fog *Holcus lanatus* through the grazing. Some of the notable suite of wildflowers with a substantial population on site include: Common Dog Violet *Viola raviniana*, Hairy Violet *Viola hirta*, Cowslip *Primula veris* (large nos.), Pyramidal Orchid *Anacamptis pyramidalis* (large nos.), Wild Basil *Clinopodium vulgare*, Wild Carrot *Daucus carota*, Hawkbit spp. *Leontodon*, Cranesbill spp. *Geranium*, Black Medick *Medicago lupulina*, Birdsfoot Trefoil *Lotus corniculatus*, Wild Strawberry *Fragaria vesca*, Black Knapweed *Centaurea nigra*, Greater Knapweed *C. scabiosa* & Field Scabious *Knautia arvensis*.

Through more recent seeding and plug plant introductions the site has gained: Kidney Vetch *Anthyllis vulneraria*, Horseshoe Vetch *Hippocrepis comosa*, Small Scabious *Scabiosa columbaria*, Devil's-bit Scabious *Succisa pratensis*, Rockrose *Helianthemum nummularium*, Sainfoin *Onobrychis vicifolia*, Oxeye Daisy *Leucanthemum vulgare*, Ladies Bedstraw *Galium verum* and plenty of Yellow Rattle *Rhinanthus*



Red Hemp-nettle *Galeopsis angustifolia*
Photo © Andy Bolton

minor. Occasional appearances have come from Southern Marsh and Greater Butterfly Orchids *Dactylorhiza praetermissa* & *Platanthera chlorantha*. In addition to the grazed downland there is an important area for rare arable plants, where one can find the very scarce Red Hemp-nettle *Galeopsis angustifolia* in some profusion, plus a number of others including Prickly Poppy *Papaver argemone*, Dense-flowered Fumitory *Fumaria densiflora* and Small Toadflax *Chinorhinum minus*.

With an ever increasing range of plants being restored to this landscape it is also enabling more and more species of invertebrates to colonise and breed. The list of Lepidoptera has been growing steadily over the past decade, now with 30 species of butterfly recorded, two of which were new in 2020, the Grizzled Skipper *Pyrgus malvae* and Dingy Skipper *Erynnis tages*. Other butterfly highlights were the Green Hairstreak *Callophrys rubi*, Common Blue *Polyommatus icarus*, Small Blue *Cupido minimus*, Small Copper *Lycaena phlaeas*, Brown Argus *Aricia agestis*, Marbled White *Melanargia galathea* and the occasional Dark Green Fritillary *Speyeria aglaja*. Out of a total of 97 moth species found here so far, some interesting species found include Wood Tiger *Parasemia plantaginis*, Small Yellow Underwing *Panermeria tenebrata*, Magpie *Abraxas grossulariata*, Sallow Kitten *Furcula furcula*, Water Carpet *Lamproteryx suffumata*,

Endothenia oblongana (Tortricidae), and Tidgrove is a regular home for the scarce micro moth *Nemophora metallica* (Adelidae, category Nb).

The Small Heath *Coenonympha pamphilus* has done well thanks to the spread of Sheep's Fescue, as mentioned earlier. With the ongoing aim being to create more habitat niches to support a wider range of insect life, the butterfly scrape area was developed in 2018 and is providing new habitat for the Small Blue.

The ongoing species enrichment of the site is evident with each season that passes, and the conditions are in place for the process to continue, even accelerate in the coming years. There is scope to gain many more species of plants and invertebrates, both through natural colonisation and introduction, e.g. if permissible under the current rules:

The Tidgrove scrubby areas would make an ideal location for the planting of Juniper bushes, which are struggling to re-generate in the wild.

The aim would be to plant some Dutch elm disease *Ophiostoma ulmi*-resistant elm saplings. Some of the latest varieties are aesthetically a very good match for native English Elm *Ulmus procera* and it would be great to get some of these wonderful trees back in the landscape where they belong, together with the specialist wildlife that they support.

Blocks of Ash tree saplings are being left alone and monitored for resistance to the Chalara Ash Dieback disease *Hymenoscyphus fraxinus*, in the hope that a few individuals will start to show immunity to it.

There were several notable avian highlights in 2020, of which probably the most exciting was the arrival of an Osprey *Pandion haliaetus* on spring migration at the beginning of May. The bird, identified from the colour-leg ring Blue KS6 as 'Dinas', a fledgling of 2018 on its first return journey from Africa, having stayed there as juvenile Ospreys do, since his arrival in autumn 2018. He hung around for at least two days, helping itself to coarse fish from a couple of Tidgrove's fishing lakes, then resumed its journey to its natal breeding site of the Dyfi Osprey Project near Machynlleth, in northwest Wales; here is a link to the blog for him:

<http://www.dyfiospreyproject.com/blog/emyr-mwt/2020/05/06/dinas-back>

Posted: Wednesday 6th May 2020 by [Emyr MWT](#)



Telyn has her first ever returnee offspring back in the UK

Late last night I got a message from Dr. Tim Mackrill. He'd received an email from the Chairman of the Hampshire Ornithological Society, Keith Betton.

They have an osprey near Kingsclere, Hampshire with a blue ring, right leg, Blue KS6.

Excerpt from Dyfi Osprey Project website blog (link above) reporting the stop over of their returning juvenile called Dinas, colour-ring 'Blue KS6' who was hatched on the reserve 3rd June 2018 and had been in Africa since migrating there that same autumn. This was his first return home to the Dyfi reserve near Machynlleth, stopping *en route* at Tidgrove for a rest

Another scarce bird which I had brief views of one afternoon in late November was a Hen Harrier *Circus cyaneus*, flying low over the scrub while foraging over the chalkland downs.

Back in the breeding season many species seemed to do well, with the County Bird Recorder describing the density of Willow Warbler *Phylloscopus trochilus* territories as one of the strongest in the south-east, with Lesser Whitethroat *Sylvia curruca* and Yellowhammer *Emberiza citrinella* being extremely numerous. Stone Curlew *Birhinus oediconemus* continued to arrive and breed with four nests present and three fledglings confirmed, and most unexpected was a Cetti's Warbler *Cettia cetti* calling from one of the thick hedgerows one day – far from its normal English reed bed habitat!

Botany Recorder's Report 2020 by Renée Grayer

The plant records below have been selected from the plant species seen during the RDNHS field meetings and Wednesday walks, and from those observed by members during 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.

Because of the COVID-19 pandemic, fewer field trips of the Society could take place, but nevertheless a similar number of plant records were received compared to previous years. As usual, representatives of the family Orchidaceae dominate the plant list, but it was good to see many grasses (fam. Poaceae) also being reported this year. Interesting urban weeds such as species of *Galinsoga* and *Valerianella* could thrive in 2020 because councils were not able to spray herbicides along the roads as frequently as in other years. However, the invasive aliens *Conyza bonariensis* and *C. sumatrensis* also thrived and are threatening to become the most abundant street weeds in Reading and surroundings.

The species in this report have been named and arranged according to the 4th edition of C.A. Stace (2019) New Flora of the British Isles, published by C&M Floristics. Whenever a species was recorded during a RDNHS trip or walk, the name of the excursion leader is usually given after the record, even if another member of the group discovered the plant.

CALAMOPHYTES

Equisetaceae

Equisetum sylvaticum – Wood Horsetail
22/10/20 Pamber Forest (RDNHS walk) SU 613613
(JH)

PTERIDOPHYTA

Blechnaceae

Blechnum spicant – Hard-fern
22/10/20 Pamber Forest (RDNHS walk) SU 617619
(JH)

Dryopteridaceae

Polystichum setiferum – Soft Shield-fern
04/01/20 Morgaston Wood SU63225672 (RG)
18/03/20 The Holies, Streatley (RDNHS walk)
SU584803 (JH)
27/09/20 Cornwell Copse, Tilehurst (RDNHS trip)
SU657741 (RS)

GYMNOSPERMAE

Cupressaceae

Juniperus communis – Common Juniper
25/07/20 Bald Hill, Aston Rowant NNR (RDNHS trip)
SU720961 (SR&AP)

ANGIOSPERMAE

Ranunculaceae

Helleborus foetidus – Stinking Hellebore
11/01/20 Winter Hill (RDNHS trip) SU873862 (JC)
22/01/20 Goring (RDNHS walk) SU601809 (RS)

Helleborus viridis – Green Hellebore
18/03/20 Stichens Green (RDNHS walk) SU587794 (JH)

Myosurus minimus – Mousetail
07/05/20, c.20 plants by water trough Plastow Green
SU53016171 (SW)

Saxifragaceae

Saxifraga granulata – Meadow Saxifrage
26/05/20 Inkpen Crocus field SU370640 (JH)

Saxifraga tridactylites – Rue-leaved Saxifrage
18/03/20 The Holies, Streatley (RDNHS walk)
SU593797 (JH)

Fabaceae

Lathyrus linifolius – Bitter-vetch
22/10/20 Pamber Forest (RDNHS walk) SU612607 (JH)

Melilotus altissimus – Tall Melilot
19/07/20. Barn Elms. SU60857371 (JL)

Rosaceae

Sorbus torminalis – Wild Service-tree
27/09/20 Sulham Hill, Tilehurst (RDNHS trip)
SU656742 (RS)

22/10/20, 42 at various locations Pamber Forest
(RDNHS walk) SU 617615 (JH)

***Rosa micrantha* – Small-flowered Sweet-briar**

15/08/20 Watlington Hill (RDNHS trip) SU7012193741
(SW)

Hypericaceae

***Hypericum humifusum* – Trailing St John's-wort**

05/09/20 Greenham Common (RDNHS trip) SU492641
(JH)

***Hypericum pulchrum* – Slender St John's-wort**

17/06/20 Bramshill Plantation (RDNHS walk)
SU756614 (RS)

Euphorbiaceae

***Euphorbia exigua* – Dwarf Spurge**

15/07/20 Hannington (RDNHS walk) SU549545 (FB)
19/08/20 Kent's Hill (RDNHS walk) SU734809 (MN)

Malvaceae

***Malva neglecta* – Dwarf Mallow**

13/08/20. Purley. SU654762 (JL)

Thymelaeaceae

***Daphne laureola* – Spurge-laurel**

06/10/20 Winterbourne Wood SU44707167 (JL)

Brassicaceae

***Cardamine amara* – Large Bitter-cress**

16/06/20. Mirami Copse, Bradfield. SU577730 (JL)

***Thlaspi arvense* – Field Penny-cress**

30/07/20, 100+plants Aldermaston SU58506539 (SW)

***Iberis amara* – Wild Candytuft**

15/08/20 Watlington Hill (RDNHS trip) SU701937 (FB)

Polygonaceae

***Rumex hydrolapathum* – Water Dock**

01/06/20, single clump on riverside Padworth Gravel
Pit SU6103966995 (KW&SW)

Caryophyllaceae

***Stellaria palustris* – Marsh Stitchwort**

29/06/20,
50+plants Ashford Hill Meadows, SU5661 (SW)

***Cerastium arvense* – Field Mouse-ear**

07/06/20 Juniper Valley, Aston Upton SU544831
(JH)

***Spergula arvensis* – Corn Spurrey**

14/07/20, abundant Aldermaston, SU584653 (SW)

Gentianaceae

***Gentianella amarella* – Autumn Gentian**

15/08/20 Watlington Hill (RDNHS trip) SU704936 (FB)

Boraginaceae

***Symphytum grandiflorum* – Creeping Comfrey**

11/02/20 Sheffield Bottom SU64286965 (JL)

Veronicaceae

***Veronica catenata* – Pink Water-speedwell**

05/09/20 Greenham Common (RDNHS trip) SU492641
(JH)

***Chaenorhinum minus* – Small Toadflax**

15/07/20 Malshanger (RDNHS walk) SU570535 (FB)

***Kickxia elatine* – Sharp-leaved Fluellen**

15/07/20 Malshanger (RDNHS walk) SU570535 (FB)

***Kickxia spuria* – Round-leaved Fluellen**

15/07/20 Malshanger (RDNHS walk) SU570535 (FB)

Linaria x sepium* – hybrid cross *L. vulgaris* & *L. repens

27/09/20 Nunhide Lane, Sulham (RDNHS trip)
SU647737 (RS)

***Linaria repens* – Pale Toadflax**

23/07/20 100+plants along roadside fence near
Swyncombe House SU68468983 (RG)

15/08/20 Watlington Hill (RDNHS trip) SU701937 (FB)

Lamiaceae

***Stachys arvensis* – Field Woundwort**

15/07/20 Hannington (RDNHS walk) SU556554 (FB)

Orobanchaceae

***Parentucellia viscosa* – Yellow Bartsia**

17/06/20 Bramshill Plantation (RDNHS walk)
SU760620 (RS)

***Orobanche elatior* – Knapweed Broomrape**

15/07/20 Hannington (RDNHS walk) SU554543 (FB)

Campanulaceae

***Campanula glomerata* – Clustered Bellflower**

25/07/20 Bald Hill, Aston Rowant NNR (RDNHS trip)
SU721962 (SR&AP)

15/08/20 Watlington Hill (RDNHS trip) SU699935 (FB)

***Campanula trachelium* – Nettle-leaved Bellflower**

15/07/20 Ibworth (RD NHS walk) SU562541 (FB)
16/07/20 Ridgeway path SU67288797 (RG)
23/07/20 Wood near Swyncombe SU68578971 (RG)
19/08/20 Crowsley (RD NHS walk) SU725796 (MN)

***Legousia speculum-veneris* – Large Venus's-looking-glass**

15/07/20 Malshanger (RD NHS walk) SU5753 (FB)

Asteraceae

***Cirsium eriophorum* – Woolly Thistle**

20/07/20 Watts Bank Reserve SU33107711 (JL)

***Onopordum acanthium* – Cotton Thistle**

10/09/20. McIlroy Park, Tilehurst. SU678740 (JL)

***Picris hieracioides* – Hawkweed Oxtongue**

15/08/20 Watlington Hill (RD NHS trip) SU703933 (FB)

***Crepis biennis* – Rough Hawk's-beard**

01/06/20, single plant Padworth Gravel Pit, SU6104466960 (SW)

***Inula conyzae* – Ploughman's-spikenard**

15/08/20 Watlington Hill (RD NHS trip) SU70208933301 (SW)

***Glebionis segetum* – Corn Marigold**

14/07/20, abundant in unsown field, Aldermaston SU586653 (SW)

***Senecio sylvaticum* – Heath Groundsel**

13/07/20. Bere Court. SU612748 (JL)

***Petasites fragrans* – Winter Heliotrope**

20/05/20. McIlroy Park, Tilehurst. SU678739 (JL)

***Galinsoga quadriradiata* – Shaggy-soldier**

02/09/20, 10+plants along the pavement Hartsbourne Road, Earley SU74037132 (RG)

Adoxaceae

***Sambucus ebulus* – Dwarf Elder**

15/08/20, abundant along road verge B4009 nr Ewelme SU6395692831 (KW&SW)

Valerianaceae

***Valerianella carinata* – Keeled-fruited Cornsalad**

11/04/20 along garden wall Falstaff Avenue, Earley SU7370870974 (RG)

Dipsacaceae

***Dipsacus pilosus* – Small Teasel**

26/06/20, 3 plants Ashford Hill SU554633 (KW)

Apiaceae

***Sanicula europaea* – Sanicle**

15/08/20 Watlington Hill (RD NHS trip) SU707934 (FB) 27/09/20 Sulham Woods (RD NHS trip) SU648740 (RS)

***Anthriscus caucalis* – Bur Chervil**

28/07/20, 14+plants Wasing SU570638 (SW)

***Scandix pecten-veneris* – Shepherd's-needle**

19/02/20 Ashampstead (RD NHS walk) SU553770 (RS)

***Sison amomum* – Stone Parsley**

14/07/20, abundant along edge of footpath Plastow Green SU53386208 (SW)

Orchidaceae

***Cephalanthera damasonium* – White Helleborine**

14/05/20, 100+ flower spikes across half a mile of woodland Sulham Woods SU644746 (JH)
24/05/20, 5 plants The Holies, Streatley SU 586800 (JH)

***Epipactis helleborine* – Broad-leaved Helleborine**

22/10/20 Pamber Forest (RD NHS walk) SU616615 (RS)

***Neottia ovata* – Common Twayblade**

26/05/20 West Woodhay Chalk Pit SU387618 (JH)

***Neottia nidus-avis* – Bird's-nest Orchid**

14/05/20 Sulham Woods, SU644749 (JH)
14/05/20, 1 flower spike Sulham Woods SU644751 (JH)

***Spiranthes spiralis* – Autumn Lady's-tresses**

05/09/20 Greenham Common (RD NHS trip) SU500645 (JH)

***Gymnadenia conopsea* – Chalk Fragrant-orchid**

26/05/20 West Woodhay Chalk Pit. SU387618 (JH)
04/07/20, 12 plants Ladle Hill (RD NHS trip), SU479568 (SW&JC)

***Coeloglossum viride* – Frog Orchid**

15/08/20 Watlington Hill (RD NHS trip) SU704436 (FB)

***Dactylorhiza praetermissa* – Southern Marsh-orchid**

17/06/20 Bramshill Plantation (RDNHS walk)
SU752618 (RS)

***Orchis mascula* – Early-purple Orchid**

24/04/20 Seif's Wood SU539619 (KW)
09/05/20, c.55 plants Moor Copse BBOWT Reserve,
SU639738 (JH)

***Anacamptis pyramidalis* – Pyramidal Orchid**

19/06/20, 200+plants along driveway Plastow
Green SU53966236 (SW)
17/06/20 Bramshill Plantation (RDNHS walk)
SU758619 (RS)
23/06/20 Lambourn Woodlands SU327747 (JL)
03/07/20 M4 westbound Reading Services
SU669699 (JH)
04/07/20 Ladle Hill (RDNHS trip) SU480569 (SW&JC)
15/07/20 Hannington (RDNHS walk) SU554543 (FB)
19/07/20 Barn Elms SU60857371 (JL)
25/07/20 Bald Hill, Aston Rowant NNR (RDNHS trip)
SU721962 (SR&AP)

***Neotinea ustulata* – Burnt Orchid**

30/06/20, 12 spikes along the ridge Ladle Hill,
SU4778656774 (SW)

***Himantoglossum hircinum* – Lizard Orchid**

10/06/20, 1 plant & flower spike Basingstoke Road,
Reading (first recorded 2019) SU71786972 (RS)

***Ophrys apifera* – Bee Orchid**

17/06/20 Bramshill Plantation (RDNHS walk)
SU753614 (RS)

Cyperaceae

***Scirpus sylvaticus* – Wood Club-rush**

02/07/20, plentiful Ashford Hill Meadows,
SU5628161804 (SW)

***Carex pseudocyperus* – Cyperus Sedge**

02/06/20, one big plant with 7+ spikes Padworth
G.P. SU6074667177 (KW&SW)

***Carex strigosa* – Thin-spiked Wood-sedge**

11/05/20 Ram Alley footpath SU538618 (KW)

Botany Report Contributors

Thanks are due to the following members for their submissions:

Alan Parfitt **AP**, Fiona Brown **FB**, Julia Cooper **JC**, Jan Haseler **JH**, John Lerpiniere **JL**, Ken White **KW**,
Maria Newham **MN**, Renée Grayer **RG**, Rob Stallard **RS**, Sally Rankin **SR**, Sarah White **SW**

Poaceae

***Vulpia bromoides* – Squirreltail Fescue**

13/05/20 in pavement cracks Harcourt Drive, Earley
SU7356871087 (RG)
30/07/20 Aldermaston SU586653 (SW)

***Vulpia myuros* – Rat's-tail Fescue**

26/06/20, abundant on arable edge Plastow Green
SU53276244 (SW)
28/07/20 Wasing SU5763 (SW)

***Briza maxima* – Greater Quaking-grass**

04/06/20 A339 road verge SU4809464002 (SW)

***Calamagrostis epigejos* – Wood Small-reed**

15/08/20, single large stand Watlington Hill
SU7066493608 (SW)

***Polypogon viridis* – Water Bent**

31/07/20 Newbury Town Centre SU47316701 (SW)

***Poa nemoralis* – Wood Meadow-grass**

28/05/20 Ashford Hill SU55286324 (SW)

***Bromus racemosus* – Smooth Brome**

14/07/20, single clump Plastow Green SU53756243
(SW)

***Hordeum secalinum* – Meadow Barley**

26/06/20 nr Oxford Copse SU 55776331 (SW)

***Setaria pumila* – Yellow Bristle-grass**

28/07/20 Wasing SU570638 (SW)
14/08/20, single plant Plastow Green SU 53746240
(SW)

Editor's note: it would be wonderful if more members took the trouble to record their sightings on a spread sheet and submit them to the various RDNHS Taxa Recorders every December.

Lepidoptera Recorder's Report 2020 by Norman Hall

2020 was a very strange year to say the least, with Covid-19 lockdowns and unusual weather - with long hot or cold spells and long wet or dry spells. One consequence of the hot spells, which included six successive days in August (7th - 12th) when the maximum temperature in Reading was 30 °C or more, was that many species were first seen on unusually early dates, and Paul Black reported that he had 61 earliest-since-2009 records and described it as 'an early year'. He also had 31 latest-since-2009 records, but many other species flying late in the year had unusually early 'latest dates' probably the result of the cold weather in November/December coupled with the pre-Christmas lockdown.

This year's report may look very much like my reports from previous years but although I received plenty of records of butterflies there were far fewer records of uncommon moth species because permissions to trap in BBOWT Nature Reserves had been withdrawn due to Covid-19. Hence there were more records from suburban gardens and less from high quality BBOWT habitats. Ian Esland has moved away from Whitchurch Hill, a very productive area, to a more suburban locality in Crowthorne, still in VC22 but less diverse entomologically. As for myself, I formed a support bubble with a friend in Salisbury and stayed there almost continuously, doing no trapping in the area covered by this journal apart from 5 successive nights from October 18th - 22nd in my garden in Earley, and the RDNHS mothing event at Withymead Nature Reserve on July 18th. Paul Black and I jointly led the event on July 18th, with Jan Haseler also leaving traps overnight and with much help from the resident warden. This was remarkably successful and was perhaps *the* highlight of the year for both Paul and me, much enjoyed despite heavy rain for many hours after midnight which signalled the end of a very long hot spell. It was a pity that no more than six members could attend next morning, when it was dry, because of Covid restrictions. Those who came saw both adult and larval stages of Striped Lychnis *Cucullia lychnitis*. Hopefully, some members who might have come had been happily running their moth traps at home.

Other highlights for the year included a Spring Usher at Bradfield in September (when it would not be expected to emerge before December at the very earliest), Gypsy Moth *Lymantria dispar* and Oak Processionary *Thaumetopoea processionea* at Crowthorne, both pest species that have gained a foothold in the UK (the Processionary Moth being a notifiable pest but the Gypsy Moth not), more Gypsy Moths and a Four-spotted *Tyta luctuosa* at Red Cow Cottage, Cholsey, a second example of Southern Chestnut *Agrochola haematidea* at Snelsmore, and a Dotted Rustic *Rhyacia simulans* at Chieveley. My 'personal' best was a third Oak Rustic *Dryobota labecula* in Earley, having also recorded it there in Autumn in 2018 and 2019. What gave me even greater pleasure was then finding yet another Oak Rustic that I had caught at Greenham Common (Brackenhurst Heath) on 1st September 2011 and put aside in a store box as I did not then recognise it. This predates any other Berkshire record I know of.

The systematic list that follows includes records from up to about 20 miles from Reading, all from Vice County 22 (old Berkshire southS or westW of the Thames), VC23 (Oxfordshire northN or eastE of the Thames), or VC12 (North Hampshire). Selected records are listed for *all* butterflies (where earliest and latest sightings are included) and for most moths not considered common in the standard field guides, with just a few for common moths. Earliest and latest dates for butterflies at Red Cow cottage, Cholsey, are also included because these constitute part of an ongoing dataset of comparable dates. These records have prefixes such as '**Earliest RC:**', where the suffix **RC** is Red Cow Cottage (unless they were the earliest of all anyway). In general, the main recorders will have seen everything they reported, or photographs thereof, and can be considered as the identifiers as well. They are acknowledged by their initials in round brackets. They may not have caught the species themselves or been the only ones to identify them, so a second acknowledgement may follow in square brackets. For example (PB) [BMG] means that PB saw it at a meeting of the Berkshire Moth Group, [BMG]. Other abbreviations used are **Act.** for Actinic Light trap and **MV.** for Mercury Vapour Light trap.

The status categories at the end of my species headings are based on those given in Waring & Townsend (3rd edition). The rarest native species are taken to be those listed in the Red Data Book (Shirt, 1987) or occurring in 15 or less 10km squares in the UK. Then follow **Notable A** (= Nationally Scarce A), **Notable B** (= Nationally Scarce B), **Local** and **Common** - depending on the number of occupied 10 km squares. However, many species are spreading into the UK from continental Europe as a result of climate change and what is their status? Are they occurring as primary migrants? Are they breeding locally on the south coast? If so, do their future generations die out or increase in number? Are they spreading inland? If they become established their status might change rapidly. The status I have given is therefore something I have made up myself, to represent the situation as I see it. If any include the word '**Adventive**' it means that the species is assumed to have been originally imported accidentally rather than by natural expansion of range. **BAP** for some butterflies indicates that there is a Biodiversity Action Plan to promote the conservation of the species.

ADELIDAE

07.002 *Nemophora metallica* Notable B
16/07/20, 7 Tidgrove Warren, Overton SU526543 VC12 (AB)

INCURVARIIDAE

08.001 *Incurvaria pectinea* Local
12/04/20 Crowthorne SU839638 Act.(IE)

ARGYRESTHIIDAE

20.010 *Argyresthia ivella* Notable B
13/07/20 Longmeadow, Axmansford SU568612 VC12 (AB)

OECOPHORIDAE

28.008 *Metalampra italica* Established adventive
24/06/20 back garden, Tilehurst SU665742 (JL) This is a small and attractive cinnamon-coloured moth that it is increasingly being found both in woodland and gardens. One to look out for if you have never seen it (NH)

28.024 *Tachystola acroxantha* Established adventive
Earliest 07/04/20 Crowthorne SU839638, daytime observation. Found inside garage (IE).
Latest Spring record was also at Crowthorne 26/05/20 to Act. Autumn records there were from 07/08/20 - 27/09/20 (IE). JH saw one in Spring for the first time in her garden in Tilehurst & the latest one there on 08/11/20.

GELECHIIDAE

35.003 *Syncopacma larseniella* Local
01/08/20 Red Cow SU592868 (AR) - Unconfirmed.
Syncopacma species are all very similar (NH)

35.022 *Dichomeris marginella* - Juniper Webber Local
24/06/20 Crowthorne SU839638, Act. (IE)

COLEOPHORIDAE

37.032 *Coleophora albitarsella* Local
13/07/20 Longmeadow, Axmansford SU568612 VC12 (AB)

37.086 *Coleophora versurella* Local
18/07/20 Withymead N.R. SU601827 VC23, MV., confirmed by dissection (NH)

MOMPHIDAE

40.004 *Mompha propinquella* Local
18/07/20 Withymead N.R. SU601827 VC23, MV. (NH)

TORTRICIDAE

49.001 *Olindia schumacherana* Local
08/09/20 Red Cow SU592868 (AR)

49.073 *Acleris schalleriana* Local
08/11/20 Westwood Road, Tilehurst SU666742 (JH)

49.085 *Acleris kochiella* Local
20/06/20 Red Cow SU592868 (AR)

49.202 *Ancylis uncella* Local
12/05/20 Padworth Common SU619645 (JL)

49.376 *Pammene aurita* Local
18/07/20, 2 Withymead N.R. SU601827 VC23, MV. (NH)

SESIIDAE

52.012 *Synanthedon vespiformis* - Yellow-legged Clearwing Notable B
15/06/20 Broadmoor Bottom SU855629 (JL)

LIMACODIDAE

53.001 *Apoda limacodes* – Festoon Notable B
Only record: 04/07/20 Windsor Gt Park SU947728 (PB)

ZYGAENIDAE

54.002 *Adscita statices* - Forester Local
18/06/20, 5 Millenium Field, Sonning Common SU713793 VC23, daytime observation (NH) [F. Cummins]

54.010 *Zygaena trifolii* - Five-spot Burnet Local
18/05/20, 8 Devil's Punchbowl SU350850 (JH)

HESPERIIDAE

57.001 *Erynnis tages* - Dingy Skipper BAP
Earliest 02/05/20, 3 field south of Padworth Common SU621644 A very good year. (JH)
High count 06/05/20, 14 The Holies SU592799 (JH)
Earliest RC 06/05/20 Red Cow SU592868 (AR)
Latest RC 30/05/20 Red Cow SU592868 (AR)
Latest 31/05/20 Furze Hill, Meadow SU511742 (JL)
Unusual second generation 20/08/20 Aston Upthorpe Downs, Juniper Valley SU544832 & 24/08/20 Greenham Common SU490643 (JH)

57.002 *Pyrgus malvae* - Grizzled Skipper BAP
Earliest 02/05/20 field south of Padworth Common SU621644 (JH)
High count 20/05/20, 5 Ufton Nerve restored gravel pit SU638666 (JH)
Latest 27/05/20 Paices Wood SU586635 (JL)

57.005 *Thymelicus lineola* - Essex Skipper
Earliest 19/06/20 Moor Copse, Cottage Field SU637736 (JL)
Earliest RC 22/06/20 Red Cow SU592868 (AR)
High count RC 05/07/20 50 Red Cow SU592868 (AR)
Latest RC 24/07/20 Red Cow SU592868 (AR)
Latest 09/08/20 Ufton Nerve restored gravel pit SU638666 (JH)

57.006 *Thymelicus sylvestris* - Small Skipper

Earliest 09/06/20 Red Cow SU592868 (AR)
 High count 12/07/20, 12 Padworth, Raghill Farm
 SU612646 (JH)
 Latest RC 20/07/20 Red Cow SU592868 (AR)
 Latest 30/07/20, 3 Mortimer, Hundred Acre Piece
 SU639651 (JH)

57.008 *Hesperia comma* - Silver-spotted Skipper

All records:
 25/07/20 Aston Rowant NNR, Bald Hill SU721962 VC23
 (JH) [RDNHS]
 08/08/20, 10 Watlington Hill SU705935 VC23 (JH)

57.009 *Ochlodes sylvanus* - Large Skipper

Earliest 20/05/20 Moor Copse, Park Wood SU637739
 (JL)
 Earliest RC 28/05/20 Red Cow SU592868 (AR)
 High count 05/07/20, 33 Basing Wood, Chineham
 SU644556 VC12 (AB)
 Latest RC 17/07/20 Red Cow SU592868 (AR)
 Latest 30/07/20 Holly Copse SU594700 (JL)

PIERIDAE**58.003 *Anthocharis cardamines* - Orange-tip**

Earliest 03/04/20 Red Cow SU592868 (AR) & Westwood
 Rd Tilehurst SU666742 (JH)
 20/04/20, 5+ Plastow Green SU537624 VC12,
 'everywhere in the garden' (KW)
 26/04/20, 5 Plastow Green SU537624 VC12 (KW)
 05/05/20 Plastow Green SU537624 VC12, roosting on
Camassia flower overnight (KW)
 Latest RC 22/05/20 Red Cow SU592868 (AR)
 Latest 25/05/20 Watts Bank reserve SU331771 (JL)

58.006 *Pieris brassicae* - Large White

Earliest 20/04/20 Tilehurst, Blundells Copse SU6773
 (JL); Bradfield, Miram's Copse SU577731 (JL) & Red Cow
 SU592868 (AR)
 High count 20/08/20 14, Aston Upthorpe Downs,
 Juniper Valley SU544832 (JH)
 Latest 29/09/20 Red Cow SU592868 (AR)

58.007 *Pieris rapae* - Small White

Very early 02/03/20 Red Cow SU592868 (AR)
 Early 10/04/20 Tidgrove Warren, Overton SU526543
 VC12 (AB)
 High count 10/07/20, 26 Fair Cross, wood south of
 Devil's Highway SU690626 VC12 (JH)
 Latest 19/10/20 Red Cow SU592868 (AR)

58.008 *Pieris napi* - Green-veined White

Earliest 07/04/20 Fobney Island SU703711 (JL)
 Earliest RC 12/04/20 Red Cow SU592868 (AR)
 High count 11/07/20, 21 Aston Upthorpe Downs,
 Juniper Valley SU544832 (JH)
 Latest RC 25/09/20 Red Cow SU592868 (AR)
 Latest 27/09/20 Sulham, Nunhide Lane SU644736 (JH)
 [RDNHS]

58.010 *Colias croceus* - Clouded Yellow

All records:
 22/07/20 Red Cow SU592868 (AR);
 25/07/20 Aston Rowant NNR, Bald Hill SU721962 VC23
 (JH) [RDNHS]
 18/08/20 Red Cow SU592868 (AR);
 08/09/20 Goddards Green, Burghfield Brook SU665666
 (JH)
 11 & 18/09/20 Moor Copse, Arable Field SU636738 (JL)

58.013 *Gonepteryx rhamni* - Brimstone

Earliest 23/02/20 Moor Copse, Hogmoor Copse
 SU634740 (JH)
 Earliest RC 08/03/20, Red Cow SU592868 (AR)
 Late 19/10/20 Matlock Rd, Caversham SU704756 VC23,
 (NH) [H. Baker]
 21/10/20 Plastow Green SU537624 VC12 (KW)
 Latest 21/11/20 Red Cow SU592868 (AR)

NYMPHALIDAE**59.003 *Pararge aegeria* - Speckled Wood**

Earliest 07/04/20 Red Cow SU592868 (AR)
 Latest RC 14/09/20 Red Cow SU592868 (AR)
 Latest 25/10/20 Theale, Wigmore Lane pits SU637700
 (JL)

59.005 *Coenonympha pamphilus* - Small Heath BAP

Earliest 06/05/20, 2 The Holies SU592799, a very good
 year (JH)
 Earliest RC 07/05/20 Red Cow SU592868 (AR)
 20/05/20, 2 Green Park, Reading SU701696 A new site
 (JH)
 High count 20/08/20, 38 Aston Upthorpe Downs,
 Juniper Valley SU544832 (JH)
 08/09/20 Goddards Green, Burghfield Brook SU665666
 A new site (JH)
 Latest RC 18/09/20 Red Cow SU592868 (AR)
 Latest 28/09/20, 2 Aston Upthorpe Downs, Juniper
 Valley SU544832 (JH)

59.009 *Aphantopus hyperantus* - Ringlet

Earliest 10/06/20 Red Cow SU592868 (AR)
 Latest RC 22/07/20 Red Cow SU592868 (AR)
 Latest 03/08/20 Bradfield, Miram's Copse SU578733 (JL)

59.010 *Maniola jurtina* - Meadow Brown

Earliest 26/05/20 West Woodhay chalk pit SU388618
 (JH)
 Earliest RC 28/05/20 Red Cow SU592868 (AR)
 High count 20/08/20, 194, Aston Upthorpe Downs,
 Juniper Valley SU544832 (JH)
 Latest RC 21/09/20 Red Cow SU592868 (AR)
 Latest 28/09/20, 2 Aston Upthorpe Downs, Juniper
 Valley SU544832 (JH)

59.011 *Pyronia tithonus* - Gatekeeper

Earliest 29/06/20 Sheepdrove Farm, SU358817 (JL)
 Earliest RC 07/07/20 Red Cow SU592868 (AR)
 High count 30/07/20, 52 Mortimer, Hundred Acre Piece
 SU639651 (JH)
 Latest RC 31/08/20 Red Cow SU592868 (AR)
 Latest 08/09/20 Fobney Island SU704709 (JL)

59.012 *Melanargia galathea* - Marbled White

Earliest 05/06/20 Red Cow SU592868 (AR)
 High Count 16/07/20, 28 Tidgrove Warren, Overton
 SU526543 VC12 (AB)
 Latest RC 22/07/20 Red Cow SU592868 (AR)
 Latest 30/07/20 St Mary Woodlands SU3274 (JL) &
 Warren Farm SU358817 (JL)

59.013 *Hipparchia semele* – Grayling BAP

All records:
 22/06/20 Mortimer, Hundred Acre Piece, Grayling bank
 SU633651 (JH)
 12/07/20 Padworth, Raghill Farm SU612646 (JH)
 28/07/20, 90 Hundred Acre Piece, Mortimer SU632650
 (AB)
 30/07/20 Mortimer, Holden's Firs SU646655 (JH) & High
 count of 136, Mortimer, Hundred Acre Piece, Grayling
 bank SU633651 (JH)

59.015 *Boloria selene* - Small Pearl-bordered Fritillary

BAP Only record:
 25/05/20 Red Cow SU592868, maybe a release? (AR)

59.017 *Argynnis paphia* - Silver-washed Fritillary

Earliest 21/06/20, 3 Starvale Woods, Mortimer
 SU655656 (JH)
 High count 05/07/20, 23 Basing Wood, Chineham
 SU644556 VC12 (AB)
 Latest 20/08/20 Bradfield, Miram's Copse SU577731 (JL)

59.019 *Argynnis aglaja* - Dark Green Fritillary

All records:
 17/06/20, 2 Bramshill Plantation SU751617 (JH) [RDNHS]
 17/06/20 Bramshill Plantation SU760618 (JH) [RDNHS]
 06/07/20 Decoy Heath SU611634 (JL)
 25/07/20, 3 Aston Rowant NNR, Bald Hill SU721962 VC23
 (JH) [RDNHS]

59.021 *Limenitis camilla* - White Admiral BAP

All records:
 13/06/20, 2 Pamber Forest & Upper Inhams Copse
 SU617602 VC12 (AB);
 17/06/20 Paices Wood SU583634 (JL);
 21/06/20, 3 Mortimer, Starvale Woods SU655656 (JH);
 05/07/20, 2 Basing Wood, Chineham SU644556 VC12
 (AB)
 20/07/20 Lambourn Woodlands SU328762 (JL)

59.022 *Apatura iris* - Purple Emperor

Only record:
 05/07/20, 2 Basing Wood, Chineham SU644556 VC12
 (AB)

59.023 *Vanessa atalanta* - Red Admiral

Earliest RC 28/01/20 Red Cow SU592868 (AR)
 Early 19/04/20 Tidgrove Warren, Overton SU526543
 VC12 (AB)
 Late 01/11/20 Westwood Rd, Tilehurst SU666742 (JH)
 Latest 24/11/20 Red Cow SU592868 (AR)

59.024 *Vanessa cardui* - Painted Lady

All records:
 16/08/20 Holly Copse - SU599701 (JL);
 20/08/20 Red Cow SU592868 (AR);
 21/08/20 Tilehurst, back garden SU665742 (JL);
 29/08/20 Red Cow SU592868 (AR)

59.026 *Aglais io* - Peacock

Earliest 04/03/20 Englefield, Five-a-Day Market
 SU626719 (JL)
 Earliest RC 16/03/20 Red Cow SU592868 (AR)
 Late 17/09/20 Bradfield SU6071 (JL)
 Latest RC 19/10/20 Red Cow SU592868 (AR)
 Latest 07/11/20 Wayfarer's Walk, Hannington SU524558
 VC12 (JH)
 12/11/20 Moor Copse, Arable Field SU636736 (JL)

59.027 *Aglais urticae* - Small Tortoiseshell

Earliest 16/03/20 Fobney Island SU701711 (JL)
 Earliest RC 23/03/20 Red Cow SU592868 (AR)
 Latest RC 09/10/20 Red Cow SU592868 (AR)
 Latest 07/11/20 Wayfarer's Walk, Hannington SU524558
 VC12 (JH)

59.031 *Polygonia c-album* - Comma

Earliest RC 06/03/20 Red Cow SU592868 (AR)
 High count 11/07/20 8, Aston Upton Down, Juniper
 Valley SU544832 (JH)
 Late 13/10/20 Sulham SU645742 (JL)
 Latest 01/11/20 Westwood Rd, Tilehurst SU666742 (JH)

59.033 *Euphydryas aurinia* - Marsh Fritillary BAP

All records:
 18/05/20, 3 Seven Barrows SU329829. There is suspicion
 that these may have been released unofficially (JH)
 27/05/20 Ashford Hill Meadows NNR, Polelands ant-hill
 meadow SU562621 VC12 (AB)

RIODINIDAE**60.001 *Hamearis lucina* - Duke of Burgundy BAP**

All records:
 18/05/20 Crog Hill SU3283 (JH)
 25/05/20 Lambourn Woodlands SU3376 (JL)
 25/05/20 Hungerford Newtown SU3471 (JL)

LYCAENIDAE**61.001 *Lycaena phlaeas* - Small Copper**

Earliest 21/04/20 Red Cow SU592868 (AR)
 High count 20/09/20, 9 Arable Field, Moor Copse.
 SU637738 (JH)
 Latest 14/10/20 Red Cow SU592868 (AR)

61.004 *Favonius quercus* - Purple Hairstreak

Earliest 16/06/20 Bradfield, Miram's Copse SU577731
 (JL)
 16/06/20 Bradfield, Miram's Copse SU579727 &
 SU580728 & SU577730 (JL)
 25/06/20, 24 Ham Lane, Axmansford SU566605 VC12, on
 roadside oaks. (AB)
 Latest 12/08/20 Bradfield, Rushall Farm pond SU584723
 (JL)

61.005 *Callophrys rubi* - Green Hairstreak
Earliest 16/05/20 Kent's Hill, Rotherfield Peppard
SU727810 VC23. (NH) [F. Cummins]
High count 18/05/20, 25 Devil's Punchbowl SU350850
(JH)
Latest 07/06/20 Aston Upthorpe Downs, Juniper Valley
SU544832 (JH)

61.006 *Satyrrium w-album* - White-letter Hairstreak
BAP All records:
23/06/20 Bradfield, Rushall Farm SU581730 (JL)
05/07/20 & 16/07/20, Red Cow SU592868 (AR)

61.010 *Cupido minimus* - Small Blue BAP
Earliest 18/05/20, 4 Devil's Punchbowl SU350850 (JH)
High count 18/05/20, 145 Crog Hill SU323833 (JH)
25/05/20 Lambourn Woodlands SU330766 & SU332769
(JL)
25/05/20 Hampstead Norreys SU537758 (JL)
High Count 14/06/20, 43 Old Down SU596487
VC12(AB)
22/06/20 Tidgrove Warren, Overton SU526543 VC12
(AB)
17/07/20 Old Down SU596487 VC12 (AB)
20/07/20 Farncombe, Lodge Down SU3077 (JL)
Latest 30/07/20 Sheepsdove Farm, SU358817 (JL)

61.012 *Celastrina argiolus* - Holly Blue
Earliest 13/03/20 Red Cow SU592868 (AR)
Latest RC 09/09/20 Red Cow SU592868 (AR)
Latest 16/09/20 Clay Hill, Stanford Dingley SU573707
(JH) [RDNHS]

61.014 *Plebejus argus* - Silver-studded Blue BAP
Only record:
13/06/20, 26 Silchester Common SU620623 VC12 (AB)
13/06/20, 26 Silchester Common SU620623 VC12 (AB)

61.015 *Aricia agestis* - Brown Argus,
Earliest 06/05/20 Red Cow SU592868 (AR)
Latest 01/10/20 Red Cow SU592868 (AR)

61.018 *Polyommatus icarus* - Common Blue,
Earliest 06/05/20 The Holies SU588802 (JH)
Earliest RC 18/05/20 Red Cow SU592868 (AR)
High count 16/07/20, 35 Tidgrove Warren, Overton
SU526543 VC12 (AB)
Latest 24/09/20 Lardon Chase SU588809 (JH)
Latest RC 11/10/20 Red Cow SU592868 (AR)

61.019 *Polyommatus bellargus* - Adonis Blue
All records:
25/05/20, 7 The Holies, Bottom Field SU594798 (JH)
Latest: 20/08/20 Aston Upthorpe Downs, Juniper Valley
SU544832 (JH)

61.020 *Polyommatus coridon* - Chalk Hill Blue
Earliest & high count 11/07/20, 19 Lardon Chase
SU588809 (JH)
Only record RC 18/08/20, Red Cow SU592868 (AR)
20/08/20, 2 Aston Upthorpe Downs, Juniper Valley
SU544832 (JH)

06/09/20 Lambourn, Crog Hill, Holloway SU322833 (JL)

PYRALIDAE

62.021 ***Oncocera semirubella*** Notable B
18/07/20, 2 Withymead N.R. SU601827 VC23, MV. (NH)

CRAMBIDAE

63.005 *Pyrausta despicata* Common
24/04/20 Tidgrove Warren, Overton SU526543 VC12
(AB)

63.014 *Sitochroa palealis* Local
17/07/20 Westwood Rd, Tilehurst SU666742, new
record for garden (JH)

63.016 *Anania fuscalis* Local
26/05/20 Westwood Rd, Tilehurst SU666742, new
record for garden (JH)

63.031 *Udea ferrugalis* - Rusty-dot Pearl Common
Migrant
07/11/20 Red Cow SU592868 (AR)
08/11/20 Westwood Rd, Tilehurst SU666742 (JH)
17/11/20 Red Cow SU592868 (AR)

63.052 ***Nomophila noctuella* - Rush Veneer,** Migrant
24/07/20 Crowthorne SU839638, Act. (IE)

63.054 *Cydalima perspectalis* - Box-tree Moth
Established pest species
Earliest 20/06/20 Crowthorne SU839638, Act. (IE)
High Counts 19 & 22/09/20, both 12, Crowthorne
SU839638, Act. (IE);
21/09/20, 13, Westwood Rd, Tilehurst SU666742, year
count 22, previously only 1/year (JH).
Latest 30/10/20 Crowthorne SU839638, Act. (IE)

This moth exists in two main forms. They typically have
diaphanous white wings with black borders, but some
are black. One box tree in the garden where NH was in
lockdown was being ravaged by caterpillars, so they
were picked off & their development was monitored.
12 moths emerged all of which were black. Clearly all
one brood caught in time (NH)

63.060 *Evergestis pallidata* Common
31/07/20 Moor Copse, Five-acre Field SU639739 (JL)

63.072 ***Eudonia delunella*** Notable B
17/05/20 Red Cow SU592868 (AR)

63.109 *Pediasia contaminella* Notable B
24/07/20 Crowthorne SU839638, Act. (IE)
30/07/20 & 06/08/20 Westwood Rd, Tilehurst
SU666742 (JH)
07/08/20 & 08/08/20 Crowthorne SU839638, Act. (IE)

63.118 *Nymphula nitidulata* - Beautiful China-mark
Local
06/08/20 Westwood Rd, Tilehurst SU666742, new
record for garden (JH)

DREPANIDAE

65.003 *Watsonalla cultraria* - Barred Hook-tip Local
14/09/20 Westwood Rd, Tilehurst SU666742, last seen
2014 (JH)

65.011 *Tethea or* - Poplar Lutestring Local
30/05/20 Stakis Hotel, Chieveley SU477727 (PB)
01/06/20 Westwood Rd, Tilehurst SU666742, new
record for garden (JH)

65.014 *Cymatophorina diluta* - Oak Lutestring Local
05/09/20, 3 Longmeadow, Axmansford SU568612 VC12
(AB)
12/09/20 Miram's Copse SU578731 (PB)
19/09/20 Burghclere Churchyard SU469610 (PB)

65.015 *Polyphoca ridens* - Frosted Green, Local
09/04/20 & 23/4/20 Crowthorne SU839638, Act. (IE)
24/04/20 Westwood Rd, Tilehurst SU666742, 3rd record
for garden, last seen 2019 (JH)

SPHINGIDAE

69.007 *Sphinx pinastri* - Pine Hawk-moth Local
Earliest 01/06/20 Westwood Rd, Tilehurst SU666742
(JH)
Latest 14/08/20 Crowthorne SU839638, Act. (IE)
Also seen at Newbury Newtown Road Cemetery,
Longmeadow Axmansford, Crowthorne & Hailey Lane
Peasemore

**69.010 *Macroglossum stellatarum* - Humming-bird
Hawk-moth,** Regular immigrant
11/07/20 Westwood Rd, Tilehurst SU666742 (JH)
02/08/20 Longmeadow, Axmansford SU568612 VC12
(AB)
06/08/20 Red Cow SU592868 (AR)
08/08/20 & 13/8/20, 2 Plastow Green SU537624 VC12,
on *Buddleja* (KW)
31/08/20 Red Cow SU592868 (AR)
22/09/20 North Heath SU455743 (JL)

**69.017 *Deilephila porcellus* - Small Elephant Hawk-
moth,** Local
Earliest 08/05/20 Red Cow SU592868 (AR)
High count 27/05/20, 16 Red Cow SU592868 (AR)
Latest 15/07/20 Hill Green SU451767 (PB)

GEOMETRIDAE

70.004 *Idaea rusticata* - Least Carpet Local
Earliest 19/06/20 Hill Green, Gypsy Lane SU450768 (PB)
High counts 15 Withymead N.R. SU600828 VC23, MV.
(NH, PB); 13, Westwood Rd, Tilehurst SU666742, highest
garden count, previous highest 5 on 06/07/18 (JH)
Latest: 08/08/20 Kintbury Chase SU374658 (PB) & 2
Crowthorne SU839638, Act. (IE)

70.006 *Idaea fuscovenosa* - Dwarf Cream Wave Local
Earliest 20/06/20 Crowthorne SU839638, Act. (IE)
Latest 18/07/20 Crowthorne SU839638, Act. (IE)

70.012 *Idaea trigeminata* - Treble Brown Spot Local
Earliest 01/06/20 Westwood Rd, Tilehurst SU666742
(JH)
Latest 25/06/20 Arlington Lane SU470713 (PB) &
Tilehurst, back garden SU665742 (JL)

70.015 *Idaea emarginata* - Small Scallop Local
04/07/20 Red Cow SU592868 (AR)
15/07/20 Hill Green SU451767 (PB)
18/07/20 Withymead N.R. SU601827 VC23, MV. A very
dark example (NH)
22/07/20 Hill Green SU451767 (PB)
29/07/20, 2 Red Cow SU592868 (AR)

70.025 *Scopula immutata* - Lesser Cream Wave Local
15/07/20 Hill Green SU451767 (PB)
18/07/20 Inkpen, Crocus Field SU370640 (JL)
26/07/20 Bagnor Marsh SU452697, headlights (PB)

70.027 *Scopula floslactata* - Cream Wave Local
23/05/20 & 28/05/20 Snelmore Lane SU461714, both
at car headlights (PB)

70.032 *Cyclophora albipunctata* - Birch Mocha Local
30/08/20 Snelmore Common, by torchlight (PB)

70.036 *Cyclophora punctaria* - Maiden's Blush Local
Earliest 08/05/20 Westwood Rd, Tilehurst SU666742
(JH)
Latest 14/09/20 Chieveley, Stakis Hotel SU477727 (PB)

70.037 *Cyclophora linearia* - Clay Triple-lines Local
23/05/20 Snelmore Lane SU461714, car headlights (PB)

70.047 *Nycterosea obstipata* - Gem Immigrant
22/10/20 Red Cow SU592868 (AR)

70.050 *Xanthorhoe biriviata* - Balsam Carpet Notable
but with no native foodplant
18/07/20, 4 Withymead N.R. SU600828 VC23, MV. (NH,
PB)

**70.055 *Xanthorhoe quadrfasiata* - Large Twin-spot
Carpet** Local
18/07/20, 20 Withymead N.R. SU600828 VC23, MV. (NH,
PB)
26/07/20 Bagnor Marsh SU452697, car headlights (PB)

70.056 *Catarhoe cuculata* - Royal Mantle Local
16/07/20 Red Cow SU592868 (AR)

70.057 *Catarhoe rubidata* - Ruddy Carpet Notable B
24/06/20 Hill Green SU451767 (PB)

70.064 *Euphyia biangulata* - Cloaked Carpet Notable B
13/07/20 Longmeadow, Axmansford SU568612 VC12
(AB)

70.065 *Euphyia unangulata* - Sharp-angled Carpet
Local Only record:
01/08/20, Burghclere Churchyard SU469610 (PB)

- 70.083 *Thera cupressata* - Cypress Carpet** Local
15/06/20 Westwood Rd, Tilehurst SU666742, new record for garden (JH)
25/06/20 Tilehurst, back garden SU665742 (JL)
08/11/20 & 17/11/20 Westwood Rd, Tilehurst SU666742 (JH)
- 70.084 *Plemyria rubiginata* - Blue-bordered Carpet** Local
08/06/20 Westwood Rd, Tilehurst SU666742, first record since 2011 (JH)
- 70.112 *Euchoeca nebulata* - Dingy Shell** Local
08/08/20 Kintbury Chase SU374658 (PB)
- 70.117 *Minoa murinata* - Drab Looper** Notable B
15/05/20 Moor Copse, Park Wood SU637739 (JL)
17/05/20 Bradfield, Miram's Copse SU577730 & Long Copse SU580727 (JL)
17/05/20 Fence Wood SU514723, daytime (PB)
04/08/20 Bradfield, Miram's Copse SU577730 & Long Copse SU580727 (JL)
- 70.118 *Philereme vetulata* - Brown Scallop** Local
12/06/20 Red Cow SU592868 (AR)
- 70.119 *Philereme transversata* - Dark Umber** Local
03/07/20 Red Cow SU592868 (AR)
12/07/20 Hailey Lane, Peasemore SU467783 (PB)
15/07/20 Hill Green SU451767 (PB)
- 70.130 *Odezia atrata* - Chimney Sweeper** Common
13/06/20 Crocus Field, Inkpen, Crocus Field SU370640 (JL)
- 70.134 *Perizoma bifaciata* - Barred Rivulet** Local
Only record: 22/07/20 Hill Green SU451767 (PB)
- 70.137 *Perizoma albulata* - Grass Rivulet** Local
Earliest 25/05/20 Watts Bank reserve SU331771, Lambourn Woodlands, Thornhill Bottom SU332768 & Cleeve Hill, Strawberry Field SU333766 (JL)
01/06/20 Westwood Rd, Tilehurst SU666742 (JH)
02/06/20 Hill Green, Gypsy Lane SU450768 (PB)
Latest 15/07/20 Hill Green SU451767 (PB)
- 70.148 *Eupithecia inturbata* - Maple Pug** Local
11/07/20 Chieveley, Stakis Hotel SU477727 (PB)
18/07/20 Withymead N.R. SU600828 VC23, MV., confirmed by dissection (NH, PB)
01/08/20 Burghclere Churchyard SU469610 (PB)
- 70.155 *Eupithecia venosata* - Netted Pug** Local
22/05/20 Snelsmore Lane SU461714, car headlights (PB)
31/05/20 Red Cow SU592868 (AR)
- 70.159 *Eupithecia phoeniceata* - Cypress Pug** Local
07/09/20 , Red Cow SU592868 (AR)
- 70.160 *Eupithecia tripunctaria* - White-spotted Pug** Local
18/05/20 Bury's Bank Rd, by torchlight at dusk (PB)
- 18/07/20, 2, Withymead N.R. SU600828 VC23, MV. (NH, PB)
12/08/20 Hill Green SU451767 (PB)
- 70.171 *Eupithecia indigata* - Ochreous Pug** Common
03/05/20 , Crowthorne SU839638, Act. (IE)
08/05/20 , Westwood Rd, Tilehurst SU666742, a new record for garden (JH)
- 70.176 *Eupithecia intricata* - Freyer's Pug** Common
26/05/20 Crowthorne SU839638, Act. (IE)
01/06/20, 3 Westwood Rd, Tilehurst SU666742 (JH)
02/06/20 Newbury, Abbots Rd SU473662 (PB) [A. Tillen]
- 70.186 *Eupithecia millefoliata* - Yarrow Pug** Notable B
24/06/20 & 15/07/20 , Hill Green SU451767 (PB)
- 70.205 *Abraxas grossulariata* - Magpie** Common
Earliest 23/07/20 Hailey Lane, Peasemore SU467783 (PB)
Latest 29/07/20 Hill Green SU451767 (PB)
- 70.208 *Ligdia adustata* - Scorched Carpet** Local
Earliest 11/04/20 Red Cow SU592868, mostly from 11/04 to 08/05 (AR)
Latest 18/07/20, 5 Withymead N.R. SU600828 VC23, MV. (NH, PB)
- 70.211 *Macaria notata* - Peacock Moth** Local
08/08/20 Kintbury Chase SU374658 (PB) [R. Dobson]
14/08/20 Crowthorne SU839638, Act. (IE)
- 70.212 *Macaria alternata* - Sharp-angled Peacock** Local
Earliest 19/06/20 Hill Green, Gypsy Lane SU450768 (PB)
Latest 12/08/20 Hill Green SU451767 (PB)
- 70.224 *Plagodis dolabraria* - Scorched Wing** Local
Earliest 27/05/20 Balancing Pond SU473715 (PB)
Latest 19/06/20 Hill Green, Gypsy Lane SU450768 (PB)
- 70.225 *Pachycnemis hippocastanaria* - Horse Chestnut** Notable B
10/03/20, 24/06/20 & 22/09/20, Crowthorne SU839638, Act. (IE)
- 70.233 *Ennomos quercinaria* - August Thorn** Local
18/07/20, 3 Withymead N.R. SU600828 VC23, MV. (NH, PB)
30/07/20 Westwood Rd, Tilehurst SU666742, a new record for garden (JH)
- 70.235 *Ennomos fuscantaria* - Dusky Thorn** Common
Very early 12/07/20 Westwood Rd, Tilehurst SU666742, earliest of 47 records, previous earliest 22/07/18 (JH)
- 70.236 *Ennomos erosaria* - September Thorn** Common
Early 22/06/20 Stakis Hotel, Chieveley, Stakis Hotel SU477727 (PB)
Late 18/10/20 Snelsmore (W of main Aspen stand) (PB)
These extreme dates are earlier and later than any since 2007 (PB)

70.246 *Apocheima hispidaria* - **Small Brindled Beauty** Local
Only record: 19/02/20 Snelsmore (left car park) (PB)

70.253 *Agriopsis leucophaearia* - **Spring Usher** Common
Exceptional 12/09/20 Miram's Copse SU578731 (PB) [R. Dobson]
Normally occurs from January to March, but occasionally in December. To see one in September is quite extraordinary (NH).

70.272 *Paradarisa consonaria* - **Square Spot** Local
19/06/20 Hill Green, Gypsy Lane SU450768 (PB)

70.295 *Perconia strigillaria* - **Grass Wave** Local
26/05/20 Decoy Heath SU612634 (JL)
01/06/20 & 15/06/20 Broadmoor Bottom SU856629 (JL)

NOTODONTIDAE

71.001 *Thaumetopoea processionea* - **Oak Processionary** Establishing pest species
08/08/20 Crowthorne SU839638, Act. (IE)
08/08/20 Kintbury Chase SU374658 (PB)

71.022 *Ptilodon cucullina* - **Maple Prominent** Local
19/06/20 Hill Green, Gypsy Lane SU450768 (PB)
18/07/20 Withymead N.R. SU600828 VC23, MV. (NH, PB)
19/08/20 Hill Green SU451767 (PB)

EREBIDAE

72.004 *Hypena rostralis* - **Buttoned Snout** Notable B
23/04/20 & 09/05/20 Crowthorne SU839638, Act. (IE)

72.009 *Leucoma salicis* - **White Satin Moth** Local
25/06/20 Arlington Lane SU470713 (PB)
26/06/20 Newtown Road Cemetery SU470662 (PB)
30/07/20 Westwood Road, Tilehurst SU666742, new record for garden (JH)

72.010 *Lymantria monacha* - **Black Arches** Local
10/07/20 Hill Green SU451767 (PB)
13/07/20, 9 Longmeadow, Axmansford SU568612 VC12 (AB)
18/07/20, 2 Withymead N.R. SU601827 VC23, MV. (NH)
08/08/20 Kintbury Chase SU374658 (PB)

72.011 *Lymantria dispar* - **Gypsy Moth** Establishing pest species
24/07/20 Red Cow SU592868 (AR)
13/08/20 2, Red Cow SU592868 (AR)
14/08/20 Red Cow SU592868 (AR)
14/08/20 Crowthorne SU839638, Act., male. (IE)
19/08/20 Hill Green SU451767 (PB)

72.012 *Euproctis chryorrhoea* - **Brown-tail** Local
24/06/20 Hill Green SU451767 (PB)
25/06/20 Red Cow SU592868 (AR)
26/06/20 Newtown Road Cemetery SU470662 (PB)
01/07/20 Red Cow SU592868 (AR)
12/07/20 Westwood Rd, Tilehurst SU666742, a new record for garden (JH)

This is a troublesome species because the larvae and adults have stinging hairs, which are at best irritant and at worst can cause blindness (NH)

72.026 *Arctia caja* - **Garden Tiger** was common but now rapidly declining in the south
20/06/20 Ashdown House SU286818 (PB)

72.029 *Callimorpha dominula* - **Scarlet Tiger** Local
Earliest 01/06/20, 3 Westwood Rd, Tilehurst SU666742, earliest of 22 records, previous earliest 09/06/16. (JH)
Latest 01/07/20 Englefield, Five-a-Day Market SU625719 (JL)

72.030 *Euplagia quadripunctaria* - **Jersey Tiger** Notable B
30/07/20, 2 & 06/08/20, 3 Westwood Rd, Tilehurst SU666742 (JH)
10/08/20 Southcote Mill SU692712 (JH)
12/08/20 Red Cow SU592868 (AR)

72.035 *Miltochrista miniata* - **Rosy Footman** Local
Earliest 12/07/20 Hailey Lane, Peasemore SU467783 (PB)
13/07/20, 3 Longmeadow, Axmansford SU568612 VC12 (AB)
18/07/20, 10 Withymead N.R. SU600828 VC23, MV. (NH, PB)
06/08/20 Westwood Rd, Tilehurst SU666742, third record for garden (JH)
10/08/20 Southcote Mill SU692712 (JH)
Latest 19/09/20 Burghclere Churchyard SU469610 (PB)

72.037 *Thumatha senex* - **Round-winged Muslin** Local
22/06/20 Chieveley, Stakis Hotel SU477727 (PB)
18/07/20 15, Withymead N.R. SU600828 VC23, MV. (NH, PB)

72.038 *Cybosia mesomella* - **Four-dotted Footman** Local
Only record: 26/06/20 Newtown Road Cemetery SU470662 (PB)

72.043 *Eilema depressa* - **Buff Footman** Local
13/07/20 Longmeadow, Axmansford SU568612 VC12 (AB)
18/07/20, 8 Withymead N.R. SU601827 VC23, MV. (NH, PB)
08/08/20 Kintbury Chase SU374658 (PB)

72.046 *Eilema complana* - **Scarce Footman** Local
21/09/20 Westwood Rd, Tilehurst SU666742, first ever second-generation specimen (JH)

72.047 *Eilema caniola* - **Hoary Footman** Notable B
25/06/20 Tilehurst, back garden SU665742 (JL)

72.049 *Eilema sororcula* - **Orange Footman** Local
30/05/20 Chieveley, Stakis Hotel SU477727 (PB)

72.052 *Macrochilo cribrumalis* - Dotted Fan-foot Notable B
18/07/20, 2 Withymead N.R. SU600828 VC23, MV.
(NH, PB)

72.061 *Schrankia costaestrigalis* - Pinion-streaked Snout Local Only record:
18/10/20 Snelsmore (W of main Aspen stand) (PB)

72.063 *Lygephila pastinum* - Blackneck Local
20/06/20 Ashdown House SU286818 (PB)
13/07/20 Longmeadow, Axmansford SU568612 VC12
(AB)

72.066 *Parascotia fuliginaria* - Waved Black Notable B
02/06/20 Red Cow SU592868 (AR)
17/07/20 Westwood Rd, Tilehurst SU666742 new
record for garden (JH)
18/07/20 Withymead N.R. SU600828 VC23, MV. (NH,
PB)
05/08/20, 2 Red Cow SU592868 (AR)
08/08/20 Kintbury Chase SU374658 (PB) [R. Dobson]
09/08/20 Red Cow SU592868 (AR)

72.069 *Laspeyria flexula* - Beautiful Hook-tip Local
Earliest 12/06/20, 3 Red Cow SU592868, where it was
recorded on ten dates (AR)
Latest 06/08/20 Red Cow SU592868 (AR)

72.076 ***Catocala fraxini*, Clifden Nonpareil**
Established and increasing
04/10/20 Snelsmore (main Aspen stand) (PB)
20/10/20 Stakis Hotel, Chieveley SU477727 (PB)

NOCTUIDAE

73.031 *Tyta luctuosa* - Four-spotted Notable A
24/07/20 Red Cow SU592868 (AR)

73.039 *Acronicta aceris* – Sycamore Local
26/05/20 Westwood Rd, Tilehurst SU666742 (JH)
24/06/20 Westwood Rd, Tilehurst SU666742 (JH)
26/06/20 Newtown Road Cemetery SU470662 (PB)

73.048 *Panemeria tenebrata* - Small Yellow Underwing Local
08/05/20 Moor Copse, SU640739 & SU639734 (JL)
17/05/20 Axmansford, paddock SU565606 VC12 (AB)
21/05/20 Holly Copse - SU596700 (JL)
22/05/20 Moor Copse, Park Wood SU637740 (JL)
Also seen at Red Cow on several days “in our
meadow” (AR)

73.050 *Cucullia absinthii* – Wormwood Notable B
24/06/20 Hill Green SU451767 (PB)

73.053 *Cucullia chamomillae* - Chamomile Shark Local
09/05/20 Red Cow SU592868 (AR)

73.057 *Cucullia lychnitis* - Striped Lychnis Notable A
01/07/20 Flowing Spring, Playhatch SU747770 VC23,
Larvae (photo submitted) (NH) [A. Booth]
18/07/20 Withymead N.R. SU601827 VC23, MV., 1
adult, 1 larva (NH)

73.059 *Calophasia lunula* - Toadflax Brocade
Established colonist, local but increasing
03/05/20 && 08/06/20, Westwood Road, Tilehurst
SU66674 (JH)
09/07/20 & 31/07/20, Red Cow SU592868 (AR)
14/08/20 Crowthorne SU839638, Act. (IE)

73.070 *Pyrrhia umbra* - Bordered Sallow Local
23/06/20 Hailey Lane, Peasemore SU467783 (PB)

73.076 *Helicoverpa armigera* - Scarce Bordered Straw Established colonist
22/10/20 Harcourt Drive, Earley SU735709, MV. (NH)

73.082 *Cryphia algae* - Tree-lichen Beauty
Established colonist
Earliest 18/07/20, 5 Withymead N.R. SU600828 VC23,
M.V. (NH, PB)
Latest 26/08/20 Crowthorne SU839638, Act. (IE)

Also seen at Red Cow SU592868 on 10 dates (AR),
Westwood Rd, Tilehurst on two dates (JH), Southcote
Mill (JH), Hill Green (PB) and on 4 more dates at
Crowthorne.

73.105 *Dypterygia scabriuscula* - Bird's Wing Local
30/05/20 Chieveley, Stakis Hotel SU477727 (PB)

73.107 *Mormo maura* - Old Lady Local
13/08/20 Red Cow SU592868 (AR)
01/09/20 & 02/09/20 Grove Road, Speen SU461683,
on overripe blackberries (PB)

73.119 *Helotropha leucostigma* – Crescent Local
18/07/20, 2 Withymead N.R. SU600828 VC23, MV.
(NH, PB)
10/08/20, 22 Southcote Mill SU692712 (JH)

73.137 *Arenostola phragmitidis* - Fen Wainscot
Local 18/07/20, 2 Withymead N.R. SU600828 VC23,
MV. (NH, PB)

73.141 *Archanara dissoluta* - Brown-veined Wainscot Local
18/07/20 Withymead N.R. SU600828 VC23,
MV. (NH, PB)

73.142 *Coenobia rufa* - Small Rufous Local
08/08/20 Kintbury Chase SU374658 (PB)

73.164 *Apamea sublustris* - Reddish Light Arches Local
Earliest 08/06/20 Hill Green SU451767 (PB)
Latest 20/06/20 Ashdown House SU286818 (PB)

73.191 *Agrochola haematidea* - Southern Chestnut Red Data Book
06/10/20 Snelsmore (W of main Aspen stand) (PB) [M. Botham]

73.197 *Conistra rubiginea* - Dotted Chestnut Notable B
11/10/20 Red Cow SU592868 (AR)

73.212 *Ipimorpha retusa* - Double Kidney Local
13/07/20 Longmeadow, Axmansford SU568612 VC12 (AB)

73.213 *Ipimorpha subtusa* – Olive Local
16/07/20 Hungerford SU325646, lighted window (PB)

73.215 *Cosmia affinis* - Lesser-spotted Pinion Local
Earliest 22/06/20 Chieveley, Stakis Hotel SU477727 (PB)
Latest 22/07/20 Hill Green SU451767 (PB)

73.217 *Cosmia pyralina* - Lunar-spotted Pinion Local
22/06/20 Chieveley, Stakis Hotel SU477727 (PB)
14/07/20 Red Cow SU592868 (AR)
15/07/20 Hill Green SU451767 (PB)

73.223 *Dryobota labecula* - Oak Rustic Recent colonist
20/10/20 Harcourt Drive, Earley SU735709, MV. (NH)

This was the third year in a row it had been seen in my garden in Autumn. (NH) A recently discovered historic record: 01/09/11 Greenham Common, Brackenhurst Heath SU487642, MV. (NH). NH found a specimen in October 2020 in a storebox and was unable to identify it in 2011, but it was fully labelled. I had seen the moth abroad, but only the form with a conspicuous white spot on each forewing and much later in the season. This was like the ones I saw in 2018, 2019 & 2020 - and was instantly recognisable this time (NH)

73.237 *Polymixis flavicincta* - Large Ranunculus Local
19/09/20 Burghclere Churchyard SU469610 (PB)

73.252 *Tholera cespitis* - Hedge Rustic Common
10/08/20 Southcote Mill SU692712 (JH)

73.279 *Hecatera bicolorata* - Broad-barred White Common
29/07/20 Hill Green SU451767, second brood (PB)
04/08/20 Red Cow SU592868 (AR)
06/08/20 Westwood Rd, Tilehurst SU666742 (JH)

73.302 *Leucania obsoleta* - Obscure Wainscot Local
17/07/20 Westwood Road, Tilehurst SU666742, a new record for garden (JH)

73.316 *Agrotis cinerea* - Light Feathered Rustic
Notable B
20/06/20 Ashdown House SU286818 (PB)

73.327 *Agrotis ipsilon* - Dark Sword-grass Immigrant
10/07/20 Hill Green SU451767 (PB)
29/08/20 Hailey Lane, Peasmore SU467783 (PB)
19/10/20 Harcourt Drive, Earley SU735709, MV. (NH)

73.334 *Diarsia rubi* - Small Square-spot Common
27/05/20 Balancing Pond SU473715 (PB)
21/08/20 Hailey Lane, Peasmore SU467783 (PB)

73.339 *Rhyacia simulans* - Dotted Rustic Local
14/09/20 Chieveley, Stakis Hotel SU477727 (PB)

73.355 *Xestia castanea* - Neglected Rustic Local
30/08/20 Snelsmore Common, by torchlight (PB)
22/09/20 Crowthorne SU839638, Act. (IE)

NOLIDAE

74.002 *Meganola albula* - Kent Black Arches
Notable B

14/07/20 Red Cow SU592868 (AR)
18/07/20 Withymead N.R. SU600828 VC23, MV. (NH, PB)
23/07/20 Hailey Lane, Peasmore SU467783 (PB)

74.003 *Nola cucullatella* - Short-cloaked Moth Common
Earliest 15/06/20 Westwood Rd, Tilehurst SU666742 (JH) Latest 10/07/20 Hill Green SU451767 (PB)

74.004 *Nola confusalis* - Least Black Arches Local
10/04/20 Westwood Rd, Tilehurst SU666742, earliest of 16 records, previous earliest 15/4/2009 (JH)
24/04/20 Westwood Rd, Tilehurst SU666742 (JH)

74.007 *Bena bicolorana* - Scarce Silver-lines Local
24/06/20, 2 Westwood Rd, Tilehurst SU666742 (JH)

74.009 *Nycteola revayana* - Oak Nycteoline Local
12/04/20 Red Cow SU592868 (AR)

Contributors

I am grateful to the main recorders:

Paul Black **PB**, Andy Bolton **AB**, Ian Esland **IE**, Norman Hall **NH**, Jan Haseler **JH**, John Lerpiniere **JL**, Tony Rayner **AR**, Ken White **KW**, Berkshire Moth Group **BMG**, Reading & District Natural History Society **RDNHS**, and equally grateful to Heather Baker, Anne Booth and Fiona Cummins, who also contributed one or two useful and interesting records.

Vertebrates Report 2020 by John Lerpiniere

Some interesting member's bird records are included here, but these are comprehensively collated by the **Berkshire Ornithological Club**, and their latest annual report available is 2016; see their website:

<http://berksoc.org.uk/recording/annual-reports/>

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, hence there are many records for some, especially Muntjac. Many of the sightings are of road kills and most of these are not recorded, but a few are included here. An abundance of one is assumed in each record unless indicated by the value given after the date and before the place name

Abbreviations used are: **juv(s)** = juvenile(s), **imm(s)** = immature(s), **GP(s)** = Gravel Pit(s), and ♂ = male, ♀ = female. The nomenclature has been updated using current listings on the national recording website **iRecord**, run primarily by the Centre for Ecology and Hydrology. However, the website is due to be completely updated with the most recent information on 14th January 2021. This is a very versatile one-stop shop for all your records if you wish to record your sightings. The records are then available for use by relevant authorities including Thames Valley Environment Centre (**TVERC**) who make good use of them.

AMPHIBIA

Bufo bufo - Common Toad

08/03/20 Rushall Farm, Bradfield, a few mating adults & some spawn in pond SU584723 (JL)
18/05/20 Cholsey, juv crossing the road SU594872 (AR)
16/09/20 Stanford Dingley SU571713 (RDNHS trip, leader Maggie Bridges)
26/10/20 The Glade, Paices Wood, Aldermaston, small toad SU584638 (JL)

Lissoariton vulgaris - Smooth Newt

11/06/20 Tilehurst, ♂ at allotment SU670748 (JL)
21/06/20, 2 Tilehurst, adults in garden pond SU665742 (JL)

Rana temporaria - Common Frog

08/02/20 Tilehurst, 1st of year in garden SU666742 (JH)
16/02/20, 10 Tilehurst, in garden pond including 1 pairing SU666742 (JH)
04/03/20, 30+ Tilehurst, first spawn in garden pond SU666742 (JH)
05/03/20, 47 Tilehurst, in garden SU666742 (JH)
08/03/20 Rushall Farm, Bradfield, several mating in pond & several spawn clumps SU584723 (JL)
18/03/20 Fobney Island, spawn clump in lake SU702710 (JL)
11/04/20 Tilehurst, adult under garden refuge SU665742 (JL)
30/05/20 Tilehurst, adult in garden pond SU665742 (JL)
16/06/20 Rushall Farm, Bradfield, tadpoles massing in pond & froglet SU584723 (JL)
02/07/20 Hosehill LNR, froglet at mire SU650694 (JL)

14/07/20 Tilehurst, adult in watering can & 2 other adults in garden following day SU665742 (JL)
31/08/20 & 18/09/20 Cholsey, in garden SU692868 (AR)
16/09/20 Stanford Dingley, SU571713 (RDNHS trip, leader Maggie Bridges)
24/10/20 Hosehill, SU648694 (JL)
26/10/20 Paices Wood, a few adults and imms. disturbed in The Glade SU583638 (JL)

REPTILIA

Zootoca vivipara - Common Lizard

22/01/20 Padworth Common, adult very lethargic among the heather SU620645 (JL)
17/06/20 Bramshill Plantation SU751617 (RDNHS trip, leader RS)
01/08/20 Padworth Common, adult SU618647 (JL)
06/09/20 to 17/10/20 Cholsey, just 6 sightings SU592868 (AR)

Anguis fragilis - Slow-worm

01/02/20 to 21/10/20 Cholsey, 1,030 sightings with highest count of 71 on 13/04/20 SU592868 (AR)
16/02/20 Tilehurst, juv torpid on lawn SU665742 (JL)
05/04/20 to 19/10/20 Tilehurst, at least 12 individuals of various ages seen under 2 garden refuges SU665742 (JL)
19/04/20, 2 Tilehurst, two juvs in garden SU666742 (JH)
24/04/20 Tilehurst, large adult in compost heap SU666742 (JH)
12/05/20, 3 Padworth Common, 2 juv ♂ under refuges SU618647; juv ♂ under refuge SU621646 (JL)
06/06/20 The Glade, Paices Wood, large dark adult ♀ under refuge seen also on 17/06/20, & 01/07/20 with

Grass Snakes SU583638 (JL)

08/06/20 Hosehill Butterfly Bank, adult ♂ under refuge
SU684694 (JL)

15/06/20 Fobney Island, adult ♂ under refuge
SU704710 (JL)

22/06/20 Hundred Acre Piece, Mortimer SU636648
(JH)

26/08/20 Padworth Common, imm under refuge
SU618647 (JL)

31/08/20 Tilehurst, adult ♀ found in compost bag from
garden (SU665742) released in allotment SU670648
(JL)

05/09/20, 3 Greenham Common SU492641 (RDNHS
trip, leader JH)

26/11/20 Cholsey, two juvs found while planting trees
SU592868 (AR)

***Natrix helvetica* - Grass Snake**

03/05/20 Fobney Island, juv under refuse object
SU704710 (JL)

12/05/20 Padworth Common, juv under refuge
SU618647 (JL)

08/06/20 Hosehill, adult under refuge SU651696 (JL)

01/07/20, 3 Paices Wood, adults under refuge with
Slow Worm SU583638 (JL)

02/07/20 Hosehill, young adult under refuge SU650694
& 1 imm under refuge SU648694 (JL)

23/07/20 Pingewood, SU693707 (GC)

26/08/20 Padworth Common, very long adult under
refuge SU618647 (JL)

18/09/20 Plastow Green, squashed dead in lane
SU534623 (KW)

***Vipera berus* - Adder**

14/06/20 Silchester Common, adult ♀ SU620624 (JL)

01/08/20 Padworth Common, large ♀ under refuge
SU618647 (JL)

AVES - Birds

***Anser albifrons* - White-fronted Goose**

05/12/20, 27 Wigmore Lane, Theale, in field with
mixed goose flock including 'escapes' of 1 Bar-headed
Goose *Anser indicus* & 1 Swan Goose *Anser cygnoides*
SU631702 (JL)

***Mergus merganser* - Goosander**

15/11/20 Purley, on R.Thames SU665771 (JH)

***Tachybaptus ruficollis* - Little Grebe**

03/09/20, 10 Mortimer West End, on lake SU622643
(KW)

***Ardea alba* - Great Egret**

07/04/20 Fobney Marshes SU700714 (JL)

29/11/20 Wigmore Lane GPs SU636703 (JL)

15/12/20 Padworth Lane GP SU608671 (RDNHS trip,
leader RS)

***Falco peregrinus* - Peregrine**

01/01/20 to 31/12/20 Newbury, 2 adults all year on
BT Exchange raised 3 young to fledging. 1 juv intruder
brought in prey & was allowed to stay to eat it. 1 adult
intruder chased off SU473668 (KW)

***Haematopus ostralegus* - Oystercatcher**

25/01/20 Hosehill, 1 & then regular pair from 30/01/20
SU649696 (JL)

***Scolopax rustica* - Woodcock**

19/01/20 Plastow Green, in stubble field SU534620
(KW)

30/05/20, 2 Mortimer SU635650 (JH)

***Cuculus canorus* - Cuckoo**

11/04/20 Plastow Green, 1st date singing ♂, last heard
07/06/20 SU534620 (KW)

08/05/20 Plastow Green, singing ♂ and a ♀ present
SU534620 (Sarah White)

12/05/20, 3 Brimpton GPs, all 3 singing ♂
SU568650(KW)

***Caprimulgus europaeus* - Nightjar**

30/05/20, approx.10 Mortimer SU635650 (JH)

***Alcedo atthis* - Kingfisher**

15/11/20 Purley SU665771 (JH)

***Upupa epops* - Hoopoe**

23/04/20 Plastow Green, singing ♂ present for just 1 day SU532624 (KW)

***Lullula arborea* - Wood Lark**

26/02/20 Padworth Common, singing ♂ SU621646 (JL)
06/04/20 Plastow Green, singing ♂ regularly until
11/04/20, ♀ also present on 07/04/20 SU532624 (KW)
23/09/20 Plastow Green, singing ♂ present until
05/10/20 SU532624 (KW)

***Riparia riparia* - Sand Martin**

13/06/20 Newbury, active nesting colony on railway station embankment SU470666 (KW)

***Turdus iliacus* – Redwing**

07/01/20, 100+ Plastow Green, with Fieldfares singing in trees - usually a sign of readiness to migrate in March SU534620 (KW)
12/12/20 Cholsey, found freshly dead below power cables SU592868 (AR)

***Luscinia megarhynchos* - Nightingale**

08/04/20 Theale Lake, 1st singing ♂ record locally SU653698 (per JL)
12/05/20, 3 Brimpton GPs, singing ♂ SU569650 (KW)

***Oenanthe oenanthe* - Wheatear**

03/09/20 Mortimer West End, on lake shore SU622643 (KW)

***Turdus pilaris* - Fieldfare**

07/01/20, 20 Plastow Green, singing in trees - usually a sign of readiness to migrate in March SU534620 (KW)
26/03/20, 80 Plastow Green, foraging in local fields SU534620 (KW)

***Muscicapa striata* - Spotted Flycatcher**

07/08/20, 3+ Moor Copse SU634737 (JL)

***Fringilla montifringilla* - Brambling**

26/11/20 Plastow Green, ♂ present for two days, 1st of winter SU537624 (KW)

***Emberiza calandra* – Corn Bunting**

03/05/20 to 14/06/20 Cholsey, holding territory by grain dryer SU596869 (AR)

MAMMALIA - Mammals

RODENTIA - Rodents

***Sciurus carolinensis* - Grey Squirrel**

01/01/20 Cholsey, 1 or 2 ever present in garden through the year SU592868 (AR)
25/05/20 Lambourn Woodlands SU3376 (JL)
09/06/20 Mclloy Park, Tilehurst SU677744 (JL)
06/09/20 Ragnal, juv dead on road SU312740 (JL)
25/10/20 and 28/11/20 Plastow Green, planting hazel nuts SU537624 (KW)
30/11/20, 2 Plastow Green, racing around the gardens SU537624 (KW)
31/12/20 Plastow Green, foraging for hazel nuts buried around the garden SU537624 (KW)

***Rattus norvegicus* - Brown Rat**

04/03/20 Reading SU710745 (GC)
20/08/20 Tilehurst, Prospect Park, imm ran under storage unit SU691727 (JL)
01/09/20 Plastow Green, 1st of summer in garden after barley harvest, 7 on 03/09/20, attracted to bird food SU537624 (KW)
28/11/20 Plastow Green, collecting seed heads off *Nicandra physalodes* SU537624 (KW)

***Apodemus sylvaticus* - Wood Mouse**

20/03/20 to 21/10/20 Cholsey, 54 sightings under garden refuges SU592868 (AR)
16/04/20 Tilehurst, on the patio in garden SU665742 (JL)

17/06/20 & 26/11/20 Tilehurst, under garden refuge SU665742 (JL)
24/10/20 Hosehill, adult under refuge SU648694 (JL)

***Microtus agrestis* - Field Vole**

11/03/20 & 23/03/20 Cholsey, singles in meadow SU592868 (AR)
14/08/20 Hosehill, adult under refuge SU652696 (JL)

***Myodes glareolus* - Bank Vole**

16/03/20 to 21/10/20 Cholsey, 84 sightings around meadow SU592868 (AR)
02/07/20 Hosehill, under refuge SU651697 (JL)
24/11/20, 2 Hosehill, imms under refuge SU648694 (JL)

LAGOMORPHA - Rabbits & Hares

***Lepus europaeus* - Brown Hare**

09/01/20 Sulham, in stubble field SU653753 (JL)
19/01/20 Mouslford, dead on road SU574837 (JL)
22/01/20 Goring SU615803 (RS)
16/02/20, 4 Plastow Green SU535625 (KW)
17/02/20, 12 Englefield SU6670 (JL)
14/03/20, 2 Swyncombe SU676895 (RDNHS trip, leader Sean O'Leary)
26/03/20 Bradfield, loped across road SU623732 (JL)
16/04/20, 2 Plastow Green, on the drive & 22/08/20, 1 SU537624 (KW)
01/05/20, 3 Plastow Green SU534622 (KW)
08/05/20, 7 Plastow Green, in fields SU534622 (KW)
18/07/20 Wawcott, adult dead on A4 SU391685 (JL)

13/08/20 Purley, in stubble field SU654756 (JL)
16/09/20, 2 Stanford Dingley SU567708 (RDNHS trip, leader Maggie Bridges)
17/10 20 Kingsclere Woodlands SU539619 (KW)
20/12/20 Farnborough SU423826 (JL)
22/12/20 Paices Wood, in flooded Alder woodland SU587644 (JL)

***Oryctolagus cuniculus* - Rabbit**

01/01/20 Cholsey, up to 4 seen regularly through year in garden SU592868 (AR)
11/02/20 Tidmarsh, adult crossed road SU636747 (JL)
18/02/20 Upper Lambourn SU297801 (JL)

08/03/20, 20 Hampstead Norreys, in field SU536754 (JL)
08/03/20, 2 Bradfield SU579631 (JL)
16/03/20, 3 Upper Basildon SU596751 (JL)
25/03/20, 6 Winterbourne Wood SU4472 (JL)
15/04/20, 2 Sulhamstead, SU626694 (JL)
23/04/20, 1, & 24/04/20, 2 Plastow Green SU535625 (KW)
12/05/20 Padworth Common, adult SU619647 (JL)
15/05/20 Paices Wood, small juv SU585636 (JL)
25/05/20, 15 Eling SU5375 (JL)
25/05/20 Tidmarsh, a black individual seemed smaller than adult size hopped into hedge, possibly domestic 'escape', & a wild juv nearby SU630746
25/05/20, 2 Lambourn Woodlands SU3376 (JL)
23/06/20, 2 Thames Valley Business Park SU747746 (DO)
24/06/20 Sonning, in field above Thames Park SU751750 (DO)
22/12/20 Paices Wood, adult SU586641 (JL)

ERINACEOMORPHA - Hedgehogs

***Erinaceus europaeus* - Hedgehog**

11/03/20 Shefford Woodlands, dead on road SU361729 (JL)
16/04/20 to 19/05/20 Cholsey, in garden coming to food SU592868 (AR)
17/04/20 Westwood Road, Tilehurst, adult dead on road, 1st seen in area for many years SU666740 (JL)

11/05/20 Earley, in garden SU737711, also 20/08/20, 05/09/20 & 24/10/20 (DO)
26/06/20 Emmer Green SU713767 (GC)
06/09/20 East Garston, dead on road SU360737 (JL)
24/10/20 Harris Gardens, Reading University, alive but a bit comatose SU798713 (DO)

SORICOMORPHA - Shrews & Moles

***Sorex araneus* - Common Shrew**

01/02/20 to 21/10/20 Cholsey, ten sightings SU592868 (AR)
10/05/20 Paices Wood, adult under refuge, & 15/05/20 SU584635 (JL)
08/06/20 Hosehill, adult under refuge SU650694 (JL)

***Talpa europaea* - Mole**

10/02/20 Wickham Green, mole hills in field, an under recorded area generally SU4071 (JL)
09/06/20 Plastow Green, dead on path, often happens after a crop spray here SU536621 (KW)
21/07/20 Plastow Green, heaving up back lawn, &
28/11/20 SU537624 (KW)
04/12/20 Moor Copse, now hundreds of hills in River Fields SU635739 (JL)

CHIROPTERA - Bats

***Pipistrellus pipistrellus* – Common Pipistrelle**

03/04/20 to 08/04/20 Cholsey, up to three in garden SU592868 (AR)
13/11/20 Cholsey, unusually late seen near garden SU592868 (AR)

CARNIVORA (Caniformia)

Canidae

***Vulpes vulpes* - Fox**

08/01/20 Padworth, dead on A4 SU613689 (JL)
29/02/20 to 24/11/20 Cholsey, family including 2 cubs seen regularly in garden & meadow SU592868 (AR)
03/03/20 Purley SU656762 (JH)
09/04/20 Plastow Green, in fields SU536621 (KW)
26/05/20 Reading SU695730 (GC)
02/06/20 Southcote SU683714 (GC)
16/07/20 Southcote SU682712 (GC)
28/07/20 Emmer Green SU714759 (GC)
31/07/20 Emmer Green SU708761 (GC)
02/09/20 Tilehurst, adult cantered through garden SU665742 (JL)
07/09/20 Tilehurst, in garden close to house SU666742 (JH)
22/09/20 Tilehurst, adult searched undergrowth in garden for 2 minutes SU665742 (JL)
18/10/20 Hermitage, dead on M4 SU495734 (JL)
27/12/20 Plastow Green, territorial barking in fields SU536621 (KW)

Mustelidae

***Meles meles* - Badger**

17/03/20 Tidmarsh, probably imm SU639744 (RS)
06/05/20 Lower Basildon, dead at roadside SU613784 (JH)

25/05/20 Lambourn Woodlands, 1 sett in chalk recently enlarged SU3376 (JL)
10/07/20 Southcote SU682712 (GC)
18/08/20 Leverton, dead on road SU329702 (JL)
30/10/20 Park Wood, Moor Copse, snuffle holes in a ride SU637740 (AC)
31/12/20 Plastow Green, 1 sett in Seif's Wood & 1 sett in large garden SU539619 (KW)

***Mustela nivalis* - Weasel**

05/05/20 Cholsey, by Bunk Railway Bridge SU5986 (P Chandler per AR)

***Mustela erminea* - Stoat**

04/04/20 Cholsey, in field SU602881 (I Bosley per AR)
04/06/20 Chalkhouse Green SU707783 (GC)
17/05/20 Bradfield, ran along road & into hedge SU582719 (JL)

***Mustela vison* - American Mink**

23/04/20 Mapledurham, swimming SU663772 (per JL)

***Lutra lutra* - Otter**

25/01/20 Whitchurch-on-Thames, in the R.Thames seen from tollbridge SU636768 (Alison Lewinson)
10/05/20 Cholsey Brook, near R.Thames SU602872 (L Scurr per AR)
13/10/20 Hogmoor Copse, Moor Copse, in R. Pang feeding on crayfish in watercress beds. Same again
10/11/20 SU635740 (AC)

ARTIODACTYLA

Cervidae – Deer

***Muntiacus reevesi* - Muntjac**

25/01/20 Tilehurst, Westwood Road, SU666742 (JH)
01/02/20 Tidmarsh, two dead on road by Moor Copse SU63740 (JL)
09/02/20 & 20/04/20 Sanham Green SU333660 (JL)
10/02/20, 2 Wickham Green, by game cover SU407711 (JL)
13/02/20 to 12/10/20 Cholsey, regular in garden SU592868 (AR)
17/02/20, 2 Paices Wood SU584236 (JL)

18/02/20 Tilehurst, Barefoot Copse SU656664 (JL)
 18/02/20, 3 Plastow Green SU534620 (KW)
 06/04/20, 2 Boxgrove Wood, Tilehurst SU652736 (JH)
 18/04/20 to 09/07/20 Emmer Green, eight sightings of singles SU713767 (GC)
 12/05/20, 2 Padworth Common, together SU622647 (JL)
 16/05/20, 2 Rushall Farm, Bradfield, together SU586732 (JL)
 25/05/20 Hampstead Norreys, min. 3, unusually possibly five, appearing from wood by game strip SU537758 (JL)
 23/06/20 Pingewood SU693707 (GC)
 26/05/20, 2 Reading Cemetery Junction, in cemetery SU735734 (DO)
 02/06/20 Bradfield, adult ♀ dead on road SU593726 (JL)
 23/06/20 Rushall Farm, Bradfield SU585725 (JL)
 13/07/20 Burnt Hill SU570742 (JL)
 27/08/20, 2 Pingewood SU684697 (GC)
 14/09/20 Englefield, adult ♂ dead on road SU632735 (JL)
 16/10/20 Englefield, a white adult SU616717 (JL)
 24/10/20 Reading Cemetery Junction, in cemetery SU735734 (DO)
 24/11/20 Hosehill, imm SU648694 (JL)
 04/12/20, 2 Winterbourne Wood, together SU447118 (JL)
 04/12/20 Ownham, a dark individual SU424701 (JL)
 06/12/20 Tidmarsh, imm ♂ dead on road SU63739 (JL)
 07/12/20, 2 Emmer Green SU715773 (GC)
 10/12/20 Emmer Green SU700767 (GC)
 20/12/20 Farnborough, adult SU423813 (JL)
 29/12/20 Plastow Green, mass of fresh footprints in mud SU534620 (KW)

Capreolus capreolus - Roe Deer

01/01/20 Lollington, regular sightings through the year SU5785 (P Chandler per AR)
 17/02/20, 4 Seif's Wood, Kingsclere Woodlands, in local fields, regular here SU539619 (KW)
 13/03/20, 3 Bere Court SU620747 (JL)
 20/03/20, 2 Rushall Farm, Bradfield SU582724 (JL)
 08/04/20, 3 Seif's Wood, Kingsclere Woodlands, 2 ♂ & 1 ♀ SU53460 (KW)
 06/04/20 Boxgrove Wood, Tilehurst SU652731 (JH)
 14/04/20, 2 Wither Copse, Tilehurst SU660723 (JH)

Contributors

With thanks to those who have contributed to this report. The names of most of the contributors are abbreviated and these include: Ailsa Claybourne **AC**, Gordon Crutchfield **GC**, Jan Haseler **JH**, John Lerpiniere **JL**, David Owens **DO**, Tony Rayner **TR**, Rob Stallard **RS**, Ken White **KW**

17/04/20 to 01/07/20 Cholsey, up to three occasional in meadow SU592868 (AR)
 27/04/20, 3 Seif's Wood, Kingsclere Woodlands SU534620 (KW)
 01/05/20 Englefield, dead on road SU632734 (JL)
 18/05/20 Pingewood SU676700 (GC)
 04/06/20, 2 Langdon Hill, Aston Upthorpe SU546835 (JH)
 01/07/20 Paices Wood, adult ♂ SU585639 (JL)
 30/07/20 Mortimer, Hundred Acre Piece, 1 at SU635650 (JH)
 13/08/20 Purley, Skylark patch in stubble field & two on 27/10/20 SU654756 (JL)
 06/10/20 Winterbourne Wood SU446718 (JL)
 19/10/20, 3 Seif's Wood, Kingsclere Woodlands (KW) SU534620
 30/10/20 River Field, Moor Copse SU635738 (AC)
 15/12/20, 3 Padworth Lane GP, 2 adults & a juv SU619652 (RDNHS trip, leader RS)

Dama dama - Fallow Deer

20/12/20, 7 Stanmore, on winter cereal SU483797 and 11 visible including a buck SU462788 (JL)

Cervus elaphus - Red Deer

25/05/20, 2 Lambourn Woodlands, adults SU3376 (JL)

Note: no records were received for:

Fish: no records at all.

Amphibia: Palmate Newt and Gt Crested Newt.

Mammals: Hazel Dormouse, Harvest Mouse, Water Vole, Pygmy Shrew, Water Shrew, and Polecat.

Editor's note: it would be wonderful if more members took the trouble to record their sightings on a spread sheet and submit them to the various RDNHS Taxa Recorders every December.

The Weather in Reading during 2020 by Roger Brugge

Department of Meteorology, University of Reading

Averages and anomalies mentioned in this report refer to the climatological period 1981-2010. Historical records date back to 1901 for rainfall, 1956 for sunshine and to 1908 for most other weather elements.

2020 was a mild, wet and sunny year overall, but with a lot of variation. Overall the year was the **equal second warmest on record**, the mean temperature of 11.6 °C tying with that in 2014, but 0.2 °C cooler than in 2006. Six months were at least 1 °C warmer than average (including January, February, April and May) while only July was colder than normal (despite having the hottest day of the year). Sharp ground frosts occurred as late as mid-May and snowfall was very slight on the three days when it did occur. Rainfall totalled 746.2mm during the year, with monthly totals ranging from just 1mm in May to 164.8mm in October. The first three months of the year were wetter than normal, and rainfall in four months exceeded the expected amount by at least 50%; in February the fall was almost two and half times the normal amount. Despite this rainfall, the sunshine total for the year of 1,892 hours made it the **second sunniest year in the past 60 years**, just behind the 1,917 hours recorded in 1959. Only October and November were duller than normal.

January

The year began with a mild month, January seeing just five air frosts: all of them slight and with no snowfall. January overall was the sixth mildest on record, being 0.7 °C cooler than the mildest January of 2007. At 9am on the 20th mean sea level pressure was recorded as 1048.5mb, the second highest in the January pressure record.

February

February was very mild, but often stormy and wet during the month. Much of the rain was associated with named storms and sharp fronts. February had the highest mean temperature anomaly of the year at +2.3 °C and just three air frosts. The mildness was due to extensive cloud at times that led to the seventh wettest February on record, with 98mm falling compared to 117mm of 2014 (the wettest February). There was some local flooding in the second half of the month due to the heavy rainfall.

March

March saw a continuation of the frequent rainfall for first three weeks, continuing a six-month-long wet spell, although the final third of the month was drier and sunny with some of coldest nights of the year. 11.2 hours of sunshine on the 25th made this one of the six sunniest March days on record. Overall, March was a sunny month with 170.5 hours of sunshine, just 8.2 hours less than in the sunniest March on record of 2007. However, March was only 0.1 °C warmer than the preceding February.

April

April was mostly dry until the final few days of the month and was more than 2 °C warmer than average overall, after a sharp frost on the 1st (only January and December had colder nights this year). **April was the sunniest April on record with 250.9 hours of sunshine**, over 16 hours more sunshine than the previous sunniest April of 1984. April was the only month of the year to record bright sunshine every day. This sunshine helped to produce a warm April, the mean temperature of 11.3 °C making it the fourth warmest April in the record.

May

Warm, dry and sunny conditions prevailed in May. Due to clear skies, the temperature at grass tip level dropped to -9.3 °C on the 12th, **the lowest ever on record for this month** and only 0.2 °C higher than the lowest reading of 2020. Just three days later it was down to -8.1 °C, this run of cold nights causing problems for newly sprouting crops. Just 1mm of rain fell during the month, making it the **driest May on record**, while the lack of cloud help to

produce 345.1 hours of sunshine during the month. Not only was this **the sunniest May on record** (previously this was 1989 with 295.1 hours) but it was the **sunniest of any month** (previously 305.6 hours in June 1975). Overall, May was over 2.9 °C warmer than average by day but 0.5 °C colder than average by night.

June

June was slightly wetter and warmer than usual. Rain fell frequently – 16 days recorded 0.2mm or more and across Reading the local rainfall totals were largely dependent upon the falls from thunderstorms that occurred on three days during the month. At the University these three thundery days brought 3.3mm on the 15th, 17.8mm on the 16th and 15.6mm on the 17th. A sunny spell during the 22nd to 26th gave 70 hours of sunshine in five days with 30 °C reached on two of these days.

July

The air temperature of 35.7 °C on the 31st made this the **second hottest July day** in the Reading record and the fourth warmest of any day in the record. This day was, however, 7 °C warmer than the preceding day and 11 °C warmer than the following day – a one-day ‘heatwave’. Overall, July was the only month to be colder than normal in 2020, with ground frosts recorded as late as the 21st. July was however drier and slightly sunnier than normal.

August

It was very warm overnight 11th/12th with the temperature falling no lower than 20.0 °C, the third warmest night of any in the record. The following night was only slightly cooler as the temperature fell to 19.8 °C. Indeed, from the 8th to 16th the air temperature did not fall below 15.9 °C. This followed a maximum temperature of 35.0 °C on the 7th, the fourth hottest August day on record. Once this hot spell had ended it turned more unsettled: there were four days with thunder during the month which was almost twice as wet as normal. The first ‘autumn’ ground frost occurred on the 31st.

September

September was the fifth sunniest September on record with 178.6 hours of sunshine. It was also a dry month with no rainfall between the 5th and 21st: most of the rain fell in the final ten days of the month. Clear skies led to warm days but the nights were cooler than average overall.

October

October began with a spell of very wet weather: 43.8mm on the 2nd made this the **second wettest October day on record**, while 42.6mm fell on the following day (the third wettest October day on record). This heavy rain helped to create the **fourth wettest October on record** with a total fall of 164.8mm, compared to 179.6mm in the wettest October in 1903 (the wettest month in the series). October was quite a dull month, the tenth dullest in Reading in the past 60 years. Temperatures were close to average overall and there were no air frosts.

November

November was mild and dry, but rather dull. Cloudy skies led to ten sunless days, and light winds helped in overnight fog development with seven mornings having fog at 9am. The highest daytime temperature in November (17.0 °C on the 1st) was almost as high as that in October (17.8 °C on the 8th).

December

December was a mainly unsettled month, generally mild and with frequent rainfall. However, the final week turned colder and drier. A very rapid fall in air pressure between the 25th and 28th culminated in a barometer reading of 971.9mb at 9a.m. on the 28th – the third lowest December reading on record. The month was still warmer than average overall, despite the 31st seeing by far the coldest day of 2020 as the temperature failed to

rise above 1 °C. Despite many grey and cloudy days, total sunshine was average for a December month.

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, Cahyo Leksmono and Ashley Dobie. 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 2020

	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	
J	9.6	1.9	4.2	2.3	6.9	2.1	12.9	14	6.5	19	9.0	9	-3.0	21	-9.5	19
F	10.4	2.4	3.8	2.1	7.1	2.3	13.6	23	6.8	6	9.4	16	-0.6	7	-7.9	28
M	11.4	0.6	3.0	-0.5	7.2	0.0	15.1	24	5.7	5	8.9	15	-2.4	25	-9.0	23
A	17.5	4.0	5.0	0.3	11.3	2.2	23.9	10,11	10.6	1	9.9	6	-2.6	1	-8.6	1
M	19.9	2.9	7.2	-0.5	13.6	1.2	26.2	20	12.0	11	15.0	22	-0.9	12	-9.3	12
J	21.0	1.0	11.3	0.7	16.2	0.9	31.4	25	14.7	6	17.2	25	6.2	7	-1.9	7
J	22.2	-0.2	12.1	-0.6	17.2	-0.4	35.7	31	18.7	15	16.4	25	6.9	12	-1.0	11
A	23.8	1.7	14.3	1.8	19.1	1.8	35.0	7	15.1	29	20.0	12	6.6	31	-0.8	31
S	20.2	1.2	10.0	-0.3	15.1	0.4	27.9	14	13.3	26	15.7	16	4.4	1	-4.3	14
O	14.6	-0.3	8.2	0.6	11.4	0.1	17.8	8	11.1	17	13.8	21	3.6	18	-3.2	10
N	12.4	1.7	5.7	1.3	9.1	1.5	17.0	1	7.3	29	12.4	2	-2.0	28	-7.5	27
D	8.3	0.4	2.9	0.7	5.6	0.6	13.7	21	1.0	31	9.3	19	-2.9	31	-8.4	31
2020	15.9	1.4	7.3	0.7	11.6	1.1	35.7	Jul	1.0	Dec	20.0	Aug	-3.0	Jan	-9.5	Jan

Precipitation 2020

	Total precipitation	% of mean precipitation	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 0900GMT	No. days with thunder	No. days with ice pellets/small hail	No. days with hail over 5mm diam	No. days with fog 0900GMT
	mm	%	days	days	mm		days	days	days	days	days	days	days	days
J	62.5	103	17	10	20.5	14	5	13	0	0	0	0	0	0
F	98.2	240	21	17	20.1	15	3	12	1	0	1	2	0	2
M	49.2	111	13	11	8.8	18	6	19	2	0	0	0	0	0
A	37.5	78	6	5	13.0	17	2	18	0	0	0	1	0	0
M	1.0	2	1	1	1.0	1	1	13	0	0	1	0	1	0
J	69.5	156	16	11	17.8	16	0	1	0	0	3	0	1	0
J	32.0	70	13	11	8.8	25	0	3	0	0	0	0	0	0
A	95.2	182	14	11	28.3	27	0	1	0	0	4	0	0	0
S	19.4	39	7	5	5.4	22	0	7	0	0	0	0	0	1
O	164.8	228	22	18	43.8	2	0	8	0	0	1	0	1	0
N	43.2	65	14	10	17.5	14	4	10	0	0	0	0	0	7
D	73.7	117	20	15	14.5	26	11	19	0	0	0	0	0	2
2020	746.2	118	164	125	43.8	Oct	32	124	3	0	10	3	3	12

Sunshine & Soil Temperature 2020

	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
J	56.8	101	6.3	21	9	5.4	6.9	8.3
F	80.6	106	7.4	11	4	5.0	6.9	7.9
M	170.5	156	11.2	25	4	5.5	7.4	8.2
A	250.9	157	13.7	21	0	11.0	10.5	9.9
M	345.1	183	14.5	28	1	16.2	14.2	12.4
J	205.4	108	14.6	2	2	18.3	17.2	14.9
J	211.7	107	14.5	20	1	19.3	17.9	16.3
A	205.7	107	13.2	20	3	19.7	19.0	17.5
S	178.6	129	10.5	13	2	15.2	16.3	16.4
O	85.7	80	7.5	11	10	10.5	12.9	14.0
N	54.4	86	6.0	4	10	8.2	10.5	11.9
D	46.6	101	5.3	1	12	5.1	7.7	8.5
2020	1892.0	124	14.6	Jun	58	11.6	12.3	12.3

Wind details 2020

	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
J	0	0	1	1	1	9	10	5	4	0
F	0	1	0	1	0	3	12	10	0	2
M	0	3	8	4	2	1	8	4	1	0
A	0	1	9	9	2	3	1	2	3	0
M	0	3	5	7	2	1	2	10	1	0
J	0	3	3	4	2	2	8	5	3	0
J	0	4	1	0	1	1	6	14	4	0
A	0	4	3	5	3	2	5	8	1	0
S	0	1	4	4	1	0	7	6	5	2
O	0	1	4	3	1	6	10	5	1	0
N	0	0	2	4	1	5	6	11	1	0
D	0	2	1	3	2	5	5	7	3	3
2020	0	23	41	45	18	38	80	87	27	7

Highlights of 2020 at BBOWT Moor Copse by Ailsa Claybourn

As ever, my walks around BBOWT Moor Copse in 2020 were rich in birds and other wildlife, absorbing and restorative; also, often wet! Covid 19 made an impact, alas, with surveys suspended during the first Lockdown - I couldn't visit between the end of March and mid-May - but what a relief and joy it was to return then. The singing Skylark and Yellowhammer of 2019 did not return, but the year brought many highlights, some more spectacular than others, but all a pleasure. Unfortunately, Ash Dieback *Hymenoscyphus fraxineus* is widespread at Moor Copse, and most of the smaller rides on the reserve are now closed off for the safety of visitors. Visitor numbers grew from May, with the relaxation of Lockdown, and though the reserve didn't suffer the very serious and destructive behaviours seen at Hosehill, for instance, where bathing and boating on the lake led to the wholesale desertion of the Sand Martin bank, resulting in no young being reared here in 2020, I saw more litter, more dogs off leads, more dog poo on paths and in bags festooning trees, and more riverbank erosion from dogs climbing in and out. Somebody had a camp-fire in Park Wood, in an area closed to the public, which damaged the vegetation where Early Purple Orchids grow. Most of the visitors I encountered were just happy to be walking in such a beautiful place and treated the reserve with respect. It's great that more people are appreciating and benefitting from nature, but some need guidance on how to care for and preserve it.

Back in **January**, Covid and its effects were far from my mind when I visited Moor Copse on the 22nd and 23rd. The flooding from earlier in the month had subsided, the temperature ranged between 4 and 7 °C, not bad for January, and the woods were alive with birdsong and calls. Blackbirds, Wrens, Nuthatches, and Jays were particularly noisy; there were plenty of Blue, Great and Long-tailed Tits around, along with some Coal and Marsh Tits, whose numbers on the reserve are always smaller. I counted 64 Redwings, saw two flocks of Siskins, with over 100 birds in each, and a mixed flock of 30 Chaffinches and Goldfinches. In Park Wood, at the junction with Bradfield Ride, I was sad to see that the tall Ash tree, in which I saw my first and so far only Moor Copse Firecrest, had been felled; but its trunk now provides a handy perch for a spot of sit-down birding. My highlight wasn't a bird, but the hedge-laying underway along the path from the meadows back to the car park: the volunteers were creating a thing of beauty which will benefit birds and other wildlife for years to come.

It was mild again for my visit on **February 21st**, and very wet, with 2 Pied Wagtails feeding around the edges of the flood in Cottage Field. Primroses, Dog's Mercury and Hazels were in flower, and the Blackthorn buds were round and ready to open. Blue and Great Tits were resplendently noisy, in full breeding plumage, but Wrens and Robins were the most prolific songsters. I saw 7 Redwings.

By the time I returned to do my survey on **March 6th**, a lot of the reserve was under water, making access very difficult, but pleasing a Moorhen that was swimming around in Hogmoor Copse! Red Kites were performing their beautiful courtship flight in the form of a mirror-dance; a Grey Heron flew-up from Corner Field. The month's highlight was the Peregrine Falcon that flew, direct and purposeful, over Corner Field and off across the M4. I made two visits in March, on the 14th and 22nd - the day before Lockdown began. Early in the month, I'd heard reports of Chiffchaffs returning from their wintering areas, but wasn't surprised not to encounter any on the 14th, which was a cold and windy day. Great Spotted Woodpeckers were drumming, I heard a Green Woodpecker yaffling, and Dunnocks, Great and Blue Tits, Robins and Wrens were singing. Badgers had been foraging in 5 Acre, making snuffle holes near the path. Spring had arrived by the 22nd, and so had the Chiffchaffs! I heard 5 males singing, had never heard so many Goldcrests; and Nuthatches, Blue, Coal and Great Tits were loud and busy. A Mistle Thrush was singing, and a bachelor party of 5 Mallard drakes was looking for females on the River Pang. Wood Anemones and Wood Spurge flowers were open, I saw a Brimstone and a Peacock butterfly, and spring had definitely sprung!

Which, considering what happened next, was just as well...we all went into a frightening and, as we were told endless times, unprecedented period of Lockdown, and I know I'm not the only person who found that wonderful warm, sunny spring and nature both a solace and a life-line. I couldn't go to Moor Copse in **April**, so I walked my local patch instead, enjoying Great Spotted Woodpeckers, Chiffchaffs, Blackcaps, Nuthatches, Stock Doves, all 5 commoner Tits, Goldcrests and Jays in Sulham Woods; and Kingfishers, Grey Herons and Cormorants along the Thames at Purley. I watched the birds in my garden, did the BTO Garden Birds Survey (still free to join now) every day, and was delighted to see a proliferation of bird-feeders on the housing estates I walked through. The highlight? - seeing a Kingfisher, with a fish in its beak, disappear into the undergrowth on the bank near where I stood, clearly bringing its young a meal.

May brought a relaxation of Lockdown, and I returned to Moor Copse on a warm and sunny day: the reserve was so green and lush, the meadows deep in buttercups, and birds busy with chirping babies, rushed off their wings trying to keep them fed! Some adults were still singing: I heard Blackbirds, Song Thrushes, Wrens, Robins, Chaffinches, Goldcrests, 9 Chiffchaffs and 21 Blackcaps! These last may have been moving around, meaning I

may have counted them twice, but I don't think so. On the 15th I heard a Whitethroat and a Garden Warbler, both in the hedge between Corner and Barton's Field. On the 27th there were 2 Whitethroats singing, but no Garden Warbler. That day, too, Red Kites were calling from Moor Copse, and I think they may have had a nest in a quiet bit of woodland, which would have been quieter still during Lockdown.

By **June**, the birds were becoming quieter, with the post-breeding moult beginning. Robins were keeping a low profile, and though Chiffchaffs and Song Thrushes were still singing, Wrens and Blackcaps were more likely to be heard by their alarm calls, the Blackcaps' 'tik tik' sounding like two stones being tapped together. One of the lovely, big mature Oaks on the edge of Moor Copse, in Barton's Field, had fallen down, possibly a victim of climate change and the very hot, dry spells we've been having more frequently of late. Two or three Kites were still active around Moor Copse, adding to my feeling that they were nesting here. But the most abundant life had six legs, as butterflies, moths, dragonflies, damselflies, grasshoppers, crickets, bees and all manner of other insects were everywhere, catching my eyes and ears as the bird-quiet moulty months of summer began.

My **July** visits were hot: on the 31st, I arrived at 9.30am when it was 23 °C; by 11.45, this had risen to 32 °C! Blue Tits were still noisy and quite brazen, and I saw and heard some Great and Long-tailed Tits, but no Coal or Marsh. A Mistle Thrush was singing in Horsemoor Copse, and I saw him with his family. Song Thrushes were quiet, having a well-deserved rest after months of mellifluous singing. Green and Great Spotted Woodpeckers were calling, there was a scattering of Nuthatches across the reserve, and the Chiffchaffs were making their post-breeding 'thweep' calls. I watched a young Kestrel feeding on the ground in Arable Field, a pleasing sight as we usually have Kestrels at Moor Copse and I hadn't seen many this year. Crickets and Grasshoppers were filling the air with stridulations, a sound so redolent of summer. I saw several beautiful Silver-washed Fritillaries feeding on Hemp Agrimony by the Pang. But the highlight was seeing a family of 3 or 4 Spotted Flycatchers in the hedge by River Field. These lovely birds, amongst the last to return from Africa, repeatedly fly from the edge of a tree or bush, catching insects on the wing and returning to their perch. Nationally, their numbers have plummeted over the last couple of decades, so it's particularly good to have them breeding at Moor Copse.

High winds and raging storms marked the end of **August**, and the temperature was down to 18 °C when I visited on the 27th. The reserve was noisier, with a hint of autumn in the air, and many very vocal Jays collecting a bumper crop of acorns. I heard Green Woodpeckers calling all over the reserve - impossible to tell if it was a whole family keeping in touch with each other, or just a couple. There were lots of Nuthatches and Great Spotted Woodpeckers - both seem to have had a very good breeding season, and I saw my first mixed-Tit flock of the season. Lots of Robins were singing, as females and males defended their individual winter territories. Only one Chiffchaff was singing, but several were thweeping. Some of the Alders by the river were hosting masses of shiny metallic blue Alder Beetles, feasting on the leaves which resembled lacework. My highlight was being signalled at to 'go away and leave alone' by a Moorhen, who flicked its white tail feathers at me in a way I couldn't mistake! I've seen more Moorhens on the Pang this year, I believe as a result of vegetation being left to grow, providing cover and making the river much more interesting.

On both my **September** visits, on the 10th and 29th, I noted that it was warm in the sun, but cold in the shade; the trees were changing colour, small parties of Siskins were returning to the reserve after spending summer elsewhere, and I saw more mixed-Tit flocks, a sure sign of autumn and the need to eat as much as possible and lay down a layer of fat before the cold of winter. Several Goldcrests had joined the tit flock, the advantage being that more eyes can find more food. Robins were singing, some Wrens too, there were plenty of Nuthatches and Great Spotted Woodpeckers, and more than one Green Woodpecker calling. Two Grey Wagtails fed by the river, and summer was hanging on, with some Chiffchaffs still thweeping. A few crickets and grasshoppers were still singing when I visited on the 29th, and the month's highlight was being cronked at by a Raven as it flew over Bradfield Ride.

October was mild and wet. The Pang was over its bank by the boardwalk on the 26th, when I did my first Winter Bird Survey (WBS) of the season. For the previous two years' surveys, it had been frosty; this year the temperature ranged from 7 to 10 °C. Great Spotted Woodpeckers, Nuthatches, Robins, Wrens, Blue Tits and Long-tailed Tits were all vocal, but there were no big flocks of tits. I heard a Treecreeper calling in Horsemoor Copse, a Green Woodpecker in Hogmoor Copse, and lots of Goldcrests. Blackbirds were abundant, though there was no sight or sound of Song or Mistle Thrushes; but their winter cousins were back! On the 26th I counted 1 Redwing, on the 30th there were 14; and I saw 20 Fieldfares fly over Barton's Field on the 26th. Numbers of Siskins, our other main winter visitors, were increasing, too, from 30 on the 26th to 76 on the 30th. Winter and summer overlap in October: a Chiffchaff was still chiff-chaffing on the 13th. More of these small warblers are over-wintering in Britain these days, but that was the last one I heard at Moor Copse in 2020.

The Jays were still noisy, busy collecting and caching acorns. I saw a Kestrel, Buzzard and Red Kite fly overhead all at once, and counted 18 Meadow Pipits in Arable Field, possibly here for the winter, or maybe just passing through. But the month's highlight - and possibly the greatest highlight of my Nature-watching life, happened totally unexpectedly on the morning of the 13th, when I saw a movement in the Pang and realised I was watching an Otter! She was hunting crayfish amongst the watercress, and her noisy crunching showed how very successful she was being. I watched, entranced, for a good 40 minutes as she swam, dived, hunted and ate. She's the first Otter to be recorded on the reserve, and I feel exceptionally fortunate to have seen her.

I made several visits in **November**, and the temperature fell across them from 14 to 0.5 °C. Robins and Wrens were vocal, I heard a Mistle Thrush singing, and counted 6 singing Song Thrushes on the 26th. There were still plenty of Long-tailed and Blue Tits about, some Great Tits, but few Coal and Marsh Tits. Still lots of Goldcrests, but fewer Great Spotted Woodpeckers; and I heard Green Woodpeckers calling almost simultaneously, so now I know there were at least 2 on the reserve. I counted 43 Siskin on my WBS, 22 Redwings and one Fieldfare. A lovely pair of Bullfinches were in the Bullace tree in Cottage Field; and I inadvertently disturbed a Buzzard enjoying a meal in a tree in Moor Copse. I was delighted to see a Woodcock on the 26th: it flew up from Barton's Field, and down by the fallen half of another of the mature Oaks, which had broken off very recently. November's highlight was seeing the Otter again, on the 10th; she was more wary this time, and I was caught out in the open with nowhere to hide; she looked up at me 2 or 3 times, then dived out of sight. And I haven't seen her since. Well, not yet, anyway....

It was **December**, and winter arrived. It was 5 °C on the 5th, 8.5 °C on the 13th, but a chilly and frosty -1 °C on the 30th when I did my WBS. It was a wet month too, but the riverbank was clear on the 30th, though Vinula Ride was under water, and much of Hogmoor Copse was very wet, as were all the meadows. Redwing numbers were building-up: 10 on the 5th, 27 on the 13th and 157 on the 30th. Siskin numbers were low, though: none, 12 and still only 15 on the same dates. There were lots of Long-tailed Tits at the start of the month, but I heard only 1 on the 30th: they are very susceptible to cold weather, and I'm hoping they were elsewhere on the reserve and I just missed them. Goldcrest numbers were low too, but it could also be that they and the Lotties were being quiet, conserving energy to keep themselves alive. There were Marsh Tits in every wooded area, and I heard a Great Spotted Woodpecker drumming! An encouraging sound of spring, but perhaps over-optimistic in late December... although a male Wren was displaying energetically to a female too. Nuthatches were vocal, I heard 3 Great Spotted Woodpeckers calling, and saw a Green Woodpecker fly up from feeding on the ground in Barton's Field: it was unusually silent, perhaps another bird conserving energy. On many of my autumn/winter visits, I've seen a Red Kite perched atop a tree in a corner of 5 Acre: it may be one of the adults I think had a nest in Moor Copse, or maybe one of their offspring. It was cold in the woods on the 30th and I was pleased to bask in the sunshine in Barton's Field when I came out of Moor Copse. The month's highlight was being joined by a female Bullfinch who flew into the hedge a couple of metres away and turned to face the sun, just as I was doing.

As I write my review of 2020, we're in another Lockdown, and the future looks uncertain. But the days are growing longer, the birds are singing, and when I did my January WBS a few days ago, Moor Copse, though badly flooded, was full of life, busy with birds and as wonderful as ever.

Every visit is different, but always rewarding and good for the soul.



Bullfinch *Pyrrhula pyrrhula* June 2019

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