

# UPSTREAM

SSUE 87 SPRING 2019



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Plus lots more...

In 2018, the Barn Owl Group recorded 107 barn owl chicks fledged from the 187 nest boxes we monitor in West Berkshire. All the chicks came from first broods.

A cold January followed by a particularly wet early spring delayed breeding by 2–3 weeks beyond the norm; not allowing time for second broods before autumn set in. This was our third highest total over the last 10 years, but fell well short of the record 173 chicks from 125 boxes that we recorded in 2014. In 2014 about one third of the total came from second broods. If that same ratio had applied this year then it would have been close to the record.

Our average brood size was 2.61 chicks. This parameter is a clear indication of the condition of the female prior to laying. In 2018 it was slightly lower than in recent years and well short of the 3.84 chicks per brood achieved in 2014. The number of boxes monitored was slightly down compared to last year despite our efforts to install at new sites. This was partly due to access to 5 sites not being allowed by the farmer after an outbreak of bovine TB. This is understandable and we sympathise with the farmer.

We installed 8 barn owl boxes at new sites and replaced or repaired 9 more which had fallen down or reached the end of their life for other reasons. It is a never-ending task to maintain and hopefully increase the number of boxes that we monitor. An added problem is that we are trying hard to ensure that all our boxes are in good habitat where barn owls can

find food and security. We resume installation work in March.

Several other species have been found in our boxes. Little owls are of interest to most of us. We monitor 11 little owl boxes, but none of them was successful. Probably the most interesting and exciting intruder found in our boxes was a tawny owl chick found in our box at Peasemore – as fully described in the last edition of Upstream. Kestrels were a little more successful as they produced at least 7 chicks. This was well down on last year's total and supports the view that the species is in decline.

Stock doves continue to like our boxes! Judging by the numbers using them it is surprising that they continue to be on the amber list of birds "of conservation concern". There are lots of them in our area.

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#### West Berkshire Countryside Society

## West Berkshire Countryside Society

The aim of the West Berkshire Countryside Society is to promote the understanding, appreciation and conservation of the West Berkshire countryside... furthering these objectives through practical conservation work and guided walks and talks from local experts. It was formed in 2012 by amalgamating the Friends of the Pang, Kennet & Lambourn Valleys; the Bucklebury Heathland Conservation Group; the Pang Valley Conservation Volunteers & the Barn Owl Group.

Upstream is our quarterly publication designed to highlight conservation matters in West Berkshire and beyond and to publicise the activities of the Society.

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#### **Volunteers' Task Diary**

For outdoor events please wear suitable footwear and clothing. Most practical tasks start at 10am and usually finish around 3pm, unless otherwise stated, so bring a packed lunch. However, we are more than happy to accept any time you can spare! All tools are provided. A map of each task location can be found on the website diary page by clicking on the grid reference shown for that task.

Date/Time	Venue	Details		
Apr 2019				
<b>Tue 02 Apr</b> 10.00	Winterbourne Wood	Stool protection and woodland maintenance. Park in the entrance to the wood. SU447 717		
<b>Tue 09 Apr</b> 10.00	Cleeve Water Meadow, Garden Cottage, Streatley	Ongoing maintenance of this important Thames side water meadow Park in the recreation ground car park at the top of Cleeve Court Road. SU593 812		
<b>Tue 16 Apr</b> 10.00	Bucklebury Meadows Off Morton's Lane, Upper Bucklebury	Hedge maintenance and scrub clearance. Parking in Morton's Lane. SU543 686		
<b>Tue 23 Apr</b> 10.00	Furze Hill, Hermitage	Woodland and butterfly habitat management on this parish wildlife site. Ample parking at new village hall – through double gates off Pinewood Crescent. SU512 740		
<b>Tue 30 Apr</b> 10.00	Grove Pit Common, Leckhampstead	Scrub clearance on this parish wildlife site. Access the common via the track which leaves the B4494 west at Cotswold Farm. SU440 777 Please leave your vehicles at the bottom of the track and walk up to the common. Vehicles carrying tools and refreshments please drive directly to the task site.		
May 2019				
<b>Tue 07 May</b> 10.00	Cleeve Water Meadow, Garden Cottage, Streatley	Ongoing maintenance of this important Thames side water meadow. Park in the recreation ground car park at the top of Cleeve Court Road. SU593 812		
<b>Tue 14 May</b> 10.00	Available			
<b>Tue 21 May</b> 10.00	Rushall Manor Farm, off Back Lane, Bradfield	Woodland management, coppicing and ride widening. Meet at the Black Barn off Back Lane between Stanford Dingley and Bradfield. SU584 723		
<b>Tue 28 May</b> 10.00	Elm Farm. Organic Research Centre, Kintbury	Scrub bashing and clearing in the Donkey field. Parking on opposite side of the road from the main building in track leading to barns. SU414 654		
Jun 2019				
<b>Tue 04 Jun</b> 10.00	Working with BBOWT	BBOWT location TBA		
<b>Tue 11 Jun</b> 10.00	Grimsbury Castle, #1 Hermitage	Clearing invasive rhododendron from this ancient hill fort. Parking near the Estate house at the castle – by the interpretation board. SU511 723		
<b>Tue 18 Jun</b> 10.00	Grimsbury Castle, #2 Hermitage	Clearing invasive rhododendron from this ancient hill fort. Parking near the Estate house at the castle – by the interpretation board. SU511 723		
<b>Tue 25 Jun</b> 10.00	Kings Copse Bradfield Southend	Bracken bashing on this SSSI. Park opposite the bungalow just before King's Copse House. Accessed via Jennets Hill. SU579 707		



We are always pleased when local villagers join us on our tasks and so were delighted to have strong delegations on two sites where we worked over the winter. During this 'dark' time of year, letting in light and sunshine was a recurring aim of our efforts. At Upper Basildon a record number of 24 volunteers worked with Friends of Emery Down in their woods, which are open to all. On previous visits we had helped create a woodland classroom for the local school. This time we returned to clear rubble, tree stumps and barbed wire from a boundary, and then dug over a long stretch of ground for a hedge to be planted later on. Elsewhere on the site we used chainsaws and hand tools to clear large branches from stormdamaged oaks, burning the brash and other debris.

Several villagers also joined us on the banks of the River Pang at Stanford



Dingley on two occasions, both threatened by forecasts of some very ominous weather that thankfully held off until our tasks were done. Working on the banks and in the river itself, we cut down trees that were blocking light, burned the smaller arisings and stacked logs for local people to take for firewood. Similar work was done on the banks of Sulham Brook, where we coppiced trees to increase light into and around the water, hopefully encouraging water voles. Our task leader warned us that we might have to climb under, over and through barbed wire to get close to the Brook, something we managed to do without too much loss of dignity!

On the first of two visits to **Boxford** water meadows, we cleared a substantial area containing mainly bramble back to the fence line. Our chainsaw teams tidied damaged trees and improved light access for ground flora where invasive willows had become too dense. Habitat log piles were made and the brash burnt. Our second visit was to the Centre for Ecology and Hydrology data-gathering area, where we cleared fallen and overhanging material from an area of willows and scrub, again using the logs and brash to make habitat piles for local wildlife.

We continued to remove invasive sycamore trees from the wood at **Holt Lodge Farm, Kintbury**, to thin out the canopy and allow more light on to the woodland floor. We felled several medium-sized trees with hand-saws, then cut them into logs which were stacked. Brambles are good cover for wildlife but are very invasive and here they were spreading too far. To tackle them we used two brush-cutters and hand tools, burning the arisings.

At Furze Hill, Hermitage, we coppiced within the fenced 'prohibited' area of former industrial workings and for the first time used galvanised steel mesh to protect stools from deer. The major task, however, was the clearing of bramble re-growth from the rotational patches in the wild-flower meadow. We prepared for the laying a new hedge at Elm Farm Organic Research Centre, Kintbury, removing tree guards and an old barbed-wire fence as a prelude to further visits over several years to lay the whole hedge.

Two fires consumed large piles of previously-cut material at **Grove Pit, Leckhampstead**, where we also opened up the clearing at the northern end to create a space for wildlife to forage. We continued haloing around staked trees, moving brambles and nettles. Our Tuesday group continued managing heathland on **Upper Common at Bucklebury**, cutting down and burning birch, with our weekend volunteers carrying on their regular visits to the Common as a whole.

Terry Crawford

#### Helping Protect Our Trees from New Pests and Diseases

Observatree is a citizen science project helping to protect the UK's trees from new pests and diseases. In recent years, the number of new pests and diseases arriving in the UK has increased at an unprecedented rate. Many originate from far away, brought here accidentally by the movement of plants, soils and wood products. Others may arrive as windblown spores or flying insects, possibly aided by changing climatic conditions. Our trees did not evolve alongside these new arrivals and may not have any natural resistance to them.

Whilst there are processes in place to limit the likelihood of new pests or diseases from being imported, it is impossible to inspect every individual plant or wooden object entering our shores. There are also examples of wooden souvenirs being brought home by tourists that have contained young insect pests. Dutch elm disease and ash dieback show the major impact that these diseases can have on our woodlands and the species that depend upon them. They also demonstrate the difficulty of preventing new pests or diseases from arriving.

If an outbreak of a new pest or disease is identified early enough, there is a better chance to manage it, perhaps by reducing rates of spread or potentially removing it all together. But this early detection is essential. This is where projects like Observatree and citizen scientists have a role.

Established in 2013 and led by Forest Research, this award winning, multi-partner (Forest Research, the Forestry Commissions of England & Scotland, APHA, Defra, Fera Science





Ltd, the National Trust, Natural Resources Wales and the Woodland Trust) project was originally a four year initiative receiving 50% funding from the EU's LIFE Programme.

Thanks to additional funding from within the partnership, Observatree is continuing for the foreseeable future. The project is designed to give people the resources they need to identify tree pests and diseases and to report them to the correct authorities to facilitate a rapid response where necessary. It does this by:

- Working with tree health professionals to obtain the latest information on current threats to our trees
- Providing a range of highly reputed educational resources (field guides, posters, videos, webinars), which are freely accessible at www. observatree.org.uk
- Supporting a network of volunteers who receive extensive training in the identification of pests and diseases; these volunteers survey their local trees and report on their health.

It is not possible to train our volunteers to identify all of the potential threats to our trees. The project has chosen 22 Priority pests and diseases that we are particularly interested in. Many are known to be in the UK, but their distribution can be poorly understood and we need information on their rates of spread. Our Priority list also contains other pests and diseases that are not thought to be present but have caused serious problems in other countries and we are concerned about the impacts they could have here. These include insects such as the Emerald ash borer, which has killed many ash trees in North America and Canada.

The Observatree volunteers have reported many important findings, including new outbreaks. We would welcome (and give full training to) new volunteers. If you are interested in becoming a volunteer, further details can be found at www.woodlandtrust. org.uk/get-involved/volunteer-with-us/ opportunities/tree-health-surveyorvarious-locations. Alternatively, you can simply help by looking at our pest and disease information and finding out which ones may be threatening the trees near you. Any findings of concern can be reported at https://treealert.forestry.gov.uk.

We will be providing information on selected tree pests and diseases in Upstream throughout 2019, starting opposite with the Oriental Chestnut Gall Wasp.

Peter Crow Project Manager for Observatree

# Introducing the Oriental Chestnut Gall Wasp

As reported in the last edition of Upstream, there are many different types of wasp, including those that cause galls on trees. One of the latest additions to the wasps found in the UK is Dryocosmus kuriphilus, a species of gall wasp native to China. It is commonly referred to as the Oriental chestnut gall wasp (OCGW) and produces galls on sweet chestnuts (Castanea sativa). In June 2015 it was discovered for only the second time in Britain by an Observatree volunteer.

The wasp induces galls (distinctive growth irregularities) to form on sweet chestnut trees, which can result in a reduction of growth and fruiting. The galls are conspicuous and distinctive. They can develop on young twigs or leaves. The galls can cause leaf distortion and deformity. Each individual gall is between 5 and 20 mm in diameter, but larger galls may be found where several coalesce. Young galls are green or rose-pink but later turn red then brown. Galls that have developed on twigs shrink considerably over time and become woody and may remain on the tree for two years or more. Galls that have formed on leaf material senesce (age) in the autumn. At this time, we believe that OCGW is the only insect that is forming galls on sweet chestnut.

The adult wasp is only 2.5 to 3.0 mm long with a black body, translucent wings and orange legs. Its small size means it is unlikely to be noticed, especially as it does not have a sting and is harmless to humans. The adult females lay eggs in the growth / leaf buds of sweet chestnut trees during the summer, with eggs typically hatching into larvae within 30 to 40 days. The early stage larvae become dormant and overwinter



in the buds but resume activity in the spring, causing the formation of the characteristic galls, which are home to the developing larvae. The larvae feed for 20-30 days within the galls before pupating and adult wasps usually emerge during June to August, creating holes in the galls as they exit. These wasps live for approximately 10 days, completing their life cycle as they lay more eggs.

Sweet chestnut is a valuable timber species and is locally important in Britain, especially where the chestnut coppicing industry continues to survive. The wasps can gall the leading apical buds resulting in lateral branching and lowering the value of the coppiced timber. High numbers of galls may weaken trees and make them more vulnerable to other pests and diseases, especially sweet chestnut blight.

The number of locations where OCGW has been found has risen dramatically from two in 2015 to more than 80 in 2018, all in SE England. Scientists are interested to know how quickly and how far this pest is spreading. The distribution of the OCGW is expanding outwards from the London / SE area. It was reported just south of Reading last

year. So OCGW is probably heading towards West Berkshire and may well be with us in the summer.

Having people looking for it, just beyond where it was last reported, allows us to track its rate of spread by receiving reports of when it is first seen in a new area. If you suspect you have seen a sighting of OCGW then please report this to https://treealert. forestry.gov.uk as soon as possible. To help you confirm your sighting you can refer to the OCGW Field ID Guide, on the Observatree website which illustrates signs and symptoms.

Compiled by Peter Crow from Observatree resources, written by scientists working on the project.



Continued from page 1.

This comment is particularly relevant as barn owls are now on the green list. Out of the 187 barn owl boxes that we checked this year, 64 were used by stock doves. As stock doves frequently have second or sometimes third broods, the number of stock dove chicks fledged was undoubtedly much higher.

Some of our boxes were taken over by other species. Grey squirrels were

frequent unwelcome intruders.

Jackdaws took over several boxes but I suspect less than usual. Hornets are another species that is sometimes found in barn owl boxes. They were in residence in at least 6 boxes that we monitored this year. They are magnificent insects and they are welcome in boxes provided that they do not interfere with barn owl breeding.

We now have about 24 volunteers involved with barn owls in WBCS. If you would like to join us or would like further information please contact enquiries@westberkscountryside.org.uk. We have produced a glossy 8-page Barn Owl booklet, providing some basic facts about barn owls which is available to volunteers, landowners & potential new recruits.

John Dellow

Year	2013	2014	2015	2016	2017	2018
Barn owl boxes checked	119	125	136	174	188	187
BO chicks fledged (est.)	0	173	31	100	114	107
Boxes with fledged chicks	0	45	15	39	40	41
% boxes successful	0	36.0	11.0	22.4	21.3	21.9
Average brood size	0	3.84	2.07	2.56	2.85	2.61

#### **Dates for Your Diary**

#### Saturday 27th April

Woodland bluebells and spring flower walk with Charles Gilchrist.

Meet at Hampstead Norreys village hall car park at 2.30pm.

#### Wednesday 22nd May

'The People, the Places and the Practicalities of Life'. A short talk by Dick Greenaway as part of the Frilsham Annual Parish Meeting at 7.30pm in Frilsham Club Room.

The talk will be about the Yattendon Estate's recently catalogued Historic Documents, from the Tudors to Victoria and relate to many local parishes.

# Wednesday 19th June 8.30pm-10.00pm

Bucklebury Common – Nightjars and glow worms at dusk.

Tim Culley leads an evening walk looking at heathland restoration and some of the specialised wildlife associated with this habitat. Meet at Angel's Corner, by the Scout Hut on Bucklebury Common at 8.30pm. Grid ref: SU 550 688.

### The Annual General Meeting of The West Berkshire Countryside Society

will take place in the Oak Room, Upper Bucklebury Memorial Hall, RG7 6QH

Tuesday 28th May 2019 7:00pm for a 7:30pm start



Don't forget our website! www.westberkscountryside.org.uk

# Geoconservation

Most people associate nature conservation with rare plants and animals - certainly not with rocks! However, Britain is now widely regarded a world leader in Geoheritage conservation (or geoconservation) – the practice of conserving, enhancing and promoting awareness of geological and geomorphological features and processes that have significance at the local or national level. Early examples of geoconservation are often related to the aesthetic value of landscapes and natural phenomena such as caves, waterfalls and volcanoes. A review of Sites of Special Scientific Interest (SSSI) between 1977 and 1990 resulted in some geological sites being denotified; creating the recognitian that some other form of protection, at a more local level, was needed. Such sites are important Geological and Geomorphological locations, designated by locally developed criteria, and are seen as the most important places for geology and geomorphology outside statutorily protected land such as SSSI. Today such sites are referred to as Local Geological Sites (LGS) and are a key means of recognising and protecting important Earth science and landscape features for future generations to enjoy.

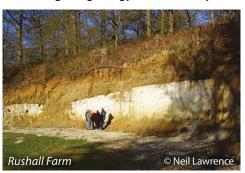
Geoconservation is a national enterprise, existing to promote local "Geo" sites for education and public benefit, focusing on the common purposes and issues of local interest to Groups at a regional level. The Berkshire Geoconservation Group (BGG) is a volunteer group which works with local authorities, landowners and the general public to safeguard our special landscape for future generations and to promote understanding of its geology and geodiversity. The conservation activities also allow for further scientific study.

BGG designate sites of significance within the county so that these can be conserved and enhanced where appropriate. There are currently 28



such designated sites across the county. We also produce a Local Geodiversity Action Plan which identifies actions to be taken over a five year period. This aims to guide the conservation and interpretation of the geological features of Berkshire. As an example we have been working progressively towards the production of Information Boards to be placed at a selection of the Local Geological Sites to educate visitors about their geological characteristics - California Country Park and Rooks Nest, near Wokingham which highlight the orange streams of the area, and a third board for Wargrave chalk pit.

Throughout the year BGG arranges walks to areas of geological interest, give talks to local groups about the geology of the Berkshire area and run practical conservation days at local sites. In addition the Group has published a number of booklets and leaflets describing the geology of the County.



The group has been involved in many conservation sessions at sites across the county including Hurley Chalk Pit (LGS), Fognam Quarry (SSSI), Hamstead Marshall (SSSI), Winterbourne Chalk Pit (SSSI), Boxford Chalk Pit (SSSI), Wargrave Chalk Pit (LGS). A regular programme of site maintenance exists (clearing away vegetation from old quarry exposures), which the group has been able to undertake on a number of sites, including those SSSI designated, with tools purchased thanks to funding from Natural England.

We are always looking to welcome willing people to join the group to participate in activities that range from walks to discover the local geological features that reveal how Berkshire is formed, to getting involved with clearance of geological sites as part of the conservation role.

Membership of the group is free, no special skills or knowledge are needed. Details about the group and how you can become involved in practical conservation or how to participate in relevant walks or talks can be found by visiting our website: www.berksgeoconservation.org.uk

Neil Lawrence

# The Mothers of Berkshire

An hour before sunset finds me and my fellow enthusiasts hauling generators and tubs that look like miniature flying saucers into the depths of the Berks, Bucks and Oxon Wildlife Trust (BBOWT) nature reserve at Moor Copse. It's a week after the summer solstice so the night will be short but very productive. It's been baking hot all day and forecast to stay muggy tonight. Perfect conditions!

We are mothers: that's moth-ers. Here to survey the moths who call the nature reserve home. Searching for pink elephants, ghosts, footmen and old ladies! Our equipment: moth traps, nets, pots and ID guides. A moth trap is a bright light which attracts moths, which then drop through a funnel into a container that is scattered with empty egg boxes. These boxes provide nooks and crannies for the moths to settle, and can be carefully removed so the moths can be identified before being safely released.

Moths are a fascinating and diverse group of insects. Together with butterflies they make up the Lepidoptera family which is derived from the Greek Lepidos meaning scale and pteron meaning wing. The beautiful iridescent colours on the wings are created by thousands of overlapping scales. Worldwide there are 20,000 species of Lepidoptera and in the UK there about 2,600. More than 2,500 are moths, far outnumbering





the butterflies. In my opinion, there are many species of moth as beautiful as our most stunning butterflies. Moths range in form and colour from the 3mm brown and cream Enteucha acetosae to the Privet Hawk Moth with its striking pink and black striped body and 120mm wing span. There are moths that look like lichen on a tree, mother-of-pearl, a birch twig or burnished brass. From the pure White Satin Moth to the jet Black Rustic, the Darth Vader of the moth world. The diversity is astounding.

The names can be as interesting too. Maiden's Blush really does have the appearance of rosy-flushed cheeks on the wings. Blood-veins, Ermines, Emeralds, Carpets, Tigers and Daggers all named due to appearance or form. The entomologists of the past were certainly creative.

Moths are an incredibly important part of our ecosystems. The huge numbers of caterpillars and adults are a vital food source for birds, bats, rodents and larger insects. Most moth caterpillars eat plants but some eat lichens, ferns, fungi, bees wax or even natural fibres. As adults some moths drink nectar but some like the Poplar Hawk-moth have no mouth and don't feed at all.

Some species are generalists and their caterpillars will eat a range of common plants. As a result they are usually common and widely distributed in gardens, parks and wild places. Others are specialists, only eating a particular plant and requiring very specific habitat conditions. For example the Drab Looper will only be found in sunny but sheltered woodland glades or rides where its food plant Wood Spurge grows abundantly. Therefore the places it can be found are far more limited.

By monitoring moths we can build a picture of how healthy our wild places are. The picture is not good news. There is a worrying decline in moth diversity and abundance.

I run monthly moth trapping nights at BBOWT nature reserves in Berkshire from March to October. Come along and see what it's all about – contact rogerstace@bbowt.org.uk. Or give it a go in your own garden. Expensive equipment isn't required to see what's there: just a porch light or a torch. Even a small suburban garden can host well over a hundred moth species. There is an amazing world of moths waiting to be discovered right outside your door.

Roger Stace, Land Manager (Conservation) for Berkshire, BBOWT