TVERC

Thames Valley Environmental Records Centre

Newsletter

2021-2022

August 2022

Welcome to the TVERC newsletter

Welcome to the TVERC Annual Newsletter for 2022. I am pleased to be able to introduce this year's Annual Newsletter. It is so nice to hear about the recording and conservation efforts that are taking place within Berkshire and Oxfordshire. Please keep sharing them with us! In this edition we can only update you on just a few.

At TVERC it has been yet another busy year with some important achievements. We have successfully recruited to fill various vacant positions. Two I would like to mention are Rob Curtis who joins us from Gloucestershire Centre for Environmental Records as the Berkshire Biodiversity Officer running the Local Wildlife Sites project, and also Henrietta Pringle, joining us from People's Trust for Endangered Species as our Biological Recording Co-ordinator. Other important achievements include: reaching 4 million high quality species records in our database; managing and responding to many more data search requests than in previous years still in an accurate and timely fashion; and growing our field surveying projects beyond the wildlife site projects to include working with landowners to help them understand the biodiversity value of their holdings.

The Environment Act gained Royal Assent in November 2021 and we are eagerly waiting the government to complete the secondary legislation this autumn. It will define the requirements for Biodiversity Net Gain mandating that developments deliver an increase in biodiversity to a minimum of 110& of predevelopment levels. Also, it will define the requirements and funding to develop a Nature Recovery Strategy for each county. This is expected to include a consultative process with a strong focus on broad stakeholder engagement identifying and prioritising Nature Recovery outcomes. Both initiatives are intended to be in place by the end of 2023 and will make use of the rich biodiversity data you help us collate, to inform good decision making across the counties.

I hope, like me, you watch out for our regular news updates either on our website or through our social media posts throughout the year. It is a great way to keep in touch with what is going on, not just with TVERC but with efforts throughout our counties.

Steve Wilkes, TVERC Director

Blue Tit ©Martin Gascoigne-Pees

Contents

We are always interested to hear about projects you have been involved and if you would like to contribute an article, news item or event notice for our newsletter please contact us at tverc@oxfordshire.gov.uk

A Botanical Legacy – The Jo Dunn Archive

Ellen Lee, TVERC Data Manager

What does a busy retirement's worth of botanizing look like? Thanks to the Wychwood Flora Group, who in 2020 donated Jo Dunn's archive of botanical treasure to TVERC to look after, we now know the answer to this question; 2 large storage boxes jammed with box files, carboard and plastic folders! Who knew what "gold dust" it might contain.

Sadly, Jo died of Covid-19 just two days after her 100th birthday in May 2020. By all accounts, she had a lifelong interest in nature, plants in particular. It was a passion that failed to be dimed either by a stint in the Timber Corps (a branch of the Women's Land Army in WWII) in the Lake District where conditions were basic and winters cold, or by DDT poisoning in the early 1960s which saw her convalescing for several months in Majorca.

On retirement, she moved to Charlbury in West Oxfordshire and turned her acute observational skills and meticulous recording to the local flora and started filling those two large storage boxes. She was a co-founder of the Cotswolds Rare Plant Group, the forerunner of today's Whycwood Flora Group.

Perhaps her major contribution to Botanical recording in Oxfordshire was her friendship with Rosemary FitzGerald whose family owned the land where Jo found the highly threatened downy woundwort (*Stachys germanica*) growing during a walk in 1983. This discovery led to a programme of monitoring and conservation that continues today and it was also instrumental in getting the area (a green lane) designated as a SSSI. The other product of the friendship was the publication *The Flora of Ditchley—Wild Flores of a an Oxfordshire Estate* (1993). For this, Jo spent 7 years combing the huge Ditchley Estate with a passionate enthusiasm.

Her activities were by no means restricted to the area around Charlbury and she contributed to many other projects and recorded plants with most of Oxfordshire's other botanists who remember her modesty, generosity, eye for detail and determination to make sure that every uncertainty was checked with an authority.

So just what was in those boxes? Although we would have loved to delve into them ourselves, the TVERC data team just didn't have the time and so we asked Nick Barber, a long term TVERC volunteer, member of the Wychwood Flora Group and veteran of other churchyard and road verge record digitization projects to see what he could find.

Jo Dunn at Otmoor © Craig Blackwell

The task was somewhat complicated by the fact that some of Jo's records were already in our database, and some were already lodged with the BSBI and were therefore among the records supplied to TVERC by them. However, undaunted, Nick got stuck in!

Once in possession of the archive he immediately reported to me that he thought it would be a year's worth of work, but somehow he completed the task in four months (100 working hours). Here is how he described the task:

"Inside the files were letters; postcards; journal reprints; handwritten site lists; VC23 record cards; photographs; newspaper articles; hand-drawn location maps and rare plant reports bearing the names of Jo Dunn and many other well-known botanists who had completed fieldwork in Oxfordshire and Berkshire.

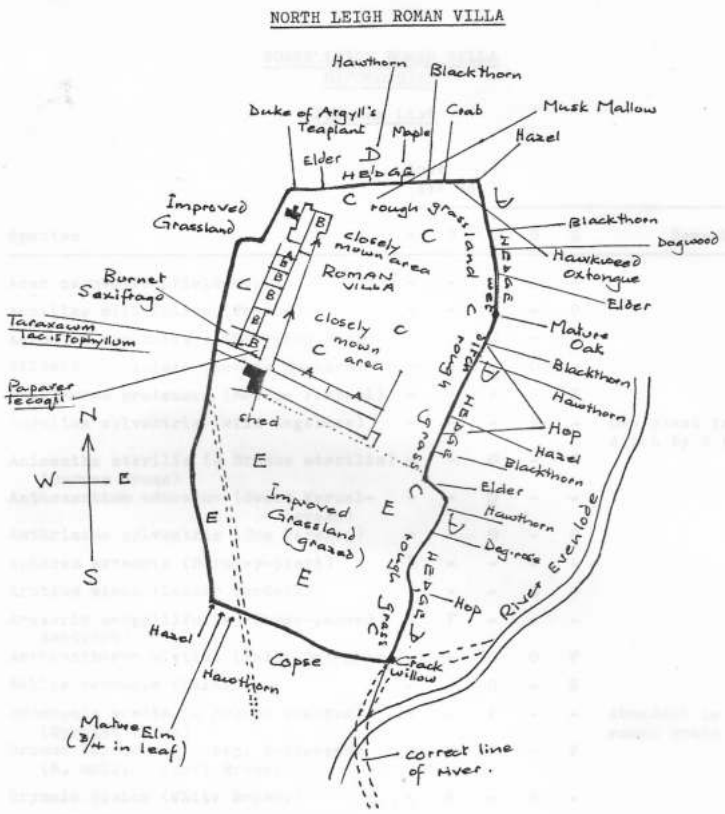
I tackled the job one folder at a time by first visually scanning through and assessing the folder contents, then transferring the records to the standard format data entry sheet. Some folders were crammed with interesting information but few actual records; some were crammed with recording cards with hundreds of records.

Over 15000 individual plant records of 907 individual taxa were entered. Records come from 96 tetrads with from 1 to a maximum of 1564 records per tetrad. The two maximum record counts happened to be for tetrads on my doorstep—SP22W (Sarsden) with 1564 and SP32C (Sarsgrove Wood) with 872. Also, scattered through the documents were 211 records from other plant and animal groups plus 129 historical plant records dating from 1970 to 1946."

So, thanks to this gargantuan effort, on 24th Feb this year I imported a grand total of 15,171 new records from Jo and fellow botanists into the TVERC database. Over 400 of these records were for protected and notable species. In addition to the actual species records, Nick found and scanned many carefully drawn maps of the locations of rare plant populations and of the habitats present at sites she visited. These too are a valuable source of information that we can now access in machine readable form. Many of the maps cover sites that are designated as Local Wildlife Sites and which TVERC monitor on a rolling basis. It's wonderful that we can now see how sites have changed over time.

I leave you then with two images. The first I have Craig Blackwell to thank for providing and granting permission to reproduce. It is of Jo sitting in the SSSI meadow at Otmoor on the occasion of her 90th birthday, enjoying the botanical riches that surround her. The second is one of her detailed site drawings, of the North Leigh Roman Villa.

Finally, I'd like not only to thank Nick Barber for his hard work and persistence, but also Brenda Betteridge from the Wychwood Flora Group who allowed me to use material from the obituary she wrote for Jo which as published by the BSBI. It was fascinating, and gave me (I only met her once) a much more complete picture of the women behind the records.



Zones

A Stonework of ruins
B Gravel areas between walls of ruins
C Grassland (central closely-mown area and rough grass around the perimeter of the site, on N, E and S sides)
D Hedges and hedge bottoms
E Improved grassland (grazed)

Badger–Meles meles; European or Eurasian Badger in Oxfordshire

Debbie White, Oxfordshire Badger Group

Most people unfortunately only see one of Britain's most iconic species lying dead on the site of the road, but some are lucky enough to capture a glimpse of this instantly recognisable animal that has been roaming the countryside for over half a million years.

Whilst a lot of what is known about badgers came out of the great work at Oxfordshire's Wytham Woods, there remains a special enigma around this nocturnal animal that spends a large proportion of its life underground.

Oxfordshire Badger Group (OBG) was set up in January 1989 to promote humane, ethical and tolerant behaviour towards badgers and advocate the conservation and protection of their habitats through public outreach and education. We want everyone to understand, appreciate and celebrate this iconic native animal.

Run and staffed entirely by volunteers, OBG helps Oxfordshire's Badgers in several ways:

Sett surveying

Key Badger Facts:

- Native omnivorous mammal, related to otters, stoats and weasels.
- Small head, stocky body and strong claws.
- Powerfully built with distinctive black, white and grey fur. Erythristic badgers are ginger/brown coloured. Leucistic badgers pale/white, albinos are rare.
- Weight 7– 13 kilos (15-29 lbs) in spring, builds up to 15– 17 kilos (33-37 lbs) in autumn.
- Nocturnal, active from spring through late autumn. Less active in winter but do not hibernate.
- Female badgers exhibit delayed implantation; they mate any time of year and with different males; but always give birth around January/ February.

Signs of badger activity

Badger populations are present in both urban and rural habitats across the county. OBG record officers have been maintaining sett and sighting records for over 30 years. We constantly work to ensure they are up to date through regular sett surveys and checking up on reports from members of the public. We now share information with Thames Environmental Records Centre (TVERC) via a mutual data sharing agreement that respects the sensitivity of our data.

OBG receives reports of badgers involved in road traffic every day. A dedicated team will check each badger, confirm death, and log a grid reference. If the badger is not dead, but injured, the rescue team takes over. Similarly with a dead lactating female, the rescue team will look for orphaned cubs. If the death is deemed suspicious, our crime team will assume responsibility working with Thames Valley Police and The Badger Trust.

OBG includes 7 rescue teams spread throughout Oxfordshire. Working closely with local wildlife hospitals to get injured badgers the help they need as quickly as possible.

In 2018 OBG started a badger vaccination project, vaccinating our first badger in 2019, under license from Natural England. Badgers are vaccinated against Bovine Tuberculosis. Whilst the primary spread of bTB is from cattle to cattle, the disease does spill over into the wildlife population and by vaccinating badgers against the disease we can offer landowners a humane alternative to the badger cull.

One of the main threats to badgers in Oxfordshire is development. Badgers and their setts are protected under *The Protection of Badgers Act 1992*. It is a serious offence to kill, injure or take a badger, or to damage or interfere with a sett unless a licence is obtained from a statutory authority.

Information shared with TVERC can highlight to developers where badger setts are and ensure that setts are properly mitigated for when planning applications are implemented.

We welcome records of setts, live sightings, and dead badgers submitted via the form on the OBG website. Every piece of information concerning badgers is held confidentially by OBG and only shared on a need-to-know basis with a limited number of organisation such as TVERC, Thames Valley Police and the RSPCA.

For more information on joining OBG, to submit a record, or to find out more about volunteering to help these fascinating animals please visit:

https://www.oxonbadgergroup.org.uk


©Caroline Coleman

Reaching 1000 data searches!

Henrietta Pringle, TVERC Biological Recording Coordinator & Filipa McGuinness, TVERC admin officer

Fundamental to the conservation of biodiversity is evidence. Knowing where species and habitats are, and how that's changed over time, helps inform where best to create and manage habitats to restore nature, how to ensure species are protected from the impacts of development, or what steps to take to prevent future declines. With over 4 million species records, extensive data on habitats and information about Local Wildlife and Geological sites, TVERC is a data hub for Oxfordshire and Berkshire, providing this critical information to local decision-makers.

This last year, TVERC has handled over 1000 requests to access our records! This means that the records that you submit—whether sent directly to us, submitted to iRecord or sent via national recording schemes—are being used for this wide range of purposes.

And don't' forget that we always need current and up-to-date information. It is important that recorders and ecologists continue to share their records with TVERC to ensure local decisions about planning and development, sustainable land management, research and conservation are driven by robust data. Current records are often more useful for development planning as they confirm a species is present in the area in recent years, rather then relying on older or historical information.

To request access to TVERC data, please submit a request via our website:

http://www.tverc.org/cms/content/data-searches

Withymead Wardens Species Spotlight

Persistent Pseudoscorpions and Fearless Phoresy

Pete Morton, Withymead Nature Reserve Head Warden

Macro Photography is brilliant, there is a real joy in immersing yourself into the micro landscape of the lawn, hedges or reedbeds and finding yourself surrounded by creatures you never even knew were there. After a few hours hunched or crouched and a stiff back to show for it you may have even got a decent photo or two. One of me recent forays into the miniature world of Withymead I had stumbled upon a few scenarios that baffled me somewhat. One of which I thought was happenstance but after a second occurrence I thought I would investigate.

In the image below is a Red-legged wasp (*Buathra laborator)* one of the larger parasitic wasps that can be seen in the UK. If you look closely at its rear leg you can see a small (2mm) Pseudoscorpion (possibly *Lamprochernes nodosus)* attached at the knee by a claw.

Also known as false scorpions, there are actually 27 known species of pseudoscorpions in the UK, a vastly under studied and under recorded invertebrate, partly due to its size and partly due to the difficulties of identifying the individual characteristics of each.

After watching the pair for a while, the wasp notices its hitchhiker and a somewhat comical scuffle ensued. After a lot of leg shaking and kicking at the pseudoscorpion, the wasp eventually freed its leg and flew away. A few days later I noticed a click beetle (pictured next page) with its own companion which led me to believe this odd behaviour was commonly occurring; so I looked into it. As it happens phoresy is a non-permanent interaction whereby the phoretic individuals attach themselves to a host purely for the purpose of transport. It is a common behaviour among pseudoscorpions and done for a number of reasons. By hitching a ride on a passing invertebrate, they can benefit by reaching new food sources, improving the odds of finding potential mates and assist them in dispersing from where they hatched to reduce the risks of inbreeding in the population. It's a bit like grabbing onto a passing helicopter one handed and hoping it's going past the shops.

Next time you are out and about surveying bees, butterflies, beetles, wasps, flies or anything else for that matter, make sure to keep an eye out for any sneaky pseudoscorpions who may just be hiding in plain sight.

Red-legged wasp © Pete Morton

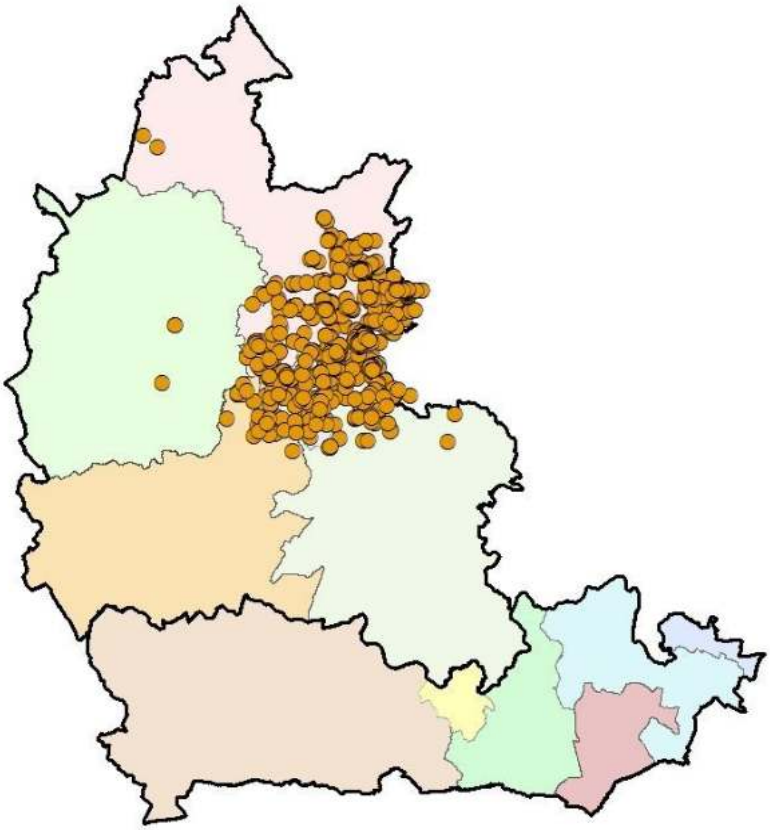
Click beetle © Pete Morton

Brown Hairstreaks Egg Spotting

Ellen Lee, TVERC Data Manager

Last year I was particularly fortunate to see a female brown hairstreak butterfly laying eggs on the larval food plant, blackthorn. Adults are on the wing from late July to early October, but are notoriously elusive. This is partly due to their cryptic colouration. When they are sitting in a blackthorn bush with their wings closed, they look very much like the reddish/brown regrowth and unless they move are very difficult to see. It's also partly to do with the fact that they spend much of their time flying around the top of prominent ash trees where they gather to mate and to feed on the honey-dew produced by aphids. The best chance to see them close-up is when they come down to feed on brambles or to lay eggs. The female I saw was totally absorbed in finding just the right place on a blackthorn stem to lay her eggs and I was able to watch her for several minutes as she slowly spiralled her way along a stem. I saw that she had laid 2 eggs previously, tiny white pinpricks, in the crook of thorns. Mainly females lay single eggs, but when I was carrying out an egg count at Milham Ford Nature Park in urban north-east Oxford, I came across this line of three eggs.

Despite blackthorn being pretty ubiquitous across the two counties, the distribution of brown hairstreaks is very much concentrated on Oxford and north-eastwards towards the Buckinghamshire boundary. This can be seen clearly in the map (right) which shows all the brown hairstreak records from 2000 onwards (all stages) held by TVERC.



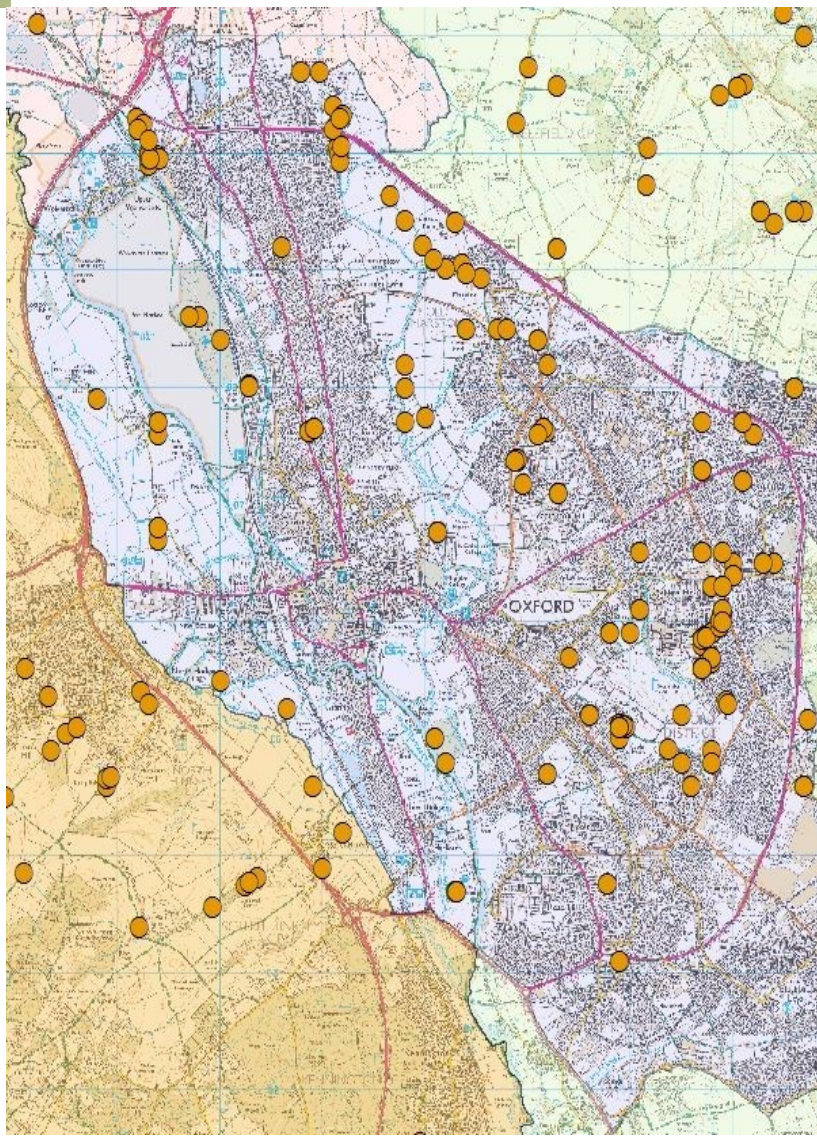
I'm not sure why the distribution looks like this. However, the eggs have to overwinter on their blackthorn bush and hatch about mid-April. The caterpillars stay on the blackthorn feeding and growing until pupating in the early to mid-summer. So they are highly dependent on blackthorn management.

Hedge flailing in the autumn/winter is very bad news for the eggs that are very often laid on the outside of a south-facing bush. Another issue is that adults stay within their colony and seldom wander more than a few hundred metres. Once a colony is lost, it's not likely to be restarted by colonisation from outside. The only thing the brown hairstreak is fussy about when it comes to blackthorn is that eggs are laid on young bushes or new regrowth, so very old, unmanaged bushes are not much used to them (luckily black hairstreak like them!).

My row of three eggs was found in an urban nature park in Oxford. In recent years the green spaces in Oxford have become important for the painfully slow range expansion of this species. In an urban environment, hedgerows are less likely to be flailed at the wrong time of year and many of the places they are found are managed nature reserves and green spaces. Below is a larger scale map of Oxford showing all TVERC's post 2000 records.

Please do get in touch if you spot any brown hairstreak eggs this winter when you are out walking. Once you've got your eye in they are not too difficult to spot. If you can include a photo that would be wonderful.

Find out more about searching for eggs of the Brown Hairstreak with Upper Thames Butterfly Conservation: https://www.upperthames-butterflies.org.uk/hairstreak_egg_hunts



Bramblings & Chaffinch ©Martin Gascoigne-Pees

100 Years of Bird Recording

Oxford Ornithological Society

In 1920 a young graduate by the name of Bernard Tucker came up to Oxford where he joined the Ashmolean Natural History Society (ANHS) and met the Reverend Francis Jourdain. Together with a small group of other ANHS members they decided that Ornithology deserved to have a separate society and as a result on 10th February 1921 the Oxford Ornithological Society was founded.

The first Annual Report however, covered the counties of Berkshire, Buckinghamshire and Oxfordshire from 1915 to 1922. This was due to records being submitted by other Ornithologists, these were considered too interesting to ignore. The three counties continued to be covered annually until 1972 when the county boundaries were realigned.

It should be stated that neither Tucker nor Jourdain were professional Ornithologists. Jourdain was a clergyman, Rector of Appleford, he was interested in the feeding habits and breeding of birds but due to his interest in collecting and studying eggs, following his death, his name became commemorated by the Jourdain Society, whilst his other interest in collecting detailed notes about feeding behaviour and breeding biology was largely forgotten.

Tucker was probably the first 'Citizen Scientist', although he studied biology, his professional career centred on Botany and later Crustaceans. However, his methodological recording and writing soon led to him encouraging members of the Oxford Ornithological Society to conduct systematic recording of certain species each year, a forerunner of the atlas work that is so important in monitoring bird populations today.

Many notable Ornithologists and bird enthusiasts became members of the OOS during their studies at Oxford. Names such as HF Witherby; Viscount Grey of Falloden; WB Alexander; Max Nicholson; David Lack; Sir Hugh Elliot t; and Lord John Krebs spring to mind. The EGI (Edward Grey Institute of Field Ornithology) was founded through the efforts of members of the society as was the BTO (British Trust for Ornithology).

Tucker with Jourdain were responsible for enabling many professional Ornithologists to gain their qualifications and experience at Oxford University, whilst also enabling those who pursued careers in other fields and professions to become 'Citizen Scientists' enjoying birds and making useful contributions to our knowledge of birds and their lives.

The society continues today and is thriving having grown from the original 7 members to over 300 at present. It caters for all those who are interested in birds and you don't have to be an expert. Each year we have a program of online 'Zoom' presentations, indoor meetings, and outdoor field meetings, we send out regular Bulletins and an Annual Report as well as offering the opportunity to do survey work for those who enjoy it; we cater for everyone. Contact the Membership Secretary on membership@oos.org.uk or have a look at out website on www.oos.org.uk. ,

Oxford Ornithological Society
OOS
100 years • 1921 - 2021

Oxfordshire Treescapes: Reporting Service

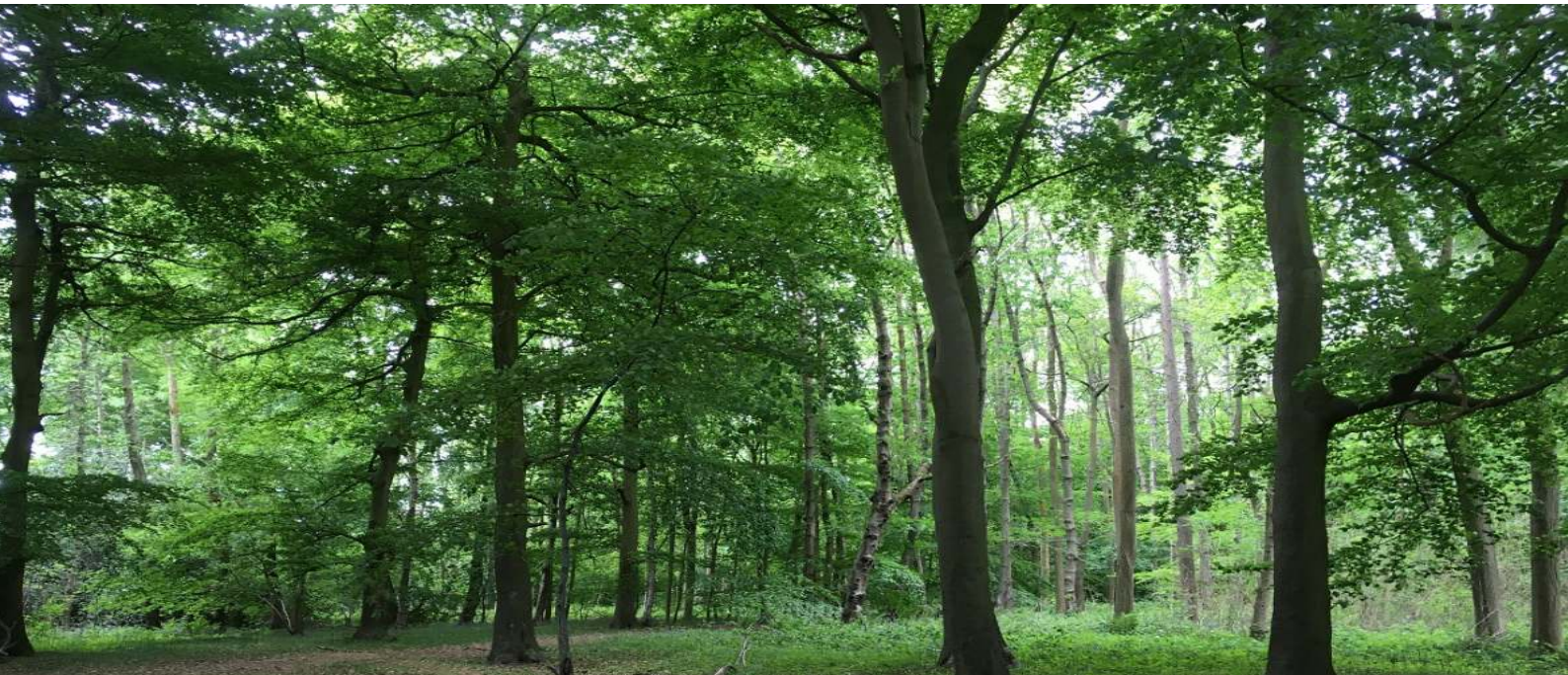
Amy Ross, TVERC Data Assistant

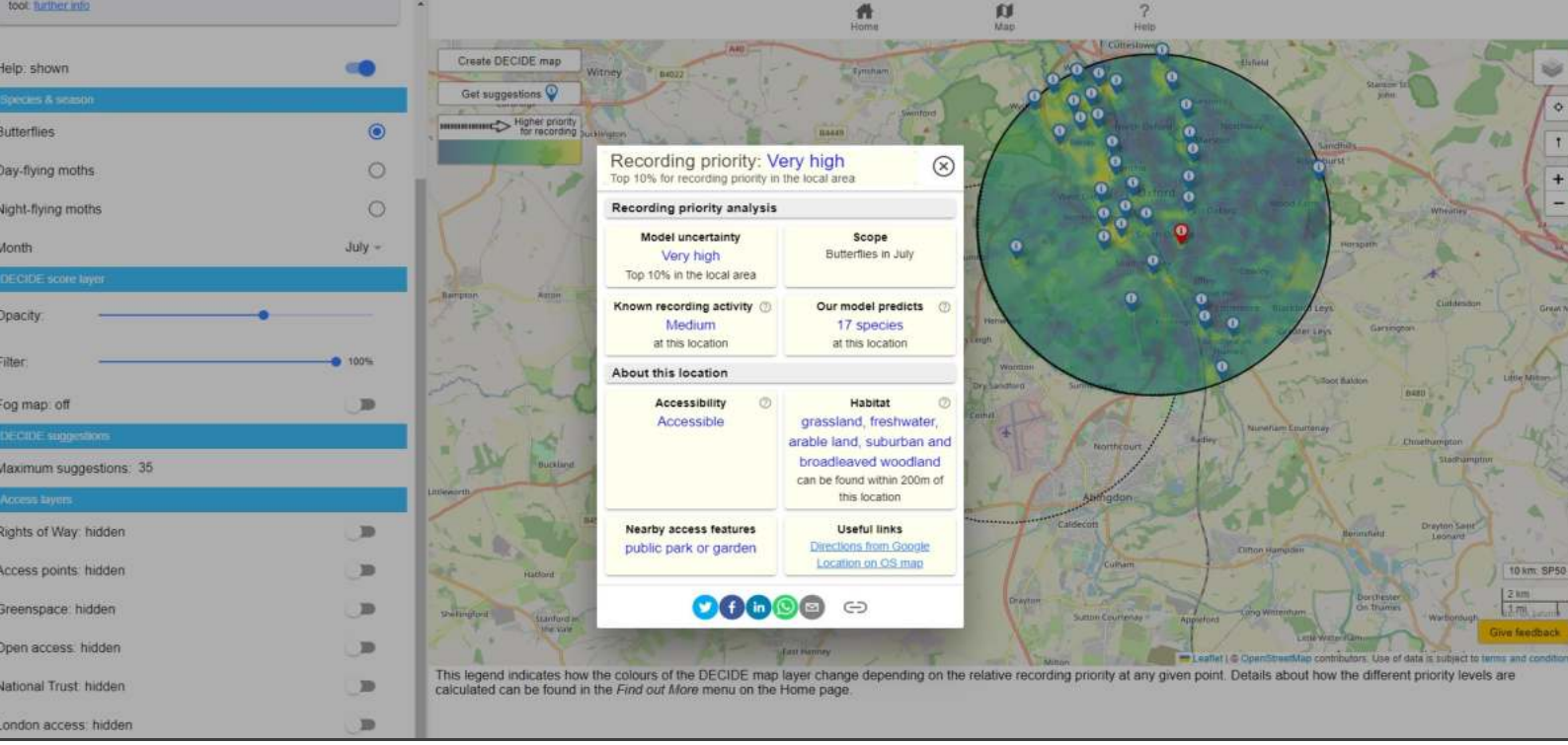
If you've read our previous blog posts, you'll know that TVERC has been working with Jamie Hartzell and Victoria McNamara from Grow Green Carbon to develop a method of selecting parcels of land that have potential for treescapes without compromising their current land-use or biodiversity. Treescapes refers to trees in their many forms and densities. Areas are assessed for their potential to hold woodlands, hedgerows, agroforestry systems and community orchards. Grasslands of high biodiversity importance have also been included.

Since our last update in November 2020, staff at TVERC have put in many hours of technical work for this project. Robbie Still our previous Interim Data Manager analysed and developed the data from TVERC's geodatabase to create an initial dataset. Consulting with Jamie and Victoria, he developed a complex code that analyses which areas are suitable for which treescapes and how much benefit this may provide to an area based on specific targets and parameters.

The second phase of this project undertaken by TVERC has been to turn this data into something useful to advise people on the optimum tree-planting strategy for their land. Following consultations with landowners, Grow Green Carbon commissioned TVERC to develop a reporting service. The reports give information on current land use, including areas populated by treescapes to show an overview of the current state of the land. It then combined this information with previous analytical work done to provide detailed maps on where treescapes could be planted. The data makes sure to exclude areas that treescapes would be unsuitable, such as areas of current wildlife value or archaeological importance. Finally, it provides maps and information on how these treescapes would provide specific benefits.

Currently there are two versions of the treescape reports available. A Parish report, aimed at parish councils and community groups, and a Landowner report, for individuals or farming clusters. These reports are now available through Oxfordshire Treescapes Project and they also put together a helpful Treescapes Guide to help people understand the information contained in the reports. The placements of treescapes is not an exact science. However, the reports are designed to present the range of opportunities available, from which a more detailed targeted land management plan can be created. The hope is that these will inform and support landowners, land managers, and parish councils to plant more trees but in a way that enhances and is sympathetic to the current landscape and area.





The DECIDE Project

Recording Nature Where It Matters

Dr Michael Pocock, Ecologist at UK Centre for Ecology and Hydrology & Henrietta Pringle, TVERC Biological Recording Co-ordinator

Picture the scene: you've got a few hours to go out looking for butterflies, but want to know where to go, where your efforts will be most useful to those using the data you collect. Of course all records are useful, building a picture of changing species communities, but you've got limited opportunity to go out and while you could go to the local hotspot that's popular with butterflies and recorders alike, you want to try somewhere new, but where?

That's where the DECIDE tool from UKCEH and partners* can help. The online tool indicates high priority areas for recording, to help you identify where records are most needed to ultimately improve the quantity and quality of biodiversity data available to decision-makers. Crucially, the DECIDE tool not only looks at gaps in recording coverage, but also increased recording would improve predictions from species distribution models. Because we can't survey everywhere, models are used to predict where species are likely to occur and how their distributions might change under different environmental scenarios and management. The models need real data to make predictions in areas where data is absent, but these predictions come with uncertainty. This uncertainty can be reduced with more records from the right places.

**Partners on the DECIDE project are UKCEH, University of York, Open University, University of Warwick, JNCC, Butterfly Conservation, North & East Yorkshire Environmental Records Centre (NEYERC) and Greenspace Information for Greater London (GiGL).*

You can use the tool to identify priority areas for butterfly and moth recording (both day and night-flying). The map highlights high priority areas in yellow and can give suggestions of where to go. Clicking on a suggestion gives you further information about why it's a recording priority and how many species the model predicts are there. It also gives you information about the type of habitat at the site and access to the site: proximity to public rights of way and open access information helping you to plan your visit.

The team behind DECIDE have also launch MyDECIDE, a project to explore how to provide automated feedback to recorders. You can sign up to their newsletter and, if you submit records to iRecord, iNaturalist or iSpot you'll receive personalised information about your records. Even if you don't record online or haven't recently, you'll receive updates about records in your area. By providing your own feedback about the emails you receive, you can help shape future communications.

You can explore the online DECIDE Tool here and give feedback on the tool here to inform development of future versions. You can sign up to MyDECIDE here to receive personalised updates about recording in your area.

The DECIDE Tool

Local Wildlife Sites

We carried out a total of 58 Local Wildlife Sites (LWS) surveys in 2021-22. Thanks to the help of our volunteers, specialist species group surveys were completed on several sites for birds, invertebrates and rare plants. Survey reports were produced and taken to the site selection panel.

Berkshire Surveys

Caitlin Coombs, TVERC Berkshire Biodiversity Officer

In 2021, a grand total of 20 Local Wildlife Sites (LWS) across Berkshire were successfully surveyed throughout the season. Berkshire Biodiversity Officer, Caitlin Coombs undertook a Phase One Habitat survey on each site, whilst a skilled team of 22 volunteer surveyors carried out systematic surveys for a range of specialist species groups including dragonflies, butterflies, birds, mammals, fungi, bryophytes and invertebrates.

Some highlights of the season were:

- Craven Hill LWS in West Berkshire, which supports lowland fen and lowland dry acid grassland – these habitats are not so common in this area of the country. The site had an array of wildflowers in rich areas including lesser spearwort, cuckooflower, creeping forget-me-not, greater bird's-foot-trefoil, marsh pennywort, ragged robin, square-stalked St John's-wort and heath-spotted orchid.

- Holies Down was probably the most beautiful in terms of chalk grassland habitats. This National Trust-owned site near Streatley supports 11.8ha of chalk grassland in a dry valley, with thousands of common spotted orchids spotted. Other species include pyramidal orchid, common spotted-orchid, salad burnet, wild basil, field madder, horseshoe vetch, fairy flax, dwarf thistle, common eyebright, carline thistle and clustered bellflower. And one of our volunteers, Linda Fenwick was lucky enough to stumble across a Hornet Robberfly (*Asilus craboniformis),* which is a species of predatory insect in the family Asilidae. Reaching more than 25mm in body length, it is one of the largest flies in the United Kingdom and feeds on grasshoppers, dung beetles and other flies.

- Lousehill Copse, a site in the suburban Tilehurst, Reading supports ancient woodland including areas of coppice, small streams and a pond. There were beautiful swathes of opposite-leaved golden saxifrage and other wet woodland flora throughout the site.


Craven Hill


Hornet Robberfly at Holies Down © Linda Fenwick


Lousehill Copse


Craven Hill


Holies Down


Lousehill Copse

Oxfordshire Surveys

Julie Kerans, TVERC Oxfordshire Biodiversity Officer

This year TVERC carried out surveys of 38 existing and proposed Local Wildlife Sites in Oxfordshire. These included a wide range of habitats such as ancient woodland, parkland, lowland calcareous grassland, lowland meadow and wetland habitats including lowland fen, tufa springs & floodplain grazing marsh. Thanks to the help of our volunteers, specialist species group and habitat surveys were completed on several sites for invertebrates, veteran trees and rare plants.

Wytham Park is a 77ha parkland in a valley adjacent to Wytham Woods Site of Special Scientific Interest (SSSI). It includes many veteran oak trees with features such as deadwood, hollowing of the trunk, rot holes, sap runs, loose bark, insect boring, dieback and loss of the crown. There are also several standing dead trees and some large fallen deadwood providing habitat for deadwood invertebrates and fungi.

Buckland Marsh is a series of wet meadows adjacent to the River Thames. It has a network of ditches and includes areas of lowland meadow and lowland fen. The site is important for birds especially Curlew.

The meadows have a variety of grasses including Yorkshire fog, quaking grass, rough meadow-grass, red fescue, tall fescue, sweet vernal-grass, crested dog's tail, meadow brome, tufted hair -grass and meadow foxtail. Sedges dominate some parts including lesser and greater pond sedge with other species including hairy sedge, glaucous sedge and brown sedge. Richer areas of grassland include abundant meadowsweet and meadow vetchling with ragged robin, oxeye daisy, black knapweed, lady's bedstraw, common bird's-foot trefoil, devil's-bit scabious and pepper saxifrage.

Wetter parts include reed sweet-grass, marsh foxtail, hard rush, common spike-rush, tubular water-dropwort, marsh marigold and common marsh bedstraw. The uncommon round-fruited rush was also recorded.

Chalk grassland near Wolvercote lies on a south-facing slope of the southern Chilterns and is a particularly good example of chalk grassland, supporting many characteristic species. These include dwarf thistle, salad burnet, carline thistle, wild marjoram, mouse-ear hawkweed, wild thyme, eyebright, pyramidal orchid, squinancywort, common rockrose, pale toadflax, fairy flax, upright brome, quaking grass, downy oat-grass, common milkwort, field scabious, cowslip, common century and hairy violet.

Of particular note were dodder and dyer's greenweed. Dodder is a parasitic annual plant which usually feeds off gorse and heather, but here is using dyer's greenweed.




Wytham Park



Buckland Marsh

Chalk Grassland near Woodcote

Dinton Pastures Bioblitz June 2022

Henrietta Pringle, TVERC Biological Recording Co-ordinator

In June, we attended the British Entomological and Natural History Society's (BENHS) Bioblitz at Dinton Pastures, near Wokingham. Part of BENHS's 150th anniversary celebrations, the two-day event saw experts and novices come together to record as many species as possible on site. So far, the count stands at over 360 species, with more still to be processed!

Each day started with a look at the catches from the previous night's moth trapping, before groups headed out to see what they could find with local experts. As well as finding out what species were on site, the event also aimed to inspire people of all ages to get out and about in nature and encourage wildlife recording. Steve Lings at BENHS produced some fantastic activity booklets, suggesting different wildlife for children to look out for to earn stickers and badges. Together with other local groups like Friends of Ruscombe Wood, Butterfly Conservation—Upper Thames branch, BBOWT volunteers and Reading Naturalists, we were stationed at the Bioblitz base camp, telling visitors about what we do, and collecting those all-important records. A particular highlight was a complete skin from a grass snake, found by two budding wildlife recorders who very kindly loaned it to our exhibit for the rest of the weekend.

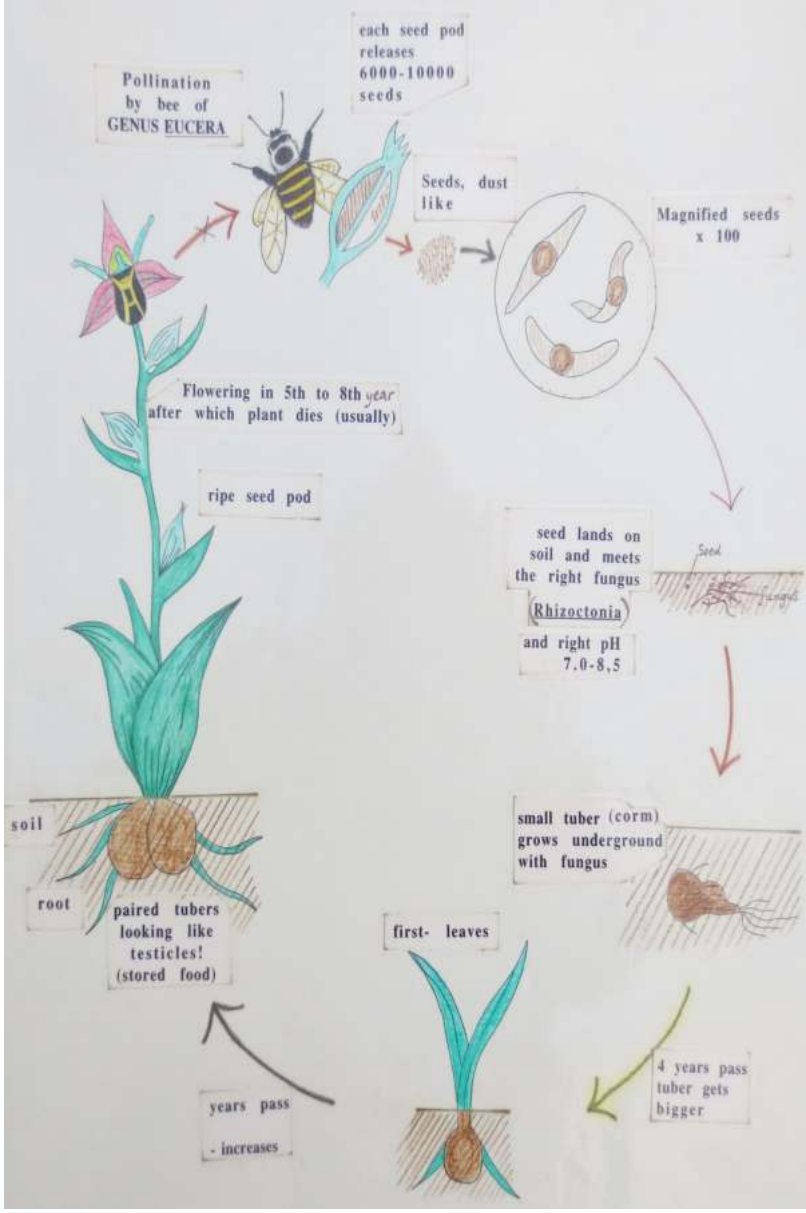
We thoroughly enjoyed taking part in the event, meeting local recorders and spreading the work about wildlife recording and are grateful to BENHS for involving us. With over 1000 visitors over the weekend, we'd also like to congratulate BENHS for inspiring so many and hope you continue to do so for another 150 years!

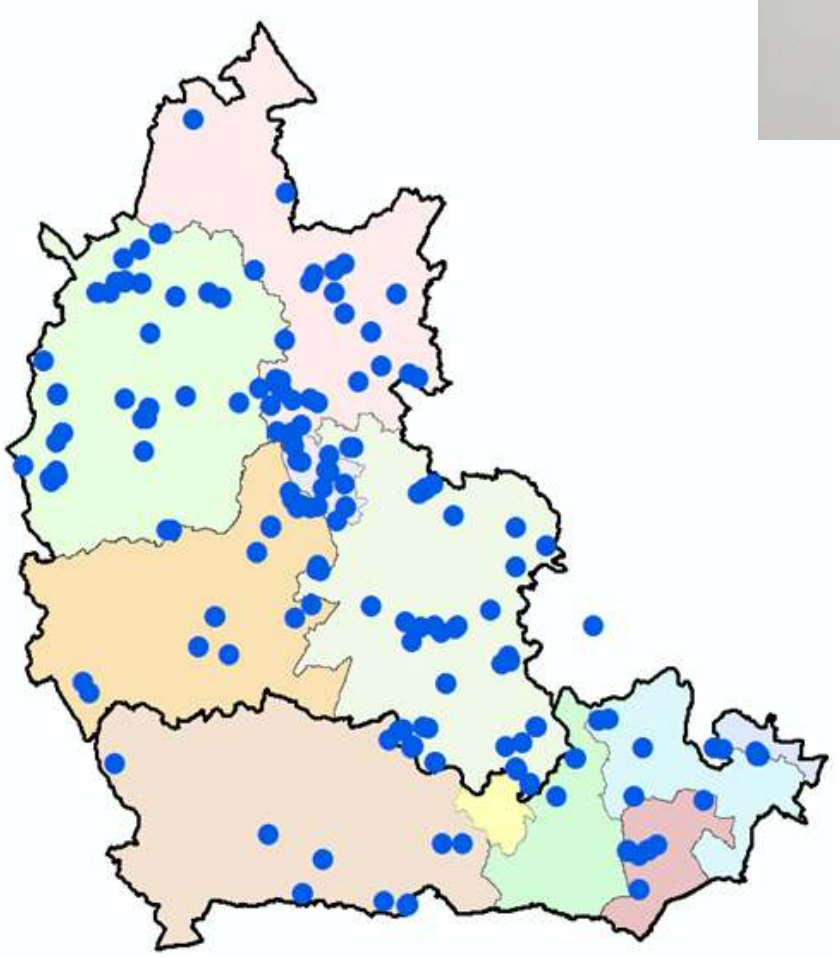
Bee Orchid Lifecyle

Ellen Lee, TVERC Data Manager

Have you ever walked, cycled, or driven down a road one day and noticed some bee orchids growing on the verge, only to realise a few days later that they have been destroyed because the verge has been mowed? Well I have, and it nudged me into finding out more. Does mowing kill a bee orchid? Can it regenerate and grow again, perhaps in the following year?

Bee orchids are one of the more common orchids in the TVERC area as can be seen from the distribution map of records for the last 10 years. They like calcareous soils and disturbed ground which makes them an enthusiastic coloniser of road verges and brown field sites. For most people living in towns, they and pyramidal orchids are the most likely orchids you will encounter.





They are both beautiful and also iconic as a prime example of a plant evolving to entice insects to pollinate it through mimicry. They have evolved to induce male bees to try to mate with them and hence to pick up pollen which is handily packaged in a so called-pollinia. It has been shown too that bee orchids not only mimic bees in a visual sense, but also in a olfactory one by emitting chemicals called allomones that mimic the smell of a female bee. It's odd then that the bee orchid has gone to all this trouble because UK bee orchids are almost 100% self-fertile and don't actually need bees at all! Their self-fertilised seeds, which are small and light and blow on the wind, are perfectly viable. Like many orchids, the bee orchid has a symbiotic relationship with a fungus and the seeds will only germinate if it is present in the soil.


©Caitlin Coombs

So, back to my original question. I asked local ecologist Judy Webb to explain the lifecycle of the bee orchid, and she did so by sending me this diagram (see page above) drawn by one of her pupils at Milham Ford School in Oxford when she taught biology there. As you can see, assuming conditions are right, it takes 4 to 5 years for a seed to grow into a flowering plant. The bad news is that if that plant is mown before setting seed, it will not be able to re-grow. It takes all its store of energy to flower once. If it is mown before it puts up its flower spike, there is some evidence that it can continue growing and flower successfully.

Mowing verges later, well into July, with removal of cuttings to reduce nutrients available to plants that otherwise might outcompete it is the recommended management.

Having discovered all of this, I'm going to be trying to find who it was mowed my local bee orchids and try to explain to them that inappropriate mowing is one of the biggest threats they face.


©Brian Walker

Student Projects:

Transforming Data into Knowledge

Filipa McGuinness, TVERC Admin Officer

TVERC believes that working closely with the fantastic science and environmental organisations in Berkshire and Oxfordshire is essential in order to maximise the impact we can collectively make on improving our environment.

TVERC has been a Micro-Internship partner of The University of Oxford since 2016 and we also have links with Imperial College London (Silwood Park) and Reading University. TVERC has consistently hosted dedicated students every year taking on specific projects and were delighted to be recognised as a University of Oxford Gold Standard Micro-Internship host las year. Through the micro-internship, students gain valuable experience that will benefit their career progress, and, at the same time, helps support TVERC's ongoing work in data management and analysis.

Over the last year, TVERC hosted 8 students, who have contributed to a myriad of different data analysis projects including characterising biodiversity value of urban areas, accessible greenspace analysis and species gap analysis including butterflies, dragonflies and moths. More recently, students have also been able to share their project findings with the recording community at our conferences, highlighting one of the many uses of environmental data in supporting research.

We also share the results of these projects to our local groups and connections to inform and influence future conservation policy decisions in the Berkshire and Oxfordshire area by providing a deeper understanding of declining or at risk species.

We hope to continue to offer these micro-internships and other university projects and to expand these opportunities to students at other universities across the two counties and beyond. These opportunities for students to gain experience in the sector are incredibly important for them to build their career and learn about the options that exist within the wildlife and conservation sector.

Find out more about our student projects or catch up on previous conference talks .

> "Having the opportunity to work in a professional environment with the range of expertise at TVERC has benefited me in many ways. From improving my biodiversity and geodiversity knowledge to increasing my confidence with GIS software"
>
> James, TVERC student

Recorders' Grant Scheme

To support projects that improve the quality, quantity and or coverage of voluntary species recording in Berkshire and Oxfordshire, we provide an annual Recorders' Grant Scheme since 2016. The fund is administered by the Trust for Oxfordshire's Environment (TOE).

The fund has attracted many applications from a range of projects, some targeting specific species and others seeking to record a range of species in a specific area. Some projects are specifically seeking to find ways to engage more volunteers in species surveying and monitoring; others are increasing the ways they engage with local communities be it by bringing people into direct contact with wildlife at events or by publicising their activities on social media.

Over 2021/22 we funded:
Project contribution for the **River Thames Conservation Trust Bird Atlas 2016-2020.**

Survey equipment for **West Oxfordshire Farmland Bird Project** including mist nets and bird rings.

Survey equipment, identification guides and training costs for the Wychwood Forest Trust **"Come Fly with Me: Improving butterfly records in the historic Wychwood Forest Area"**

Project contribution towards printing costs of **Beetles of Oxfordshire.**

This year, TOE is asking stakeholders to help improve their work by answering some questions. Your answers will help TOE improve our grant-making and ensure that more community groups know about this funding. Please respond to the 5-minute survey by following this link.

Full details, guidance notes and the application form can be downloaded from TOE's website:
www.trustforoxfordshire.org.uk/main-fund

©Martin Gasgoine-Pees

Sightings Highlights

Thank you to all of you, we now hold over 4 million species records to our database, It is difficult to choose a particular highlight as there are so many and interesting finds! These are just some that stand out:

House Centipede

House centipedes aren't native to the UK, they come from Mediterranean countries, but are thought to arrive on produce. They seem to be able to survive outside for most of the year eating smaller insects. Nobody really knows how big the UK population is as they are seldom reported, indeed this is the first one that TVERC has heard about. It was found in a house in Chinnor in September.

Nightjar

Last year we received a Nightjar record, maybe not where you would expect to see it—this nightjar was roosting in someone's pot of tomatoes on their patio in Hungerford!

Green-Fanged Tube Web Spider

After receiving a sighting (only our 3rd record in Oxfordshire) of the impressive Green-Fanged Tube Web Spider from botanist Brian Laney in central Oxford in a south-facing hole in one of the college walls, some of TVERC staff visited only to find multiple cylindrical web along the college wall. The exit to the tube is covered by a circular section of web with extending "trip wires" and looks a bit like a bicycle wheel.

Pool Frog Alert

We've recently had a report of a possible frog sighting on a footpath in Soutcote near Reading. Unfortunately the reporter of this record was jogging at the time and didn't have his phone handy. Pool frogs were declared extinct in the UK in 1995, but have since been reintroduced into a couple of sites in Norfolk. TVERC has only a single verified record of a pool frog from a pond in the vicinity of Greenham.

Rare Fungi

We've had two records of rare fungi over the last year. First up was a record of sandy siltball (*Battarrae phalloides*) spotted in Tilehurst. The second fungus is a species that grows on old apple trees, orchard toothcrust (*Sarcodontia crocea*). This was found at Aston's Eyot in Oxford. As it's name suggests, it forms a yellowy/orange crust on old fruit trees and smells of pineapple when fresh.

House Centipede ©P Masters

Nightjar©A Blake

Green-fanged Tube Web Spider web ©Ellen Lee

Pool Frog © Dave Rousseau CC BY

About TVERC

Enabling data-driven decisions to better enhance and protect our natural environment.

Thames Valley Environmental Records Centre (TVERC) is a 'not for profit' organisation covering Berkshire and Oxfordshire. We are run by a partnership and are one of a national network of local records centres. We are a member of the Association of Local Records Centres (ALERC) and the National Biodiversity Network (NBN).
Our funding partners include all the local authorities in Oxfordshire & Berkshire plus the Environment Agency.
We also work closely with the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust.

WHAT WE DO

We provide our funding partners with annually updated species and sites information as GIS tables, and undertake surveys of local wildlife sites. We also carry out data analysis for the monitoring of local authority Local Plans. We provide information to parish councils, local people, conservation bodies, land-owners, students and commercial organisations such as ecological consultants and utilities companies via data searches, data licensing and data exchanges. We provide other services such as ecological surveys, data analysis & presentation and training

Get involved!

Please continue (or begin) to submit your records to TVERC. The more data we have, the better we are able to help protect our local wildlife. Thank you!

https://www.tverc.org/cms/content/share-your-records

Our Records

We hold over 4 million records of flora and fauna in Berkshire and Oxfordshire plus information about Local Wildlife Sites and Geological Sites, NERC Act S41 Habitats of Principal Importance and Ecological Networks. We collect this data from the general public, skilled volunteer/amateur recorders, professionals working for wildlife charities and for government agencies and ecological consultants.

WHAT THE INFORMATION IS USED FOR

- By planning authorities and developers to make informed decision on the design and location of sustainable development
- To help farmers, land-owners and conservation organisations manage land in the best way to enhance biodiversity
- By nature partnerships to direct wildlife conservation work
- By teachers, students and scientists for education and scientific research.

Thames Valley Environmental Records Centre
Speedwell House, Speedwell Street
Oxford, OX1 1NE

www.tverc.org

tverc@oxfordshire.gov.uk

Facebook.com/tverc1

Twitter.com/tverc1

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LinkedIn/tverc1