British Naturalist

The Newsletter of the British Naturalists' Association

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In This Issue

Cover pictures:
Front: Hoverfly *Volucella pellucens.* Photo: S. Jones
Back: Melanistic *Adder Vipera berus.* Photo: R. Turner

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Editorial

I am writing this after returning from a holiday in Wales, Ceredigion area. It's a place we used to visit all the time when we lived in Bristol but after moving to South Yorkshire we tend to holiday further north now. In those days (early 80s) the Red Kite was at its start of their recovery programme, and to see one was usually a glimpse as a 'dot in the sky'. However, this has been one of the greatest success stories as Red Kites are seen almost anywhere now. Getting back to our holiday, we visited Nant Y Arian to see the Red Kites feeding, which is quite a spectacle for anyone not used to seeing these birds, with hundreds coming in at feeding time.

For those of you who have never seen the Red Kites at a feeding station, this photo gives you an idea of what to expect.

VOLUNTEER OPPORTUNITIES WITHIN THE BNA.

The BNA is seeking 2 volunteers with enthusiasm for the organisation and a small amount of monthly time commitment, operating from home.

HON. MEMBERSHIP SECRETARY – approximately 10 hours per month.
The primary role of the Membership Secretary is to collect subscriptions and manage the membership database.
This requires an understanding of the use of spreadsheets and good administrative ability.

HON. TREASURER – approximately 5 hours per month.
The primary role of the BNA's Honorary Treasurer is to oversee the financial administration of the charity and to keep the board of trustees fully appraised of the charity's financial position.

Both roles are to be carried out in line with best practice for the sector, ensuring that the charity remains compliant with its governing document, any legal requirements and any external regulatory requirements.
And both roles require attendance at regular online Council Meetings.

We are an active registered charity operating throughout the UK and committed to promoting the study of all aspects of natural history.

If you are interested, or for further information, please contact
Steven Rutherford, Honorary Chairman
at - honchairman.bnanaturalists@gmail.com

OBSERVATIONS FROM THE SOUTH

Endymion Beer MBNA
Photos (indicated in bold) E. Beer

On the 14th April, I accompanied the Taw and Exmoor Branch of the BNA, on a field trip, near Hartland I took some close-up photographs of a beautiful **Holly Blue** butterfly (*Celastrina argiolus*) resting on a leaf of an old deciduous hedge. Here both foodplants, Holly (*Ilex aquifolium*) and Ivy (*Hedera helix*) grew abundantly. It rested for several minutes allowing members of the group excellent photographic opportunities.

I was amazed to find clusters of 7-spot ladybirds (*Coccinella septempunctata*) on coastal vegetation in good numbers, some on every plant, just like the good old days. That was heart-warming. Among our many observations, my favourite finds of the day were of a female **Oil Beetle** (*Meloe proscarabaeus*) digging – she wanted to lay her eggs. Her legs shone an iridescent blue and I had to look closely to notice the straight edge to the bottom of the thorax. This identified her as a black oil beetle. A close relative of the violet oil beetle, which can be identified by a small tooth shape protruding at the bottom of its thorax. Apart from that, the two species are very similar. The rugged oil beetle is not shiny, but dull and to me, looks more like it is attired in armour ready for battle. There was a lovely Tawny Mining Bee (*Andrena fulva*), carder bees (*Bombus pascuorum*) and an Oak Eggar moth caterpillar (*Lasiocampa quercus*) all found within a relatively small range. The views were spectacular and we were lucky to have such a fine day.

2nd of March, travelling up to London to see Abba Voyage, a belated 50th birthday treat, with my travelling companion Cameron, the coach afforded excellent views. I could see numerous large balls of Mistletoe (*Viscum album*) amongst the trees, almost the moment we seemed to cross the Somerset boarder.

The Scarlet Willow (*Salix alba britzensis*) was stunning, casting scarlet reflections over the lakes and rivers. There were plenty of Daffodils (*Narcissus pseudonarcissus*) all about in flower on the riverbanks. A Muntjac Deer (*Muntiacus reevesi*) was spotted wandering about in a rough field full of rushes and reeds, and actually, a coach for a hide is pretty good for a quick snapshot of nature as one travels by. Early in the morning we have often spotted a Barn Owl (*Tyto alba*) swoop across the road, but not today.

The 14th of March was blossom time here in Devon. The Blackthorn blossom (*Prunus spinosa*) white and profuse, quite striking against the golden Gorse flowers (*Ulex europaeus*). With the lime green – yellow flowers of Alexanders (*Smyrnium olusatrum*) the Atlantic Highway was a picture. I wondered how many other people thought so too, or even noticed.

On the 9th April, I decided to touch base with nature and get some fresh air. I headed toward Fremington Quay passing Fremington Pill enroute. The tide was in and the water was very high. Clearly it had covered the pathway at some point because strandline debris lay all about. I enjoyed the wildness of the water and sat to watch the waves crashing against the quayside. It was dramatic yet therapeutic. Walking back the way I had come, I noticed 7 Little Egrets (*Egretta garzetta*) circling over a group of trees on the opposite side of the Pill. Gradually one by one, they would drop to settle in the tree tops. I watched each one hunker down in true heron fashion for the night, as the sky faded to sunset. It was peaceful.

The 5th of May was one of the rare chances I had to sit quietly in the sunshine in my garden. We have had so much rain. The sunshine brought out Orange-tip (*Anthocharis cardamines*), Red Admiral (*Vanessa atalanta*) and Brimstone (*Gonepteryx rhamni*) butterflies and I felt confident that I had nectaring plants

and all of their food plants here, or would have soon. I participate in 'No Mow May', and I allow all species of wildflower in my lawn, and it is interesting to identify the leaves of those not yet in flower. I know I shall have Selfheal (*Prunella vulgaris*), Rounded Leaved and Cut Leaved Cranesbill, (*Geranium rotundifolium* and *Geranium dissectum)* Meadow and Creeping Buttercup, (*Ranunculus acris* and *Ranunculus repens*) Ladies Smock, (*Cardamine pratensis*) herb Robert, (*Geranium robertianum*) Red Campion (*Silene dioica*) and Herb Bennett or Wood Avens (*Geum urbanum*). Some of the species mentioned are flowering now. I listened to the chattering of House Sparrow (*Passer domesticus*), the rasping speak of Starlings (*Sturnus vulgaris*), Wood Pigeons (*Columba palumbus*), Long Tailed Tits (*Aegithalos caudatus*) and bees. Bliss – my little patch of heaven.

On Sunday 12th May, my friend Glen and I went to the allotment. He showed me the frogs (*Rana temporaria)* in his pond. He fed the fish and they all came up to feed. There were ladybirds everywhere with part of the ruling for allotment keepers being to sow a percentage of wildflowers. It is a beautiful place. Blackbirds (*Turdus merula*) were bathing 3 at time, Robins (*Erithacus rubecula)* were at the ready to take advantage of invertebrates that newly over-turned soil offered. It is fair to say that this is one of Glen's favourite places to be and I can appreciate why. One of the ponds was full of Palmate Newts (*Lissotriton helveticus*) - you don't have to sit and wait too long before one comes up for air! There were Rose Chafers (*Cetonia aurata*) and other insects. The whole place is well managed in a sustainable manner for growing home produce, as well as being a benefit to wildlife.

15th May for a few days now I have sat on a bench, at lunchtime in Victoria Park to watch the birds. Surprisingly, I observed the pigeons keeping the gulls at bay. When the pigeons are feeding on the suet pellets that I cast down for them, soon Blackbirds, Robin, Dunnock (*Prunellla medularis*) come to investigate. A glossy black Crow (*Corvus corone*) joined the group. It kept a safe distance, but also enjoyed the feast. It was interesting to note that the birds were all streetwise and conscious of the small

dogs that liked to chase them for short distances for fun. Luckily the dogs were all on leads so no harm done and the birds were well out of reach.

17th of May was a holiday day for me. Great! I spent a day working in the garden and catching up with jobs that were long overdue. An Orange Tip butterfly (*Anthocharis cardamines*), fluttered over the lawn which I had still not cut. I was delighted to see this species but also concerned because I couldn't see my Ladies Smock in flower, or Cuckoo Flower (*Cardamine pratensis*) as it is often called. It grows on the damper side of the garden over by the pond. It should have been in flower and flowers in April in other places – when the cuckoo starts to arrive from Africa, hence the name, but it was another week before mine flowered. When it did, I had twice as many flowers as the year before, but no orange tip making use of them – not that I have seen. It is now almost the end of May and the flowers are still going strong. I have yet to find any caterpillars.

Driving to work along my old pot hole route, a Buzzard (*buteo buteo*) appeared to fall out of the hedge and fly haphazard and awkwardly about as three crows came persistently at it, marauding and chasing the poor buzzard over the hedge into the field yonder. It out flew them easily.

27th May the Atlantic Highway is now strewn with Ox-eye Daisies (*Leucanthemum vulgare*), a few red Poppies (*Papaver rhoeas*), Valerian (*Centranthus ruber*) and lacy white umbellifers such as Cow Parsley (*Anthriscus sylvestris*) and Hogweed (*Heracleum sphondylium*) all in flower giving a spectacular display. I observed Mexican Fleabane (*Erigeron karvinskianus*), Ivy leaved Toadflax (*Cymbalaria muralis*) and many small ferns such as Rue-leaved Spleenwort (*Asplenium ruta-muraria*), Rusty Back fern (*Asplenium ceterach*) and Maidenhair Sleenwort (*Asplenium trichomanes*) growing in old stone walls that I pass by on my way to work. I also found a demised Soldier Beetle (*Rhagonycha fulva*) on the pavement.

It is a strange thing to be a naturalist. A naturalist wanders through life with eyes more open than the non-naturalist. It is about learning to see, to spot the smallest creatures, or the camouflaged ones, to celebrate in identifying the species, to appreciate other life forms as well as to appreciate our own very special place in nature. There's a lot we can do to help protect other species if we put our minds to it..... and we should.

OBSERVATIONS FROM THE NORTH

The Northern Fringe: *An Iomallach a Tuath*

Neil Redgate FBNA

Failte. As with the previous year, both the Hibernal and Pre-vernal seasons were predominantly cold, wet and windy this year. In weeks 2 and 3 (mid-January) there was persistent snow cover on the ground to the depth of 20*cm*. Strong Northerly storms peppered the north coast at the end of the Hibernal season and continued in a similar pattern, with lesser winds, through the Pre-vernal season. The first half of the Vernal season was changeable – generally cooler and cloudy with increasingly longer dry periods between light showers. There was a sharp change for the second half becoming much warmer and being further emphasised due to the persistent high humidity (85+%, frequently 90+%) yet there was no rainfall. At the end of this season the ground surface was notably dry.

During the period of snowfall (week 3), the garden received a new visitor – 2 Fieldfares, *Turdus pilaris*: these birds were playing hide and seek around the "fallen" apples on the ground with the resident male Blackbird, *T. merula*. The "game" being played out is exactly as that between the resident male Blackbird and a winter-passage male Blackcap described in my last article – *British Naturalist* (March 2024):14. The following day the same Blackbird was defending "his fruit" from a pair of Continental Redwings, *T. iliacus iliacus,* while the visiting Fieldfares fed without any harassment.

In the first week of the Vernal season (week 1) there was a major change in the local ecological landscape. The adjacent semi-improved grassland, that supported grazing livestock and contained large areas of the old 'rig & furrow' system, was ploughed in a single day. The field had not been ploughed in living memory (approx 80 years) and probably for much longer: personally, I found the sudden and drastic change, as well as watching it happen, very unsettling at the time. Although the growing Barley is well established, it still doesn't "feel right". One pleasant outcome is that the local Roe deer, *Capreolus capreolus*, family have been seen more frequently, while moving and browsing through the young Barley. It will be interesting to observe what changes to the bird diversity occur though the seasons and successive years.

The project of restricting the movement of neighbourhood cats throughout the gardens is still in development and so the quantity and range of different foods is still being restricted. As a result, the numbers of birds and the diversity of species is still down compared with previous years – the stalwarts are Blackbird (resident pair); Common Starling, *Sturnus vulgaris*, (resident pair); British Wren, *Troglodytes troglodytes*, (resident pair); House Sparrow, *Passer domesticus*, (a few resident pairs); Tree Sparrow, *P.*

montanus; Western Jackdaw, *Corvus monedula spermologus*; Rook, *C. frugilegus*; Collared Dove, *Streptopelia decaocto*; and, Woodpigeon, *Columba palumbus*.

On the 11th April, I observed the first Bumblebee of the year – Buff-tailed Bumblebee, *Bombus terrestris* – in the first spell of very warm weather. The very warm and bright weather at the end of the Vernal season provided the opportunity to observe 50+ bumblebees collecting pollen and feeding on the flowers of Cotoneaster. The majority were the Buff-tailed Bumblebee; others included Common Carder Bee, *B. pascuorum*, and Broken-belted Bumblebee, *B. soroeensis*.

It is the fourth year of my "no-mowing" of the lawn project and both the Northern Marsh Orchid, *Dactylorhiza purpurella*, and the Lady's Smock, *Cardamine pratense*, are maintaining their presence. The orchid numbers have slightly dropped to 24 compared with 28 in 2023; the Lady's Smock has doubled its numbers to 88 compared with 44 in 2023.

I overlooked an interesting observation in my preparations for my last article and believe it would be of interest to my fellow naturalists. On 30th August 2023, I was working my compost heap and, before starting, I check the surface for any wildlife such as slugs and snails, and relocate the individuals to a safer location on the heap. There was a single Leopard Slug, *Limax maximus*, Green Cellar Slug, *Limacus maculatus* and (I believe to be) 4 Vulgar Slug, *Arion vulgaris* on the underside of the thermal cover; another 3 were on the compost surface. Two of these individuals were easily removed from the surface but when I tried to remove the third individual, I discovered it was firmly attached to the surface and I could not remove it gently. Due to this attention the slug contracted its body shape into the classic "Arion" dome shape. On further inspection, I noticed the slug was attached to a piece of solid organic matter. After removing the surrounding compost, I was able to lift the slug and its attachment clear from the compost. The vegetable matter appears to be a section of the central stem from a head of broccoli and the slug was firmly attached to its centre on the underside of its head, presumably by its radula. The radula is a short, broad organ (a "tongue") within the mouth that is covered by rows of chitinous teeth on its surface. It is used for rasping its food and is continuously renewed as the teeth become worn or lost. I tried to separate the animal from the plant with a few tentative pulls – with no success – and then relocated it to a safe place. I hope it was able to enjoy the rest of its meal!

I do not know the detail of the gastropod buccal anatomy and assume the slug was being held by the teeth of the radula in place – whether still feeding or as an anchor – I do not know. I am not aware of any other buccal feature that could be used to attach the slug so firmly, i.e. sucking capability? I was amazed by the strength of its anchorage and holding power.

ASTRONOMICAL SIGHTINGS

Roy Stewart FBNA

Image credit: JWST Tarantual Nebula NASA

The first nine months of this year has produced some outstanding astronomical observations and events. The most notable and most watched event was the total solar eclipse in April which tracked across America but it still attracted phenomenal television and social media coverage. Comet 12p/Pons-Brooks was stunning as it approached closest to Earth in April which had a lovely green colouration possibly due to diatomic carbon. The James Webb telescope is still sending incredible images that are causing some consternation in the cosmology and astronomical community as they seem to be demonstrating that our knowledge of the universe is still remarkably incomplete and many assumptions are being challenged.

The aurorae or Northern and Southern lights have produced amazing displays of late and have been seen down to equatorial zones in the northern and southern hemispheres. These displays are due to the current solar cycle (number 25) which is starting to reach its peak activity and this is predicted to occur in July 2025. The increased presence and intensity of aurorae is due to this peak activity and so far, the actual activity has been far stronger than models predict. There have been numerous solar flares and coronal mass ejections in a classification class known as X5-9 and these are classed as severe solar eruptions. These are not the strongest of events as other solar eruptions have been estimated to be between 10 and 50. The Carrington event of 1859 was thought to be class X50 but this is based on estimates and its effects on the Earth and no true measurements were made. Therefore, the likelihood of seeing more striking aurorae during the rest of this year and next year is extremely high. It's worth looking for aurorae forecasts on the internet or news channels.

What else can we expect to see over the next six months? In keeping with the Sun as a topic, on the 2nd October an annular solar eclipse will occur which is when the Moon is too far away from the Earth to completely cover the Sun and unlike a total eclipse this results in just a ring of light around the darkened Moon. There will be no Sun's corona visible during an annular eclipse. As with the total

eclipse in April, this eclipse path will begin in the Pacific Ocean off the coast of South America and move across parts of southern Chile and Argentina. A partial eclipse will be visible throughout most of southern South America. I would imagine there will be some media coverage.

Meteor showers could be observed in the next six months and will start with the Draconids Meteor Shower on October 6th. The Draconids is a minor meteor shower producing only about 10 meteors per hour. It is produced by dust grains left behind by comet 21P Giacobini-Zinner, which was first discovered in 1900. The shower runs from October 6 -10th and peaks this year on the night of the 7th. Fortunately, (if the British weather allows) the second quarter moon should ensure dark skies in the early evening and if seen it could produce a good show. Best viewing will be in the early evening and the Meteors will radiate from the constellation Draco, but can appear anywhere in the sky.

The next meteor shower will occur between October 2nd to November 7th and will be the Orionids Meteor Shower. The Orionids tend to be a good shower producing up to 20 meteors per hour at its peak. It is produced by dust grains left behind by comet Halley, which has been known and observed since ancient times. The shower peaks this year on the night of October 21st and the morning of October 22nd, but there is a waning gibbous moon which will negate the viewing of faint meteors. The Meteors will radiate from the constellation Orion, but again can appear anywhere in the sky.

The next shower is The Taurids and this is a long-running minor meteor shower producing about 5-10 meteors per hour. This shower is unusual in that it consists of two separate shower streams. The first is produced by dust grains left behind by Asteroid 2004 TG10. The second stream is produced by debris left behind by Comet 2P Encke. The shower runs annually from September 7th to December 10th and it peaks this year on the night of November 4th. Meteors will radiate from the constellation Taurus, but again can appear anywhere in the sky.

The Leonids is a good average shower, producing up to 15 meteors per hour and the shower runs annually from November 6th – 30th. It peaks this year on the night of the 17th and morning of the 18th. This shower is unique in that it has a cyclonic peak about every 33 years where hundreds of meteors per hour can be seen. That last of these occurred in 2001. The Leonids is produced by dust grains left behind by comet Tempel-Tuttle, which was discovered in 1865. Unfortunately, the peak occurrence also coincides with a nearly full moon which will block all but the brightest meteors. But because there is a good average meteor per hour rate then the chances of catching a few good ones is fairly high.

The Meteors will radiate from the constellation Leo, but like previous showers they can appear anywhere in the sky.

There are still three more showers expected and the next one is the Geminids meteor shower. This is considered the best of all the meteor showers, producing up to 120 multicoloured meteors per hour at its peak. It is produced by debris left behind by an asteroid known as 3200 Phaethon, which was discovered in 1982. The shower runs annually from December 7-17th. It peaks this year on the night of the 13th and morning of the 14th. The peak coincides with nearly full moon but because of the amount of potential material falling through the atmosphere then one is almost guaranteed a sighting. The Meteors will radiate from the constellation Gemini, but can appear anywhere in the sky.

The Ursids is the penultimate shower but it is only a minor meteor shower producing about 5-10 meteors per hour. It is produced by dust grains left behind by comet Tuttle, which was first discovered in 1790. The shower runs annually from December 17-25th but it peaks on the night of the 21st and morning of the 22nd. Meteors will radiate from the constellation Ursa Minor, but can appear anywhere in the sky.

Finally, we have the Quadrantids Meteor Shower which is an above average shower, with up to 40 meteors per hour at its peak. It is thought to be produced by dust grains left behind by an extinct comet known as 2003 EH1, which was discovered in 2003. The shower runs from January 1st - 5th. It peaks this year on the night of the 3rd and morning of the 4th. There should be excellent viewing conditions as dark skies are predicted but again weather could dictate the number of sightings made. Meteors will radiate from the constellation Bootes, but like all the previous showers they can appear anywhere in the sky.

The planets are also staring to make a showing once again and on November 17th the ice giant Uranus is at opposition. Even though the blue-green planet will be at its closest approach to Earth and its face will be fully illuminated by the Sun and It will be brighter than any other time of the year and will be visible all night long it will still be difficult to observe due to its distance from Earth which is 2.78 billion kilometres and light takes about 2.7 hours to reach us from its reflected sunlight. A good 3-4 inch telescope with 100x magnification should show it as a tiny blue-green dot and an 8 to 10 inch will reveal subtle detail and probably its five main moons. Given all these factors this is the best time to view Uranus.

The king of the planets the gas giant Jupiter will be at its closest approach to Earth on 7th December and its face will be fully illuminated by the Sun and like

Uranus It will be brighter than any other time of the year and will be visible all night long. This is the best time to view and photograph Jupiter and its moons. Because of its size and relative closeness in astronomical terms a good pair of binoculars should allow you to see hints of Jupiter's cloud system and its four largest moons, appearing as bright dots on either side of the planet. It will be in the constellation of Taurus and is as high in the sky as it gets.

On December 2nd Mercury will be at its Greatest Western elongation. The planet Mercury reaches its greatest western elongation which is 22 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the morning sky. Look for the planet low in the eastern sky just before sunrise.

On January 10th Venus will be at its Greatest Eastern Elongation of 47.2 degrees from the Sun. This is also the best time to view Venus since it will be at its highest point above the horizon in the evening sky. Look for the bright planet in the western sky after sunset.

We also now have Mars at opposition on January 16th. Like the other planets the red planet will be at its closest approach to Earth and its face will be fully illuminated by the Sun. It will be brighter than any other time of the year and will be visible all night long. A medium-sized telescope will allow you to see some of the dark details of the canals on the planet's orange surface and its polar cap.

On March 14th the Americans will be lucky again as there will be a total lunar eclipse. This will be visible throughout all of North America, Mexico, Central America, and South America. A total lunar eclipse occurs when the Moon passes completely through the Earth's dark shadow, or umbra. During this type of eclipse, the Moon will gradually get darker and then take on a rusty or blood red colour.

On March 29th a partial solar eclipse will occur and this is when the Moon covers only a part of the Sun, sometimes resembling a bite taken out of a biscuit. We may be lucky this time for this event as this partial eclipse will be visible throughout Greenland and most of northern Europe and northern Russia although it will be best seen from Canada with 93% coverage.

Comets are fickle objects and often difficult to predict or observe although some are oblivious to these rules eg Halley's comet but as far as predictions go then the two following comets should make an appearance.

The first one is C/2023 A3 (Tsuchinshan-ATLAS) which should reach Perihelion on September 27th 2024 at mag 0.2). Its closest approach to Earth will be October 12th 2024 (mag -0.9). The real interest in this Comet is that Tsuchinshan-ATLAS has the potential to become exceptionally bright and earn the title of a "great comet". In September and October, it might become visible to the naked eye and could be as bright as some of the brightest stars in the sky. C/2023 A3 (Tsuchinshan–ATLAS) is a comet from the Oort cloud and was discovered by the Purple Mountain Observatory on January 9th 2023, and independently found by the ATLAS astronomical survey on February 22nd 2023. The next comet with a certainty attached to it is 333P/LINEAR and its perihelion will be November 29th 2024 (mag 9.8). Its closest approach to Earth on December 9th 2024 and will be at magnitude 10. It can be observed in the northern hemisphere but may well require binoculars. 333P/LINEAR is unusual as it is a Jupiter family periodic comet discovered by the LINEAR project in 2007. The comet has a retrograde orbit and an orbital period of 8.7 years.

Space exploration still continues despite enormous cutbacks in funding but a real exciting project is the launch in October 2024 of the Europa Clipper mission. This will explore Jupiter's icy moon Europa, which scientists believe has an ocean of liquid water under its crust and is believed to contain more water than Earth's oceans combined. The spacecraft, set to reach orbit around Jupiter by 2030, will make multiple flybys around Europa at altitudes as low as 25 kilometres above the surface, and will be able to scan almost the entirety of the moon. The idea behind this mission is it aims to gather more information about Europa's composition and geology, which will help to investigate whether places underneath the surface have conditions that may support life. There are three telescopes currently under construction and all fall under the category of extremely large telescopes an are all land-based instruments. The appropriately named Extremely Large Telescope (ELT) will be the world's largest optical/near infra-red telescope. This is part of the European Southern Observatory (ESO) agency and is located on top of Cerro Amazones in the Atacama Desert of northern Chile. The design consists of a reflecting telescope with a 39.3-metre-diameter segmented primary mirror. Other planned extremely large telescopes include the 25 m/368 m2 Giant Magellan Telescope and 30 m/655 Thirty Meter Telescope, which are also targeting the second half of the 2020s decade for completion. They are estimated to be 250 times more sensitive in light gathering than the Hubble telescope which itself has produced some of the most iconic images ever seen.

RECAPTURING YOUR CHILDLIKE CURIOSITY

Simon Jones MBNA
Photos S. Jones


Checking the sweep net

A symphony of sounds lifted my spirits each day. Bird song played out across the country-side with each instrument perfectly tuned, the gentle rustling and swaying of trees blended with the hum and thrum of insects was the soundtrack to a sublime week away here in Suffolk.

It was a chance to recapture that "childlike" curiosity of the familiar and the less frequently encountered. It was also an opportunity to really look and be fully present with every wildlife encounter without any expectation, just to simply appreciate and be in awe.

As an amateur naturalist, it can sometimes be easy to chase the rarity, the unusual or pursue that elusive first county record and get caught up in the excitement of seeing something new. However; we must not lose sight or forget what's right on our doorstep, whether that's in our gardens or when we are out and about exploring our local patch. For most of us, these are often as children where the first seed begins to germinate for our fascination and curiosity for the natural world, and if we are lucky, it will remain with us throughout our lives.

With such busy lives for the majority of people, it's hard to imagine just affording the time to simply sit still and watch nature for a moment, to marvel at the stories as they unfold before your eyes, but it's essential to find the time to do so. Our gardens and local green spaces can provide that escape to do just that.

Overturn a decaying log, a discarded brick or a stone, and you might just discover a hidden world of predators, prey or quite possibly an opportunity to observe a behaviour that you may not have witnessed before. Reconnecting with the detective inside of you and ask the what? where? and why? to see what you learn. Even a Common Shiny Woodlouse (*Oniscus asellus ssp)*, a frequently encountered isopod has a story to tell.

What follows is a brief account of just a very small number of familiar characters to me, each as fascinating as the next. Some of which I encounter more often than others. What's familiar will differ for each of us depending on where we live, and I hope this article may inspire you the readers, just a little to grub around in the leaf litter, or top up your bird feeders and spend a little time re-discovering the charm and the stories of the wildlife on your doorstep.

Mimics are common in the natural world and none more so than among the insects. This is true for the **Wasp Beetle** *(Clytus arietis)*. The clue is in the name, fooling you into thinking it's a wasp. They were very abundant during a recent holiday found on various plants, moving with a curious jerky motion. This mimicry (or as I like to call it, fakery) has a purpose which is to deter any would be predators. The yellow and black markings indicate a warning that they may be distasteful, or something to be best avoided, possibly harmful. This enables these mimics to be bold and spend time out in the open without too much concern of predation. The caveat to this of course are spiders, who are less concerned with their prey's fashion choices!

Reptiles can be elusive but if your timing is right, the best time is to catch them basking is in the early morning sun as the day begins to unfold, late afternoon or even on a warm overcast day, on a path, on a bank or other situation. Take the opportunity to look under a discarded pieces of corrugated tin or roof felt and you may just encounter a **Grass Snake** *(Natrix helvetica)*, Adder *(Vipera berus)* or Slow worm *(Anguis fragilis)*. Once these reptiles have warmed up sufficiently, they will be quick to evade you. I had the delight of recently spotting a juvenile Grass Snake, and without hesitation, I had to carefully pick it up for a closer inspection. It had little intention of remaining still, but I got to observe just how beautifully marked these creatures are. I have seen them many times before, and much larger specimens too, but in this moment, the experience was to be a very personal one,

and of course, the obligatory photo had to be taken before releasing it back into the long grass where it quickly disappeared out of sight.

Another reptile I see occasionally is the **Common Lizard** *(Zootoca vivipara)*. The specimen in the photo was in prime condition, and typically was found basking on the wooden walkway to the East Hide at RSPB Minsmere. The body of the lizard was slightly flattened and they do this to increase their bodies surface area to enable it to warm up faster. It was carefully watching my every move, as I joyfully watched it. Like the Grass Snake, the colouration, scales and patterns were incredible, and perfectly adapted for blending into the undergrowth, and disappearing at speed if disturbed.

I could not go on holiday without doing a spot of mothing, so over two non-consecutive days, I set up the skinner light trap to see what would turn up. The numbers were low compared with the same time previous years, whether this was due to the wet spring having an impact on caterpillar numbers or those over wintering pupae, I can't be sure. When inspecting the trap, the usual crowd pleasers were in residence, The Hawk-moths! They are always a welcome sight, no matter how often I get to see them, they are still stunning, fascinating and a marvel to observe. Elephant Hawk-moth (*Deilephila elpenor)* with their spectacular pinks and greens, the **Poplar Hawk-moth** *(Laothoe populi)* with their unusual resting wing position. **Eyed Hawk-moth** Which when threatened will surprise you with a flash of the eye spots**.**

Poplar and Eyed Hawkmoths

Robins *(Erithacus rubecula)* were abound, busy collecting insects for hungry mouths to feed. I never tire of Robins, such characterful birds, bold, and opportunistic. A friendly bird that always seems to be the first to arrive after a spot of gardening. The familiar song of Chiffchaff *(Phylloscopus collybita)* carried over and through the trees. Hearing a Chiffchaff for the first time each year is a welcome sound marking the start of spring for many. Such a delicate little bird, and very similar to the Willow Warbler *(Phylloscopus trochilus)* with a song that is unmistakable. The clinking sound of pebbles introduces the **Stonechat**! *(Saxicola rubicola)* Not as familiar to many, but I have included them here, as I always see them when visiting RSPB Minsmere. Perched aloft Bramble or Gorse, especially the male, with its rusty red breast, white patches and black head, often with a back drop of a blue sky, a moment to be treasured.

Lastly but by no means least, Hoverflies (Syrphidae) like this **Marmalade Hoverfly** *Episyrphus balteatus*. There are so many varying species, some less obvious to spot than others, and like the Wasp Beetle mentioned earlier in this article, many are superb mimics, especially of Bumblebees and Wasps, some more convincing than others. Nevertheless, a wildflower patch would be less interesting without them, and of course like so many flies, they are important pollinators too. If you are unsure if it is a wasp, bee or fly that you are seeing, look closely, and if it has only a single pair of wings, fleshy pad like mouthparts and short antennae, it's a good indicator its a fly. Flies belong to the order Diptera, and in general need as much positive publicity as any Bumblebee, not just as pollinators, flies are important decomposers too, helping recycle the dead and decaying.

Next time you step outside, take a stroll around your garden, or local patch, take a moment to notice the familiar, you never know what you might discover.

FOSSIL HUNTING

Samantha Eastwood

Since I was young, I've always had an interest in shiny rocks and dinosaurs! Never did I think that one day I'd be on the beach finding fossils which are millions of years old! My husband James and I, over the past few years have started taking a big interest in fossil hunting and learning about the fossils we find. Particularly the ones found along **Whitby coast**. For the last couple of years our main holidays have been on the beautiful north Yorkshire coast, searching the shores of Sandsend, Saltwick Bay and Runswick Bay; with others such as Portmulgrave and Kettleness Bay still to visit.

The first day we went fossil hunting we didn't really find much; you have to have patience. But the second day and the feeling you get when you see a rock with the keel poking out of it is so exciting! Seeing this ammonite for the first time in millions of years! We've got our hammers and safety goggles and once we cracked one open there was no stopping us! 180-million-year-old ammonite in your hands it is amazing!

We have found many Dactylioceras, Hildoceras, and Phylliceras ammonites which are all found on the Yorkshire coast, some more

common than others. We've also found hundreds of Belemnites "fossilised squids" and we've just added Whitby jet to our collection which is fossilised wood from the monkey puzzle tree. We spend hours on the beach and walk miles with very heavy bags at the end of it!




Some of our collection

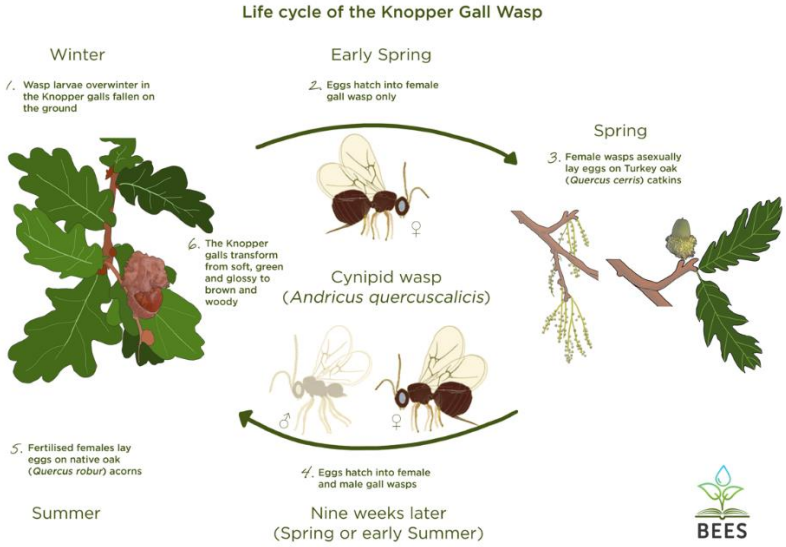
I would say this activity is very relaxing, and very interesting, finding and learning about the creatures that once lived on our earth millions of years ago. I've still to find a bone from the Ichthyosaurs but I'm sure one day I will! One thing I've learned is you're never too old to learn new things!

THE BEE A NATURE GUIDE COURSE PROGRAMME

Anneloes Martinsen, PhD FBNA, Chair at BEES

Photos and images Anneloes Martinsen unless indicated

On a walk to East Town Park with my three-year old son, he spotted a strange bumpy growth resembling a gnarled walnut on a native oak tree. I am sure Steven Rutherford will appreciate it. What is that? - he asked. It was a Knopper gall (right) and is the handiwork of a tiny wasp named *Andricus quercuscalicis* which produces the Knopper gall on the acorn (Jukes, 1984). Inside the gall, there is a female baby wasp (the larva). The larva will spend the winter cozy and warm, and will transform into an adult female come spring. But here's the twist: these ladies skip the usual partner dance and lay their eggs in a different type of oak, the Turkey oak (*Quercus cerris*), developing smaller galls on the male flowers. These eggs hatch only nine weeks afterwards in the spring or early summer into a generation containing both sexes. The new and fertilised females then migrate to the familiar native oak, also known as Pedunculate oak (*Quercus robur*) to lay their eggs through the summer and autumn of the same year, restarting the cycle with those curious Knopper galls.



Life cycle of the cynipid wasp *Andricus quercuscalicis*. Drawing not at scale.

Not that he understood or remembered all of it 10 minutes later, but it caught his eyes, and he was amazed by it. I will keep telling him amazing things about nature and giving him the opportunity to discover nature, so he can keep doing it as an adult. So, next time you spot a Knopper gall, remember it's not just a quirky growth, but a tiny world buzzing with life and a testament to the intricate relationships woven within nature's tapestry.

We are naturally drawn to nature as children. Yet, daily life often pulls us away. While there's so much focus on nature education for children, I think adults deserve it too! Connecting and reconnecting people with nature, inspiring them to engage with their natural environment improves health and wellbeing. Educating adults to protect our wildlife and their habitats is also fundamental for future generations to benefit from them.

In the face of climate change, biodiversity loss and the urgent need to protect our natural heritage, teaching adults about nature is more essential than ever. As Sir David Attenborough eloquently stated: "No one will protect what they don't care about, and no one will care about what they haven't experienced".

Raising nature and environmental awareness with members of the public, is what we do at Biodiversity and Environmental Education Society (BEES). It also helps organisations such as the Wildlife Trusts, the RSPB, the BTO and many others get the support they need to protect and manage the natural habitats so precious for our wildlife, and ultimately safeguarding our own survival.

Biodiversity and Environmental Education Society (BEES)

BEES is a registered charity in England and Wales since February 2020 (charity number: 1187828) run by four trustees, all scientists and passionate about nature and education. Our mission is to train and educate members of the public to become nature guides and ambassadors for nature, whatever their initial background in sciences or natural history. With our BEE a Nature Guide course programme (https://www.beeanatureguide.org.uk/the-course), we are empowering nature enthusiasts to spark a love for the natural world among their peers, families, colleagues and communities.

The BEE a Nature Guide course programme

Our course programme combines virtual training and outdoor in-person practical sessions, giving the opportunity to our participants to meet with our expert teachers, all friendly and keen to share their passion. The course is currently run in Suffolk and Norfolk. The course consists of 20 different topics (botany, bryology, ecology, entomology, forestry, herpetology, mammalogy, mycology, ornithology, hydrobiology, astronomy, geology, geomorphology, soil science, human geography, law and legislation, nature conservation and

management, sustainable development, map reading and methodology), plus an accredited first aid training from an external provider. It also includes two leadership skills sessions where our participants can practice leading a group and develop their confidence and leadership skills.

Indoor methodology session at Hopton Village Hall

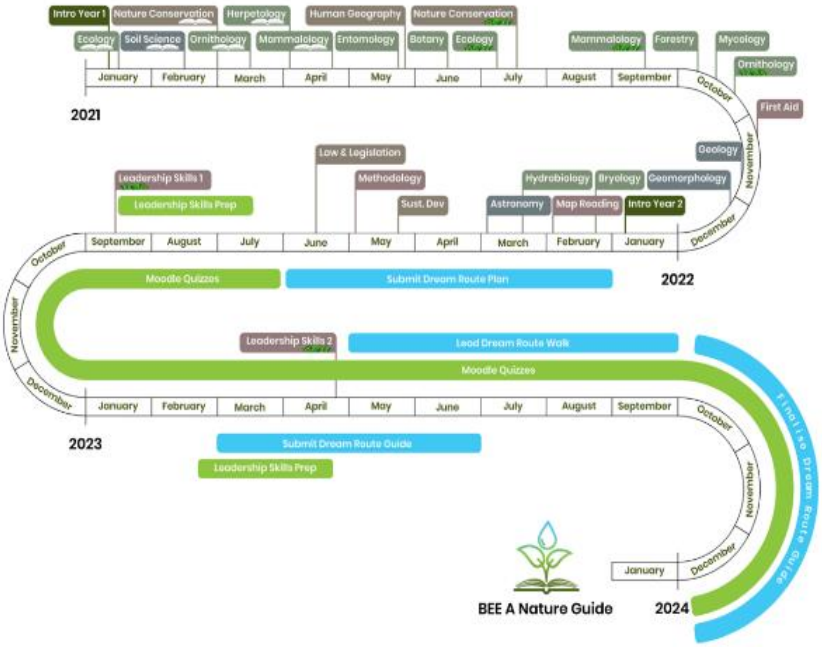
Outdoor methodology session at Knettishall Heath

Both led by Steven Rutherford FBNA

Each course has its own comprehensive handbook, hand curated by us and printed using our eco-printer. We also have a resourceful online learning platform Moodle, which hosts digital versions of our handbooks, as well as interactive quizzes, where our participants can assess and enhance their knowledge.

A sample of the BEES handbooks. Credit: Sam Rogers

Our first course programme ran over three years, with the first 18 months dedicated to teaching the different subjects. Time was given afterwards for our participants to attend the leadership skills sessions, to complete the online quizzes and for the keenest to prepare and present their own guided walk (referred to as Dream Route Plan, Dream Route Walk and Dream Route Guide).



Schedule of our first BEE a Nature Guide course programme, which extended over three years.

Who can attend the course?

The BEE a Nature Guide course programme is accessible to any adults whatever their background knowledge, whether they are keen amateurs, have experience or training in specific natural sciences subjects or it is all new to them. We aim to provide a comprehensive understanding of our natural world, from basic concepts to more in-depth knowledge in a variety of subjects.

We are flexible and participants can either only attend the course sessions and have access to our online learning resources, or complete the full programme and become nature guides. We deliver two types of certificates at the end: an attendance certificate and the BEE a Nature Guide certificate, depending on the journey the participants decide to undertake.

What does it mean to be a nature guide?

BEES' vision is for individuals and communities to become responsible and respectful of nature. Our mission is to grow a network of nature guides that

will go on passing on information, guiding others, and suggesting to them how and where to take action, first in East Anglia and ultimately throughout the whole of the UK. Through general or themed nature walks, engaging activities and everyday conversations, our trained nature guides and ambassadors for nature will foster a deeper appreciation for the environment and inspire others to become stewards of our planet.

The nature guides will interpret the diverse ecosystems and the key species that live in them, showcasing their unique relationships and adaptations. Travelling through time, the nature guides will unveil the fascinating human history that has shaped our landscapes and explain how conservation efforts can for instance prevent ecological succession to maintain certain habitats and protect biodiversity. Building a sustainable planet is a new challenge and our nature guides will contribute to achieving this goal.

Why would you attend the course?

Are you looking to progress in your career or change direction? Are you looking to improve your skills and knowledge about nature? Would you like to actively engage with your community? Would you like to connect people to the natural world and help protect our natural heritage? Or would you simply like to meet like-minded people and share communal interests? If the answer is yes to any of these questions, then our BEE a Nature Guide course programme is for you! We believe that financial circumstance should not be a barrier to environmental education and try to ensure the course is kept as financially accessible as possible.

Where did the idea of BEES come from?

Although new to the UK, our training model has been successfully pioneered by our partners in Belgium, the Cercles des Naturalistes de Belgique (CNB) registered charity in Belgium. They have trained about 10,000 ambassadors for nature since 1975. In April 2019, I got in touch with Léon Woué, the chairman of the CNB, and after a fruitful and enthusiastic discussion, a partnership between us was created. I was excited to bring this training method to the UK and help to develop and support a growing community of nature guides.

Who are we?

We are a small team but proud to be a dynamic and diverse group. I am originally from Belgium where I graduated as a biologist and obtained my PhD in biomedical sciences. Along with the PhD, I took on the nature guide course training delivered by the CNB in Belgium and met with David Cammaerts,

another participant and hydrobiologist. We became good friends and always cherished the idea of setting up an environmental charity. I moved to the UK in 2015 to work as a senior research associate for the University of East Anglia for almost four years. During that time, I obtained my associate fellowship of the Higher Education Academy. I also joined the local RSPB group in Norwich and discovered a lot of nature reserves and natural beauties around the county and beyond. At the end of 2018, I moved to Suffolk and early 2019 started volunteering with the Suffolk Wildlife Trust helping the learning team at Lackford Lakes, a beautiful reserve with amazing staff and volunteers. This is where I met with Jasmine Canham, a young warden at the time. With her and David, we were three, the minimum number of trustees to set up a charity: BEES was born!

Dr Lee Fletcher, neuroscientist, joined us in July 2020. He was living in Cambridge and helped a lot with the course material and sessions. He has now moved back to Australia but remains one of our trustees. Jasmine stepped down from the board of trustees a couple of months later to focus on her studies in nature conservation.

Since 2023, Laura Benstead, SEN teaching assistant and currently doing a BSc Combined STEM, Earth and Environmental Science, joined us as a trustee after a year volunteering with us helping with the outdoor practical sessions. Based in Norfolk, she is now actively involved in the running of the charity.

Sam Rogers, technical coordinator for a housing company has volunteered with us as a trustee support officer since 2020, where he developed and manages our website, designs our handbooks, provides wildlife photos, helps with IT issues, etc. We were pleased to welcome him as a trustee earlier this year.

Our teachers and BNA partners

My passion and dedication for nature and education have driven me to set up and run BEES in Suffolk and Norfolk and have also pushed me to search for and recruit our brilliant teachers and collaborators. I have developed a partnership and friendship with the British Naturalists' Association. It first started when I met with Roger Tabor in August 2019, and then later with Steven Rutherford and Roy Stewart in January 2020. It has been a pleasure and a great help to have the three of them as well as two other BNA members, Dr Tim Gardiner and Simon Jones, happy to be involved one way or the other in our course programme.

Where are we now?

We have now reached the end of our first course programme. We have trained 26 ambassadors for nature. Six of them also completed our online quizzes, presented their guided walk, and obtained their Nature Guide certificate. We have received glowing feedback from our first participants in Suffolk and Norfolk, a testament to our commitment to delivering an exceptional learning experience.

We had 94 people who registered their interest in the course on our website! We are hoping to start a new course before the end of 2024. But for the charity to be sustainable and ensure the success of a second course programme, we need more help and support.

We are urgently looking for volunteers to start our second course programme.

- Are you passionate about nature and reside in East Anglia?
- Do you like being outdoors and caring for others? We need you to assist the teachers with our outdoor practical sessions in East Anglia and to make sure these run smoothly and comfortably for our teachers and participants.
- Do you prefer working with online sessions? We need you to attend and moderate our live online learning sessions using our online learning platform, and to make sure these run smoothly and comfortably for our teachers and participants.
- Do you specialise in one of our subjects and like sharing your passion with others? We need you as a teacher for our online and/or outdoors sessions in East Anglia.

If you answered yes to one or more of these questions, please get in touch with us at contact@beeanatureguide.org.uk to get involved! We look forward to hearing from you!

Let's make a difference in safeguarding our planet's precious ecosystems and inspiring everyone and future generations to become stewards of the environment.

Reference:

Jukes, M.R. (1984). *The Knopper gall. Arboriculture Research Note 55.* Issued by the Arboricultural Advisory and Information Service. Forestry Commission. 2pp. Accessed online at https://www.trees.org.uk/Trees.org.uk/files/a4/a490c5b3-06ac-4c6a-a2b5-2488770961c9.pdf on Feb 21st, 2024.

THE CHAIRMAN'S CHALLENGE

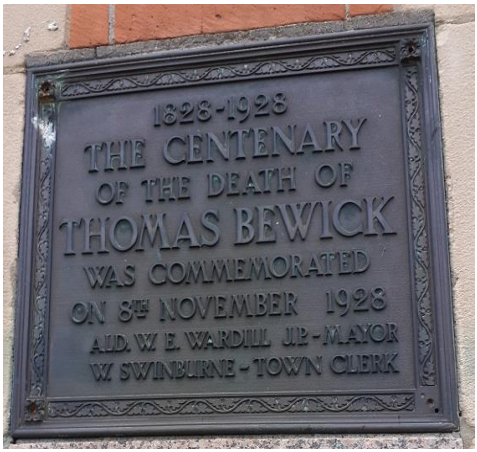
Steven Rutherford FBNA
Photos: S. Rutherford

Thomas Bewick 1753 – 1828
Photo © NHSN

Thomas Bewick was a naturalist, artist and wood engraver who was born in 1753 and grew up on the banks of the River Tyne at Cherryburn Farm in the village of Mickley and later worked in the city of Newcastle. He is mostly remembered by fellow naturalists for his books on Quadrupeds and the two volume bird books that, at the time were ground breaking and allowed many of the poorer population access to good quality identification books for the first time. As an adult, on a Sunday, Bewick would sometimes walk the near 15 miles from his marital home in Gateshead to Cherryburn for lunch with his sisters before returning home in the late afternoon. I have thought for some time that it would be good to follow the path that Bewick took as a challenge and to honour the man as a fellow naturalist.

My walk started in West Street, Gateshead at the site of Bewick's home and I crossed the river using the swing bridge and then walked up to Amen Corner to the place where Bewick had his workshop. It was a damp start to the day, but as soon as I left the city boundaries the rain cleared and the day was overcast and cool; perfect for a long walk. Scotswood Road used to be the most run-down and depressing area of Newcastle through the 1960's and 70's, but not now. The Hadrian's Cycleway runs past the clean and beautifully developed area, following a very wide roadside verge that is full of native plants and teaming with wildlife.

The swing bridge across the River Tyne



Plaque where Bewick lived on West Street Gateshead


Bust of Bewick in Amen Corner

My next destination marker was the village of Lemington, some six miles into the walk, and to call in to **Lemington Riverside Primary School**, to say hello in passing. This call was important to me, as this was my school that I attended from 1962 until leaving in 1969. Following the river from Lemington through Newburn and on to Wylam, was so very familiar as this was my play grounds through those early years, and would have also been the play areas for a young Thomas Bewick as can be seen in some of his work.


Riverside Primary School, Lemington

A view of the River Tyne from Hagg Bridge, Wylam

A nice surprise for the visitor to this area and about half way between Newburn and Wylam, there is a small cottage you pass which was the birthplace of the engineer George Stephenson, and so this is part of his story, too. After leaving Wylam I crossed the river at Hagg Bridge to the south bank of the Tyne for the last stetch of the first half of the walk, that took me to Mickley and Cherryburn Farm to meet with the wonderful staff and volunteers from the National Trust who look after the former Bewick home.

George Stephenson's birthplace

Another view along the river

After lunch in the delightful Cherryburn gardens the return walk was a reverse of the morning walk and I returned to West Street some ten hours after setting off on this challenge and completing almost 30 miles.

Cherryburn

My thanks to everyone who helped and supported this challenge, including The Bewick Society members, the National Trust staff and volunteers at Cherryburn, the Headmaster Mr Heeley of Lemington School and everyone who sponsored and helped throughout. All donations will go to education projects for Student members and Young Nats.

THE ENVIRONMENT
Brian Sims ABNA

Brian is Chairman of the Taw and Exmoor branch and has been actively collecting blister packs for recycling. He said most people think blister packs are recycled if you put them in the local council recycling boxes. however, they are not and end up in land fill! Other people think a blister pack is only a small item and won't hurt to go in the bin. However, since July Brian has collected 16 bin refuse sacks! To date, Brian has taken 22 bin bags that will not end up in land fill and one bag of blister packs weighs 3.8kg! Brian started researching what happens to blister packs when he discovered they were not being recycled by the local council. He is the Environmental Officer for the Bideford Rotary Club. His research led him to discover that the pharmacy chain, Superdrug recycle them and every Thursday in Barnstaple, North Devon, the blister packs are collected by a company called Terracycle.

Brian Sims, on a branch walk

Blister packs are made of aluminium and various plastics. Brian found out that the aluminium is extracted, and then mixed with other metals to make screws, nuts, bolts, washers etc. Meanwhile the plastics, depending on which type of plastic, is re-used and mixed with other plastics to make either waste bins or to make the frames for UPVC frames for double glazed windows. Well done, Brian, excellent work.

Why not collect blister packs from friends and family as well as your own and join Brian in helping the environment.

A bags of blister packs Brian collected.

Graded Members and Awards

Harry West awarded MBNA in January 2024

I am going into my third year at University of Kent, studying wildlife conservation. I work as a summer surveyor, fitting the work in around my university course, which has given me some really good opportunities and experiences doing different surveys and relocations. Once I leave university my goal is to work within rewilding, species reintroduction, and habitat management.

In my spare time you'll catch me out hiking, exploring water ways, bird watching, insect hunting, searching for plants or out with my moth trap in various places! Some would say, I am a nightmare to go out with because one minute I'll be there talking, the next I'm off on a mission because something has caught my eye, or I've seen an interesting insect fly past where I would be off tracking it to try and get a photo! Last year I spent the summer finding as many orchid as I possible could while I was in Kent and I ended up ticking of 17 new species, this year I would like to continue that mission and find the ones that I missed.

My favourite species will always be a great spotted woodpecker, I've loved them since I was young hearing them drumming in the early spring; kingfishers are another favourite. Apart from the new species of orchids I found last year; I also had my first sighting of a hoopoe.

My interests in natural history started when I was given my first camera from my grandparents, I'd be out constantly taking photos and then trying to identify what I had taken without any real knowledge of what I was looking at (thank goodness for books, apps, and the internet!). Now I have an array of identification books, so many - I had to go out and buy a book case! The best ID books I have are in the WILDGuides series (Princeton University Press), Roger Phillips, and Collins.

In the past 4 years I've been trying to turn my garden wilder with planting more native plants; especially those which attract pollinator; putting bird boxes

up, and creating a meadow. There have been some successes and some failures, but over all I have attracted a variety of different pollinators including hoverflies, bees, butterflies, moths, parasitic wasps, and other flies. Leafcutter bees use the bee hotels I made 4 years ago, (this was the first habitat I put in the garden) and they return every year. And there's always hoverflies and other flies around the yarrows and wild carrots I have planted, as well as bumblebee queens nesting in plant pots, several species of moth attracted to my moth trap, and blue tits who have moved into the recently added bird boxes.

If you would have told me when I was at school this would be my path in life, I wouldn't have believed a word said especially as I didn't know what I wanted to do! I am proud to be where I am now, the hard work and constant learning is paying off but there is no slowing down as there is always more to learn!

Andrew Taylor awarded FBNA in January 2024

I have been actively involved in the study of Natural History for the last 40 years since my introduction to the subject at my local museum (The Potteries Museum and Art Gallery). The curator was instrumental in developing my interest all those years ago, and I was quickly hooked. It wasn't long before we began to work together as he would often give me tasks to perform on behalf of the Museum such as sampling local pond invertebrates. He ensured that I felt my contribution was important & valued. I would eagerly bring the specimens back to the museum where he and I would spend hours keying them out in the lab together. I learned so much from him and quickly progressed onto field surveys on behalf of the Museum.

As a result of that initial interaction, I developed a life-long interest in the natural world and natural history collections. I am now the custodian of a private collection of over 170,000 preserved specimens, both UK and global, that I have amassed for research and teaching purposes. I have a particular interest in deep ocean ecosystems and the adaptations of meso/bathypelagic organisms to survive in such extreme environments, which are well represented in my collection. The scope of the collection however is broad, spanning zoology, entomology and botany, as well as geological and paleontological specimens, and a significant research library. In addition to my own specimens, my collection has been

supplemented by material donated from other museums, research institutes and private individuals around the world. I also supply specimens to other collections, most recently I have donated four specimens of *Bathynomus kapala* (a giant marine isopod) to the Natural History Museum and currently my specimen of *Colossendeis colossea* (Giant Antarctic Sea Spider) is on loan for use in BBC Radio 4's Nature Table.

Much of my own fieldwork has been abroad, such as searching for Dendrobatids (Arrow Dart Frogs) in the Brazilian Amazon on behalf of the Smithsonian Institute, with numerous observations also made during my military service with the Marines. I have an active interest in Botany, particularly searching out some of the rarest of our native flora here in the UK.

The collection is available for outreach and education as well as research. Currently, I am working with Denstone College in Staffordshire, developing a range of teaching materials and opportunities for students to explore the collections and associated curriculum-linked ecological and conservation questions as part of British Science Week. I am also working with the University of Nottingham, making available avian osteology specimens for use in their 3D scanning lab. Prints from these will be used by the University when teaching comparative anatomy on the BSc Zoology.

Colin Bonnington awarded FBNA April 2024

I am passionate about the natural world which can be seen from the career and volunteering activities I participates in. I completed three environmental degrees (BSc in Ecological Science, MSc in Ecological Economics and DPhil in Wildlife Conservation). I also spent 19 months in East Africa, leading a wildlife conservation field project (for over one year of that time), where I trained and taught volunteers into human-wildlife conflicts in the region, undertook and managed the fieldwork, as well as visiting local schools and communities to educate about such environmental issues.

I spent over 12 years working in ecological consultancy advising with regards to ecological and ornithological matters in the renewable energy sector. This is to help promote green energy, but at the same time to survey and carry out

assessments to ensure the natural world will not be adversely affected by the proposed developments.

During my career, I have published 14 articles in peer-reviewed natural world journals, comprising seven from my African work, five from my doctorate and two from my consultancy roles. I also regularly review scientific journal articles intended for publication.

I am a full member of the Chartered Institute for Ecology and Environmental Management (MCIEEM). This institute promotes the highest standards of practice for the benefit of nature and society. I'm a Fellow of the Linnen Society of London (FLS) and a full member of the Royal Society of Biology (MRSB). I have been a member on the judging panel for the CIEEM annual awards which rewards individuals or companies/organisations in environmental good practice. And as a judge awarding university student for sound and robust projects, enhancing our understanding of the natural world.

I carry out considerable volunteering in my spare time. This includes carrying out bird surveys for BTO (breeding bird surveys) for over 15 years. I have also volunteered for the Chesire Wildlife Trust carrying out habitat management which has lead habitat enhancement at the local village's pond to improve the waterbody for the benefit of wildlife and the public. I also write a wildlife article in my local parish's quarterly magazine, for the past two years.

Finally, I have written and published three children's books related to the natural world to engage with children and interest them in the amazing wildlife that we have in the UK.

Theodore Brook awarded MBNA in April 2024

Originally from East Yorkshire, I now live in southwest London and am pursuing a PhD in the evolution, ecology, and conservation of the flora of a small oceanic island (Lord Howe Island) in the Pacific. Beyond my academic interests, I'm a keen naturalist with a (somewhat unsurprising) interest in botany. I've recently started the Identiplant course run by the Botanical Society of Britain and Ireland, which is helping me develop on my confidence of field identification. I'm lucky that my PhD is based

at Silwood Park, the rural Berkshire campus of Imperial College London, which provides me with the opportunity to study a broader range of flora that I might not encounter in London...

Like most naturalists, I'm also a keen birder. Having grown up near the East Yorkshire coast (with sites like Bempton Cliffs, Flamborough Head, and Spurn Point), I have a particular fondness for seabirds. I have also started moth-ing over the last year, an endeavour that has tested my identification abilities.

Another interest of mine is bats and recording. I was lucky enough to be involved in a study whilst at Cambridge looking at the activity of bats in their hibernation period (Brook *et al.*, 2022, *Nature in Cambridgshire* 64: 3). I'm also currently working with the Heath and Hampstead Society on a report assessing the effect of concerts at Kenwood House on local bat activity.

I'm very happy to be recognised as a Registered Member and would like to thank the BNA for this honour. I'm excited to continue working with the Association and to keep learning from its excellent membership.

Chairman's Award 2024

Chris Page, Meteorologist and Anglia TV Weather presenter, was awarded the Chairman's Award in April by Hon Chairman Steven Rutherford. This award is presented to BNA members or non-members who may or may not be classed as naturalists', but have given unprecedented service to Natural History.

Steve met with Chris at Eaton Park in Norwich to present him with it. Chris supported the Young Nats in their recording of the weather during the 2023 project. He has agreed to write future articles for the BNA, the first should be in the next issue of Country-Side.

New Student

Samantha Eastwood

My name is Sam and I've always had a keen interest in wildlife since childhood. Visiting the Peak District and the Lake District and seeing bird of prey in the wild, of which, owls which are my favourite. A few years ago, we visited a bird sanctuary in York and I held and named a juvenile Barn Owl "Yorkie". A year later my husband planned a surprise proposal with Yorkie who was flown to me at the sanctuary with a message around his foot "will you marry me"! I was shocked and of course I said yes! So, when we organised our wedding, it made sense to involve owls and bird of prey. We arranged for the sanctuary to come to our wedding so our guests could see and hold the birds they brought. Yorkie (my) Barn Owl was there and so was a Tawny Owl and many others. Sadly, Yorkie is no longer with us, but I do like to send over a donation to the sanctuary to help raise other bird of prey and keep them safe and healthy.

Bees are another of my favourite insects and we try very hard in our garden to have as many bee-friendly plants and flowers as possible as well having over 100 house plants too! In the future I shall carry on with my healthy garden for the wildlife and insects, but I would also like to learn more on how to help them for the future.

David Attenborough is my inspiration and I think I've learnt a lot from watching many of his programmes and reading his books. We need to help and maintain our wildlife; we don't know how lucky we are!

I recently developed an interest in fossils (see my article on page 14), so I started a Palaeontology course online and after a few months passed this. I then began an advanced course in Palaeontology which I am still on with today. I've found Palaeontology very interesting and if I had the chance, I think this would be my dream career! I have recently booked on to the Geology course too as it links well with the Palaeontology.

A visit to Cornwall and Scotland are planned for the future as I would love to the see Puffins on the coast nesting! but for now Whitby is my next holiday with more fossil hunting and spotting many birds of prey, as well as seals and whales, which when you see them in the wild it makes them that little bit more special!

Young Nats

Meet our latest Young Naturalists

Livy Wilde

Hi I'm Livy and I live by the sea in Exmoor National Park so I get to see lots of wildlife. I absolutely love foxes and think that all animals should be treated equally with respect. On Exmoor in the summer you can occasionally find an Adder and if you're lucky you will see a Black Adder like this one on the front cover!

We have loads of different plants to see, but the most amazing is the Star Jelly which nobody seems to know what it is. Some used to say that it fell out of the sky! The Star Jelly is a gooey substance that lies on the ground, dries up a bit then evaporates so you have to be lucky to find some! I'm vegetarian and I care for all nature and wildlife. I want to do lots of things to help stop climate change and save animals homes from melting in the Arctic and the Antarctic. I hope other people try to understand the world like me and how we only have this one!

Eve Chater

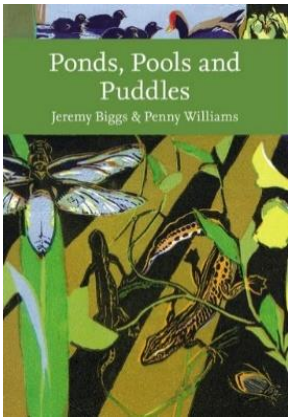
My name is Eve and I am fourteen years old. I live in in South Oxfordshire. My love of nature evolved naturally and I have always had an interest in insects in the garden. I started photographing bees from the age of seven years old. My holidays are spent in equally beautiful places such as Norfolk, Dartmoor, Cornwall and Exmoor where I enjoy exploring the countryside and going to nature reserves to learn more about my interest for wildlife. I have developed a love and real passion for Lepidoptera, specifically moths. I was so excited in September 2021 to discover a very rare and beautiful moth called the Blue Underwing (the Clifden Nonpareil). I regularly visit the UK Biodiversity Centre (Angela Marmont Centre) at the Natural History Museum in London.

My favourite season of the year is Spring as everything is growing in the garden and countryside and I am looking forward to participating in the BNA activity to record butterflies and moths in the garden from April to October.

Book Review

Editor Roy Stewart MSc, FIBMS, FLS, FRSB, FBNA

PONDS, POOLS AND PUDDLES (NEW NATURALIST LIBRARY)
by Jeremy Biggs and Penny Williams
Published by Harper Collins, March 2024.
ISBN: - 9780002200851. Hardback £65



When I was asked to review this book, I was expecting a very good book all about Ponds, Pools and Puddles, especially as it is published by The New Naturalist Library, a publishing house that you expect high quality books and lots of information. However, on receiving it I was stunned, firstly by how heavy it is and how chocked full of information the book is. Secondly, I was impressed by how in-depth, comprehensive, and well written it is; Jeremy and Penny have surpassed themselves in this beautifully put together book.

A number of years ago I had a landscape company where I specialised in building just the sort of areas this book features and I wish it was on my library shelf back then, it would have saved me from making so many mistakes. I have learnt so much by going through this book and crucially the information contained in it, is up to date and widespread, it even includes one of my most favourite quarries, Foggintor on Dartmoor, a place I have spent many a happy hour, just watching and absorbing the natural world – full of the most amazing life - that has taken over this man-made hole in the ground. One of my favourite sections is about the crustaceans especially the Triops, which I was honoured to work with alongside my seahorses work a number of years ago.

As well as being comprehensive what is refreshing about the book, is it does not shy away from subjects like the damage so many dogs are doing to ponds, pools and puddles and the future of these features in the natural world; for a dog lover the damage they do is a real bug bear for me. Normally any mention of the damage dogs do to our natural world, is met with howls of outrage, Jeremey and Penny explain carefully, why, and how damage occurs and why our four-legged friends should be kept on a lead in the countryside. If we do not care and look

after these reservoirs of life for future generations then they will be gone forever, time is definitely not on our side.

I love the way it starts from the beginning, in chapter one Ponds; An Ancient Natural Environment really highlights how crucial they have been in the ecological history and shaping of our planet. It then works its way through the history and uses of ponds, what makes a pond so special through its biology, types of ponds, and crucially why ponds are so important (as stated in Chapter 7) which points to Dispersal, Colonisation and Succession. We need ponds to live and sadly these days ponds need us to survive. This book tells us how and why they are crucial to human survival and what we should do to help them survive into the future. Ponds and water features like these, are the backbone of our natural world, the arteries, so many species including humans, depend on them; they travel from one water body to another like camels going from one oasis to the next. Without them our natural world is so depleted, and Jeremy and Penny have done an amazing job in this thoughtful, scientifically based, well laid out book for the modern naturalist.

It is without doubt the most comprehensive book of its kind on the market and if you only had one book of this type in your library for these sorts of water features then I would say look no further, this is the one. It is not aimed to be a beginner's guide to water features but there is a lot for all in it, and so if you are new to this type of water body or even highly experienced then start with this book, you will not need to buy any other, everything is there. For ecological and environmental students and graduates then this should be the book that underpins their courses and reading. It is fully comprehensive and once gone through it would give anyone a good understanding of ponds and their function in our world.

It is not a cheap book at £65 but you pay for what you get, it is based on a lifetime of expertise and experience and so the cost is a small price to pay for what you get. If I had one small niggle, I would have liked more pictures for visual identification guidance but to be honest if you wanted to fit in all this knowledge and all of the pictures, I want, you would have a book that is twice the size.

I would highly recommend this book and like I said, if you only buy one book about this subject than this should be it. Well, done to Jeremy and Penny for producing such a comprehensive, informative 'bible' on the subject.

Review by Neil Garrick-Maidment FBNA

National Events

National Encaenia and Exhibits Handling Day

5th October 2024

In the Flett Theatre, Natural History Museum, London

This will be a "Ticket Only" event, it is free and open to BNA members, guests and non-members.

Please note to avoid disappointment on the day, email the webmaster for tickets and programme: webmaster.bnanaturalists@gmail.com

We are repeating the success from 2023 and holding the 2024 Encaenia at the NHM, beginning with tea/coffee on arrival.

In the morning there will be tours (including around the newly renovated NHM garden), exhibits to look at and information stalls from Society for the History of Natural History and Linnean Society (TBC) and after lunch there will be the award and recognition encaenia, followed by PowerPoint talks from guests (subjects will be confirmed nearer the date.
There are several cafes and coffee shops within the museum.

Graded members at 2023 Encaenia. Photo: L. Artindale

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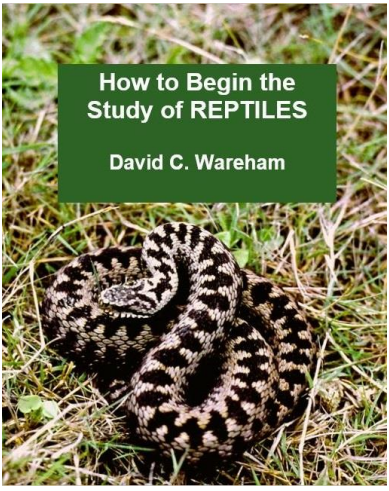
New Book published July 2024

How to Begin the Study of REPTILES

This will join others in this series and covers all six native species, with information on how, where and when to find them.

£9.95 available from the BNA website shop on this link:-
https://bna-naturalists.org/shop/clothing-books-accessories/



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