NATURE GAZETTE

The Newsletter for Young Naturalists

August 2024

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Spotting Wildlife At Local Nature Reserves, Herons and Egrets, The Use and Misuse of Apps in Nature, Garden Safari, Looking at Science, Working With Nature, Book Reviews, Young Naturalists Hub and more!

Spotting wildlife at local nature reserves.

By Chairman Steve

There are so many fantastic places to see wildlife throughout these islands that we call home. So much so, that I had to think long and hard about where I would write about here. Plants, insects and animals can be common and easy to find in some places, and difficult in others.

A good way to decide where I am going to visit is to think, not about the species that I might see, but the habitat and what might live there. The coast for sea birds and rock pooling, or a grassland and old hedge for flowers, beetles, bees and butterflies; some habitats are special places to see wetland birds such as Marsh Harriers, ducks and Reed Warblers; but one of my favourite nature reserves to visit is the Wildlife Trust's reserve at Knettishall Heath in Suffolk.

Heathlands soil is very sandy and so cannot hold much water so the plants tend to be very specialised, and so, the insects and birds tend to be specialists too. Knettishall is well managed for Heather, a plant that does very well on the loose sandy soil of the heath. And it is the combination of the abundance of Heather and the soil structure that is easy for insects to burrow into for nest sites, makes this a great place to watch Heather Bees. Even though the Heather Bee is a solitary bee it nests in huge colonies, and at this site hundreds of females can be seen feeding on the flowers of the Heather and carrying pollen back to their nests. The males tend to stay closer to the burrows as they await the emergence of the new females in the hope to mate with them.

Another heathland specialist that I watch when I visit Knettishall is the Woodlark. The Woodlark is a ground nesting bird that is traditionally found in the south and east of England and is relative of the Skylark. The display flight is distinct and not as high as the Skylarks, and it is worth using a "Merlin" app on your mobile device to detect, and then learn the song.

When visiting a nature reserve, have a look on their website before you go for the best times to see species that you are particularly interested in, however, it is also good to talk with the staff and volunteers when you arrive if you are looking for something specific such as a local butterfly or reptile as they will be able to tell you the best place to see your target species, and they are also always pleased to receive your sightings at the end of your visit.

Heather Bee (left) and nest (below)

When is a Heron not a Heron? When it's an Egret!

By Di Farrar MBNA

Grey Heron

If you happen to see a tall bird with long legs by a river or lake, it is most likely to be either a heron or an egret. They are elegant looking birds and can often be seen standing like statues in shallow water watching for small unsuspecting fish to swim by.

Egrets are part of the heron family but are easy to recognise as their plumage is all white, whilst herons in this country, are mostly grey. Herons and egrets can also be spotted in fields and farmland in their search or food.

Grey Heron

- Commonly found in the UK.
- Can be up to 100cm tall.
- They have grey backs, white necks with black markings along the front, large pointed bill, black stripe on the head which goes into a long black crest at the back.
- They plunge their bill quickly into water to catch fish.
- Also feed on small birds and small mammals like voles, mice or rats. They also find amphibians like frogs very tasty!
- Their nests are built high up in trees in groups called heronries.
- The Grey Heron is the emblem of the British Naturalists Association.

Little Egret

Little Egret

- Smaller than the Grey Heron at around 60cm tall.
- Their habitat varies but usually found where there is water, eg lakes, rivers, canals or estuaries.
- Plumage is all white, the bill and legs are black and they have distinctive bright yellow feet.
- Once a rare visitor to Britain, they are now a common sight around wetlands.
- They nest and roost in trees.
- Feed on small fish and crustaceans – often seen shuffling their feet in the shallow water to disturb their prey.

Cattle Egret

Cattle Egret

- The smallest of these, standing at approximately 50cm.
- They have a short, yellow bill and yellowish legs.
- The plumage is white but during breeding season they develop patches of yellow/orange feathers on the chest, head and back.
- Not as common as Little Egrets but are regular winter visitors to Britain.
- Can be found near to grazing cattle, feeding on insects and other invertebrates disturbed by them, they especially love to feed on grasshoppers.
- They prefer to be in groups and also nest in colonies usually mixed with other herons.

The Use and Misuse of Apps in Nature

By Dr Chris Gibson Trustee & FBNA

There is a saying that anyone who relies on a satnav in getting from A to B is permanently lost! And so too with an overreliance on apps to identify things in nature: I would argue that anyone who does so uncritically is lost on the pathway to becoming a naturalist, a lost soul wandering aimlessly in purgatory unable to experience the delight that most of us get from growing, learning and succeeding in putting names to the world around us.

Of course, fighting against the ubiquity and appeal of apps is a fool's game, a lost cause. But I will try! I see really two main issues. One of these is becoming less of an issue as the algorithms and AI become better and the databases of images (or sounds) become more comprehensively populated. So while the popular plant identification apps regularly used to throw up 'positive identifications' of species from the wrong continent or even kingdom (I know of one that 'identified' a cowrie shell unequivocally as a potato!), that is probably no long such an issue. The training of AI systems is likely to be improving the results all the time.

But the second issue is the value to the user. It is all well and good knowing what something is, but it is another thing knowing why it is what it is. Surely this is the objective of all naturalists, to know 'why' as well as 'what'? And while our brains are good at coping with uncertainty (life is little more than a series of chance events strung together by factors beyond our control), sometimes the desire for an answer will override reason. It is all to easy to overlook uncertainty and percentage likelihoods when an answer comes out of the magic of AI as somehow 'desirable', by virtue of rarity or perhaps if it helps build a life-list.

Of course, I would say this: I write identification guides! But it is certainly a fact that not everything can be told apart on external appearance alone, even combined with data such as geographic location or date, as for example with species pairs such as Grey/Dark Dagger moths or Common/Soprano Pipistrelle bats. Some species need destructive internal examination (incompatible with the ethos of many naturalists, myself included), or genetic analysis, out of reach of most folks. Plant identifications may rely on or at least be facilitated by touch or taste or smell. Until someone develops an app-based system where your phone incorporates a DNA reflectance scanner, surface textureometer and an artificial nose, those things will be forever out of reach, notwithstanding the comfort gleaned from a magic box saying 'this is species X'.

The very best app for nature study in my view is Merlin, the bird sound identification app (https://merlin.allaboutbirds.org/) produced by the Cornell Lab of Ornithology. This app relies on the fact that your phone can act as a digital ear and then make comparisons with a vast database of recordings, rather than the printed page which relies upon imprecise transliterations, vague descriptions of calls or uninterpretable sonographs. And because the singing species' name lights up when it sings, this is a tool to learn with, not just to record uncritically. Yes, it can go wrong. It has pointed me to birds from other continents at times, and more frequently failed to 'hear' things that I have heard, but all in all it is quite remarkable. It is just sad that it works best when just one bird is singing; the fact that this seems now to be the norm speaks volumes for the nature-depletion we are suffering. That and the related 'shifting baseline syndrome' is another story for another day…

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Apps tap into the same desire for instant gratification as fast food. And we all know now the health risks of fast food compare with home cooked and prepared. As many who cook know, it is not just that the results are healthier, but the process of cooking is positively creative and good for one's inner self being. So too with apps: they risk perverting the course of biological recording by producing unverified results, they risk cutting off at the tap the flow of new expert naturalists (who could provide that verification) and they risk taking away the joy and sense of achievement that knowing why something is what it is gives to all of us. They have a role to play in drawing people in, and in giving hints if you are completely stumped. While a good servant they are a bad master - never use them in isolation, never believe the results uncritically, never assume they are an alternative to experience and critical thinking in our own brains.

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Science Snippets

By Endymion Beer MBNA

The study of Pteridology (silent p) is the study of ferns. Ferns are fascinating with their often intricate leaves, called fronds.

Ferns are non flowering. For species which are similarly formed, like the 'buckler' fern species of which I believe there are 60 species in the UK, spores (also called sori) play a key part in their identification. Ferns produce spores to reproduce. When ripe these are eaily brushed off or become airborne and produce new plants in the right conditions. Now is the time of year to start looking at spores, so get your hand lenses out, and start having a look on the undersides of ferns - you'll discover a whole new world in miniature!

Hartstongue Fern

Hartstongue Fern spores

Polypody

Polypody spores

Then and Now

By Endymion Beer MBNA

Children from the church infants school in Bideford grew an acorn in 1905. This is what that little acorn looks like now! Oak trees have the greatest biodiversity. They are home to numerous insects providing food and shelter to subsequent bird and other animal life. Planting a tree is a wonderful thing to do. Let me know if you have planted a tree or are planning to do so…..

Buff Tip Moth

Garden Safari

By Elizabeth Fowler and Carol King

Moths are often seen as the poor relation to butterflies, but they can be just as colourful, often more beautifully marked and there are 2,500 species in Britain. So whenever you are out you will almost be guaranteed to see a moth. 130 larger moths are day flying like the beautiful tiger moths, plus all the micro moths that flit from stem to stem as you walk.

Depressaria aucella moth

Moths lay hundreds of egg which turn into caterpillars and are the main food source for many birds. Some caterpillars however have evolved elaborate ways to avoid being eaten.

One good effort is to be poisonous, achieved by feeding on poisonous plants and advertise the fact with vivid, often yellow and black, colouring. The tiny Depressaria daucella is one, feeding on one of the most poisonous plants in England the Hemlock Water Dropwort, the Cinnabar caterpillar does this by feeding on Ragwort. Cinnabar caterpillars are also poisonous and have the same distinctive yellow/black colouring.

Cinnabar Caterpillars

But this moth goes one step further and as a moth disguises itself quite remarkably as a small twig. Other moths have intricate patterned markings that blend completely into tree bark. I have spent many hours staring at trees trying to find these moths. You can watch one fly onto a particular tree and completely disappear. Others will do the same by having the colouration of lichen. Caterpillars also disguise themselves, the Swallowtails pretend to be bird droppings (not a tasty morsel).

Another defensive characteristic for caterpillars is to have toxic hairy bodies. If you find a hairy caterpillar it is unwise to handle it unless you are sure which it is as the hairs, at the least, are often a nasty irritant. The Oak Processionary caterpillar is particularly toxic so if passing a hedge covered in these its best to be careful not to brush against them.

However this strategy is in vain when Cuckoos are about as they are able to eat toxic caterpillars. They do this by slicing the caterpillar, shaking out the toxic bits and then regurgitating the hairs as a pellet. How ever did they learn to do that? It's no wonder moths need to lay so many eggs in order to continue as a species.

Moths are also vital pollinators, the dramatic hawk moths feeding at night on nectar from evening primrose. The pale yellow flowers are much more visible at night than most flowers so attract night flying moths, other day flying moths will feed in the morning. Evening primrose (pictured left) is widely established across Britain and in places grows profusely in coastal regions.

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Garden Safari *Continued....*

By Elizabeth Fowler and Carol King

However it is not native to Britain and is one of the foreign introduced plants that came from the Americas in the 17th Century. There it was widely used by the native Americans as a food and medicine, the young greens were boiled and eaten, a tea was made for over-fatness and a hot root poultice for piles, the bark was used for whooping cough and asthma. Here it is best known for the oil, Omega 6, which is thought beneficial for a wide variety of symptoms.

Another interesting plant that has been brought into the country as an attractive garden plant and has spread, to a certain extent, is Giant Quaking Grass (picture above). A lovely grass with drooping flower heads in the shape of elongated hearts on long slender stalks that are described as dancing in the wind, hence the name. There is a smaller native version well worth looking for as the flowers are quite unlike any other grasses.

Once you start looking at grasses the variety of shape, colour and growth pattern is enormous. This variety is now being recognised as of great importance as many are much more resilient to the effects of climate change and will be needed in the future. It is worth finding a patch of ancient pasture and counting the number of species of grasses. In 1996 580 grasses were recorded in Britain.

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New Book

Now Available in the “How to Begin the Study of Series” **REPTILES** Written by David C. Wareham is a fantastic new edition to the collection

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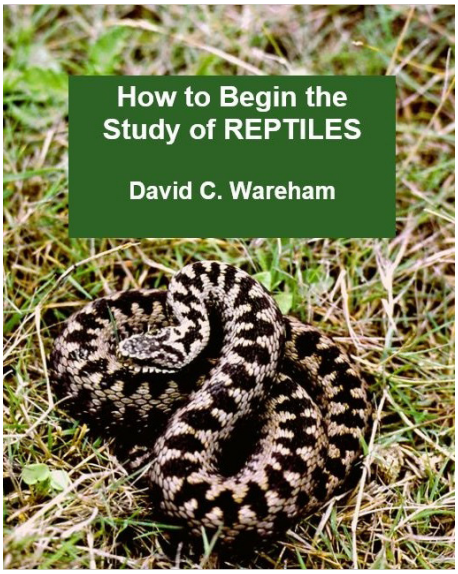
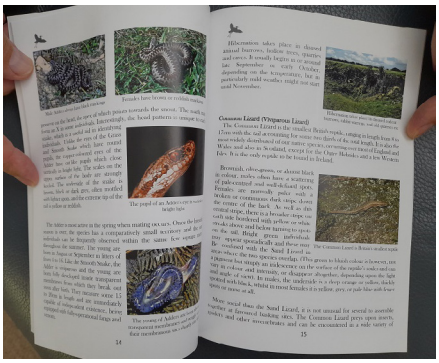
This covers all 6 British species with lots of information and photographs to help you, £9.95.

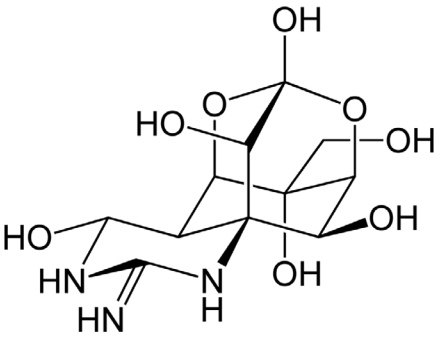




Looking At Science

Toxins, Poisons and Venoms

By Roy Stewart MSc FIBMS FLS FRSB FBNA



1024px Tetrodotoxin 2D skeletal

You may well have come across the three terms in the title especially in television news and the press but the problem is they are often used interchangeably or totally in the wrong context. An exact definition is not universally given but generally toxins are biological molecules which are usually small and often tend to be derived parts of proteins called peptides or actual proteins themselves. They are metabolic products from living organisms and are often produced as a secondary process so are not essential for the organism to function and tend to be used as a defensive or prey mechanism. They are produced by a vast number of different life forms and each has a distinctive mode of action in conjunction with a characteristic molecular structure and biochemistry. A common feature to all toxins is that minute quantities will exert a pronounced effect on their intended targets. Toxins are often given a prefix to denote the parent type of organism that synthesized them eg mycotoxins from fungi or phytotoxins manufactured by plants. To further confuse the situation toxins are sometimes given a prefix which denotes their primary mode of action eg neurotoxins which act on the nervous system or cytotoxins which act on individual cells. There are many more terms used. The definition so far has covered biological toxins but there are inorganic or synthetic (manufactured) toxins and these are sometimes referred to as toxicants to differentiate them from toxins. Toxins or toxicants can also be called poisons or venoms and this refers to the way the toxins are delivered.

Phytophotodermatitis Severe Case

For a toxin to be called a venom it has to be actively injected, characteristically by fangs (be careful here as the definition of fangs can also be used for the teeth found in bats, baboons, big cats, and even hippos and other carnivores but they do not inject venom) which are typically found in snakes and spiders or delivered by stings as found in wasps, bees, jellyfish etc and tends to be used by predators. The procedure for injecting venom is called envenomation. Now this is where terminology and definitions can be confusing. Would you consider being stung by a stinging nettle to be caused by venom. If you look at the actual definition then the substances released by a stinging nettle which are histamine, acetylcholine, and serotonin and these are mainly responsible for the pain felt, are delivered by modified hair cells made of silica which effectively act as minute glass syringes or hypodermics so technically this is a case of envenomation. Nature can be very confusing.

Giant Hogweed

The final term is poison and this is a substance or toxin that is obtained passively such as breathing, eating or absorption trough the skin and tend to be defensive substances. A poison can also be used as a form of treatment apart from causing serious harm and death and depends on the context its used in and also critically its dose. Yew tree berries are very poisonous apart from the bright red jelly like covering of the seed but the bark especially contains a series of compounds called taxanes or taxols after the latin name for the tree, Taxus. These compounds are used in the treatment of human cancers especially breast and ovarian cancer and works by stopping cells dividing and is a very effective drug.

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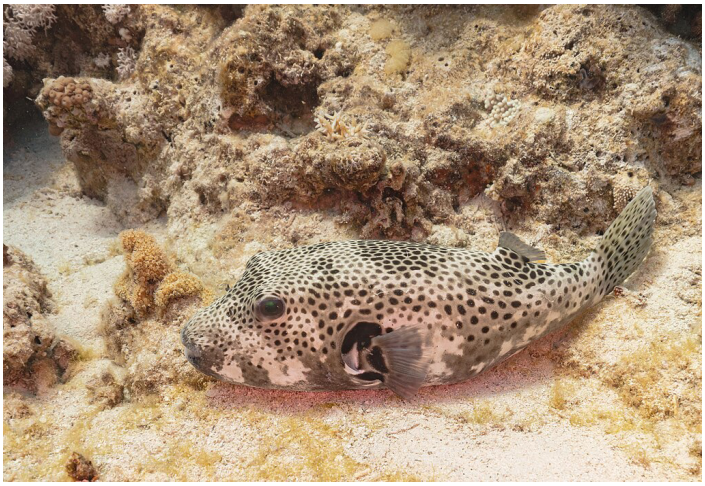
Hapalochlaena lunulata blue ringed octopus



Puffer Fish

One of the most poisonous toxins produced is from a bacteria called Clostridium botulinum and the toxin is botulinum toxin and blocks the release of acetyl choline from nervous cells and so causes muscle paralysis and is often fatal but in smaller doses can cause paralysis that last for months. In very very small doses it is used in clinical situations such as spasms and movement disorders but is widely used in the cosmetic industry to decrease crease and stretch lines especially in facial tissue. Another potent toxin is tetrodotoxin (TX) which is a potent neurotoxin responsible for many deaths each year. The actual origin of TX is not known but is possibly bacterial again but passed down the food chain and accumulates in different organs in different organisms. It is famously found in Pufferfish which is considered a delicacy in Japan and can only be prepared by trained and licensed chefs called Fugu chefs where the TX accumulates in the fish liver.

The skill is to prepare the fish with just enough TX left in the dish for the consumer to have a delicious little tingle on the tongue. As you may have guess there unfortunately have been rerecorded deaths from this risky process usually from untrained chefs. TX is the most powerful neurotoxin known and is 1200 times more toxic than cyanide and has no known antidote(treatment). TX is also found in frogs and toads and newts but also in the blue ringed octopus found in the Pacific and Indian oceans especially around coral reefs but especially in Queensland Australia and even though the octopus is tiny (up to 8 inches) its sting packs enough venom to kill 25 humans within minutes.

One last example of poisoning is closer to home and this is caused by an invasive plant that originated in the Caucasus and its called Giant Hogweed and lives up to its name as it can grow 4 metres tall. It produces a group of molecules called furanocoumarins which are found in the sap and these can penetrate the skin which prevent the skin from being able to protect itself from sunlight especially ultra violet and this leads to a reaction called photodermatitis and leads to intense blistering that in certain individuals can resemble third degree burns as seen in serious burns victims. The reactions can start within 15 minutes and can last several days.

One last thing to mention is the notorious use of poisons within a political setting and there have been two recent cases (out of many) that have highlighted the fatal effects of externally administered poisons. One was the use of a toxic nerve agent called Novichok which was used in the botched assassination of the Skirpals in Salisbury but actually killed Dawn Sturgess as a standby incident probably as a result of the delivery mechanism used which was as a perfume and used accidentally. Another incidence was the deliberate injection of radioactive polonium into Alexander Litvinenko which unfortunately was fatal; again in the UK. There have also been deliberate use of poisons to kill individuals and relatives involved in domestic situations. A recent one is the use of deadly mushrooms used in a meal in Australia; this is still an ongoing case. There are numerous other examples I could have used but it would have turned into a book but I hope this has raised your interest in toxins, venoms and poisons and if you do further research you will be amazed at the type of compounds used or the reactions that can occur across the flora and fauna of this incredible planet.

Working with Nature

Looking at careers and talking with people who are actively working with nature from all walks of life - This time, we talked with North Devon **Dr Amanda Yates.**

I am a retired Biomedical Scientist. As a volunteer now I wear several hats. I am a Lundy Ambassador which means that I get to lead guided walks on Lundy and help out with visiting schools. I am also in the Lundy Field Society (LFS) and I take part in the working parties that go over to Lundy to do conservation work. When I am on Lundy I note down the wildlife that I see and hear and also take photographs, this helps the LFS to document what is on the island. I am the LFS contact for Odonata (dragonflies and damselflies) and am in the British Dragonfly Society and take part in Odonata surveys on Lundy and on the mainland. I am also a member of Devon Birds and do regular voluntary nature conservation work at Godborough Castle Nature Refuge. I also organise and take part in the bird surveys and Odonata surveys for the Godborough Castle site.

As a teenager I developed a love for birds and always enjoyed walking in the countryside. The love of being outdoors stayed with me and the more I went outdoors, the more I saw. Initially my inspiration were the birds and then people. I think being surrounded by people who enjoy nature is very important. They can show you things that you may not have noticed if you were walking alone. That is one of the great things about going out with the BNA, it takes us ages to walk a short distance but we see and hear so much more.

My chosen career evolved through my love of science, I started as a lab assistant as I left school with only a few O'levels. I took pride in my work and always tried to be the best I could be and gradually worked my way up the ranks. I ended up being a scientist and getting a PhD. When I retired and my time became my own I joined a lot of groups that would encourage me to get outside and enjoy nature. When I first started at Godborough I didn't know anything about conservation work but as I learn about the site and the creatures that use it, I think that I am beginning to get more knowledgeable.

Looking back if there was anything I would have done differently, I wish that I had been interested in nature at an earlier age. I think that I would have seen and learnt so much more. The natural word is a very special and beautiful thing and there is so much to learn and enjoy. Being interested in nature when you are young is a wonderful thing. The advice I would offer a young naturalists seeking a career path is this. Don't be afraid to start at the bottom and work your way up, that's what I did with my career and with my volunteering.

It's always good to have a goal to achieve, and currently I would like to improve my skills for identifying birds by sound.

If I had the power to change one thing to help nature, I would get the British Government to understand how important nature is and persuade them to protect more land and to create larger areas and corridors for nature to have a home.

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Wild Carrot

By Trish MacDuff ABNA

As summer unfolds, we see many wild flowers that are umbellifers. The word umbellifer comes from the Latin word umbellula – meaning little shade. If you look at the flower head, you will see 'spokes' and the 'shade' like a parasol or umbrella, which describe this type of flower.

Wild carrot is a common plant from this family, appearing from June to September. The first year it appears as a rosette of leaves in the ground. By the second year it will have a tall stalk bearing flowers. The flowers start as purple/ pink colour but open up into white blossoms. This plant is a perennial so comes up every year, and particularly likes chalk soils and well drained land. You can often find it by the coast.

Its roots and leaves do smell like carrots – crush a leaf and sniff! But the roots are not orange like the carrots that are grown to eat.

Besides the smell of its leaves, another way to confirm the identity of a wild carrot, is to look for a red dot in the centre of the flower head. It is thought that this red colour helps to attract pollinators to the plant.

When the flowers die back, the flower head turns in on itself and the dried seed heads make a concave nest shape.

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Dung Beetle underside

Dung Beetles

By Trish MacDuff ABNA

Super heroes of the natural world, dung beetles help to get rid of the piles of poo that animals leave behind, perhaps from livestock like cattle or sheep, or wild animals like deer etc. In the UK we have around 60 species of these beetles, which feed on manure, use it to make their homes, and provide food for their young.

In doing this, the beetles recycle the nutrients, fertilise and improve soil structure and sustain many plants. In removing waste from the top of the ground, it helps to keep the fly and parasite population down. A dung beetle will work all year round, although mainly in spring and summer. They can make a cow pat disappear completely in a few days.

They have a brilliant sense of smell to sniff out their next meal. The larvae have sharp mouthparts to bite their way through coarse droppings. They can be divided into four groups:

***** Dwellers : will live inside the dung pad.

***** Tunnellers : also live in the dung, but make a tunnel underneath it, pulling pieces of dung down into it and laying their eggs there.

* Stealers: will take advantage of tunnels already made by others, and use for their own eggs.

* Rollers: are found in warmer countries, where they make balls out of the dung and roll it away and bury them in brood chambers away from other beetles.

Carrion Beetle
Silpha tristis
(Right)

The Buzz on Beekeeping

By Pippa Woodley, aged 14

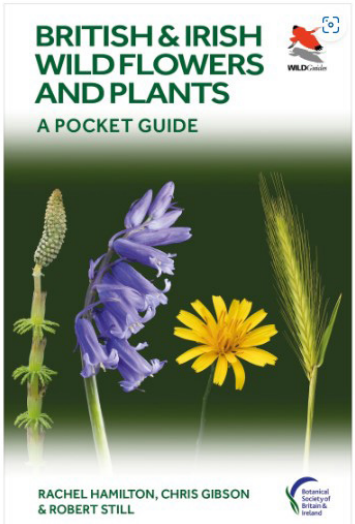
I have recently finished a 10-week beekeeping course, and I am now helping at my local apiary. I have learned so many fascinating facts about bees that would have never crossed my mind. Although beekeeping may seem relatively simple, it is, in fact, a huge responsibility.

For example, there are hundreds of different diseases and parasites that can affect your bees, such as varroa (a mite that feeds on brood, causing the bees to emerge deformed) and foul brood (in some cases, the whole hive must be destroyed). In the warmer months, bees can also sometimes swarm. This is when the queen leaves the hive and takes around half of the bees with her. Early signs of a swarm are when the bees begin to create queen cells as they prepare for their current queen to leave. This can be prevented by taking away the queen cell or splitting the hive and allowing the new queen to develop.

At the moment, I visit my local apiary every Sunday and watch the people around me care for their bees. It's fascinating to see how every beekeeper has their own way of looking after their bees, varying from different hive inspection methods to entirely different hive styles such as the Langstroth hives and the flow hives.

Recently, I was given the responsibility of looking through a hive myself! I wouldn't say I was the best at it, but it was such a fun experience (even though I was stung twice!). The hive that I looked through was packed with stores and weighed a lot! Sadly, the weather wasn't too great, and towards the end of the inspection, the bees began to get very restless, and my smoker ran out!

Apart from the few downsides, the inspection was overall a success, and I learned even more about beekeeping. I can't wait for my next visit to the apiary!

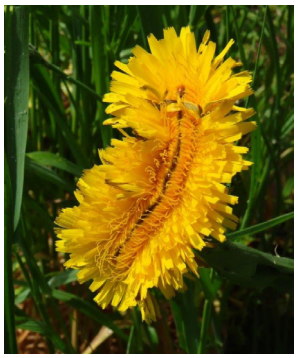


Congratulations to Dr Chris Gibson, Robert Still and Rachel Hamilton

on their new book pictured left. For further information or to order a copy please follow the link below:

https://press.princeton.edu/books/paperback/9780691245409/british-and-irish-wild-flowers-and-plants

The Young Naturalists' Hub



Have you ever seen anything like this?

This is in fact a dandelion - a double headed dandelion.
Picture courtesy of Dr Chris Gibson.

For reference, we include Pauline Rutherford's article as published in Countryside Autumn Winter 2020 edition because it is so intereting!
Your observations are important - keep them coming in!

The Humble Dandelion

Pauline Rutherford MBNA with additional content from David Jenner

At the end of April South Yorkshire member David Jenner, sent me a photo his wife had taken on their daily exercise walk. It was of a dandelion with a globe-like head and very thick stem. He hadn't seen anything like this before and wondered what had caused it. Examination of the stem revealed it to be double width so maybe two flowers growing next to each other forced together like Siamese twins. The stem felt like two pieces of electric cable within the same plastic covering.

I was able to tell him it is caused by two of the plant's ovaries being fertilised at the same time – therefore making it con-joined. This phenomenon found more frequent in vegetables isn't altogether common, some horticulturists say it is as common as in human twins.

This started something with me, and I was scanning all the dandelions growing along the grass verges when I next went out on my daily exercise during lockdown. Whereas we didn't find any like the one David had seen, we did see a different specimen. This one had a very wide, splayed stem and a stretched out flowerhead. This is called fasciation, which means banded or bundled. Again, it is uncommon and it is thought the deformity to be caused by a hormonal imbalance.

Two examples of abnormal growth in a plant, who would have thought the humble dandelion could be so interesting?

Conjoined - Dandelion showing the globe flowerhead.

Conjoined - Dandelion showing the thickened double stem.

Photos: David Jenner

Fasciation - Dandelion showing stretched out flowerhead.

Fasciation - Dandelion showing the thick splayed stem

Photos: Pauline Rutherford

The Young Naturalists' Hub

Recording Bees and Butterflies!

Star Observation from Leah Reid!

Because of the bee survey we have found out a lot about mason bees which are in our garden. Some of them used our bee house. We have been seeing little black wasps using the house too. We wondered if they are predators. One of the tubes was cracked so we had a look inside and found a hoard of paralysed small spiders. Also some cocoons. One was hatching and we watched it hatch into a wasp. The other one was empty. We think they are bramble wasps.

We discovered through research, that the mason bees need longer tubes because they lay their girl eggs at the back and boys at the front. We have collected lots of stems of cow parsley and also bought a mason bee kit with longer tubes. We hope this helps them.

Mason bees are gentle and don't sting.

From Leah

Leah Reid's Mason Bee photograph.

Thanks Chris!

Chris Page ITV presenter and champion of last year's weather project, was awarded the 2024 Chairman's Award from Steve Rutherford on behalf of the British Naturalists Association.

Chris says *"Over the past year I've been supporting the BNA's Young Naturalists weather recording project. Aiming to help children see the importance of weather impacting the natural word."*

Thank you Chris your support has been truly inspirational!

Chairman's Challenge!

Chairman Steven Rutherford completed a walk in honour of Thomas Bewick, the Northern wood engraver and Naturalist; who used to walk from his office in Newcastle on Tyne to his family home every Sunday along the banks of the river Tyne. Steve's challenge was to walk the same route there and back in a day on Thursday 16th May. The route was a little under 30 miles in total and he completed it in just over 10 hours.

Steve says:
The walk was to raise funds to help the BNA Youth and Students members. Thank you to everyone who supported my challenge, and if anyone would still like to donate you can do so by clicking this link and following the instructions. https://bna-naturalists.org/donate/

Look out for Steve's report of the challenge in the Autumn issue of the British Naturalist magazine.

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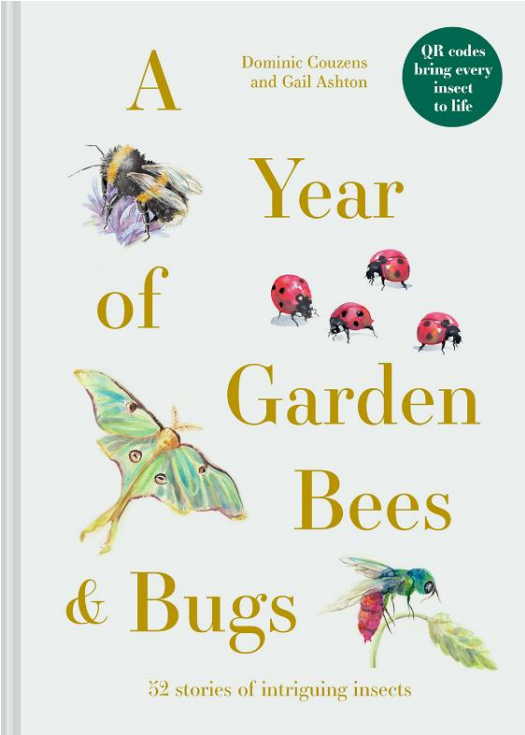
Book review



A Year of Garden Bees and Bugs: 52 stories of intriguing insects

By Dominic Couzens and Gail Ashton. Illustrated by Lesley Buckingham.

Hardback ISBN: 9781849947954

Hardback price: £ 20.00

Hardback publication date: 14 March 2024

Published by Batsford

Reviewed by

Pippa Woodley. Young Naturalist, British Naturalists Association.

"A Year of Garden Bees and Bugs" is a fantastic non-fiction book. It consists of so many interesting facts that I would have never known if I hadn't read the book. Who knew how fascinating the Brimstone Butterfly is and how they sleep throughout winter! Not only does the book educate you on interesting new facts, but it tells you about these things in a capturing way; turning all the fascinating creatures into stories that can keep you hooked for many hours.

These wonderous stories are suitable and enjoyable for all ages. Furthermore, it includes interactive aspects where you can scan a QR code and watch a video of the insect you are learning about. I loved being able to combine the aspect of reading and watching, especially when I was able to compare the insect in real life as to the beautifully illustrated picture. In total, there are 52 intriguing stories; meaning you can read one every week.

I would highly recommend reading this book as it is perfect for nature-lovers.

The Young Naturalists' Hub

Congratulations !

James Wilkins received his BNA Young Naturalist badge and certificate. He has been a member for a full year and continues to enjoy natural history.

Aerin Ansell says:

I got a great sighting of a Large Emerald moth on the walls of my house!

Aerin sent in several pictures and the best of these is pictured below. Great shot Aerin!

Livy Wilde says:

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 (melanistic) Adder this is a photo we took of one.

See Livy's full biography in British Naturalist

Contributors please note:

If you are a contributor, or would like to submit articles and pictures for consideration, the **deadline** for the Nature Gazette due out in August will be **Oct 11th 2024**
Please send to bna.zoom.talks@gmail.com
Thank you for your support!

Do you have a query?
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Please note that your membership renewals will be sent to you from bna.zoom.talks@gmail.com