



NATURE GAZETTE

The Newsletter for Young Naturalists
August 2023



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Swifts and Swallows and more.

Camouflage by Trish MacDuff ABNA

All animals and plants have an innate need to survive and reproduce. Camouflage is a survival technique which allows the animal to blend into its background so that it can hide from predators trying to eat them. It also works the other way round – it disguises the predator so that the victim can't see them hunting them down!

- Mountain hares can change colour in the winter, from brown to white, so that they can blend into a snowy background. Stoats that live further north can also turn white, but the ones in warmer more southerly places don't do this. The ptarmigan, a member of the grouse family can also turn its brown feathers white in winter.
- Caterpillars can be very hard to spot on their host plant as they can be a similar colour to leaves or twigs for example, speckled wood caterpillar. Some caterpillars even look like bird poo.
- Moths can blend in very well with their surroundings. The peppered moth, white with black speckles that give it its name, can be almost impossible to spot against a moss or lichen covered tree.
- Stick insects resemble the twigs of trees it lives on, having a similar colour and a twiggy look.
- A young deer isn't strong enough to run away from its hunter. As it lies quietly in the undergrowth the pale spots on its back resemble the pattern of sunlight through the leaves on the trees, which break up the outline of the deer, making it harder to see.
- A bee orchid pretends to be something it isn't, in order to help pollination. Part of its flower resembles a bumble bee. It emits a fragrance which attracts male bees, but when the male lands and realises it isn't a female bee he has spotted, he has already has pollen on his body, which he will carry to another plant for pollination.
- There are many examples of camouflage at work on the ocean floor – fishes like plaice and flounder are able to mimic the colours of the seabed and be extremely hard to spot.



Moth Trapping

By Pauline Rutherford FBNA

Moths belong to the same family as butterflies – Lepidoptera, and are simply butterflies of the night. There are 2500 moths in Britain, 900 are Macro (larger) moths and 1600 are Micro (quite small) moths. Some of them are beautiful colours and have beautiful markings, and some have unusual names which relate to their colour. For example, the Elephant Hawkmoth gets its name from the caterpillar which looks like an elephant's trunk. The Pebble Prominent looks like pebbles. The Spectacle moth looks like it is wearing a pair of glasses! And some of the micro moths look like bird droppings!

It is a fascinating and fun activity to do. Below is some information about different moth traps, if you know someone who is good at DIY, you can build your own trap, which will be cheaper as you only need to purchase the specialised bulb and the electronics. Here is a link to use: <https://butterfly-conservation.org/sites/default/files/how-to-build-a-moth-trap.pdf>

Types of Moth Traps

Robinson – a large round, robust plastic container

- best moth traps for quantity and species with less escapees
- it is mains operated
- usually uses a mercury vapour (MV) lamp
- It is bulky and takes up more room than the other two
- it is the most expensive



Skinner – large box shape made from wood, aluminium or plastic

- good amount of moth species but they can escape as you empty it
- can use MV or actinic or similar lamps
- can be mains or battery run
- often collapsible so easier to transport or take on holiday
- mid-range price



Heath – rectangular box, light and usually flat pack for storage and transport

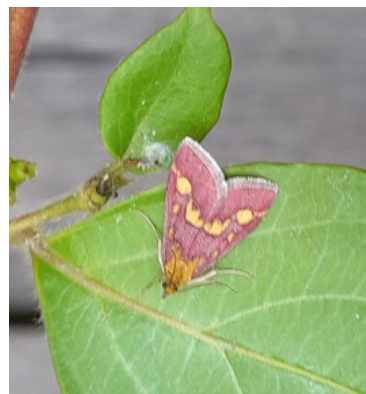
- great for moth trapping in different habitats
- catches fewer moths
- uses actinic or similar lamps
- battery run but can be mains
- cheapest option



Elephant Hawk Moth



Large Emerald



Micro - *Pyrausta aurata*



Micro - (bird dropping moth)
Apotomis capreana

Moth Trapping Continued....

websites for more information;

Anglian Lepidopterist Supplies – www.angleps.com

Watson & Doncaster – www.watdon.co.uk

Natural History Book Store – www.nhbs.com



Pine Hawk Moth

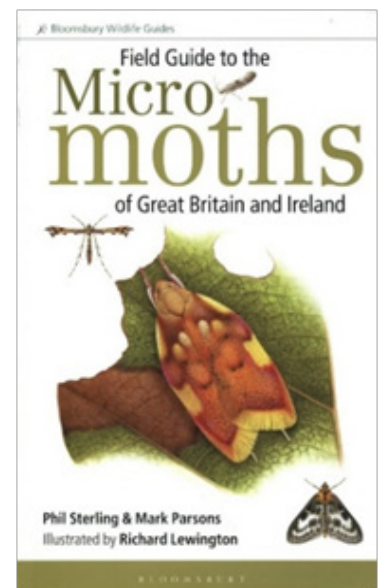
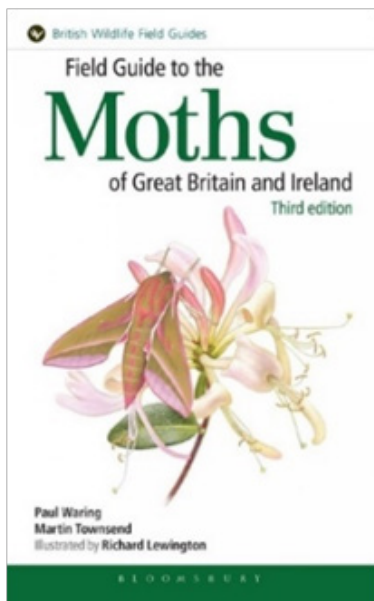
You can trap all year round but the most active months are between April and September. If there is a full moon, or if it is windy or raining, you might find your catch isn't as good.

Moths are pristine when they first emerge, but quickly fade and become 'threadbare'. This makes identifying them difficult. Therefore, to begin with concentrate on identifying the Macro moths. The books below are very good identification guides as the two macro books show the moths at actual size.

Learn the features to look for, start with:

- size
- colour
- wing shape
- markings

Trapping regularly, you will quickly come to recognise the moths even when they are faded, and learn the key features to identifying them.



Poplar Hawkmoth



Spectacle moth



Plum tree tortrix micro-moth looking like bird poo

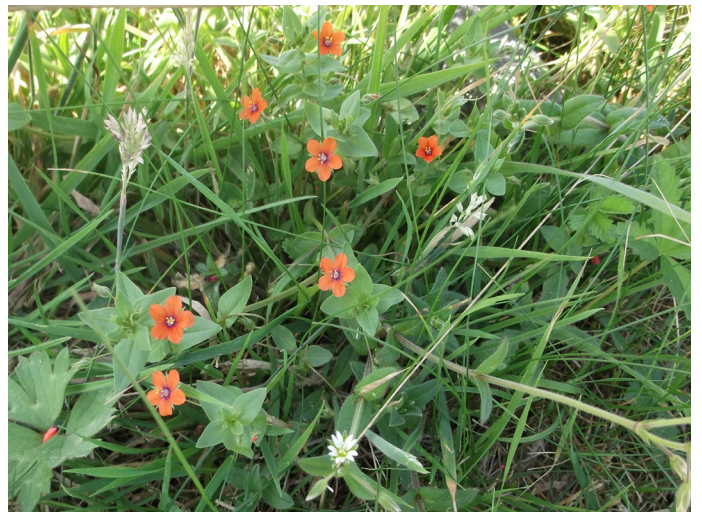


Pebble prominent

Scarlet Pimpernel by Trish MacDuff ABNA

This lovely little flower is easy to spot as it is common in hedgerows, fields, waste land and along our roadsides.

- It can be seen from June to September. The flowers are star shaped. It has five red petals which are about 4 – 7 mm across. Its leaves are opposite each other on the stem, oval and with little black dots underneath.
- Although it commonly has a red flower, occasionally the flowers can be blue.
- The plant is low growing and has a habit of spreading across the ground.
- It usually self-pollinates. When the flower goes to seed, one seed capsule can have as many as 30 -40 seeds. So one plant with many flowers can produce up to 900 seeds.
- Some of its alternative names are 'Shepherds Weather Glass' and 'Poormans Barometer'. This is because its flowers only open in bright sunlight. When it is overcast and cloudy, the petals will close up. The flowers close by late afternoon.
- The Scarlet Pimpernel was the name of a fictional character set in the French Revolution. Only his close friends knew his identity, and his messages were always signed with the scarlet pimpernel flower that he adopted as his name.





Swallow



Swift

Swifts & Swallows

By Di Farrar MBNA

Swifts and Swallows are both summer visitors to this country, flying for thousands of miles to come here each year from Africa. They travel here to take advantage of our warm, summer weather and a plentiful supply of insects on which to feed, and also to breed and raise their young. Although these amazing acrobatic birds may look similar in the air, there are several differences between them. If you look up into the sky you might see them swirling around, hear them chattering often in groups and see them catching flies.

Swift

- Blackish brown in colour with a white patch on the throat, the forehead and underside are paler.
- Wings are long and pointed, shaped a little like a boomerang.
- Tails have a fork shape in them.
- Bills are small and black.
- Nesting material is gathered on the wing, including feathers, seeds, paper and hay, they use their saliva to cement it all together. Nests are high up in holes of old buildings or churches, they do not build nests outside.

Swallow

- Shiny dark blue back with white underside. Dark red throat and forehead and a black band across the chest.
- Wings are slender and pointed but not as long as the Swift.
- Deep forked tail with long streamers.
- Bills are slender and thin.
- Nests are made from mud and straw often in barns or under the eaves of houses.

You might see Swallows in groups on telephone wires or television ariels, around the time for them to migrate back to Africa.

Apart from when they're nesting, Swifts spend their lives in flight. They feed, drink, sleep and mate on the wing, you won't see them perching. They have tiny feet and very short legs.

Then and Now

Text and illustration by Endymion Beer MBNA



The British Naturalists' Association was founded by E.K. Robinson in 1905, which is 118 years ago this year! Countryside our official Journal has been going a long time! Our Honorary Solicitor, Michael Demidecki has recently, and very kindly, passed some rather old copies my way and my goodness are they interesting to read. The earliest volume dates back to February 1947. He suggested it might be interesting to put together a 'then and now' article to compare the times.

Having recently travelled to Lundy with the Devon Branch on a private charter, the first volume struck a chord the moment I opened it. Mandy, another Devon branch member, leads guided walks on Lundy and will often talk about how the wildlife is faring there.

In February 1947, Rosemary E Studdy reminisces and contemplates her trip from the previous Autumn. She says on the 19th September there was a terrible storm which delayed her crossing from Ilfracombe by four days. She eventually sailed across on a 35ft fishing vessel called the "Enterprise" on a beautiful day, taking four hours to make the trip.

Lundy, the 'Isle of Puffins', which in Rosemary's day were indeed the most numerous of the seabirds to nest there on the cliffs. Can you imagine!

Rosemary was part of the Lundy Field Society which was founded in 1946. She and her fellow naturalists travelled on the 23rd September 1946, and stayed on Lundy recording species. This was her first trip across and the team recorded 40 different species of bird during their working visit. She also talks about plans to ring and record bird species in the spring of 1947. It is a lovely account and easy to picture in the minds' eye having visited myself.

Today, a privately hired boat can travel to Lundy in an hour from Hartland Quay Harbour. The Oldenburg running from Bideford takes about an hour and a half. A stark difference then, from Rosemary's four hour crossing.

Puffins in recent years were almost wiped out by the black rats which arrived on Lundy originally from ship wrecks and visiting vessels. The rats bred. Conservation methods had to be employed in order to control the rats. Now however, the puffin population is increasing. Mandy confirms the puffins are doing well and the best news is that bird flu has not hit this little Island which lies about 20 miles out to sea from Ilfracombe, North Devon. Lundy is looked after by two charities. It is owned by the National Trust and managed by the Landmark Trust. It is certainly well worth a visit if you happen to be this way. Long may the success of the Isle of Puffins continue.....

Dear Young Naturalists,

Delighted to let you know that the Scanning Electron Microscope is now back in the AMC and available for use!

All BNA members are very welcome to come in to use it while we have it (it will be returning to the schools loan programme at the start of September so we have it for the whole of the summer holidays), and it doesn't matter if members don't have a project in mind to use it on, just an 'I'd love to have a go with it' is a perfectly valid reason!

Full training will be provided on how to use it, members just need to book in via amc-enquiries@nhm.ac.uk to reserve some time on it.

We're open 10am-4pm Monday-Friday and once a month on Saturdays. Specimens do need to be quite small to fit in this particular SEM, however we can also facilitate access to larger facilities within our main imaging unit if needed.

Best wishes,

Stephanie Holt

UK Biodiversity Training Manager
Centre for UK Nature
Natural History Museum

**We've printed a lovely letter from BNA Trustee
Stephanie Holt here.**

**If you would like to try the Scanning Electron
Microscope (S.E.M) at the
Natural History Museum in London, you have
until the end of August to book your place!**

Weather Recordings by Our Honorary Chairman Steven Rutherford FBNA

It is strange writing this. We are reporting an incredibly dry four weeks during the wettest part of the year, as it has been raining for week 24, almost nonstop, but that will be reported in with the next records. For the records of between the weeks of 20, 21, 22 and 23, with recording dates of 21st May and 11th June I had no recordable rain to record.

I was not the only recorder to find this period dry. Pippa recorded 0.5 mm of rain while both Isla and James were able to record 2mm for the four weeks, and even Freddy and Rose, who live in Ireland and usually have high records of rain, only measured 5mm.

To show how it is important to record across the whole of the British Isles and including the island of Ireland, and how variable the weather can be, Leah and Archie and Aerin recorded 15mm of rain during week 20.

The important thing we are looking at is how these weather patterns affect the nature around us – how are leaves on the trees? Are the flowers in bloom and feeding the local bees? Are butterflies coming into the garden? Matching weather events with how we look at nature is a great way to see how the birds, mammals and plants are adapting to the changes in climate that we are living through.

The maximum temperatures have been quite constantly at around the 20°C in my garden. Your temperatures may vary a great deal compared with mine; however, this could be showing that different gardens have micro habitats, or what my Mum used to call a sun trap, that is an area where the sun can reach and is shaded from any wind that could take the temperature down.

These micro habitats are interesting in themselves, so if you are recording a micro habitat, don't worry as it will make a good talking point in a later issue. In the meantime, I hope that you are enjoying taking part in this project and carry on recording.

Steve's Weather Chart



BRITISH NATURALISTS' ASSOCIATION

Founded 1905 The National Body for Naturalists
British Naturalists' Association, 27 Old Gloucester Street, London, WC1N 3AX
Official Journal **COUNTRY-SIDE**

Hon President - Roger Tabor CBIol, FRSB, MPhil, FCFBA, Hon FBNA, FLS
Hon Chairman - Steven Rutherford FBNA



Young Nats Weather Recording Project 2023

Sponsored by Wentworth Garden Centre

Week No.	Date	Minimum	Maximum	Rain Fall	Week No.	Date	Minimum	Maximum	Rain Fall
1	08/01/23	5.1	17.2	20mm	27	09/07/23			
2	15/01/23	1.8	12.9	47mm	28	16/07/23*			
3	22/01/23	-3.6	16.2	1mm	29				
4	29/01/23*	-3.5	19.2	0mm	30				
5	05/02/23	1.5	16.1	1mm	31				
6	12/02/23	-1.0	12.6	0mm	32				
7	19/02/23	0.1	14.3	0mm	33				
8	26/02/23*	3.1	13.8	1mm	34				
9	05/03/23	1.8	13.7	4mm	35				
10	12/03/23	2.8	13.5	35mm	36				
11	19/03/23	-0.9	15.2	25mm	37				
12	26/03/23*	6.5	18.6	14mm	38				
13					39				
14	09/04/23	0.3	25.8	24mm	40				
15	16/04/23	2.5	20.5	33mm	41				
16	23/04/23*	3.9	17.2	8.5mm	42				
17	30/04/23	2.8	20	5mm	43				
18	07/05/23	5.4	19.3	8mm	44				
19	14/05/23	7.8	20.3	32mm	45				
20	21/05/23*	7.1	21.3	0mm	46				
21	28/05/23	8.9	22.4	0mm	47				
22	04/06/23	8.2	18.8	0mm	48				
23	11/06/23	7.6	20.3	0mm	49				
24	18/06/23*				50				
25	25/06/23				51				
26	02/07/23				52				

Instructions

- Put the date of each record on the form against the week number
- Record the minimum and maximum temperatures, and rainfall at the end of each week then reset the thermometer and empty rain gauge after each recording
- If you miss a week, don't worry just carry on and record the following week
- Chairman Steve will ask you for interim progress throughout the year, so keep your records safe

The results will be collated and then published in the Young Nats Newsletter and in the British Naturalist magazine.

Chris Page the ITV Weatherman will be sent a copy and stay up to date with your progress.

The thermometer and rain gauge are yours to keep so you can continue to record once the project has finished.

Best wishes

Chairman Steve



The Young Naturalists' Hub

NEWS

Congratulations to our young naturalists featured below on their achievements.



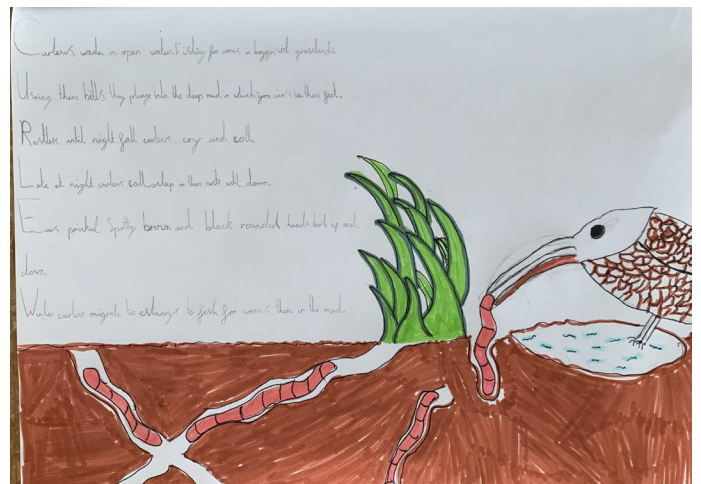
Arthur Tweed with his BNA Wildlife Reporter badge



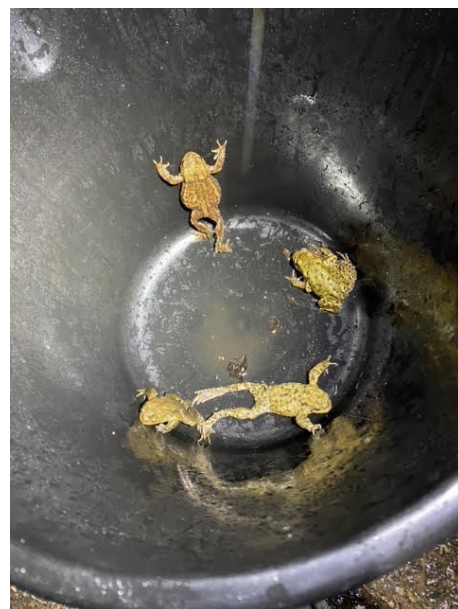
Beatrix and her certificate and badge for taking part in Curlew Action - World Curlew Day



Pippa Woodley with her Young Naturalists Badge.



Beatrix's entry into the curlew competition.



The Young Naturalists' Hub continued.....

NEWS

Some great pictures here of Archie and Aerin Ansell on a toad patrol. Well done to you both! So what is a toad patrol? Well, a toad patrol is a group of volunteers who look after a specific area of road where toads are known to cross each year, to reach their breeding ponds in spring. Volunteers help them safely across the road, saving many from being run over. However, this doesn't happen on just one day. Roads need to be monitored from January to April. That's how long the toad migration can last prior to breeding. Toad patrollers therefore need to be very committed.

If you want to get involved have a look at froglife.org to find your nearest toad crossing and to sign up for toad patrolling.

If you become a toad patroller, make sure you are safe. Wear high visibility clothing and carry a torch. Make sure the road is safe and not too dangerous to patrol. Don't put yourself at risk. Take a responsible adult with you, never go alone. Dedicate a recorder for your patrol team and allow one person to collate all of the information for frog life. Record how many toads you have helped cross the road, the number killed, how many days you patrolled and how many patrollers took part. Follow the froglife guidance on this and copy us in, let us know how you got on and we'll share your news.

Amphibians won't come out of hibernation until the weather warms to 5 degrees centigrade or more and they like it when it rains - you'll need your above. Toads will now be searching for suitable places to hibernate. In the garden toad houses are great but if you can't afford a toad house, try a half buried plant pot on its side, with plenty of leaves. Observe and record.

Photo right by E Beer - Common toad found in the garden - look how camouflaged it is!



Using Apps in the field – Identifying species!

By Endymion beer MBNA

While it is true to say that most budding young naturalists probably carry a field guide of some description in their pocket, today there is additional help. Mobile phone Apps are now the thing. I asked around our branch members and some of our national members to find out which apps they preferred to use. Some apps are free and some you have to pay for, but here are some examples to get you started;



Merlin Bird ID – This app is free to use and easy to download from your app store. It is perfect for use out of doors and will listen to bird song, identifying the bird for you before you have even caught sight of it. With this app you can build a digital scrapbook of your birding memories with 'Save My Bird'. Tap "This is my bird!" each time you identify a bird, and the app will add it to your growing life list.

Picture Bird – As the name suggests, this is a bird identifier and it is designed to recognise any bird species by sound or photo. Simply upload a picture of a bird. The app also allows you to sharpen bird photographs if they are slightly out of focus. Again, free to download.



Google Lens – This is a really useful tool to have on your phone. Take a photograph of a species. Open google lens, select your photograph from the library of photographs on your phone, and it will give you the species. Very easy to use and good for general use, and although it doesn't find everything, it seems to find most.

Seek (by iNaturalist) – Helps you to identify Wildlife, plants and fungi. Simply open the app, point the seek camera at living things. You can also earn badges for observing different types of species and participating in challenges.



There are many apps out there but all are dependent on you having a working camera on your mobile phone or tablet. Admittedly I am biased towards the free apps, but if you are already using an app – email me at **bna.zoom.talks@gmail.com** and let us know;

1. which app you are using,
2. why you like it and
3. how easy it is to use.
4. Would you recommend it for other young naturalists to use?

We'll share your thoughts in the next newsletter for other young naturalists to read.



SNIPPETS

WORDSEARCH

You are looking for types of clouds. There will be other words to mislead you. Can you find the following?

STRATUS
CUMULUS
CIRRUS
CIRROCUMULUS
ALTOCUMULUS
CUMULONIMBUS
CIRROSTRATUS
NIMBOSTRATUS
ALTOSTRATUS
STRATOCUMULUS
CONTRAIL

Two types of clouds are mentioned twice. Which ones?

C	I	R	R	O	S	T	R	A	T	U	S	S
I	C	U	M	U	L	U	S	A	I	R	A	T
R	F	L	U	F	F	Y	C	L	O	U	L	R
R	O	C	O	N	T	R	A	I	L	N	T	A
O	L	U	N	D	E	R	N	E	A	C	O	T
C	U	M	U	L	O	N	I	M	B	U	S	O
U	P	U	Y	I	N	A	M	F	C	M	T	O
M	W	H	I	T	E	F	L	Y	A	W	A	Y
U	C	L	O	U	D	S	O	O	M	L	A	A
L	I	C	I	R	R	U	S	A	U	U	T	U
U	L	I	G	H	T	N	T	T	L	S	U	L
S	T	R	A	T	U	S	R	Y	O	P	S	U
W	A	T	E	R	O	V	A	P	O	U	R	S
C	O	N	D	E	N	S	T	Y	N	P	M	O
S	T	R	A	T	O	C	U	M	U	L	U	S
P	L	C	I	R	R	O	S	T	R	A	T	E

Goodbye Spuggie Sparrow!



Spuggie and his wife successfully raised a brood of chicks this past breeding season.



Every one fledged successfully!



The house they used as a nesting site is having a new roof. There is now no access for sparrows!

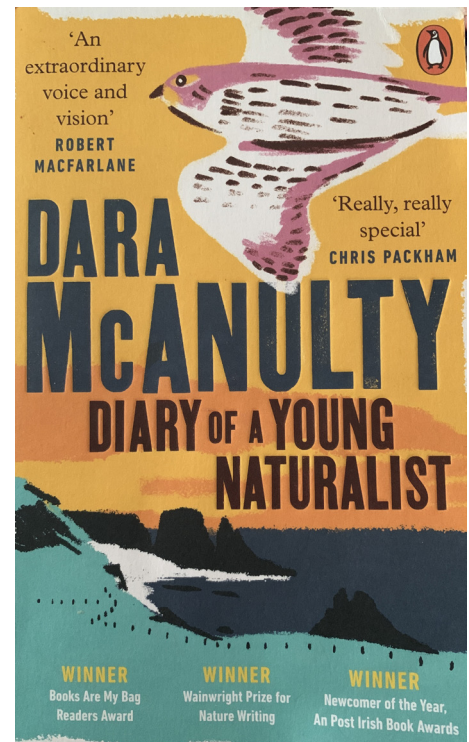


So Spuggie and his wife say goodbye to Hal the Heron. They are going to look for somewhere to roost. Goodbye Spuggie!

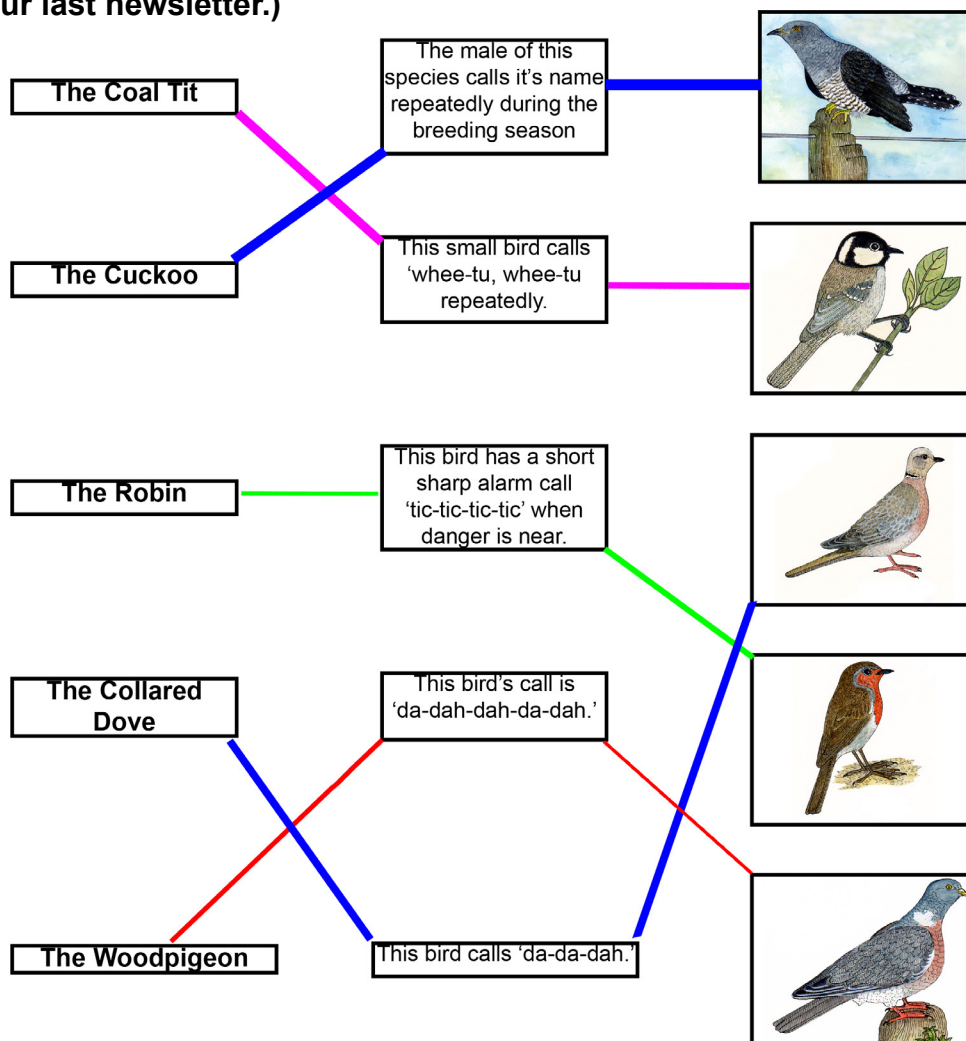
The importance of keeping a nature journal

When young Irish naturalist Dara McAnulty was 17 years old, he had his first book published and he called it '*Diary of a Young Naturalist*'.

It is beautifully written, very frank and lovely to read. Dara comes across very strongly as a born naturalist, always making observations, studying nature and relishing being at one with the natural world. He talks of adventures with his family, his struggles and his triumphs. Do read it if you can. It might inspire you to keep a nature journal of your own. Keeping a nature journal allows you to compare the success of species from year to year. You could be the very first person to spot when a species is in trouble in your area, and consequently report it, or you might discover a new species – climate change is on and nature is responding accordingly. There will be changes, many of which we have not yet predicted. Observation is so important.



Answers to the bird song quiz (from our last newsletter.)



Do you have a query?

email: info@bna-naturalists.org

write: Youth Officer, British Naturalists' Association,
27 Old Gloucester Street, London, England WC1N 3AX