

FREE!

RIVER ART
POSTER



**NUTTY
NATURE**

Seven nuts to spot
this autumn

**PRICKLY
PALS**

Discover the world
of hedgehogs



Issue 103 Autumn 2022



Wildlife Watch

MAGAZINE

DUELLING DEER

Who will win in the battle
to be king of the herd!

The
Wildlife
Trusts





Editor's corner

TOM HIBBERT
Editor, Wildlife Watch

It's autumn again, a fantastic season of change! Have you spotted any leaves turning red, yellow, or gold yet? If you've ever wondered why the trees change colour, you can discover the answer on page 23!

Whilst many of our trees are losing their leaves, some special plants are only just starting to bloom. Turn to page 12 to see the flowers adding even more colour to autumn. But this issue isn't just about pretty sights; there's action in autumn, too! On page 20 we delve into the dangerous world of duelling deer, where stags battle to be the best.

We've also got plenty for you to do too! See how many kinds of nuts you can spot after reading all about them on page 18, or use our guide to making a footprint trap to see what wildlife is roaming your garden. Don't forget to keep sending us your artwork, photos, and stories!

Have a wild autumn!

Tom



GET IN TOUCH

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WILD THINGS

News from our Wildlife Watchers



POND SNAIL SURPRISE



We're thrilled to see another great wildlife pond made by a Wildlife Watcher! Olivia (aged 5) from Surrey created this pond a few months ago. She was delighted to discover that some water snails have moved in!

MINIBEAST MANSIONS

Mallory and friends from Staffordshire went on a trip to Tuckleshome Nature Reserve near Burton-on-Trent, where they made bug hotels from natural materials! These little houses are super stylish.



NURDLE KNOWLEDGE

This fantastic fish was made by Amy (age 7) from Hampshire. It was made from clay and plastic nurdles (a type of litter) she cleaned up from the beach. She used a photo of it in a book her family has written about nurdles.



BEETLE BRILLIANCE

William (aged 7) from Hertfordshire found an impressive lesser stag beetle in his garden for the second year in a row!

He's put out some old tree branches to give young beetles somewhere to live.

Herbie (aged 4) from Surrey spotted this beetle's even larger cousin, the stag beetle! One female was in his garden and another was wandering along a path — see the photo in the circle above!



Rook © Terry Whitaker / 2020VISION

06



Original fox and cat by Watch reader, Ella

Glow-worm © Will Atkins

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WILDLIFE WATCH 103

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What's Wildlife Watch?

Wildlife Watch is the junior branch of The Wildlife Trusts. Join Wildlife Watch and start your nature adventure. Prices range from £10-£24 per year for child-only membership and £30-£60 for family membership.

You'll receive a starter pack and four issues of Wildlife Watch magazine a year. This is

packed full of amazing pictures, posters and competitions. We also have a really wild website and e-newsletter full of wild ideas and nature-spotting tips. Plus you get access to local events and groups. Go to [wildlifewatch.org.uk](https://www.wildlifewatch.org.uk) to find out more.

KEEP WATCHING!

The Science Section

In every issue this year we'll be bringing you a fact-packed science section, sharing recent discoveries about weird and wonderful wildlife and explaining the meaning of some scientific words.

WILD WORDS

Impress your friends with new words from the world of wildlife science!

WEEVIL

(wee-vil or weev-ul)
Weevils are a group of beetles that are best known for their long 'snouts', though some weevils actually have quite short ones. Around 500 species of weevil have been seen in the UK!

PARASITE

(pa-ruh-site)
A living thing (animal, plant, or single-celled lifeform) that gets its food from another living thing, usually by living on it or inside it. A tick is a parasite because it clings to other animals and sucks their blood.

HIBERNACULUM

(hi-ber-nak-u-lum)
This is the name given to any place where an animal shelters for the winter. Some creatures use caves or tree holes as a hibernaculum. Many caterpillars make their own out of silk.

RECENT DISCOVERIES



BRANCHING OUT

Where would you look for a toad? Probably on the ground or in a pond. But it turns out toads also like to climb trees! Volunteers searching for bats and dormice have recorded more than 50 toads up trees. They were mostly found in dormouse nest boxes or natural holes, though one was in an empty blackbird

nest. One toad even made it more than three metres up an oak tree! Scientists think tree-climbing toads may be even more common than this – there could be a toad in one in every hundred trees. Now experts want to figure out why these toads are climbing trees. It could be to find food, or maybe to avoid predators – we're not really sure!

ALL A FLUTTER

Butterfly fans are celebrating after a rare species was discovered breeding at a new location in Sussex. The large tortoiseshell used to live all across Britain but went extinct here around 70 years ago. There have been a few spotted since, usually on the south coast, but they're very rare. These butterflies most likely flew over the sea from continental Europe.

However, in the last few years, small numbers have been found breeding on the Dorset coast. This has given some hope that they might make a comeback in England! There was more good news this summer, when they were also discovered breeding at the rewilding estate, Knepp, in Sussex. We'll have to wait and see if the large tortoiseshell can come back to Britain for good!



YOUR PHOTOS

We were sent so many wonderful photos this issue, we just had to share them with you. So instead of Your Stories, here are Your Photos!

Lydia (aged 15) was at her favourite nature reserve when a male great spotted woodpecker appeared. Just as she was about to take the photo, a young woodpecker (with the red head) joined him! What a fantastic photo!



Ruby (aged 6) was walking in her local woods when she took this wonderfully sharp photo of a common spotted orchid. She saw lots of them on her visit – aren't they beautiful?



Ava (aged 11) captured this incredible photo of an adder. Ava did a great job of getting the eye in focus whilst shooting through cluttered branches. What a stunning snake!



Campbell (aged 8) was quick enough to get this great photo of a lizard basking on the sand! Did you know that if a lizard feels threatened, it can drop its tail to distract the possible predator whilst it escapes?



Grace (aged 12) snapped this scenic shot of a ladybird lounging on a leaf. It has such lovely vibrant colours with the green of the leaves, the blue of the flowers, and of course the bright red beetle!

Do you want to write for the magazine? Send your stories and ideas to watch@wildlifetrusts.org!

CLEVER CORVIDS!

by Pete Dommett

The crow family is no bunch of feather-brained fools – they're brilliantly brainy birds!

Magpie © Jon Hawkins - Surey Hills Photography



Hooded crow © Margaret Holland



THE CROW AND THE PITCHER

Let me tell you a story. A thirsty crow found a pitcher (a jug) with a little water in it. But it couldn't reach the water because the pitcher was too tall and the bird's beak was too short. After thinking for a while, the crow had an idea. It collected pebbles and dropped them into the pitcher. With each pebble, the level of the water rose slightly. Eventually, the crow was able to reach the water and enjoy a well-earned drink!

The lesson of the story is: clever thinking can solve a tricky problem!

Have you heard of *Aesop's Fables*? These tall tales were written over 2,000 years ago in Ancient Greece to teach people lessons about life. But, unlike lots of the stories, *The Crow and the Pitcher* could have happened for real!

Corvids* can find answers to perplexing puzzles, use tools and show other signs of being super-clever!

Jay © Mike Wilkes / naturepl.com



PROBLEM SOLVED

In special tests in captivity, rooks, jays and some species of crow have all been able to work out the 'pitcher puzzle'. Scientists reckon this requires the same brain-power as a 7-year old human child!

Clever corvids can solve problems in the wild too – like how to open food with a tough shell. Hooded crows drop shellfish on to hard rocks to break them apart. Carrion crows in Japan put hard-to-crack walnuts on the road and pick up the pieces after they've been run over by cars. They even place the nuts on pedestrian crossings so they can collect them safely when the lights turn red!

*Corvids are birds in the Corvidae (or crow) family. There are eight species in the UK – carrion crow, hooded crow, raven, rook, chough, jackdaw, jay and magpie.

MEGA MEMORY

Many corvids have amazing memories. In autumn, the UK's population of jays are busy storing food away for the winter. Over the season, a single jay might bury more than 3,000 acorns in the ground! When food becomes scarce in the colder months, the jay remembers where it buried its stash of snacks and digs them all up (well, almost all of them – the jays do forget a few acorns which then grow into oak trees!).

TOOL TIME

Several animals use tools in the wild, including apes, dolphins, sea otters and even octopuses – but corvids are the only ones (apart from primates) to make tools. **New Caledonian crows** (which live on islands in the Pacific Ocean) poke twigs into tree holes to get at hard-to-reach insects. But they'll also bend and carve specially-selected sticks into hooks to make their tools even better!

Hey, I know you! Scientific tests have shown that magpies can recognise themselves in mirrors.

Bird Brain! A crow's brain is small, but packed with 1.5 billion brain cells – about the same number as some species of monkey!

CLEVER PLAY

Some scientists say that another sign of intelligence in animals is playing. Ravens – the biggest corvids of all – sometimes break twigs off trees to play with. They've even been seen sliding down the snow-covered slopes of mountains on their backs! Caww... what fun!



Rook © Terry Whiteaker / 2020VISION



PRICKLY PERFECTION

by Dr Deborah Wright



Deborah loves hedgehogs because they are so different, each with their own character, and when you do something to help them, you help so many other animals too!

© Jon Hawkins - Surrey Hills Photography



Hedgehogs are the UK's only spiky mammal, with up to 7,000 spines! They are nocturnal, meaning they are awake at night, and they spend their time snuffling about looking for tasty insects to eat. In the winter, they hibernate (a sort of long sleep) to save energy, safely tucked away under a bush or log pile. Let's learn more about them!



Hoglets

Hedgehogs have one or sometimes two lots of young called "hoglets" each summer. There are usually four or five little hoglets born at a time. They spend their first four weeks snuggled up in a nursery nest that their mum has made. They are born pink and blind, with their spines underneath their skin, but they soon pop out. By just 6-8 weeks old they are ready to leave the nest and go out on their own. Time flies when you are a hedgehog!

Hungry mums with hoglets will need to eat three times as much food to help them make tasty milk for the hoglets to drink.

Hidey hogs

Hedgehogs hibernate in the winter when it is cold and there is not much insect food about for them to eat. They make a big nest out of layers of leaves under a bush, log pile, or shed, and snuggle up inside. In the autumn, they mostly spend their time eating as much food as they can. They need to put on lots of fat, which they slowly burn over the winter to keep them going until they wake up in the spring.

A group of hedgehogs is called a "prickle" or an "array".

More than a deep sleep

When a hedgehog hibernates, its body drops to the same temperature as the air outside to save energy, just above freezing. The hedgehog breathes less often and slowly breaks down the fat it has stored to make water and help it survive. It takes around 2-5 hours to fully wake up, using a special type of fat it has stored, and it will be hungry when it does!

Hedgehogs tend to eat in two sittings each night, with a digestive rest period in between.



A hedgehog's brain and nerves do not shut down when it hibernates, so it can still have memories from year to year, often remembering the exact garden where someone leaves food out for them!



SALTMARSH

by Rachel Langley



I'm Rachel from Essex Wildlife Trust and I love saltmarshes! I enjoy visiting the coast and listening to the sounds of the saltmarshes.



Saltmarsh © Terry Whittaker / 2020VISION

What are saltmarshes?

Saltmarshes are a special habitat found along the coast between the land and sea. They are called saltmarshes as they are made up of unusual, strong plants that can live in pretty salty water. They have muddy channels that wind through them, making them look a bit like a brain from above!

What wildlife lives there?

Saltmarshes are home to loads of amazing wildlife! Birds absolutely love them – you'll often find them feeding on tiny critters and plants in the mud and in the water, or just having a paddle and a rest. In the winter listen out for the gentle 'honk' of flocks of brent geese. There is a secret world within the water too, as saltmarshes are safe, sheltered areas for baby fish! As the tide rises and the water gets deeper in the saltmarshes' muddy channels, baby fish like bass and mullet swim in to hide from predators, rest, eat and grow big and strong. Take a closer look at the saltmarsh plants and you might spot a bee buzzing around the summer flowers or find some samphire — a succulent, salt-loving plant that some people eat.



European bass © Paul Naylor / marinephoto.co.uk

European bass can live for up to 25 years.

How do they fight the climate crisis?

Saltmarshes are real-life superheroes! They help us fight the climate crisis as they absorb and lock away carbon in their plants and mud. Some saltmarshes have very deep mud and can lock-up carbon for hundreds of years – or even longer! It's important we help saltmarshes to be healthy and strong so they can continue to hold this precious carbon-filled mud for centuries.

How can we help them?

In the UK, we sadly lose lots of saltmarsh every year and the saltmarsh we have left is not as strong as it used to be – they need our help! One exciting way we can help is by creating 'new' saltmarsh by letting salty water into some dry areas along the coast. You can also help by keeping on paths off saltmarshes (to help them stay strong) and by taking home your litter when you visit.

Saltmarshes can absorb and store carbon faster than rainforests!



Brent geese © David Tring / 2020VISION

© Ross Hoddinott / naturepl.com



Brilliant Bugs!

Meet the green shieldbug! It loves to feed on plants and fruits, using its sharp mouthparts to stab into them and suck up their juices.



I love wildflowers! My favourite thing is helping people find out more about our wonderful wildflowers and the wildlife they support.

PLANTING FOR POLLINATORS

Pollinators need to be able to find nectar during autumn and winter. You'll be helping them get through the colder months by planting late-flowering plants like these in your garden

- Autumn crocus
- Ice-plant
- Oregon-grape
- Berberis
- Hemp-agrimony
- Michaelmas daisy



There are lots of wildflowers that bloom in summer – but what happens when autumn arrives? Some summer plants keep flowering until the frost comes. Others don't even appear until autumn!

AUTUMN FLOWERS

by Louise Marsh

Meadow © Alan Williams / naturpl.com



AUTUMN LADY'S-TRESSES



© Botanical Society of Britain & Ireland

This plant is a kind of orchid and it got its name because people used to think it looked like a lady's hair! I don't really think it does – do you? – but it is pretty, with tiny little white flowers that go up the stem in a spiral. It grows in the south of England in short grass and is incredibly rare.

This New Year, why not see how many kinds of wildflowers you can find in bloom? Last year, plant hunters found more than 600 different kinds! Find out how to take part: bsbi.org/new-year-plant-hunt

AUTUMN HAWKBIT



© Nora O'Donnell

This plant has yellow flowers. It looks a lot like a dandelion. You'll need to look really closely through a magnifying glass to see that this plant has tiny hairs that are forked at the tip. Dandelions don't have any hairs. If you get right down on the ground and look at it from below, you'll see that some of the yellow petals are red underneath. This plant grows across most of Britain in grassland and on road verges.

AUTUMN GENTIAN



© Botanical Society of Britain & Ireland

This little plant has clusters of pinky-purple bell-shaped flowers. It blooms from July to October, but if the weather isn't very sunny, the flowers don't open up fully. Keep a special look-out for this one if you are by the seaside on the south coast and the sun is shining.

IVY



© Jane Adams

You probably know ivy already, with shiny green leaves that last right through the winter – maybe it grows on a wall near where you live? But have you ever spotted its tiny yellow-green flowers? They come out in September and provide nectar for bees and other pollinators right through autumn. The flowers turn into berries full of seeds in the winter. Birds such as blackcaps love them, but the berries are poisonous to humans. They also taste horrible, so don't be tempted to try them!

YARROW



© Brian Evesham

Yarrow has flat flowerheads made up of lots of little white or pale pink flowers. It has feathery leaves which smell sweet when you bruise them. It is attractive to lots of different pollinators including hoverflies and bumblebees – it is also an important food plant for many species of moth. Yarrow grows in wasteland and on road verges across the whole of the UK. It starts flowering in summer but can keep going through autumn and into winter.

RED VALERIAN



© Nicola S

This plant has lots of small red flowers in its flowerhead. It grows across most of the UK on old walls, on railway banks and on bare or waste ground. It's not originally from the UK but is a good source of nectar for bees, butterflies, and moths. Hummingbird hawk-moths love it! This plant flowers through summer and autumn and often carries on blooming until New Year's Day. Lots of families have spotted it during the New Year Plant Hunt.

GALLERY

Send in your photos, poems, artwork and letters for your chance to feature in the gallery. If your artwork is picked as the star entry you'll win your very own drawing kit! **The perfect starter set for any budding wildlife artist.**



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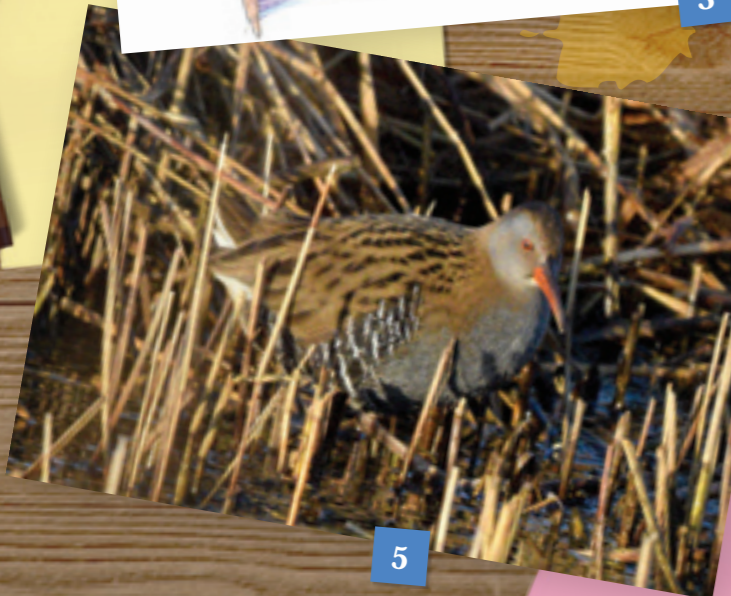
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11



5



12

1) Hedgehog by Pippa, aged 7
We love the sparkle in this hedgehog's eye, and how much detail there is in the spines!

2) Canada goose by Arthur, aged 11
Arthur has mastered the action pose of this flying goose.

3) Otter by Beatrice, aged 7
This otter is adorable, and we love the little butterfly friend!

4) Fox by Ella, aged 8
Ella has been really creative with this origami fox and cub.

5) Water rail by Ethan, aged 12
Water rails are really sneaky, so Ethan must have been fast to get this amazing photo!

6) Bat by Elizabeth, aged 8
We love all the details in this bat, and the great fur texture on the body.

7) Green hairstreak by Florence, aged 10
A beautiful painting of a dazzling butterfly!

8) Dog rose by Jazmyn, aged 17
The shading and colours on these flowers are gorgeous.

9) Wildcat by Freya, aged 9
Wildcats are really rare, so it's lovely to see this drawing of one snoozing happily.

10) Blue tit by Scarlet, aged 6
This is such a lovely and vibrant blue tit!

11) Dragon and damselflies by James, aged 7
This is a great comparison of some colourful insects.

12) Kingfisher by Jonathan, aged 6
We love the way Jonathan created a scene with this leafy coloured background.

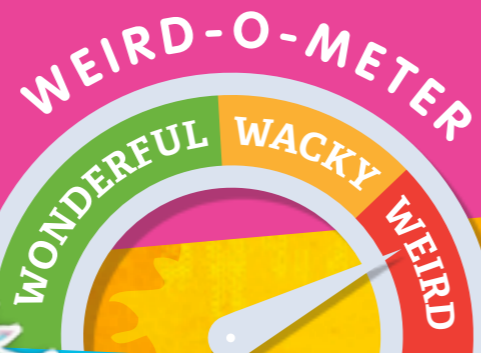


If we feature your artwork we will need your first name and your age, so don't forget to include them. We might also share it on our website and social media.

HOW TO ENTER
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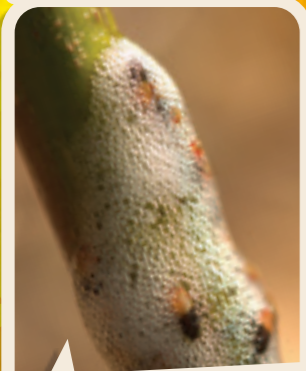
WEIRD NATURE

In the animal kingdom, bums can do so much more than just poop!



THIS ISSUE: BIZARRE BUMS

FROGHOPPER



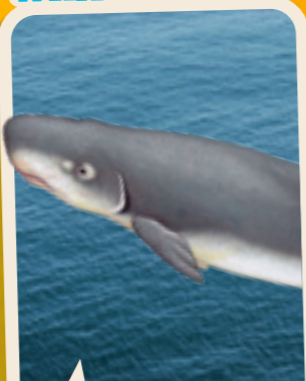
Have you ever spotted frothy white bubbles all over a plant stem? We call this foam 'cuckoo-spit', but it doesn't come from a cuckoo! It's created by young frog hoppers, a type of bug. They hide inside it to avoid predators. They make the foam by blowing bubbles from their bum!

SEA CUCUMBER



These sausage-shaped sea creatures are related to starfishes. They breathe through their bum, but also have a secret weapon back there. If they're in danger, they can fire out some of their organs! The sticky mess distracts predators whilst the sea cucumber escapes.

PYGMY SPERM WHALE



Sea cucumbers aren't the only animals to use their bums as a distraction. When pygmy sperm whales feel threatened, they poop out a cloud of reddish-brown fluid stored in a sac in their intestine. This makes the water murky, giving them a chance to escape! Squids do the same thing by spraying ink.

DRAGONFLY NYMPH



Young dragonflies suck in water through their butt and hold it inside them. This helps increase the pressure inside their body, which lets them fire out their mouthparts incredibly quickly to grab their prey. They also shoot the water out like a jet pack, and breathe through their bum!

BOMBARDIER BEETLE



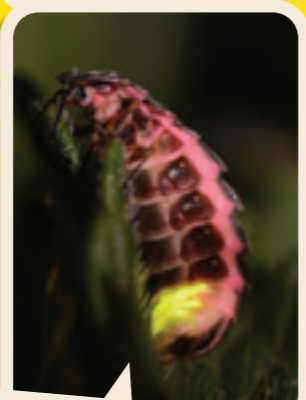
These brilliant beetles take bum-based defence to the next level! When they're threatened, they fire bursts of burning hot liquid out of their bum to hurt their attacker. This spray is around 100 degrees Celsius and can quickly kill other insects!

SEA ANEMONE



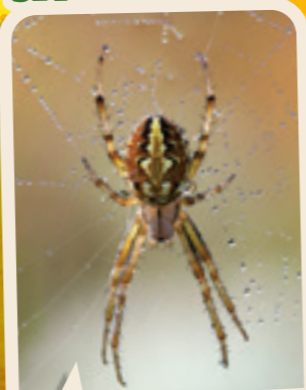
Some creatures, like sea anemones, don't have a mouth and a butt – they use the same opening for both. That's right, they eat with their bum! Or poo from their mouth, depending on how you want to look at it. Either way, it's pretty gross!

GLOW-WORM



These bizarre beetles might not spray deadly chemicals out of their bum, but their backsides are still pretty impressive. Female glow-worms glow in the dark! Their rear ends light up a yellowish-green colour, to attract any males that are flying by. When animals create light like this, it's called bioluminescence.

SPIDERS



Spiders have some pretty useful tools stuck to their bums: a set of little nozzles called spinnerets. These produce the webbing that spiders use to catch prey, protect their eggs, and even ride the wind! Spinnerets are not part of the butt, so although it might look like it, spiders don't actually poop their webs.

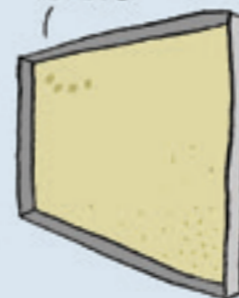


How to make an animal footprint trap

You will need:

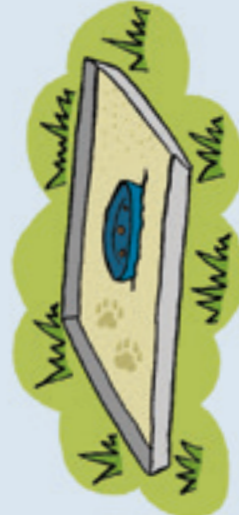
- old baking tray
- long ruler
- fine grain sand
- water
- low-sided dish
- meaty cat or dog food
- footprint ID guide

1 Fill an old baking tray with damp sand and smooth out the surface with a ruler.



Check to make sure your fingers leave a mark.

3 Leave the trap overnight in a garden and check in the morning for footprints left by curious visitors.



2 Place hedgehog food or meaty cat or dog food in a low-sided dish in the middle of the tray.

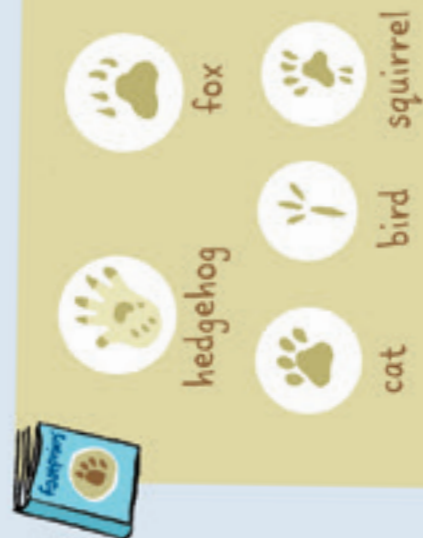


Illustration: Corinne Welch © Copyright Royal Society of Wildlife Trusts 2015

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KNOW YOUR NUTS!



by Paul Glanfield



PAUL GLANFIELD looks after nature reserves for Kent Wildlife Trust, and from a very young age has been passionate about all things that fly, sliver and crawl!

HAZELNUTS



Also known as "cobs", these are the fruit of the hazel tree. They begin to ripen in small clusters as the hazel leaves change colour in October. You won't have to look far for hazel trees as they grow all over our countryside in hedgerow and woodlands.

ACORNS



Acorns are the fruit of the oak tree. They're held in shallow cups and are the favourite dish of many woodland creatures. Mice, squirrels and birds gather these during autumn and store them safely away to keep them going during the long winter months.

SWEET CHESTNUTS



Sweet chestnut trees have been in this country since they were introduced by the Romans. They enjoyed roasting the nuts over an open fire, just as we do today! Look out for their prickly casings on the woodland floor in October, when they ripen and fall from the trees.

HORSE CHESTNUTS



Horse chestnut trees also produce large glossy nuts in a spikey case. But don't mix them up with sweet chestnuts, as these ones are poisonous to people. Animals like deer and boar will eat them though. For us, they do come in handy for a game of conkers!

BEECH NUTS



Look beneath beech trees in autumn and you will find small, spiky pods holding triangular brown nuts. These beech nuts are the favourite food of some birds including bramblings, which travel across Europe in winter searching for them. Every 5-10 years beech trees will have a "mast" year and produce a bumper crop.

PINE NUTS



I bet you've seen a pinecone before, but how about pine nuts? All types of pine trees produce them, but some have larger nuts than others. The nuts are tucked inside the pinecones. If you find an open pinecone on the floor, you might be able to shake out some nuts – unless the squirrels beat you to it!

As summer turns to autumn the trees in hedgerows and woodlands begin to fill with berries and nuts. Nuts are a type of dry fruit that contain a single seed within a hard shell. The seed is usually full of natural oil, which makes it an important source of energy for lots of animals. Nuts help many creatures fatten up to survive the winter. Here are the seven most common nuts you'll find in the UK!

Did you know that peanuts and coconuts are not true nuts?

NUTS ABOUT NUTS!

It's possible to tell what animals have been nibbling some nuts from the remains of the shell.

Common dormice leave a smooth, round hole in the side of the nut, with teeth marks running around the inside of the hole.

Wood mice leave teeth marks on the surface of the nut and across the

edge of the hole, which is usually more ragged than with dormice.

Bank voles create a round hole but the teeth marks are across the edge of the shell, not on the surface. This can take them sometime, so you will often find collections of nibbled nuts under logs or leaves.

If you find nuts cracked into irregular pieces these are usually left by birds like woodpeckers and nuthatches.

The scientific name of the walnut, *Juglans regia*, means the 'royal nut of Jupiter' – Jupiter was the king of the Roman gods!

WALNUTS



This is another tree that the Romans brought to the UK for its nuts! You'll find walnut trees in hedgerows and areas of untouched woodland. In October, the fleshy green fruits fall to the ground, with the nuts inside them. They are also a favourite of squirrels!



Bank vole © SCOTLAND - The Big Picture / naturepi.com

The battle to be head of the herd

DUELLING DEER

by Stuart Edmunds



Stuart Edmunds works for Shropshire Wildlife Trust. In his free time he is chair of Shropshire Mammal Group and a fanatical camera trapper!

At this time of the year, if you go for a walk on the moors or in some remote woodlands, the atmosphere will be filled with the terrifying sounds of male deer (stags). After a year of feeding and bulking up, by autumn, they are ready for a fight to show their dominance. This is called the rutting season.

WHAT IS A RUT?

The word "rut" literally means "ROAR!". It's the sound that larger male deer make when they want to impress female deer (does) in their territory. Triggered by the shorter days, the rut is the time for males to attract as many females as they can to mate with. They do this by beating other stags in a battle of the antlers – often causing huge damage or even death in the process.

The battles are usually at their most intense just after dawn.



WHICH DEER RUT?

Red deer are famous for rutting, but they aren't the only ones that battle to be the best. There are several species of deer that have been brought to the UK from other countries, which also fight to defend territories and impress females. Like red deer, fallow deer and sika deer both rut between September and November. The much smaller Chinese water deer rut a little later, in November and December. They have tusks instead of antlers, so fights aren't quite as dramatic.

Red deer stags can start to fight from the age of two, but battles rarely take place between males of different sizes.



BELLOWING BATTLE

The terrifying roar of a big stag can be quite scary to us humans, so just imagine how intimidating it must sound to a smaller deer that's just about to start the fight! If a stag's roar is impressive enough, his rival might just run away without even trying to fight. The louder the roar, the more attractive the stag is to nearby females, too.

Muntjac deer don't have a rutting season as they breed all year, but males do sometimes scrap over females. Our only other native deer, roe deer, rut in spring. They also use their smaller, pointed antlers to battle to be head of their herd.



LOCKING ANTLERS

The battle begins with two stags sizing each other up and circling. Then when one feels they might have an advantage, he will launch himself headfirst into the head of the opponent with all the strength he can gather. The sounds of clashing antlers can be heard for miles around. Older deer usually have heavier antlers with more sharp points to do damage, but it is normally the fighter who gains the higher ground that comes out as the winner.



Find the best places to see red deer rutting at wildlifetrusts.org/deer-rut

A single fight can last several minutes and ends when the defeated deer runs away.



FEATURE CREATURE

SHORT-EARED OWL



© Russell Savory

I'M 'OWL' EARS

Short-eared owls (also known as shorties) are named for the short, feathered tufts on top of their head. But these aren't their ears! They raise these tufts when they are agitated or being aggressive. Their ears are hidden under feathers on each side of their head.

They have piercing yellow eyes, surrounded by dark feathered rings. Their speckled light and dark brown bodies help them to camouflage in long grass.

HAVING A HOOT!

Short-eared owls begin calling whilst still inside the egg! Once grown, they have lots of calls to express themselves. A high-pitched rasp shouts discomfort. Their territorial song is a soft, repeated hooting that sounds like a steam train puffing down the track. Another call sounds like a dog barking!

Even with all these calls to choose from, they are very quiet birds and you rarely hear them. They don't want to draw attention to their nest, or let their prey know they're coming.



© Andy Rouse / 2020VISION

ESSENTIAL FACTS

Scientific name

Asio flammeus

Size

90-105cm wingspan

Amazing fact

To defend their nest, they distract potential predators by pretending to be hurt, usually faking a broken wing!



© Ben Hall / 2020VISION

WHAT'S ON THE MENU?

Their favourite food is small rodents, like voles and mice. They will make sure there are lots nearby when choosing a nesting spot. Their dinner choice has an important impact on the world around them by helping to control the population of small mammals. Hunting can be tiring work and after catching their prey, sometimes they stay put for a post-meal nap!

WHERE TO SPOT THEM

Short-eared owls are ground nesting birds that live all over the world, except in Antarctica and Australia. They love wide open spaces such as moorland, grassland and saltmarshes. In the UK, they mostly breed on uplands in northern England and Scotland.

In winter, they travel to the milder lowlands of the UK, particularly around the coast. Here, they are joined by migrant short-eared owls from Scandinavia and eastern Europe. You can sometimes spot them flying in over the sea!

WHY DO TREES CHANGE COLOUR?



Autumn woodlands are an explosion of colour, with green leaves turning red and gold. But what causes this incredible change?

GOOD OLD GREEN

Before we explore the colour change, let's take a look at why most leaves are green in the first place! These leaves are green because they contain a green chemical, called chlorophyll. Chlorophyll is what lets plants take in sunlight and use it to create sugars that give them energy. They need this energy to live and grow. Leaves also contain lots of other chemicals that are different colours, but the green chlorophyll hides them all.

SAVING ENERGY

Chlorophyll helps plants create energy, but it also costs energy to produce it. In winter, when there's less sunlight, chlorophyll wouldn't be able to make as much sugar. So, in autumn, the plants break the chlorophyll down into pieces and move them out of the leaves. They store them safely in other parts of the plant. Then in spring they put them back together to make chlorophyll for their new leaves.



© Jon Hawkins Surrey, Hills Photography

FIERY FORESTS

As the green chlorophyll is pulled out of the leaves, you start to see the colours of the other chemicals that are left in them. These chemicals are red or yellow. The colour of an

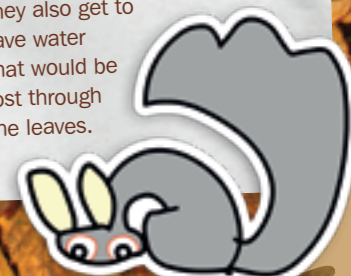
autumn leaf depends on how much of each chemical is in it. Sometimes the red is stronger, sometimes the yellow. The mix of reds, yellows and oranges creates the beautiful fiery colours that we see in our forests each autumn.

THE LEAVES ARE LEAVING!

The trees don't stay fiery for long. Soon the leaves drop off completely. Without their chlorophyll, they aren't much use anymore, so the tree gets rid of them! They break the connection between the leaf and the twig, so that the leaf can fall to the ground. Because they no longer have to look after their leaves, trees don't need to use as much energy in winter. They also get to save water that would be lost through the leaves.



Oak leaf © Ross Hoadinett / 2020VISION



Beech forest © Mark Hamblin / 2020VISION

COMPETITIONS



WIN

A WILD CHILD'S BOOK OF BIRDS

Join young naturalist Dara McAnulty to discover the wonderful birds of the UK. This beautifully illustrated book provides a seasonal guide to the birds you'll spot, as well as lots of info on birdsong, eggs, flight and so much more!

We've got **FIVE** copies to give away.

Buy online at: wtru.st/wild-child-birds RRP: £17.99

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Name one plant that has flowers in autumn in the UK!

WIN A BUILD YOUR OWN SNOWY OWL

Snowy owls are only rare visitors to the UK, but with this kit you can bring one into your home! This easy-to-assemble kit slots together with no glue and no fuss. You can even turn its head 270 degrees, just like a real owl! It also comes with a fact sheet to learn more about these brilliant birds.

We've got **FIVE** kits to give away!

Buy online at: buildyourownkits.com
RRP: £9.99



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We've got **FOUR** copies to give away.

RRP: £16.99

FOR YOUR CHANCE TO WIN:

Just answer this question! How many spines does a hedgehog have?

- a) Up to 700
- b) Up to 7,000
- c) Up to 70,000

Clue – the answer is in the magazine

If you're sending multiple entries, please try to put them in one email to save energy!

COMPETITION RULES

Send your competition entries to us: **By email** watchcomps@wildlifetrusts.org **By post** Wildlife Watch, The Kiln, Mather Road, Newark, Nottinghamshire NG24 1WT
Don't forget to include your name, age and a way of contacting you about your entry! **DEADLINE: 30 November 2022**
Competition entries may be used on our website and social media channels.