

Bringing people, wildlife and wellbeing together

We hope this issue finds you well and that, amongst the continued uncertainty, you've been able to take some time out for yourself to get out and enjoy the beauty and colour that only Autumn can bring.

Has anyone noticed that particularly bright 'star' rising just to the east of the moon each evening recently? It is in actual fact Mars, named after the Roman God of War. It was captured in this beautiful photograph taken by Hilary White over one of the lakes at Brandon Marsh just this week. You can see the moon glowing brightly in the centre and Mars just to its left. If you look closely on a clear night, you'll notice that it actually glows amber, this is due to the iron oxide in its terrain and the dusty atmosphere that surrounds it. Its trajectory across the night sky more or less follows that of our moon, although its orbit around the sun is significantly different to that of the Earth (one Mars year is about 687 Earth days compared to Earth's 365 days). We are able to observe the red planet so clearly at the moment as it is particularly close to Earth, it was only a mere 38.6 million miles away at its nearest back on 6th October; it won't pass that close again for another 15 years! Did you know... Mars has two moons, its tallest mountain is three times taller than Everest making it the tallest mountain on any of the planets and it has polar ice caps, just as we do on Earth?



The Autumn colours do appear to be even more spectacular than usual this year. Why is that? Natural substances produced by the leaves which enable them to produce their own food give leaves their colour (pigments). Although, as with everything in nature, there are exceptions and variations, the three main pigments that colour leaves are chlorophyll which is green, yellow carotenes and anthocyanins which give a range of pinks and reds. The Woodland Trust's Helen Keating explains the reasons why the reds seem redder this year...

"The depth of colour is influenced by the blend of chemical processes and weather conditions.

Cold nights: low temperatures destroy chlorophyll so the green leaf fades to yellow, but if temperatures stay above freezing, anthocyanin production is enhanced and the leaves take on a red colour.

Dry weather: sugars become concentrated in the leaves, more anthocyanin is produced and consequently leaves are redder.

Bright sunny days: although the production of new chlorophyll stops in autumn, photosynthesis can still occur on sunny autumn days, using the remaining chlorophyll. Sugar concentration increases, more anthocyanin is produced and the leaves are redder."

TEaM does



Unscramble the letters to discover the six species of deer found in the UK.

Which two are native?



eee drdr

red oere

derwol flea

nature scmeejd ever

read skie

winters cheer eade

Issue 23 answers...

teadh pac - death cap

starcel pef luc - scarlet elf cup

leifd moomrush - field mushroom

yeohn gufsun - honey fungus

taign fallpubf - giant puffball

Shortkinn - stinkhorn

Taking time in Nature...

Choose a park or green space with trees to take a walk. There is so much to notice in woodland this time of year... the vast pallet of shades from the palest yellow to the most vivid red, the way the leaves twist and turn as they fall to the ground, the weird and wonderful fungi pushing its way through the newly laid leaf carpet. We can even spend time noticing the spaces between the trees that are no longer filled with foliage. What do you now notice in those spaces? Take time to notice the beauty of Autumn.



WILD-WORDSEARCH

Nocturnal Creatures

- Aardvark
- Badger
- Barn owl
- Bush baby
- Hamster
- Hermit crab
- Kiwi
- Luna moth
- Mouse
- Nightjar
- Ocelot
- Puma
- Red panda
- Tawny owl

Laurence Liddy (BTO)

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

Challenge... Find the two hidden words that hint at next week's theme!

"I'm so glad I live in a world where there are Octobers"

L.M. Montgomery, Anne of Green Gables

Name It!

Can you identify the wildlife in the photos?



1

Erin Green



2

R.Charter



3

R.Charter

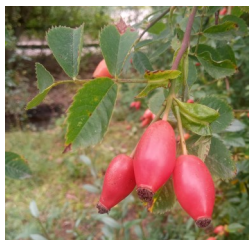
Issue 23 answers...

Name It!

1. rose hips

2. field maple

3. roe deer



Missing Links...

- wood-scape (**land**)
- crab—crumble (**apple**)
- tad—cat (**pole**)
- king-man (**fisher**)
- field—syrup (**maple**)

Missing Links...

Your task is to find the missing word that follows the first clue and precedes the second. For example, the answer to Rain-String could be 'Bow' giving Rainbow and Bowstring.

mature-house

green-agaric

jelly-ring

butterfly-craft

peace-beetle

Answers next week!

You can also follow TEaM on social media for a Daily Dose of Nature...



The Environment and Me



theenvironmentandme



TheEnviroandMe

ANIMAL CAMOUFLAGE

MIMICRY

Most organisms that use camouflage employ mimicry of some kind. They may try to look not only like their surroundings but also like another creature. These forms of mimicry can take many forms across the living world. Some organisms mimic inedible objects or dangerous/poisonous creatures in order to avoid being eaten whilst others mimic food in order to attract prey.



An example of this is *Batesian Mimicry* where a vulnerable animal mimics a dangerous or poisonous one. The Owl Butterfly is mimicking an owl. If it feels threatened, it suddenly opens its wings revealing two large eye-like spots that are designed to startle in an attempt to frighten any predator away.

Another form of mimicry is when separate species that are either unpalatable, poisonous or dangerous mimic each other's markings. This allows potential predators to avoid eating any animals sharing these warning markings. This is known as *Mullerian Mimicry*. In the image an unpalatable caterpillar shares similar markings to stinging wasps and even poisonous coral snakes. This deters potential predators from eating either species. It is no coincidence that we commonly use black and yellow strips or chevrons to indicate a hazard!

More Müllerian mimicry



Image: environment-watch.com

Finally, some species mimic food in order to lure their prey close enough to catch. Different organisms use different strategies to achieve this but perhaps one of the best known is The Angler Fish that uses a bio-luminescent globule suspended on a long rod-like structure. In the dark depths of the oceans the Angler Fish uses this light as bait in order to draw small fish within reach of its cavernous mouth. This is known as *Aggressive Mimicry*.

In this week's article we have seen animals that use Batesian Mimicry (when a vulnerable animal tries to look like a dangerous one), Mullerian Mimicry (where inedible, unpalatable or poisonous animals share warning markings) and Aggressive Mimicry (where a predator tries to look like food in order to catch its prey). Below are some more examples (plants and animals) that fall into one of the three categories above. Can you decide which they fit into? Answers next week.



◀ Hawkmoth larva

▼ Green parrot snake



Image: Dragonflyissuesinevolution13.wikia.com



Peruvian Poison Frogs (image from Pithcare.com)

Here, the harmless larva of a moth mimics a dangerous snake. Which type of mimicry is this?

Here, poisonous frogs from South America share similar markings. Can you tell which kind of mimicry this is?



Image: Juliet. F. Barcelona

The Stinking Corpse Lily is the largest carnivorous plant in the world. Unfortunately, I have personal experience of this whilst working in remote parts of Palawan Island, Philippines. On returning to my hut after a hard day's work my nostrils were assailed by the stench of something large that had clearly died beneath my house. After a long time searching we found this plant outside doing a very good job of imitating a piece of rotting meat in order to attract flies. Isn't nature wonderful...and sometimes just a bit icky! Which type of mimicry is this?

Feature Species

Red Deer and The Rut

Arguably, there is no greater autumnal spectacle than the rut of the red deer! For most species of deer in the UK, rutting season takes place between September and late November. There are exceptions: muntjac deer (the very small ones frequently seen around more rural Coventry and Warwickshire woodlands) do not have a rutting seasons as they mate throughout the year; the native roe deer rut between July and August. 'The rut' is the time where male deer compete for access to the female deer (hinds). For red deer (UK's largest land mammal), the dramatic display of power begins just after dawn with a loud, haunting vocal call. They can often be seen thrashing vegetation to 'decorate' their antlers making them appear larger and more threatening. If this is insufficient in warding off rival males, a fierce battle may commence where males lock antlers in a show of strength and endurance with each male trying to take the literal higher ground to gain advantage. When fully grown, stags weigh between 90 and 190kg and up to 1.37m tall at the shoulder so there is a lot of power behind those charging antlers! The largest herds of red deer are found across the Scottish Highlands, but they are also found in isolated pockets in other parts of the UK including the Lake District, in the South-West England, New Forest and in the Royal Parks of London where, although they are enclosed and used to people, they remain wild and as dangerous during the rut as those in the Scottish wilds.



Terry Whittaker

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**Stay
safe**

