

Bringing people, wildlife and wellbeing together

Nature Thoughts...

Has anyone been out at night to try to spot the comet NEOWISE yet? Any luck?? Neowise (Comet C/2020 F3 NEOWISE) last entered our Solar System 4500 years ago. On its most recent visit, it was first spotted by astronomers, underneath the bright star, Capella, on March 27th 2020 using the NEOWISE telescope. The first spot with the naked eye of the brightest visible comet to enter our Solar System since Hale-Bopp in 1997, was not until July 3rd. During the first half of the month, it was visible in the early hours of the morning just before dawn. It will reach its closest point to Earth on July 23rd, that said, it will still be 103 million kilometres away! As the month progresses, it should be visible in the evening after dark and is now approaching the stars that make up the Plough which form part of the Great Bear constellation (or Ursa Major if we're being 'proper').

To see it, from this weekend, you need to be looking towards the north-north-west (roughly in the direction of Tamworth or Manchester!) and close to the horizon. If you've got binoculars, use those to begin with and spotting Plough first will help. As comets pass close to the sun and heat up, two tails are created, one of gas and the other rocky, dusty debris. These tails are lit up by light from the sun and we should be able to spot them so it will look quite different to a star. We should expect to be able to see NEOWISE until around the 31st July, after that, it wont re-enter our Solar System for another ~7000 years!

What is a comet?

"Comets are frozen leftovers from the formation of the solar system composed of dust, rock and ices. They range from a few miles to tens of miles wide, but as they orbit closer to the sun, they heat up and spew gases and dust into a glowing head that can be larger than a planet. This material forms a tail that stretches millions of miles."

Solarsystem.nasa.gov

I've been waiting for NEOWISE to appear earlier at night and for a clear sky before I venture out to spot it as I'll need to drive or maybe cycle a little way before I have a clear view of the horizon, not obscured by buildings! I'll keep you posted!



NEOWISE meets Chesterton Windmill by Dale Hodgetts, Coventryobserver.co.uk

I've been quite intrigued by NEOWISE, just as I was by Venus when it orbited the Earth close by recently, appearing super bright and have done a fair bit of research. I have to admit, however, I don't know a huge amount about the Solar System and the names of the 'things' we can spot from our spot on Earth beyond the commonly known or the out of the ordinary. I do know that I enjoy looking at them though and that throughout lockdown, my interest in looking up at night has grown. I like the way it makes me feel. I've noticed that spending some time watching the sky, even on a cloudy night when there's little to see, calms me in the same way as staring out at the open sea. I never feel I need to know all of the names of the stars or what orbits what. I mean, it's great when I recognise constellations, or spot planets, but it's also nice just to be able to stare and let my gaze drift from star to star. Staring into the massive expanse of Space makes me feel tiny and with that, everything about me and my life feels tiny too. I find comfort in this because, if I am tiny, in the vast expanse of the universe, then so are the usual worries that bog us down, the 'to do' lists and other 'life admin' that during the day, as they do for us all, can become my whole world. As I gaze from star to star and take some deep breaths of cool evening air, everything somehow feels more manageable and when something feels manageable I can think more clearly and begin to figure out how I might begin to unpick that problem or where I might start with the 'to do' list tomorrow. I gradually begin to feel calmer and more relaxed.

As Monday's brain fog lifts and becomes a distant cloud drifting across the moon, I can think more clearly and a plan for Tuesday emerges. Sure, when Tuesday comes, 'life admin' will become my world again, but now I have a plan to tackle it with and I know the vast sky with all its stars will still be there to bring me some perspective and calm at the end of the day. I wondered what it was about stargazing that made me feel this sense of calm, if there was anything more scientific so I Googled 'why does stargazing make me feel calm?' Quite a lot as it turns out, it's worth a Google...!! Meditation expert Susan Kaiser Greenland explains in an article for Natural Health magazine: "When we softly focus on the world above us, our bodies tend to relax, our minds tend to quiet, and it's harder to get tangled up in our thoughts. This practice reminds us that even when emotions cloud it, there's a sky-like awareness within us and that wide-open awareness has enough space and clarity to hold whatever feelings, thoughts, reactions, biases and sensations come and go in our heads."

It's also thought that the physical act of stargazing has a positive impact on our posture. As we stand and look up, our bodies are drawn upwards, our spines elongated, heads up and back and we are able to breath more deeply and fully without even thinking about it! So another reason to go out and spot NEOWISE; it's good for me! Happy comet spotting! Rosie

Read of the Week... The Boy, The Mole, the Fox and The Horse by Charlie Mackesey "I've learned how to be in the present." "How?" asked the boy. "I find a quiet spot and shut my eyes and breathe." "That's good, and then?" "Then I focus." "What do you focus on?" "Cake," said the mole.

WILD-WORDSEARCH!	E	Y	5	U	D	W	T	U	0	Т	E	G	Ν	A	M
Grow Your Own		F	0	S	Ρ	R	0	U	T	E	R	0	Н	R	D
Beetroot		С	Т	A	D	G	A	В	В	A	н	I	L	L	\$
Broccoli		G	A	W	В	Т	Ν	E	С	F	Т	L	С	0	Ε
Cabbage		D		E	т	т	E	G	D	U	•	^	Р		R
Carrot	R	R	Μ	E			E	u	R	U	0	С	Р	L	R
Courgette	Y	Α	0	Ε	В	Т	С	E	U	D	0	С	Α	Ε	Y
Cucumber	L	С	Т	С	R	W	U	S	К	Ρ	R	К	В	G	R
Lettuce		-	-	-				-		-					
Mangeto <mark>ut</mark>	Ρ	0	U	0	T	A	T	0	Ρ	T	T	M	K	A	R
Potato	W	Μ	0	T	R	В	Т	A	Н	A	U	Ρ	G	В	Ε
Radish	н	Т	Т	Y	G	R		w		С	Ν	Y	U	В	В
Strawberry			•	T	u	R			•	-		T		D	D
Sprout	S		E	A	A	U	A	Η	U	G	B	F	Η	A	W
Sweetcorn	R	L	G	D	В	R	0	С	С	0	L	I	Μ	С	A
Tomato	A	0	I	К	W	F	Ν	S	Μ	F	E	R	R	Y	R
Challenge Find the two						_					_			-	
hidden words that hint at		S	W	E	E	T	С	0	R	Ν		T	K	S	T
next week's theme!		L	B	B	E	T	B	E	C	U	T	T	E	L	\$

'Look up at the stars and not down at your feet. Try to make sense of what you see, and wonder about what makes the universe exist. Be curious. And however difficult life may seem, there is always something you can do and succeed at. It matters that you don't just give up.' Stephen Hawking



Can you identify the wildlife in the photos...



lssue 16 answers...

Name It!

1. 14 spot ladybird

2. Love-in-the-mist

3. Leucistic grey squirrel



🔗 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.

Grass-Fall

Dog-House

Seal-Hill

Hawk-Patch

Summer-Piece

Spring-End

Answers next week!

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



The Environment and Me

Ian Lan Adam



theenvironmentandme



TheEnviroandMe

NATNAV

TIME AND TIDE WAIT FOR NO-ONE

I am guessing everyone has visited the coast at some time in their lives and so are familiar with high and low tides, however predicting them can be complicated. Of course, the best way to understand the tides and stay safe wherever you are in the UK is to consult the local tide timetables which are available from nearby shops or online at https://www.tidetimes.org.uk/all.



The tides are created by the gravitational pull of the moon and also to a lesser extend the sun. The combined influences of the moon and sun create two high and two low tides per day at any given point on the ocean and hence along our coastline. These tides are said to be '*flooding*' (rising) or '*ebbing*' (falling). An example of these effects is the famous '*Severn Bore*'. In this case a rising tide is funnelled up the narrowing Bristol Channel until the rising waters are forced up along the River Severn. Although in the lower, wider parts of the estuary this is seen as a slight roller, as it proceeds upriver it becomes increasingly constrained by the riverbanks to form a series of larger waves which may allow experienced surfers to ride the 'bores' <u>up</u> the river!

The tide times and amount of rise and fall vary and this is further complicated by the shape of our coastlines and relative positions of our landmasses so let's keep it simple and aim to stay safe. We are at our most vulnerable when we walk along a beach, around a headland at low tide and then become engrossed in enjoying ourselves sunbathing etc and forget that the incoming tide (flood tide) may cut off our route back. Equally, we may go out swimming and a tide that is going out (ebbing) may pull us away from the coast whilst if we swim on a rising tide (flooding) it is more likely to push us back towards land. There are a number of simple ways to judge our safety and the state of the tide by spotting natural clues.

If we always keep an eye out for whether routes back up off the beach are available or blocked by cliffs for example, we can make sure we have a way inland and off the coast. We can also observe the water's edge. If the sand on the beach is wet above the wave line, then it is likely the tide is ebbing whilst if it is dry then the tide is likely to be coming in or flooding (it is usually safer to swim on a flood tide than an ebb). If the beach is steeply sloped then the water level will change more slowly whilst if it is flatter, then the tide can ebb or flood very quickly (at or above walking pace in parts of the UK!). This may mean that a rising tide appears to come in slowly on a steep stretch of beach and then suddenly accelerates when it reaches a flatter section.

We can also look at '*strand-lines*'. Strand-lines tell us how high the tide may reach. These can be recognised as lines of debris (often seaweed, shells, wood and unfortunately litter) that run along the beach roughly parallel to the sea. This debris was left as the last high tide reached its maximum height and so can be a good guide and a good area to beach-comb along. Strand lines may also be along the base of cliffs which tell us that the beach may disappear entirely at high tide.

If we use the Five Ways to Wellbeing' and '*take notice*' of all these things we can gather enough information from our natural coastal environment to be able to understand the likely state of the tides and hence enjoy ourselves without having to call out the coastguard or appear in the local paper!



Next week, Martin brings us a new feature all about birds of prey!

TEaM	does	A mindfulness moment Want to try a stargazing-based meditation?						
	OW N	Follow Susan's Kaiser Greenland step-by-step guide. "Stargazing cuts through many of the challenges people have when they learn to meditate. We relax, gaze at the sky, and explore what's happening at the moment. Sit or lie down comfortably and relax. Settle into the natural rhythm of your						
Unscramble the anagrams to reveal the bushcraft themed words.		breathing.						
		When your body feels relaxed, move your attention to your out-breath and lightly rest it there.						
seork ttmtle	gknildin	Look at the horizon and rest your gaze. Keep your eyes soft and open, not focused on any particular object.						
cmie apfr	dntier	Notice any changes that you see in the sky.						
mhocamk	dofr iwoe	When thoughts, emotions, and body sensations bubble up, let them be. If you do this, they tend to stay for a while and then fade away on their own" (Ref: <u>https://www.naturalhealthmagazine.co.uk/wellbeing/stargazing-your-new-mindful-hobby</u>)						

Mindfully colouring is one great way to occupy the mind in a gentle way and also to slow it down, helping you to unwind.



Feature Species!!

Diversity in Nature

Have any of you ever spotted an animal that seems to be the 'wrong colour' for its species? It's either cream in colour or dark brown and you're sure it *should* be grey? There is a very good chance, unless you're mistaking a little gull for a pigeon, that you've got the species correct and it is a colour variant. This is particularly common in squirrels, and even more so in red squirrels, who's fur can range anywhere from 'buff' to jet black. They are as wonderfully diverse and as individual as us humans! In pockets of the UK, fully black (melanistic) grey squirrels, equal or even outnumber grey squirrels. It is far more rare, however, to spot a squirrel that is completely pure white!

Leucistic Squirrels Leucism happens due to a genetic condition that causes some or all of an animal's fur to lose pigment. Only the fur is effected so a leucistic squirrel that has lost all of its pigment may appear completely white or have white patches, its eyes



Albino grey squirrel in Surrey, by Ivor Paetow, news.bbc.co.uk

will remain dark and unaffected as will its skin tone. Leucistic squirrels are becoming more common, particularly in the south of England.

Albino Squirrels Albinism is a genetic mutation that effects all of the pigments in an animal. An albino squirrel will appear white all over and its eyes will look pink with very pale skin. Due to reduced retinal function caused by



Leucistic red squirrel by Chris Eddington, BBC.co.uk

the albinism, vision is often impaired and it is thought that this is the main reason why albino squirrels do not live as long in the wild as grey morphs. They are also unable to camouflage in the same way.









