TEaM Up!

Issue 31
4th February 2021

Bringing people, wildlife and wellbeing together

How is everyone doing this week? This weeks Issue comes to you on It's Time to Talk Day and this year the theme is 'The Power of Small'. A small conversation, a small question: 'How are you?' has the power to make a huge difference. Starting small conversations about mental health has the power to break down stigma and barriers, and asking someone how they're doing today, has the power to turn their day around.

Nature give us a great way to connect with others. My family WhatsApp group is full of what's become known as 'walk spam'. Although we can't walk together, we have been sending each other selfies from walk's, snaps of views from our various localities across England and Wales or wildlife we've spotted. There are even videos of bird song with 'What's this?' questions. It's also been lovely to arrange to go for a walk at the same time as a friend and call and chat as we walk, spending time in our locality, together from afar. Communicating with family and friends in this way and sharing the little bit of the world we each have around us, has definitely helped me to feel connected and less alone. Take care and keep talking, Rosie

Winter Walking Challenge: Distance update...

Well so far we've made it over 52 miles, which, using Google Maps in 'walk mode' would get us from Coventry centre to: Oxford, Cirencester, Tenbury Wells, Much Wenlock up near Ironbridge or Fenny Bentley in south Peak District. There's more stats to come in so expect a big jump in next weeks update! It's never too late to join the challenge with the time you've walked or distance!!!

Snowdrops
(Galanthus nivalus)

You'd be hard pushed to take a walk and not spot a patch of snowdrops right now! They were brought to the UK from Europe to be cultivated in gardens, it's thought, in the 1500's but escaped into the wild (probably with some help) and do extremely well in our cold climate! Snow drops have evolved specially reinforced leaf tips to break through hard, frozen ground! In Europe, wild, fertile species are pollinated by bees. The seed drops on to the ground and ants, after the 'tasty' coating around the outside, drag the seed down to their nests. The seed remains untouched and begins to grow in its relocated position! Clever! In Britain, however, most snowdrops are sterile and rely on the splitting of the bulb beneath the soil's surface to reproduce - this seems to work pretty well for them!! Snowdrops became a symbol for Imbolc, the Celtic festival celebrating the mid point between the shortest day and Spring Equinox. This year it fell on Monday 1st February. Imbolc celebrated the re-awakening of the natural world and new beginnings!

An extract for the day...

THE WOOD:

The Life and Times of Cockshutt Wood

By John Lewis-Stempel

February 4th: *On the Lane. Looking through the Land Rover window towards Cockshutt's iron oaks, standing their ground against the rain. I have been defeated and left my fencing work, but the oaks are uncompromising. In the 1990's I rediscovered (after hazy, lazy university days) graft, by taking up the family line, farming. I can hack days outside in the rain. I can tell you that. In 2001 I spent six consecutive days on the hill above Abbey Dore, in mad, ceaseless downpour building a 'race' (a corridor to contain cattle). Every hole for the uprights, which were railway sleepers, filled with water before I had finished digging it. I did twenty holes, hauled every sleeper myself because it was so slick the tractors wheels would not grip. The horizontal rails, motorway crash barriers, I fixed myself. Today I have given up. Bowed before the elements. I am flesh. The trees are wood. We are not the same.*

The Hebridean sheep, also made of flesh and tough, have sheltered behind the boles of the oaks, which are bulwarks.

Where does tree growth come from? How can the trunk increase in thickness and be continuously functional?

Xylem is a plant vascular tissue that conveys water and dissolved nutrients from the roots to the rest of the tree, and support. In trees, xylem builds a ring of new xylem around itself. Dead xylem becomes heartwood; and the new xylem around the outside, still serving as plumbing (like the Pompidou Centre), becomes 'sapwood'. The heartwood provides the backbone of the tree, the stick for the lolly. The age of the tree may be determined by counting the number of annual xylem rings at the base of the trunk when cut in cross section.

WILD-WORDSEARCH

Winter Colour

Brambling
Dogwood
Hawthorn
Hazel
Holly
Mallard
Redwing
Robin
Rosehip
Rowan
Siskin
Starling
Waxwing
Winter aconite

Rosie Charter

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

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

"Nothing in nature blooms all year round, be patient with yourself" Unknown

Name It!

Can you identify the wildlife in these photos?

1

Rosie Charter

2

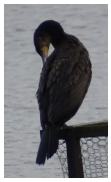
Man Lan Adams

3

Rosie Charter

Issue 29 answers… Name It!

1. Coal tit 2. Cormorant 3. Oysterling fungi

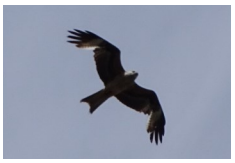


Missing Link Answers:

snow - down **(fall)**
red - back chair **(wing)**
pine - hatch **(nut)**
Norfolk - bean **(broad)**
black - skate **(ice)**
beech - pecker **(wood)**

How well do you know your…

Bird Idioms?



Fill in the blanks to complete these commonly known sayings.

As proud as a _____.

As the _____ flies.

The early _____ catches the _____.

_____ eye.

As happy as a _____.

You can also follow TEaM on social media for a

The Environment and Me

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FROST AND ICE

Waking to a landscape covered in a blanket of snow is becoming increasingly rare in the UK, however, waking to a winter landscape gripped by frost and ice is much more common. Whenever moist air, the ground or other surfaces drop below freezing frost, glaze or ice can form. There are many forms of frost and ice so we will look at just some of the types we may encounter in the UK.

Window Ice
Image: Man Lan Adams

Air-frost can occur where the temperature of moist air falls below the freezing point of water. Ground frost on the other hand refers to ice forming on the surface of the ground, on trees or other objects and occurs when the temperature of these surfaces drops quicker than the surrounding air temperature. This means that a ground frost can occur when the air temperature is above freezing with the moisture in the air freezing on contact with a cooler (freezing) surface. Clear nights in spring and even early summer can lead to the formation of ground frost and is often a bane to gardeners who may lose tender plants to this type of frost.

Hoar frost is one of the more striking types of frost. It forms in much the same way as dew but when the surface temperature of an object (e.g. a tree-branch) drops below freezing before the dew forms then feathery ice-crystals may grow creating Hoar frost. If the dew forms before the surface temperature drops below freezing, then a white frost is formed instead.

Hoar frost on cobwebs,
Image: blogspot.com

Hoar Frost on Trees,
Image: blogspot.com

Frost is often confused with ‘Glaze’ or ‘Rime’. Glaze forms when rain comes into contact with a surface that is well below zero or when supercooled rain contacts the ground, even though the ground is temperature may be above freezing. Water may become supercooled (i.e. remain a liquid even though its temperature is below freezing) due to the presence of particles such as salts or air-borne pollutants in the rain droplets.
Rime is a rough white film of ice that forms on vertical surfaces (e.g. buildings) when supercooled fog comes into contact as it drifts past. Glaze can be particularly dangerous as it may appear to be liquid water when it is in fact ice.

Black-ice, also called clear-ice, is another potentially dangerous form of ice and takes the form of a thin coating of glaze ice on a surface, especially on roads. The ice itself is not black, but visually transparent, allowing the black road surface below to be seen through it. If you are walking or driving and know that the surrounding temperatures are below freezing then you should assume that a puddle that looks filled with water is actually black or clear-ice.

Black or Clear-ice
Image: Australianbollards.com.au

‘Window frost’ (also known as ‘Fern frost’ or ‘ice-flowers’) is a particularly striking form of ice. It forms when a glass pane is exposed to extremely cold air on the outside and relatively warm air on the inside. Where the glass is a single pane and therefore not very well insulated the water vapour outside the window pane condenses onto the glass where it begins to freeze and grow wonderful ice crystal patterns. This form of frost is most common on cars and apparently forms better fern-like patterns if the car is dirty. Great! Another excuse for me not to clean the car in winter!

Fern-ice or ice-flowers on a car
Image: Australianbollards.com.au

Window Ice
Image: Helen Filatova

Hair ice is one of the stranger types of ice. In order to form it needs a porous surface where micro-holes in the surface allow water to penetrate. When the air temperature then drops below freezing, the water in the outer part of the holes freezes solid. As the cold penetrates deeper into the hole, the water also freezes and expand, pushing the initial ice plug out forming hair-like structures. The picture below shows hair-ice formed on one of my plant pots. Eventually after happening a few times the pressure inside the holes in the surface of the pot reached the point where the whole pot fractured and fell apart! Needle ice forms in much the same way as Hair-ice but in pores in the soil.

Hair-ice on the porous surface of a plant pot.
Image: Martin Felstead

Image: Gisela Preuß

Needle-ice
Image: soil-net.com

Finally, icicles…

Icicles are a common winter sight. They form when snow or ice melts (e.g. during daytime) and then refreezes. The melting water drips from edges (e.g. gutters) forming a structure similar to a stalactite in a cave. Over repeated freeze-thaw cycles long icicles can form creating beautiful structures that can also be dangerous once their anchor point melts and they drop!

Image: Mark Duell

Next week I will start a new series of articles...
…Does anyone want to request a subject?

Stay safe