# TEaM Up!

**Issue 25**
13th November 2020

**Bringing people, wildlife and wellbeing together**

Hi there everyone, we hope this issue finds you well! During the next few weeks, we'll be sending out TEaM Up out a little more frequently in the hope of bringing some positivity to your inboxes and doorsteps!

## Down the plot...

It's been another busy couple of weeks at the TEaM allotment! The broad beans that were planted in pots and were just beginning to emerge three weeks ago are now in the ground and thriving.



Volunteer Winston and TEaM member John take a well earned break from gardening. Taking time to chat and check in with friends is as important at the plot as the growing!

Since we returned to the allotment, keen wood worker and TEaM member Richard has been working hard to create a new potting bench! It looks really great Rich, well done!

Whilst digging up the last of the spuds, TEaM member Becky and volunteer Chad came across this furry fellow hidden amongst the long grass growing around the edge. Dark brown with and orange 'fuzz', can anyone identify the moth or butterfly it will become next spring? After a brief photo call, it was relocated to a safe spot for the winter.

## TEaM does


Unscramble the letters to discover the five types of conifer found in the UK. Three are UK natives and one is not evergreen!!

**cones tips**

**fogilus rad**

**neurjip**

**harcl**

**ewy**


David Alderman

Issue 24 answers...
**eee drdr - red deer**
**red oere - roe deer**
**derwol flea - fallow deer**
**nature scmeejd ever - Reeves' muntjac deer**
**read skie - sika deer**
**winters cheer eade - Chinese water deer**

# What's Next?

Ever wondered what you need to be doing, when in your own garden? In a new monthly feature, we bring you a calendar of allotment activity to give you some ideas for things you could be doing in your own garden.

| | |
|---|---|
| October | October was the time for planting the broad beans and digging up the spuds. We were also still busy harvesting the last of the tomatoes, peppers and chillies for the year! The beds were dug over and the apples began to fall for eating and pies! Yum! |
| November | Now is the time to get the garlic in the ground - look out for a 'how to' guide next issue! Broad beans have also gone into the ground this week. Hedges are now being cut back, leaves raked up for composting and the wormery and the apples continue to fall! |
| December | December will be all about maintenance. The beds will have been 'put to bed' and members will focus on replacing rotten bed edges, carrying out repairs, painting when the weathers' dry and burning woody clippings that can't be composted! Bonfire time! |

# WILD-WORDSEARCH

## Constelations

Andromeda
Aquila
Aries
Cassiopeia
Cygnus
Gemini
Hydra
Leo
Libra
Lyra
Orion
Pegasus
Perseus
Ursa Minor

Image: BABAK TAFRESHI

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

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

**"Autumn shows us how beautiful it is to let things go."**

Unknown

# Name It!

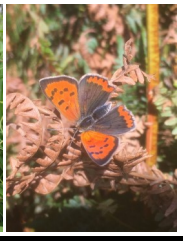
## Can you identify the wildlife in the photos?




**Issue 24 answers...**

**Name It!**

1. Otter 2. shaggy Inkcap 3. Small Copper butterfly



**Missing Links...**

mature-house **(tree)**
green-agaric **(fly)**
jelly-ring **(ear)**
butterfly-craft **(bush)**
peace-beetle **(lily)**

## 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.

**rain - tie**

**Scots - needle**

**black - table**

**oxeye - chain**

**collared - tail**

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 3
## Animals that can change colour

So far in TEaM-Up we have looked at animals or plants that can mimic their backgrounds, mimic unpalatable, dangerous or poisonous animals, mimic food and animals that share common colouration to warn off predators. This week we will look at animals that can change their colour!

Animals change colour for three main reasons: to hide from predators or prey, intimidate rivals or predators or woo potential mates.

Some animals change their colour seasonally. This happens in environments which also change colour dramatically as the seasons shift. The most obvious environment is the high latitudes where vegetation cover gives way to snow cover with the onset of winter. The Rock Ptarmigan loses its brown summer plumage by moulting and grows a new set of pure white feathers whilst Artic Hares and Stoats will also change from brown coloured fur to pure white as the winter snows arrive. The Ptarmigans and Hares are trying to hide from predators whilst the Stoat is trying to become invisible to prey. All of them are trying to blend into the snowy white landscape of high winter. Over 20 species of birds and mammals in the high northern latitudes change their colour from brown to white between summer and winter. This change is governed by changes in day length which trigger hormonal signals resulting in the moulting and re-growing of different coloured feathers or fur.

Summer Stoat
(image from Konrad Wothe, Minden Pictures)

Winter Stoat
(image from Greg Winston, Nat Geo Imager Collection)

Seasonal changes in colour can also occur underwater! Chameleon Shrimp for example change their colour from red to green or visa-versa in response to the seasonal dominance of the algae in their rockpool (red or green algae). Goldenrod Crab Spiders can flip their colouration in response to the background they are on. If they await their prey on a white flower then they become white and if they move to a yellow flower they will become yellow. This colour changing process takes the crab spider a few days to complete.

However, some creatures can change their colour in a matter of seconds! Chameleons can completely change colour-patterns in under 30 seconds. They do this by using special skins cells (dermal chromatophores) which act as pathways for pigments which then interact with other cell-types (iridiphores) which contain reflective crystals. If these cells are stretched or compressed they reflect different light wave lengths and hence the colours we see. These cells work together with pigments to create the huge range of iridescent blues, reds and oranges that we see on chameleons.

Two male panther chameleons show off bold, orange colouring, which communicates aggression.
Image: Christian Ziegler, Nat Geo Image Collection

Whilst chameleons use this technique to camouflage themselves they also use it to convey emotions such as aggression or submission. This occurs most often during courtship battles where chameleons seek to intimidate their opponents or admit defeat by tightening or loosening their skin and producing brighter (aggressive) or darker (submissive) during intense '*colour-battles*'.

Some animals, known as ‘Super-quick Changers’, are masters of this process and can flash from blue or green to red in less than half a second! Chameleon sand tilefish employ adrenaline to trigger iridiphore cells to change colour. However, it is the cephalopods (octopuses, squids and cuttlefish) that are the undisputed champions when it comes to speed and variety of colour change. Cephalopods directly control their chromatophore cells from their central nervous system. The Humboldt squid can flash its entire body’s chromatophore cells at once to create a coloured strobe effect changing at up to four times per second. In most cases these colour changes are used during courtship contests or as a signal of being ready to mate. This would be like you or me being able to change our skin colour and patterns of colour at the speed of thought!

I recommend exploring these creatures further (octopus, squid and cuttlefish). When you see them changing colour on video you can really appreciate their amazing abilities and perhaps imagine what our world might look like if we could do the same!

Iridescent Humboldt Squid

## Feature Species


### Murmuration

Starlings (Sturnus vulgaris) can be found everywhere: in the countryside or in towns and cities. It is one of the most common garden birds, however, the starling population has fallen by 80% since 1979 in the UK and they are now on the critical list of UK birds most at risk. The fall in numbers are due to loss of pastures, Increased use of chemicals and a shortage of food and nesting sites.
They can be mistaken for blackbirds, however, starlings have a glossy sheen of iridescent purple and green and spotty plumage and are slightly smaller than a blackbird. Both male and female look the same except the male has fewer spots on the rump and wing. A juvenile starling has grey-brown feathers and they moult between summer and winter to gain their adult plumage.
Starlings are great at mimicry, making sounds such as telephone and car alarms. Their songs are often a mix of squeaks and whistles. They are noisy and sociable and tend to gather in flocks. They feed on insects, snails, worms, berries, fruit, scraps and suet.
In the autumn starlings from Scandinavia, Finland and Poland migrate to winter in Britain. During the winter resident and immigrant starlings form large roosts. Especially between October and March, there is a nature spectacle phenomenon called **murmuration.**
Murmurations are where thousands of birds dance in unison, twisting, turning, swooping and swirling across the sky in amazing shapes and patterns just before dusk as they come together to roost. Other birds such as knot and dunlin also murmurate but a starling murmuration is more common and easier to see. As the weeks go on the number of starlings flocking together will increase. Starling murmurations can be seen even in towns and cities, so keep your eyes open and look up to the sky at dusk.
Why do starlings murmurate? One of the main reasons may be safety – safety in numbers against potential predators such as peregrine falcons, that will find it difficult to target one bird in the middle of thousands. Also, they gather together to keep warm at night and to share information such as best feeding grounds.
Nature is incredible and scientists still do not really understand how each starling knows which way to turn without bumping into another in all this twisting and turning.




Further details at: www.rspb.org.uk and www.garden-birds.co.uk

**Stay safe**