

## Bringing people, wildlife and wellbeing together

Issue 34 of TEaM Up! included some fantastic tips on providing water for wildlife, so this week I thought I'd share with you my own efforts to make sure the visitors to my garden have places to drink and bathe.

Since I began working at Warwickshire Wildlife Trust, 2 years ago, I have become much more aware of the wildlife on my own doorstep and I regularly pester my more knowledgeable colleagues for tips and advice about the best things I can do to help it thrive. Top of that list is always 'give them a water source' and so last autumn I roped my husband in to helping me create a teeny tiny pond (I call it my wildlife puddle) in the front garden basically a washing up bowl in a hole, with a few plants and stones in it. Now, when I am working in the front room, I can see the blackbirds and sparrows having a drink or a wash and I love it! Spurred on by this, and inspired by the amazing wildlife pond at the TEaM allotment, my mission for this spring has been to create a 'proper' pond in the back garden. I asked my family for pond liner as a birthday gift in February, then set to work with the spade, before quickly realising that a pickaxe was needed and calling for reinforcements again when some huge roots appeared, soon followed by some pretty impressive rocks! We persevered and once the hole was dug (over a couple of days), I was so excited to fill it that we ended up burying the liner edges in the dark not the best of plans but I think we got away with it. With water in (we emptied our water butt), my pond was beginning to take shape, and it was time to add some substrate, which basically meant that my lovely water turned into sand soup for a few scary days. While waiting for it to settle, I made a spur of the moment decision to dig a little bog garden at one edge of the pond, using offcuts of liner. At the moment this is living up to its name and is not the most attractive area (the bricks around it are to remind us not to tread in it) but I am looking forward to getting some plants in there.



The wildlife was interested from the moment I started digging, with a little robin hopping about and inspecting the hole at regular intervals. When the water was first in and a goldfinch came down for a drink I could barely breathe as I watched it, and just this morning some starlings took a noisy bath. The next step will be to plant in and around the pond to really bring it to life and cover up the exposed liner. I can't wait to see it develop over the year and am so excited to see what birds, insects and other creatures might choose to pay it a visit, or even move in!

Even though I am not directly involved in the project, TEaM really has been an inspiration to me and you have taught me so much about how to appreciate nature and make space and time for it in my life. Thank you and best wishes,

Hilary







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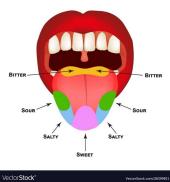


TheEnviroandMe

## ANIMAL SENSES AND SUPER-SENSES TASTE

In the previous issue of TEaM-Up we explored various animals' sense of smell. This week we will look at the sense of taste (known as '*Gustation*') which often works in tandem with smell.

There are four natural basic tastes: sweet, sour, salty and bitter, plus umami (the taste of glutamates). Together with our noses the 10,000 taste buds on our tongues allow us to not only enjoy the pleasure of eating something we like but also protect us from eating something poisonous or dangerously unfit to eat. Our sense of smell may attract us to a food source, but it is our sense of taste that then inspects it to see if it is edible. If you have ever sniffed a bottle of milk that has gone 'off' then you will know it by both smell and taste. In the wild animals also have senses of taste that enable them to identify safe nutritious food and protect them from eating something dangerous. This week we will explore those animals with the most unique and extraordinary powers of 'gustation' (taste).



Cows possess 25,000-35,000 taste-buds giving them an excellent sense of taste which is 2-3

times more sensitive than that of a human. Being herbivores, it is believed that they have developed this heightened sense of taste in order to distinguish between edible and poisonous plants whilst pigs, which are omnivores, have around 15,000 taste buds and will eat almost anything put in front of them (they particularly like savoury tastes).



Catfish using barbells to quest ahead (image from dating-detective.blog)

An animal with one of the most acute senses of taste is the Catfish. These beady-eyed fish live and hunt in the murky waters close to the muddy river bed. In this environment eye-sight is less important than the senses of both taste and touch. It is for these reasons that catfish have developed four pairs of long whisker-like feelers or barbells (which give them their name). These are concentrated around their mouths with further taste receptors located elsewhere such as around their fins, tails and along their flanks (around 100,000-175,000 receptors in total). This amazing array of sensors allows the catfish to taste their environment and so not only identify, locate and catch prey but also avoid predators.

In the insect-world butterflies and flies all have taste receptors which help them locate and identify safe nutritional food sources.

Butterfly taste buds are located on their feet (known as 'tarsi'). Once in contact with a potential food source, these receptors sense whether the food is edible which, once confirmed, will signal the butterfly to unfurl its proboscis and begin feeding. These same receptors are also used to find a suitable location for egglaying. The butterfly first tests this by tapping the plant so that it releases juices that the butterfly can then taste through receptors on its legs. Only once the butterfly has confirmed that the plant has the right taste will it then lay its eggs.

Flies have also have taste receptors located on their legs and will unfurl their



proboscis in the same way as the butterfly. Flies prefer sweet, high energy foods and are deterred by bitter tastes. Once the proboscis starts to feed, the fly also examines the food using its proboscis and also in the pharynx which is located behind the proboscis.



One final taster example from the animal kingdom is the octopus. This cephalopod has taste receptors on each sucker which, given that the octopus has around 200 suckers on each of its 8 tentacles, amounts to an array of taste buds that makes it a 'super-taster'. This in combination with its highly dextrous use of its 8 tentacles allows the octopus to explore small crevices in coral reefs and literally taste if there is live prey hiding there. In addition, octopi can remember tastes they like and so develop quite a discerning pallet over time. This ability to taste through its many arms makes the intelligent octopus a fearsomely successful hunter of the marine world.

The next issue of TEaM-up will have my final article on animal senses. An exploration of the sense of touch in the animal kingdom will take us into truly weird environments populated by the denizens of the dark...*The Troglodytes!* 

## Down on the Plot

Spring has certainly sprung down on the plot. The frogs have been laying their eggs in the pond. Frogspawn is definitely a sign of spring.

It would be great to see the development of these tiny black dots into tadpoles and then into frogs. Watch this space for future pics.





Jackie along with volunteers and members have been busy setting seeds such as chilli, tomatoes, beans and sweet peas in the green house. These will be re-potted in the coming weeks when they have germinated and grown in size.

What else has been happening? There has been a couple of creations of nature crafts. Members had a go at making bird feeders for fat balls out of silver birch twigs. They also tried their hands on making wire trees, each so different and beautiful. They have thoroughly enjoyed these activities and were able to take the result of their creativity home.

All around the plot there are signs of spring with crocus and daffodils flowering brightly. Queen bees have awakened from hibernation in search of pollen and nesting sites. Watch out and listen to the buzzing of these bees as they fly around looking for places to nest and start a new colony.



There have been fantastic bird sightings down on the plot. You can see the buzzards soaring on the thermals on lovely blue sunny days. Kestrel hovering extending the tips of its wings and fans its tail feathers hunting for it's lunch. Another wonderful sight is seeing a little egret flying overhead in the distance. Little egrets were once a rare sight but now with changes in the climate, they can be seen in lots of places, just keep your eye open.

We want to say a special thank you to Winston's friend who has generously donated to TEaM project several bags of seed potatoes, which is now being chit in the cabin. Chitting will encourage the seed potatoes to sprout before planting, giving then a head start.

Finally another sign of spring is the hawthorn bursting with fresh green leaves. This plant produces leaves before the flowers. The fresh young leaves are edible, add to salad. Taste and see for yourself!



THANK YOU! For the donation of seed potatoes.

WILD-WORDSEARCH	A	E	D	F	C	A	D	D	I	5	F	L	Y	5	Η
Pond Life	R	Y	E	R	0	F	T	R	0	W	Ν	R	0	Н	С
Arrowhead	E	Р	L	G	A	Μ	Т	E	A	В	R	L	G	S	E
Caddisfly	V	0	T	F	V	G		T	н	0		T	Y	U	E
Diving beetle	•	V	-	F	•		•			U			T	U	
Dragonfly	Μ	D	E	В	S	Т	E	A	W	A	T	R	E	R	W
Frogbit	Ε	Ν	E	E	К	R	E	К	Ν	Y	R	Y	5	T	5
Hornwort	Α	S	В	Α	Α	D	В	S	E	E	L	E		F	Α
Leech	A	•	D	A	<b>A</b>		D	•		E		E			A
Meadowsweet	D	Н	R	V	Т	R	R	D	M	F	R		L	0	V
Pond skater	0	0	E	E	E	E	R	Ν	Ν	R	С	D	V	S	Ν
Silverweed			T		-						-				
Soft rush	W	Ν		R	T	0	L	0	R	0	G	D	E	D	E
Water avens	\$	R	A	A	G	I	G	Ρ	W	В	Н	A	R	D	L
Water beetle	W	W	W	R	S	A	Т	U	S	Н	A	С	W	I	Т
Water snail Man Lan Adams	E	0	D	F	R	0	G	В		Т	E	В	E	E	F
Challenge Find the two				ſ	R		u	D				D			
hidden words that hint at	E	R	E	D	0	W	U	S	Ν	A	Μ	A	E	E	Y
next week's theme!	T	E	L	T	E	E	B	G	Ν	I	V	I	D	R	L

"Nature gives to every time and season some beauties of its own" Charles Dickens

