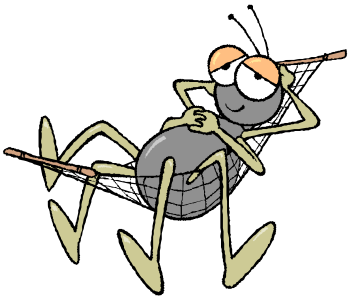


Nature's Web

Issue No. 35 Autumn 2014

Inside This Issue...

Super Bright Supermoon

Image copyright Robbie Murphy

Editor's Page

A Tiger in the House!

Every house has wildlife visitors now and then. They creep or fly in open doors and windows and some, such as spiders, can even take up residents in quiet corners. One day this summer a Garden Tiger Moth flew in our front door and was captured on camera. This moth has very distinctive markings, which are great for frightening off predators, such as small birds. The colourful 'tiger' pattern is produced by thousands of coloured scales on its wings. It may not be a wild cat but it is certainly looks like it should be related to one!

Garden Tiger Moth

Moths are however related to butterflies – but with a few differences. Moths generally come out at night and are less colourful than butterflies (though the Garden Tiger Moth is one of the exceptions!). When at rest they keep their wings flat and tucked in rather than upright and their antennae are feathery and without bobbles on the end (which is a characteristic of butterflies). For more information on moths see the Winter 2006 issue of Nature's Web.

As Gaeilge! We are delighted to have teamed up with An Gúm, who are translating Nature's Web into Irish. Issues are now available, as gaeilge, at: http://www.gaeilge.ie/ForasnaGaeilge/An_Bhunscoil.asp

Seafood Recipe

Salmon Kiev in a Crust

WHAT'S NEEDED:

- 4 x 175g salmon fillets, skinned and boned (each one at least 2.5cm thick)
- 100g butter, softened
- 2 tablesp. fresh tarragon, chopped
- 1 tablesp. fresh chives, snipped
- 1 small garlic clove, crushed
- 500g packet puff pastry, thawed if frozen (all butter, if possible)
- A little plain flour, for dusting
- 50g tender young baby spinach leaves
- Good Pinch freshly-grated nutmeg
- 1 egg, beaten
- Salt and freshly-grated black pepper

What to do: *Serves 4*

Preheat the oven to Gas Mark 6, 200°C (400°F).

Place the butter in a small bowl and beat in the tarragon with the chives, garlic and a little pepper and salt to taste. Spoon on to a sheet of clingfilm or non-stick parchment paper and shape into a roll about 2.5cm thick, then wrap tightly. Chill in the freezer for at least 10 minutes to firm up (or keep in the fridge for up to 48 hours until required, if time allows),

Cut the pastry into 8 even-sized sections and roll each one out on a lightly floured surface to a 23cm x 15cm rectangle, trimming down the edges as necessary. Place a salmon fillet in the centre of 4 of the pastry rectangles. Unwrap the tarragon butter, cut into slices and arrange on top, then cover with the spinach leaves. Season the spinach and add a little nutmeg.

Brush the edges of the pastry bases with a little of the beaten egg and lay a second sheet of pastry on top, pressing down to seal. Crimp the edges by gently pressing the edge of the pastry with the forefinger of one hand and between the first two fingers of the other hand. Continue all the way around the edge of the parcel, then repeat until you have 4 parcels in total. Using a sharp knife, make light slashes across each parcel but take care not to cut right through.

Place a baking sheet in the preheated oven for a few minutes. Meanwhile, brush the pastry parcels with the remaining beaten egg. transfer to the heated baking sheet and bake for 25-30 minutes or until the pastry is cooked through and golden brown. Arrange the salmon parcels on warmed serving plates.

Serving Suggestions

Delicious served with steamed samphire or green beans and hollandaise sauce.


Photo: © Bord Bia - Irish Food Board

Courtesy of Bord Bia - Irish Food Board.
www.bordbia.ie.

Welcome to the Autumn Edition of Nature's Web!

Dear Reader,

Welcome everyone to the Autumn 2014 issue of Nature's Web. Looking out to sea from Sherkin Island, we often see huge tankers on the horizon. In this issue we are delighted to feature the captain of one such tanker, John O'Sullivan. It is fascinating to read about his work and how his ship transports oil around Europe.

We look at the Broad Bean, a tasty vegetable that you could start to grow this autumn, for an early crop next Spring. Thanks to Robbie Murphy, we can see what a 'Supermoon' looks like and Captain Cockle brings us back in time with Mesolithic Marine Tours! Check out nature news from around the world on page 10 and enjoy a giggle with the jokes on page 14.

We would love to hear your views and comments and suggestions for future articles. Have a good read!

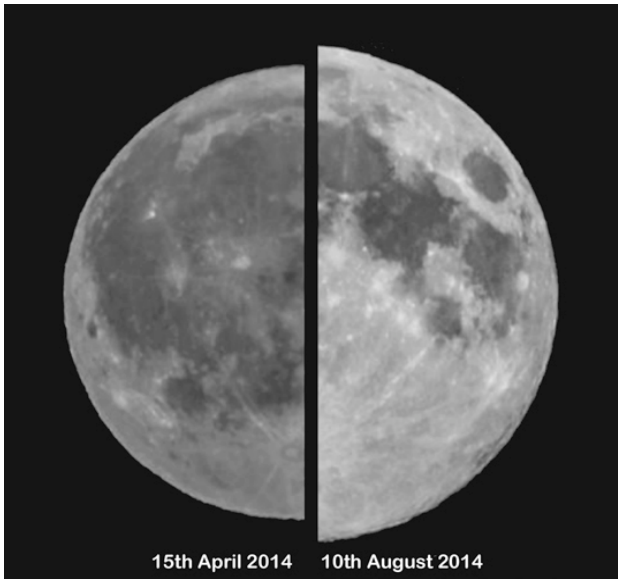
Susan

Email: editor@naturesweb.ie
Web: www.naturesweb.ie
Editor:
Susan Murphy Wickens
Layout and Design:
Susan Murphy Wickens

Foreign Correspondent:
Michael Ludwig

Special Feature

What is a Supermoon?



Photos courtesy of Robbie Murphy

Above is the Supermoon of 10th August 2014 compared to an average moon of 5th April 2014 - as seen from Sherkin Island.

The Moon is approximately 384,400 km from the Earth. That distance can vary, depending on the orbiting of the Moon and the Earth in relation to each other and to the Sun. The diameter of the Moon is 3,476 km but this does not change, whether it is closer to or further from the Earth. Though the physical size of the Moon does not change, every now and then a full moon will seem larger and brighter in the night sky. This happens when the full moon is at its closest point to Earth during its elliptical orbit. On these occasions, the Moon is known as a 'supermoon'. A supermoon can appear to be 14% bigger than the usual Full Moon and up to 30% brighter.

A supermoon occur more often than we realise - every 13 months and 18 days. Weather conditions may not be good enough to see it however.

The supermoon effect is best seen when the moon rises just above the horizon and when the moon is near a landmark. The landmark gives it scale. On the right is a picture of Spain Tower, Baltimore, Co Cork, taken by Robbie Murphy on 8th September 2014.

Ireland had three supermoons in 2014. According to Astronomy Ireland, these three moons were closest to the Earth on 13th July at 2:10 am (356,088 km), on 11th August at 1:38 am (354,157 km) and 8th September at 12:27 am (355,392 km).

The Scientific Name

The scientific name for a supermoon effect is a Perigee Moon. 'Perigee' is when the moon is at its closest point to the Earth. When a moon is at its furthest point from the Earth and this event coincides with a full moon, then the full moon is known as a Apogee Moon. 'Apogee' is when the moon is at its furthest point from the Earth.

When a moon is in perigee or in apogee, it is not always a full moon, so a supermoon may not occur.

A Harvest Moon

A Harvest Moon is actually a supermoon occurring around the autumn equinox (between the 21st & 24th September each year). Farmers gave it that name as the light from the moon helped them with their work.

A Giant Reflector!

The Moon itself does not produce light. The brightness of the moon is due to the light of the sun being reflected off the moon's surface - like a mirror. It is this reflected light that we see from Earth. The amount of moon surface that is reflected at any one time depends on where the Earth and Moon are in their various orbits and in relation to the Sun. This is the reason why sometimes we see a full moon or fractions of a moon or even no moon.

The Crocodile

Crocodiles belong to a class of animals known as reptilians. Other reptiles include alligators, snakes, turtles, tortoises and lizards. They are cold-blooded animals, which means their bodies take on the temperature of their surroundings.

The crocodile's body is long and flattened and it has a very powerful tail. The skin on its back is hard and bony, while on its underbelly it is soft. It has a long snout and impressive teeth, which are used for grabbing and crushing its prey. These teeth are not used for chewing however, instead they swallow stones to grind food in their stomach and also to weigh themselves down. It takes huge pressure to close the crocodile's jaw but the jaw is very weak when it comes to opening it again. A crocodile sweats through its mouth and can be seen trying to cool down on the riverbank with its mouth open.

Crocodiles live mostly in freshwater rivers and lakes but some live in saltwater. It is the saltwater crocodiles that are the biggest. Crocodiles are found in many parts of the world, from S.E. America, the northern part of South America, Africa, S.E. Asia to N. Australia.

Poaching

The skin on the underbelly of the crocodile is prized and is used to make bags, shoes and belts. As it is valued, poaching of crocodiles is a problem and has lead to a number of species of the animal becoming endangered.

Crocodiles and their Young

Crocodiles, like other cold-blooded animals, reproduce by laying eggs. The female lays from 10 to 100 eggs in a nest, which it digs about 3 m into the ground - only about a fifth of the eggs will hatch into young crocodiles called hatchlings. The crocodiles need a good memory to find the eggs again but being so well hidden will prevents the eggs from being eaten by predators. Crocodiles are good mothers and look after their offspring.

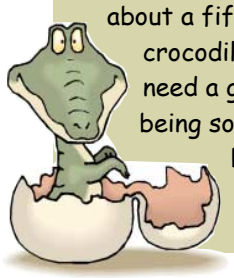


Image courtesy of US Fish & Wildlife Service www.fws.org

An American Crocodile.

Crocodiles and their Relatives

There are 23 species of crocodilians in the world, which includes crocodiles, alligators and caimans. Crocodiles and alligators look very similar. Their snout and teeth can help tell them apart. Crocodiles have a longer, wider snout and the fourth lower teeth in the crocodile's jaw are visible when the mouth is shut.

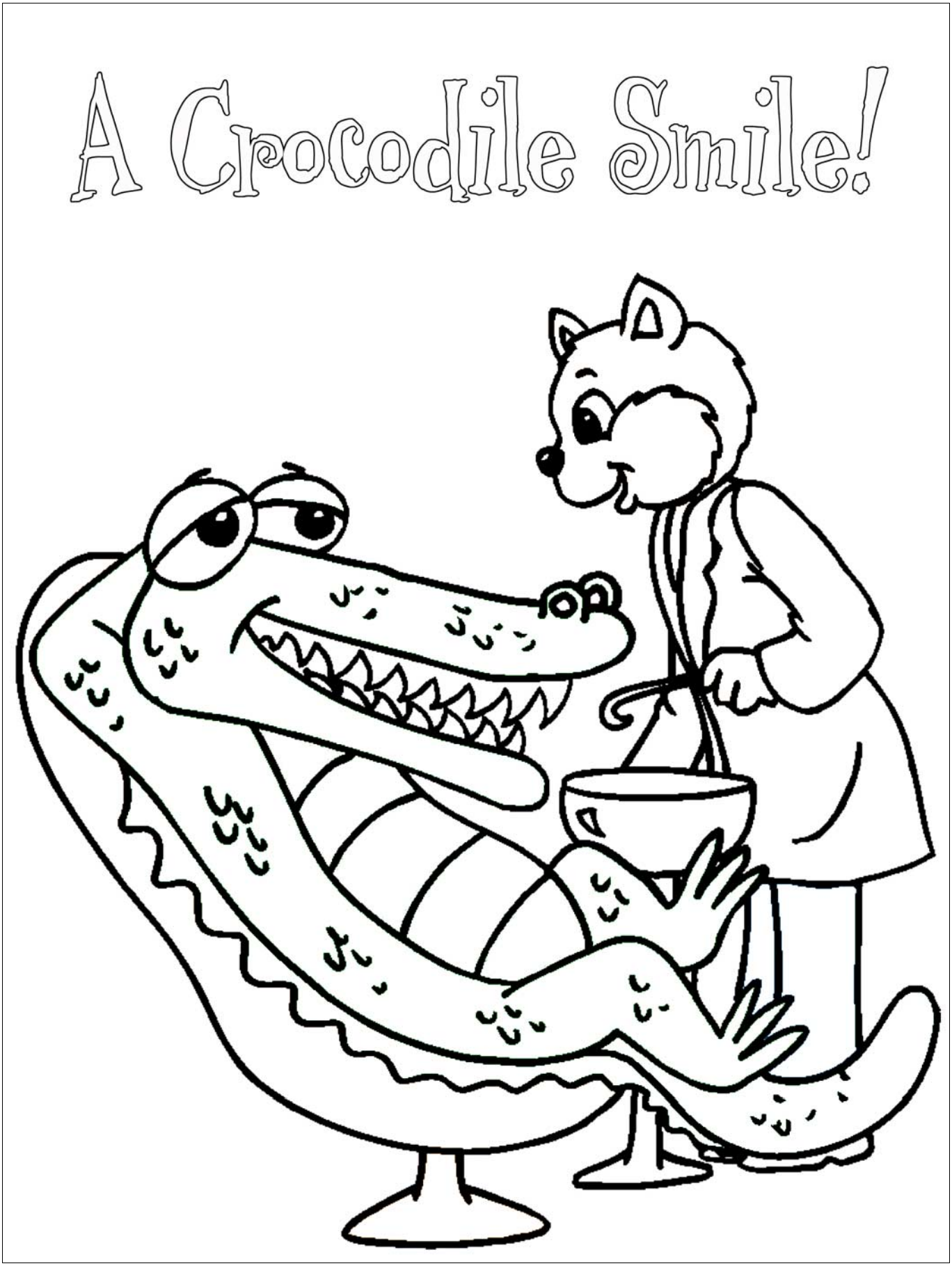
The largest species of crocodile is the Saltwater Crocodile, which can grow up to 7 metres in length.

Feeding Time!

Crocodiles are carnivorous. They pretty much eat anything that it can grab in the water or near the water - fish, amphibians, birds, buffalo, deer, large wild animals and even domestic animals that drink at the water's edge.

Crocodiles sometimes feed together, overcoming larger animals and storing the carcass below the waterline until it is ready to be eaten.

Colour In

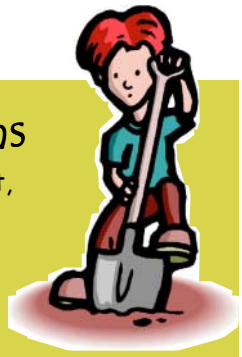


Broad Beans

Scientific Name: *Vicia faba*
Irish Name: Ponair

The Broad Bean is a well-known vegetable grown in many gardens. Part of the Pea Family, it is related to peas, French beans and runner beans. Wild relatives of this garden vegetable can be found in the Eastern Mediterranean.

The Broad Bean plant produces sweetly scented white and blackish-purple flowers that are particularly attractive to bees. Once the flowers fade, long seed pods are produced and the seeds, which are in fact the beans that we eat, are a tasty and popular food for humans but are also a source of food for farm animals.



Growing Broad Beans

The Broad Bean is an annual plant, which means its seeds must be planted each year. The plant is very easy to grow and is best sown in autumn (from late October) if the climate is mild, but also grows well if sown from late winter to the end of May. Autumn planting produces an early crop in the spring when few other vegetables are available. This also avoids black fly attacks. It prefers to grow in the open, in a well-drained soil that contains some lime. It can grow about 120 cm in height and usually needs to be staked. There are several varieties of the broad bean and some of the dwarf varieties do not need staking.

http://en.wikipedia.org/wiki/Vicia_faba#mediaviewer/File:Vicia_faba.jpg CC BY-SA 3.0

A Problem for Some

Image courtesy of http://commons.wikimedia.org/wiki/File:Tuinbon_zaden_in_peul.jpg CC BY-SA 3.0

In some parts of the world, the beans are poisonous to local people. Those that are affected can develop a blood disorder if they eat the beans or are exposed to the flowers.This disorder is known as favism, referring to the name 'Fava Bean' – the name for the Broad Bean in the USA.

Good for the Soil!

The roots of the broad bean have swellings full of bacteria that 'fix' nitrogen from the air. If left in the soil when the plant dies, these roots put nitrogen into the soil, which benefits nitrogen-loving vegetables that are planted there next.

All in a Day's Work

John O'Sullivan – Captain, Merchant Navy

John O' Sullivan works at sea as a Captain in the Merchant Navy. He works on oil tankers in Northern European sea areas delivering oil products, such as petrol, diesel, kerosene, jet fuel and lube oils, from major oil refineries to various cities around Europe.

Images courtesy of Capt. John O'Sullivan

Where do you work?

I work for a Shipping Company called James Fisher Shipping Services, based in Barrow-in-Furness, UK. They own/manage about twenty ships, mainly oil tankers of various carrying capacity. I work on an eight week on, eight week off rotation. When I am due to join a vessel I will fly out to wherever in Europe the ship is at that time.

Did you always want to do this job?

I have always had a love for the sea. I was born and brought up in Dublin in an area close to the sea and now live on Sherkin Island. Even as a toddler my grandmother had me down on the beach nearly every day and I feel the sea is in my blood. After I finished my Junior Cert (Inter Cert as it was known then), I was only fifteen and wanted to work at sea but I was persuaded to complete my Leaving Certificate so more opportunities would be available to me.

What training did you do for this job?

When I finished school there were few jobs in the shipping industry so I fell back on my second choice of hotel management. I have always enjoyed dealing with people, food and catering. After a couple of years at that an opportunity came up to work on fishing trawlers. Then I joined the Merchant Navy and took a job as an Able Seaman/Deckhand on a cargo ship. After a short time I knew this was the career for me. I went back to college and studied for deck officer exams, which I passed first time, but even serving as Chief Mate was not enough for me so I went back to college again and studied for my Masters Certificate. With that I got a job as Captain on a cargo ship and have been in command of various ships since then.

What is a day in your life like?

No day is ever the same in this job. I normally take the morning navigation watch on the bridge, making sure the ship proceeds safely towards the next port. In the afternoon I do paperwork and go back on the bridge in the evening for the evening navigation watch. On watch you have to deal with many other ships travelling in various directions, narrow channels, shallow areas of water, various tidal effects and sometimes extreme weather. The task is anything but routine. I also have to manage the everyday running of the ship including maintenance, stores, food and water, hours of work for the crew to comply with regulations, safety drills etc. I may get called to the bridge at any time day or night to deal with emergency or other situations.

What is the best thing about your job?

Travelling around the world and visiting different countries. When the sea is calm we often observe whales and dolphins at play or hunting shoals of fish. The other good thing is the amount of time off. Eight weeks is plenty of time to enjoy home life and carry out projects in one go. Most people only have weekends free with a couple of weeks annual holidays.

What is the worst thing about your job?

The worst part of my job is dealing with the weather winter throws at us. Another thing is being away from family and friends for months at a time and missing out on social events. This has become a little easier to bear nowadays with computers and mobile phones. When I first went to sea we were lucky to receive a letter once a month and phone calls were only available when the vessel was in port.

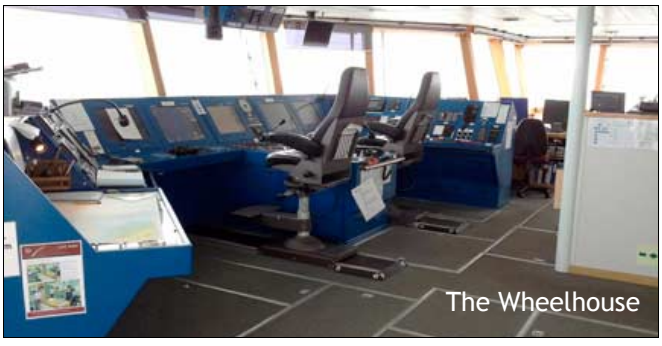
Do you enjoy your work?

I love working with people of all nationalities, spending time on the open sea and manoeuvring large ships in small areas safely. There is a huge sense of satisfaction at the end of the every day.

What is best piece of advice you have ever had?

Work hard, always use your initiative and don't be afraid to ask for advice. Asking for advice is not a sign of weakness but a sign that you have the ability to gather information and use it for the best outcome based on the experiences of others.

The Main Deck



The Wheelhouse

Sea anemones and jellyfish belong to a group of animals known as cnidarians (pronounced nid-ar-ians) - the jelly animals. These animals often resemble flowers, with their soft, colourful, sac-like body and rings of tentacles around the mouth. They can be found as single individuals, which are known as polyps, or joined with others to form a group or colony.
Cnidarians have many tiny stinging cells on their tentacles, which they use for self-defence and to catch food. In some species, the sting is powerful enough to be dangerous to humans.

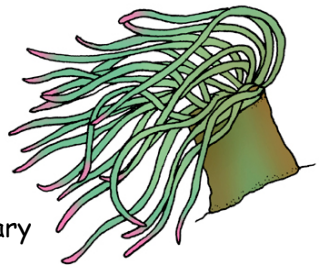

Beadlet Anemone

The **Beadlet Anemone** the most common anemone found on rocky shores around Ireland, and is often first noticed as a blob of jelly on the rocks. It is usually red in colour but there are also green and orange-brown varieties. Look out for the blue, bead-like warts at the base of the tentacles, and a thin blue line edging the base of the column.

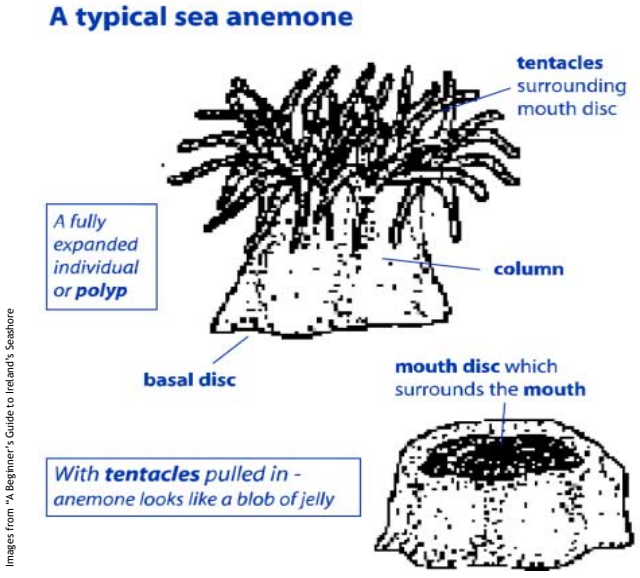
Blobs of Jelly!

Sea anemones often appear like blobs of jelly on the shore, as many are able to pull in their tentacles. They react like this if they are disturbed, or when the tide goes out, as it helps prevent drying out and damage. A slimy mucus coating also helps to keep moisture in.

Sea Anemones


Snakelocks Anemone

To identify the different sea anemones, the features we usually use are colour, shape and tentacle number. You should keep in mind, though, that colour, in particular, may vary in different environments. The anemones that live on rocky shores attach themselves firmly to rocks and stones with a sticky basal disc, but are still able to move. In anemones that live on soft muddy shores, the basal disc and column have adapted to burrowing. Anemones are solitary or single cnidarians and, although many may cover a rock surface, they are not joined together in any way.



Images from "A Beginner's Guide to Ireland's Seashore

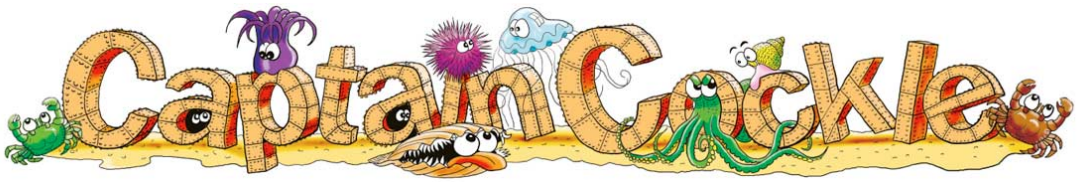
Their Relative - the Jellyfish

Their close relatives, the jellyfish, are similar but they inhabit the open sea and are found on the shore only when stranded.

Fact File:

Habitat: On the rocky shore, in crevices, rockpools & under seaweeds
Colour: Varies from red to orange to green to brown, with blue warts
Size: 2-7cm in diameter

Captain Cockle

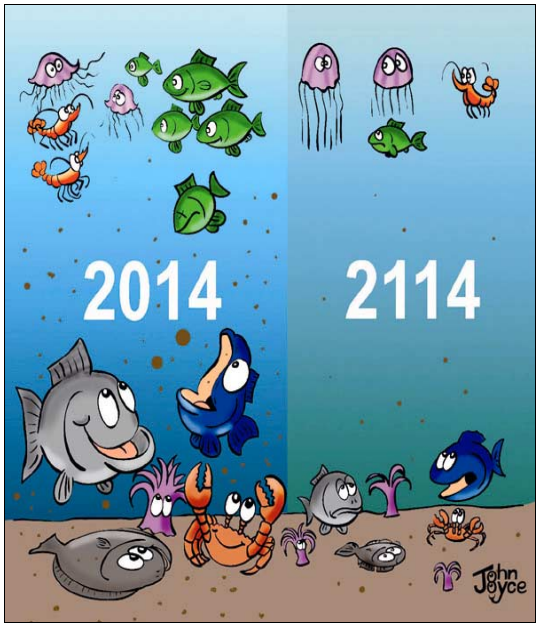


Mesolithic Marine Tours?

Evidence that humans undertook sea voyages of up to 40 miles (64 km) as long ago as 700,000 years ago has been discovered on the island of Crete, off the Greek mainland in the Mediterranean. While Crete has been separated from mainland Europe for about five million years, stone axes and other tools dating back to between 130,000 and 700,000 years have been discovered close to shelters on the island's south coast. Previous evidence of open-sea travel in Greece dates back 11,000 years and, worldwide, to around 60,000 years, although these figures have been disputed.

Meanwhile, the world's oldest surviving sea-going boat was discovered in Dover, UK, in 1992 and is estimated to be some 3,500 years old - when Stonehenge was still in use and when Tutankhamen was still the ruler of Egypt. A team of workers are currently building a half-size replica of the oaken boat and plan to demonstrate how it could have been used to cross the English Channel.

Major Reductions in Seafloor Life



Marine life living on the sea floor of the Atlantic could decline by as much as 38% over the next hundred years, according to a new international marine study, carried out by the National Oceanographic Centre in Southampton, UK and other partners. The study suggests that this reduction could be driven by the effects of climate change, including reduced ocean circulation and the creation of a warmer, less salty layer of seawater near the surface. This would reduce the number of animals and plants that live in shallower waters, which would also reduce the amount of food reaching the animals at the bottom.

Dr. Daniel Jones, who led the study said, "We were expecting some negative changes around the world, but the extent of changes, particularly in the North Atlantic, were staggering. Globally we are talking about losses of marine life weighing more than every person on the planet put together."

Changes such as these may not take place all over the world, but most oceans will be affected in some way. It is estimated that all key marine habitats - from coldwater coral reefs, to seamounts and submarine canyons - will experience losses in the numbers of animals and plants living there. The research also predicts that marine animals living on the bottom of the sea will become smaller due to lack of food. This will have an impact on seabed fisheries and marine ecosystems as a whole.

The study was carried out as part of the Marine Environmental Mapping Programme (MAREMAP) and involved researchers from the National Oceanography Centre, the Memorial University of Newfoundland, Canada, the University of Tasmania, and the Laboratoire des Sciences du Climat et de l'Environment, France. For detailed information see: http://noc.ac.uk/news/major-reductions-seafloor-marine-life-from-climate-change-2100

For more Fun Facts see the Children's Page at http://www.spindriftpress.com

The World Around Us

"Foreign Correspondent" Michael Ludwig reports on interesting news from the natural world.

Communications

We all make body movements or gestures to help communicate. We wave a hand to say "hello" and "goodbye" shrug our shoulders to say "I don't know" or shake our head to say "No". For those who cannot hear, sign language is even more important for communicating because it replaces the spoken word.

Humans however are not the only creatures to use gestures to communicate. Researchers at the University of St. Andrews in Scotland studied chimpanzees interactions over time. They filmed 3,400 of the interactions, during which 4,500 gestures were made. By studying the gestures and when they were made, for example during play time, meal time or bed time, they were able to build up a 'dictionary' of meanings. Some of the gestures and their meanings were: slapping an object meant "move away"; touching an arm meant "scratch me"; a mother showing the sole of her foot to her baby meant she wanted the baby to climb up on her.

Catching a Comet!

In August of this year, after a remarkable 10-year journey, 'Rosetta', a spacecraft from the European Space Agency (ESA), finally caught up with Comet 67P/Churyumov- Gerasimenko some 405 million kilometres from Earth. The comet orbits our Sun every 6.5 years, passing through the orbits of Jupiter and Earth as it does so - Earth orbits the Sun every 365 days, while Jupiter orbits the Sun every 11.86 of our years. Catching up with and travelling alongside a comet as it heads into the inner Solar System, is a feat which has never been achieved before. A lot of manoeuvring was involved to get Rosetta into position and it will stay alongside old 67P for one year on its orbit of the Sun. The ESA hope to put a small lander, known as 'Philae', onto the comet on 12th November to find out what it is made of. They hope that by studying the comet, particularly as it is reacts to the heat of the sun, many questions will be answered about the beginnings of the Solar System.

Image courtesy of US Geological Survey

Eyes in the Sky!

With Climate Change causing polar ice melting, polar bear habitat is shrinking and the bears are in danger. So, it is important to keep track of the population to understand the impact the changes are causing. The usual way of surveying polar bears is by aerial surveillance - flying over their habitat and counting each bear. This is time consuming and not easy. So, US Geological Survey and other researchers are shifting to using Satellite pictures. A very high-tech solution, with much better results! One advantage of this type of surveying is that it does not disturb the polar bears. Another is that large areas are quickly scanned.

Yawning

Warning: This story may make you yawn. That's because yawning is highly contagious. Even reading about it, much less seeing or hearing someone yawn, is enough to make you yawn. Yawning in a group will lead to others in the group yawning also. Thus; contagious yawning. And, it can occur in other animals as well. Scientists have found contagious yawning among wolves and monkeys. Reporting that the more time wolves spend together in a pack, the more likely it will happen. There have already been studies that have found contagious yawning occurs with monkeys. So, start a yawn event and laugh!

Envelope Bookmarks

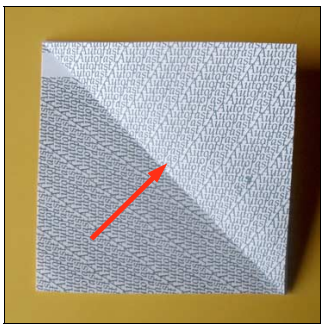
Letters and cards arrive in envelopes of all shapes, sizes and colours. Some can be reused again to post other letters and cards but some can also be made into fun bookmarks for yourself, your family and friends. All sorts of envelopes are good for this. The colourful envelopes are particularly good as the coloured paper can add to the decoration. Keep an eye out for these envelopes around birthdays and Christmas and put them aside for making bookmarks at a later stage.

Below we are using a simple white envelope to make a bookmark. It does not matter if there is text on the front. All you need is one blank corner. This is what you do.

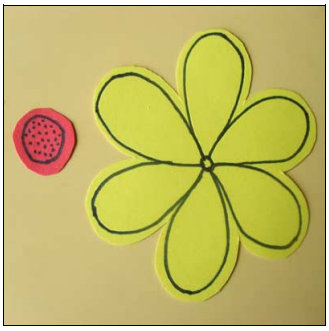
1. Choose an envelope that has a blank corner.

2. Measure in from the corner and cut a 7.5 cm x 7.5 cm square.

3. Fold the open corner to the opposite corner and create a fold.



4. Cut along the fold to create a triangular corner pocket.

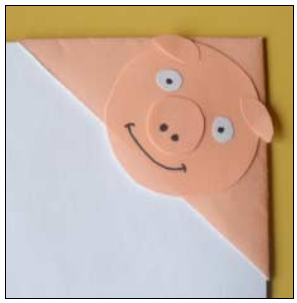


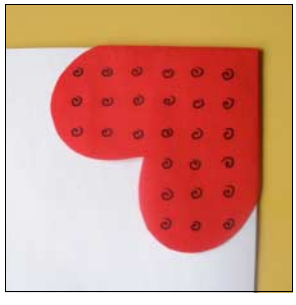
5. Draw and cut out a flower from a different coloured envelope and a circle for the centre of the flower. Glue both onto the corner pocket.

6. Remember to let the glue dry before you use it as a bookmark, otherwise it could glue the pages together!

Other ideas:

Use your imagination to come up with other styles of bookmark. Here we have made a shark, a pig and a heart but there is no end to what you can make. The only thing to consider is that it needs to be relatively flat so that it lies between the pages of a book.





Images courtesy of Susan Murphy Wickens

Autumn Scavenger Hunt

How many of these items can you find? Tick the box as you discover each one. Maybe challenge a friend to see who can find them first?

- ☐ A brown leaf 
- ☐ A nut 
- ☐ A seed head 
- ☐ A rain cloud 
- ☐ A rainbow 
- ☐ A spider's web 
- ☐ A deciduous tree 
- ☐ Animal tracks 
- ☐ A snail 
- ☐ A flock of birds 
- ☐ An evergreen tree 
- ☐ A worm 

- ☐ A yellow flower 
- ☐ A black & white bird 
- ☐ A stone wall 
- ☐ A pine cone 
- ☐ A pumpkin 
- ☐ Rain on glass 
- ☐ A full moon 
- ☐ Berries 
- ☐ A round stone 
- ☐ An apple 
- ☐ A pile of leaves 
- ☐ A beetle 

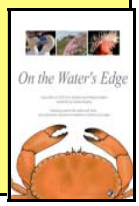
Learn More

Only €2.10 each including postage or €14.00 for all eight (inc. postage). *32pp each*

Sherkin Island Marine Station has published a range of colouring books, guides and activity books for children. Each 32-page *Colouring & Guide Book* gives you the chance to colour, identify and learn about the wildlife around Ireland. Safety Sam's Activity Book is filled with activities to encourage safety for children. *My Nature Diary* contains lined pages to fill in a daily record of sightings and nature news.

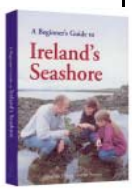
Sea Life DVD: *"On the Water's Edge"*

Produced by Sherkin Island Marine Station, the DVD '*On the Water's Edge*', features a short film on life beside the sea. Presented by Audrey Murphy, it includes 6-10 hours of interactive material for children of all ages. *Only €6.00 plus €1.30 p&p.*



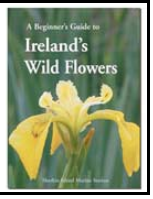
A Beginner's Guide to Ireland's Seashore is a pocket-sized guide, suitable for beginners of all ages. This book will help you to explore the wonders of marine life found on the shores around Ireland.

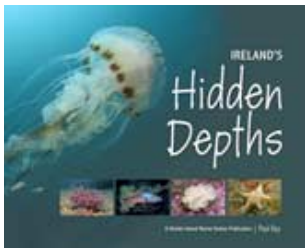
Only €8.00 inc. postage



A Beginner's Guide to Ireland's Wild Flowers With the help of this pocket-sized guide, beginners of all ages will be introduced to the many common wild flowers found around Ireland. *206pp*

Only €8.50 inc. postage





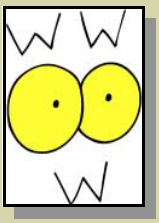
Ireland's Hidden Depths is published by Sherkin Island Marine Station. Ireland's amazing marine life, glorious kelp forests and spectacular undersea scenery are featured in over 200 spectacular photographs by nature photographer Paul Kay. 277 x 227 mm 160 pps

Only €13.00 including postage

"An A to Z of Geology" explores the fascinating world of rocks and geology – a world of volcanoes, tsunamis, earthquakes, diamonds, gold and even dinosaurs! Produced by Sherkin Island Marine Station, in association with the Geological Survey of Ireland.

Only €6.99 including postage

To order books, visit **www.sherkinmarine.ie** for details of paying by Paypal or send your name and address along with a cheque or postal order made payable to Sherkin Island Marine Station to: *Sherkin Island Marine Station, Sherkin Island, Co.Cork. Ireland.*



Useful Web Addresses

There are lots of websites to be found on the internet that will give you further information on topics we have covered in this newsletter. Here are a few that may be of interest:

Garden Tiger Moth: http://www.irishmoths.net/index.html

Supermoon:
http://www.astronomy.ie/ http://science.nasa.gov/science-news/science-at-nasa/2014/10jul_supermoons/

Sea Anemones: http://www.arkive.org/invertebrates-marine/ http://www.marlin.ac.uk/speciesinformation.php?speciesID=2359

The Crocodile: http://crocodilian.com/ http://www.reptilepark.com.au/our-animals/reptiles/alligators-crocs/

Broad Beans: https://www.quickcrop.ie/plant/broad_bean

Merchant Navy: http://www.maritimecareers.ie/Pages/home.aspx http://www.careersatsea.org/

Animal Sign Language:
http://news.bbc.co.uk/earth/hi/earth_news/newsid_9475000/9475408.stm
http://www.natureworldnews.com/articles/7915/20140705/researchers-decode-chimpanzee-sign-language.htm

Rosetta Spacecraft: http://www.esa.int/Our_Activities/Space_Science/Rosetta
https://rosetta.jpl.nasa.gov/

Contagious Yawning: http://www.smithsonianmag.com/science-nature/yawning-spread-plague-wolves-180952484/?no-ist

Polar Bears & Satellite Imagery: http://alaska.usgs.gov/science/biology/polar_bears/tracking.html

Autumn Scavenger Hunt: http://www.noticenature.ie/ http://www.npws.ie/

We cannot be responsible for the content of external websites, so please observe due care when accessing any site on the internet.

Fun Page

How much did you learn?

The answers to all these questions can be found in the newsletter...see if you can remember!

1. How many years did it take the spacecraft 'Rosetta' to reach comet 67P/Churyumov-Gerasimenko?
2. Name an animal affected by contagious yawning?
3. Which is the biggest crocodile species?
4. Harvest moons occur during the spring equinox. True or false?
5. What type of 'tiger' came into the Editor's home this summer?
6. To which family does the broad bean belong?
7. What two animals are on the bookmarks on page 14?
8. How old is the oldest surviving sea-going boat?
9. Where does Capt. John O'Sullivan live?
10. How much brighter does a full moon appear when it is a supermoon?
11. What covers the salmon in the Bord Bia recipe?
12. Are sea anemones related to jellyfish?
13. What is the second last item on the scavenger hunt?
14. Which animals are being tracked by satellite imagery?
15. Crocodiles never eat meat. True or false?
16. How many weeks does Capt. John O'Sullivan spend at sea at any one time?
17. What part of the sea anemone's body is used to catch food?
18. Which university studied the gestures of chimpanzees?

Answers: (1) 10 years; (2) Wolves or monkeys; (3) Saltwater Crocodiles; (4) False. They occur during the autumn equinox; (5) A Garden Tiger Moth; (6) The Pea Family; (7) A shark and pig; (8) 3,500 years old; (9) Sherkin Island; (10) 30% brighter; (11) Puff Pastry; (12) Yes; (13) A pile of leaves; (14) Polar Bears; (15) False; (16) Eight weeks; (17) Its tentacle; (18) St Andrew's University, Scotland.

What a Picture!

Have fun with your friends making up a title for this picture of three gannets.

Courtesy of Alan D. Wilson www.naturespicsonline.com

Nature Jokes

Who invented underground tunnels?
A Mole

How does a leopard change its spots?
When it gets tired of one spot it just moves to another.

What do you get if you cross an elephant and a kangaroo?
Big holes all over Australia!

What rabbit can jump higher than a tree?
Any rabbit can jump higher than a tree. Trees don't jump.

What has no fingers, but many rings?
A tree!

What animal grows down?
A duck.

What happened to the cat that swallowed a ball of wool?
She had mittens!

Nature's Web Wordsearch

Nature's Web Autumn 2014

Try out this giant wordsearch containing words found in this issue of the newsletter.

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

Broad Beans

Comet

Crocodile

Envelope Bookmark

Full Moon

Garden Tiger Moth

John O'Sullivan

Merchant Navy

Mesolithic Tours

Pea Family

Polar Bear

Rosetta

Salmon Kiev

Sea Anemones

Seafloor Life

Sign Language

Supermoon

Wolves

SOLUTIONS: *(Over,Down,Direction)* Broad Beans (2,10,N); Comet (11,12,NE); Crocodile (5,15,E); Envelope Bookmark (4,16,N); Full Moon (15,14,W); Garden Tiger Moth (4,17,NE); John O'Sullivan (5,3,SE); Merchant Navy (1,1,S); Mesolithic Tour (1,18,E); Pea Family (7,1,SE); Polar Bear (3,1,S); Rosetta (15,7,NW); Salmon Kiev (8,11,NE); Sea Anemones (15,11,NW); Seafloor Life (16,1,SW); Sign Language (17,16,W); Supermoon (14,1,SW); Wolves (16,12,N).

Nature's Noticeboard

Autumn 2014

Sherkin Island Marine Station would like to thank those who have helped with this newsletter, particularly John Akeroyd, John Joyce, Michael Ludwig, Robbie Murphy, John O'Sullivan and Jez Wickens.

Visit the Sherkin Island Marine Station website at www.sherkinmarine.ie