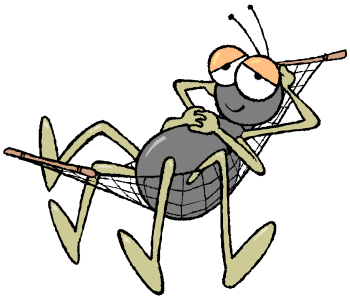
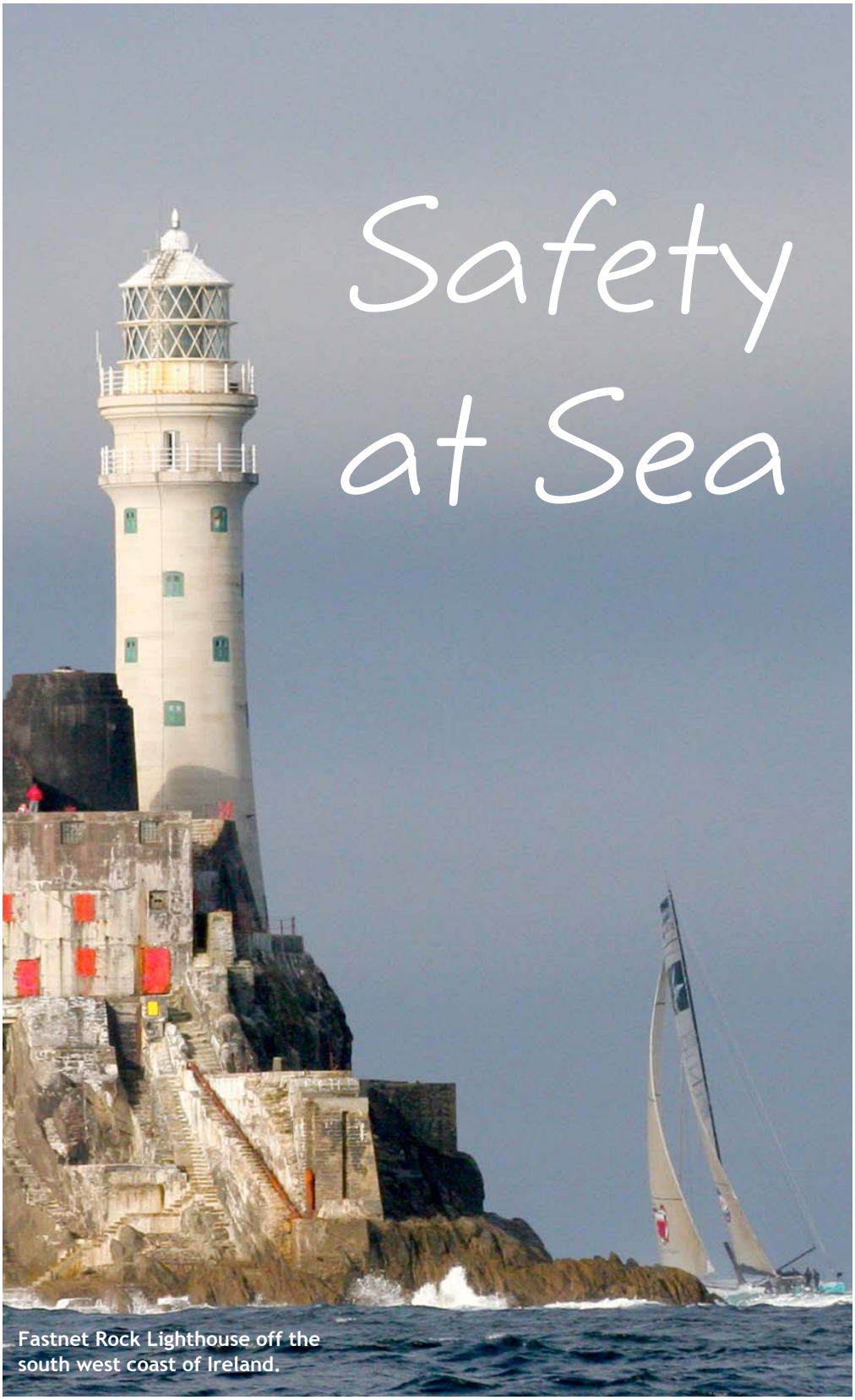


Nature's Web

Issue No. 41 Spring 2016

Inside This Issue...



Safety at Sea

Fastnet Rock Lighthouse off the south west coast of Ireland.

Image courtesy of Robbie Murphy

Editor's Page

Navigating Baltimore Harbour

On pages 8 and 9 we look at Aids to Navigation and how they help to keep sea farers safe at sea. Every time we go in and out on the ferry to Sherkin, we pass the many Aids to Navigation in Baltimore Harbour. The most striking is the Beacon, which has become an iconic symbol for Baltimore and the surrounding area. This beacon and the lighthouse on Sherkin Island both help to mark the entrance to Baltimore Harbour.

Images courtesy of Robbie Murphy

The lighthouse on Sherkin Island, with Baltimore Beacon in the background.

Underneath the Beacon is the Loo Buoy, which sits over rocks that were named after a British man-of-war ship, *HMS Looe*, which struck them in 1697. In the middle of the Harbour, the Perch - a 12m high cardinal beacon - sits on the Lousy Rocks and these can be seen at low tide. Nearer to Baltimore Pier is the Wallis Rock buoy, which sits over rocks that have just 1.8m of water above them at low tide. Though we might take these Aids to Navigation for granted seeing them every day, we are grateful to have them to guide our way.

The Loo Buoy is situated below the Beacon, at the mouth of Baltimore Harbour.

The Wallis, with Baltimore Lifeboat Station in the background.

The perch, which sits in the middle of the harbour.

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/maidir-le-foras-na-gaeilge/an-gum/lion-dulra/

Courtesy of Bord Bia

Fish Burgers with Tomato Salsa and Chunky

What you need:

- 700g hake, skinned, boned and finely chopped
- 2 tablesp. fresh parsley, chopped
- ½ red chilli, deseeded and finely chopped
- 2cm piece of fresh ginger, grated
- 1 garlic clove, crushed
- 1 egg, beaten
- 2 tablesp. mayonnaise
- 1 tablesp. fish sauce
- Zest and juice of 1 lime
- 40g stale breadcrumbs or Panko breadcrumbs
- 1 tablesp. rapeseed oil

To Serve:
Toasted baps, lettuce leaves, 2 tomatoes sliced, extra mayonnaise

Tomato Salsa:

- 4-6 tomatoes, diced
- 1 red onion, peeled and diced
- 1-2 garlic cloves, peeled and finely chopped
- 1 tablesp. basil or coriander, chopped
- Juice of ½ lime
- 1 tablesp. olive oil
- A little salt and black pepper

Chunky Guacamole:

- 2 ripe avocados, peeled and chopped
- Juice of ½ lime
- 2 scallions, finely sliced
- ½ red chilli, deseeded and finely

Method:

Serves 6.

To Cook: Place the fish in a large bowl with the parsley, chilli, ginger, garlic, beaten egg, mayonnaise, fish sauce, lime zest and juice and the breadcrumbs and mix together.

Shape the mixture into 6 x 8cm burgers, put them on a plate, cover with cling-film and chill for an hour if you have time. This will help them to hold their shape when you are cooking them.

Heat the oil in a large frying pan. Add the fish burgers and cook over a medium heat for 4 minutes on each side, until crisp and golden.

To make the Salsa: Mix all the ingredients well together, taste and season with a little salt and black pepper. Set aside until ready to serve.

To make the Chunky Guacamole: In another bowl mix the avocados, lime juice, scallions and chilli. Using a fork roughly mash everything together, taste and season.

Serving Suggestions: Spread a little mayonnaise over each bap, layer with lettuce leaves, some slices of tomato and then the burger. Spoon a little mayonnaise on top of each burger. Serve the tomato salsa and chunky guacamole on the side.

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

Welcome to the Spring Edition of Nature's Web!

Dear Reader,

Welcome everyone to the Spring issue of Nature's Web. In this issue we learn what it is like to work at Mizen Head Signal Station off Ireland's most south-westerly point. We look at the various Aids to Navigation that help keep seafarers safe at sea and we learn about the Commissioners of Irish Lights, who look after them. Black John the Bogus Pirate explains how the sea has shaped the country we live in and we look at one of the many red seaweeds growing on our shores – Carrageen Moss. You can check out nature news from around the world on page 11 and enjoy a giggle with jokes on page 13.

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

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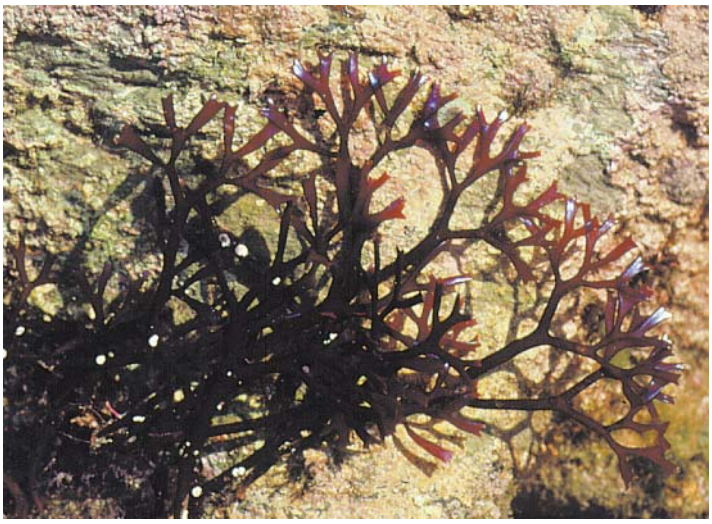
Carrageen Moss



Carrageen Moss

Scientific Name: Chondrus crispus
Irish Name: Cosáinín (carraige)

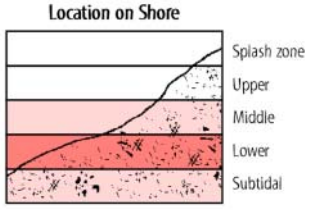
There are three main groups of seaweeds: red, green and brown. Carrageen Moss is one of the red seaweeds. This is a small, bushy seaweed with flat fronds that regularly divide to form a fan shape. 'Frond' is the word used to describe the leaf-like parts of a seaweed.
One of the most beautiful features of Carrageen Moss is its colour. Under water, the tips of the fronds may have a purple/blue shine, known as iridescence. It is common all around the coast of Ireland.

The similar red seaweed, *Mastocarpus stellatus* has slightly rolled edges to its fronds and a warty surface on older parts. It is also collected as Irish Moss.

Images by Terry Farnell/Sherkin Island Marine

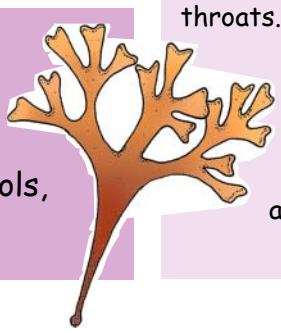
Mastocarpus stellatus

Where can you find Carrageen Moss?

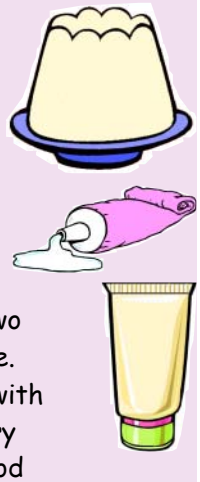


Carrageen Moss is usually found growing underneath the larger brown seaweeds in rockpools, or on rocks on the lower shore. It does not like being out of water for any length of time.

FACT FILE:
Colour: Dark red-purple.
Size: From 7-15 cm long.
Habitat: Grows on rocks and stones in pools, on the lower shore and in shallow water.



Carrageen Moss in Food & Health



Carrageen, or Irish Moss as it is also known, is often dried and used as a food or used as a thickening agent in cooking. It contains carrageenan, which has setting properties and is also good for combining two liquids into a smooth mixture. Along with other seaweeds with similar properties, it is a very important additive in the food industry for making such things as soups and jellies. It is also found in toothpastes, creams and lotion. In many Irish homes, Carrageen Moss pudding is a typical milk-based dessert.

Carrageen is also used in medicines and has been used in Ireland for centuries as a treatment for colds, coughs and sore throats.

When Carrageen is harvested for eating, it is washed and dried in the sun to preserve it, where it turns yellowish and translucent and becomes brittle.

Black John the Bogus Pirate

By John Joyce

Avast there, Mateys! Even if you live many kilometres from the Sea, it still has an effect on you. One of the ways it does is described in the 'Second Principle' of 'Ocean Literacy', which says that 'The Ocean and Life in the Ocean Shapes the Features of Life on Earth'.

The Largest Land Features from the Smallest Marine Animals

For example, the chalk that makes up the mighty 'White Cliffs of Dover' along the south coast of England is made up of the fossil shells of trillions and trillions of microscopic marine animals called 'Foraminifera' - which still thrive in the Sea today. The shells in these cliffs can tell us a lot about the conditions in the Oceans where they lived millions of years ago.

A problem that is being appreciated today is that carbon dioxide emissions (from our burning of 'fossil fuels' such as petrol, diesel and natural gas) dissolve in seawater and make the Ocean more acidic. This increased acidity could eventually become so acute that it could prevent tiny marine animals such as Foraminifera, and even bigger animals such as crabs, oysters and mussels from building their calcium carbonate shells – which dissolve in acid conditions.

This is just one reason why renewable forms of energy – such as wind energy, solar energy, wave and tidal power are so important in protecting the environment here on planet Earth.

For more information see: http://kids.britannica.com/comptons/art-107890/The-white-cliffs-at-Beachy-Head-in-East-Sussex-England

Oceans of Sand

Images © John Joyce

The Ocean also contains some of the largest deposits of sand on the planet. Geologists have found what they believe could be the largest 'extrusive' body of sand on Earth – an incredible 2.4 CUBIC MILES (10 cubic kilometres) of it – not that far from Ireland – in the North Sea. 'Extrusive' refers to the fact that the sand erupted onto the sea floor due to the pressure of water between the sand grains.

If all this sand was to be dumped onto Manhattan Island in New York, it would cover that island to a depth of 525 feet (160 metres). To learn more, visit http://www.livescience.com/31295-giant-sand-mass-discovered.html . Meanwhile, in 2013 a completely new island appeared in the North Sea, off the coast of Germany, made up entirely of sand. It lies 15 miles off the coast of Schleswig-Holstein to the far north of Germany in a stretch of coastline known as the Wattenmeer, which has now been declared a marine national park. It is thought to be the result of normal tidal movements and has been named. 'Bird Island' because of the large numbers of gulls, eider ducks, common ringed plovers and even peregrine falcons found there.

The ISLANDS of Ireland?

One extremely important reason to limit the amount of 'Greenhouse Gases' that we create from the burning of fossil fuels, is that they could build up in the atmosphere and cause the Earth to heat up. This would lead to what is called 'Global Warming' which, in turn, would have the effect of melting the polar ice caps, releasing billions of tons of frozen water back into the Ocean.

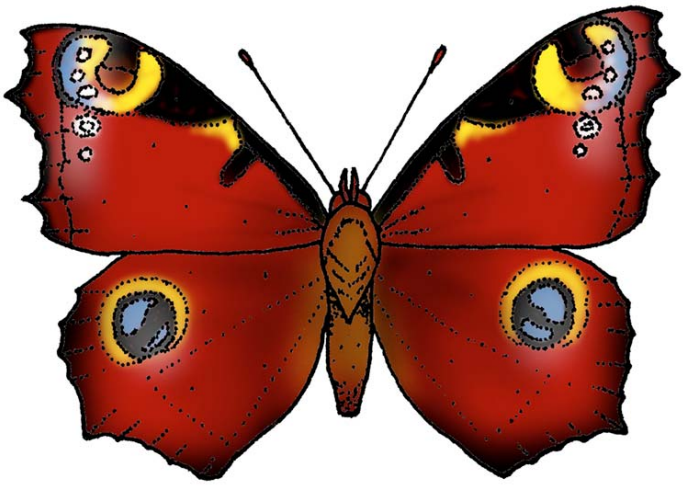
This would not only interfere with the currents that flow in the Ocean – leading to increased storms and changed weather patterns – but would also result in a rise in sea level. To see what Ireland might look like if the sea level was to rise by only 70 metres and all the lowlands flooded – leaving us with 'The Islands of Ireland' - check out http://www.broadsheet.ie/2014/11/28/ireland-in-bits/ .

Follow 'Black John the Bogus Pirate' on Facebook at https://www.facebook.com/BlackJohntheBogusPirate/

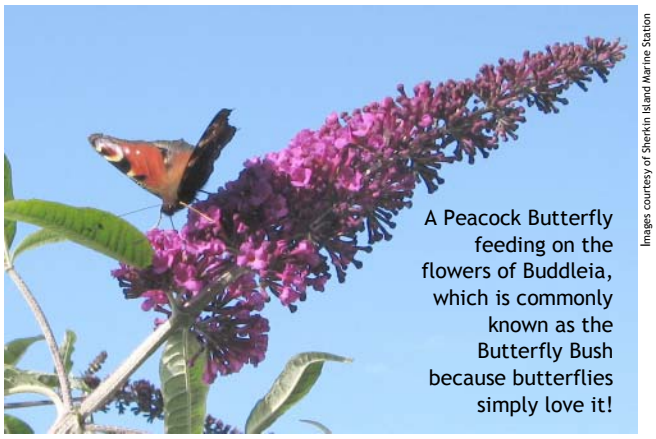
The Peacock Butterfly

Scientific Name: *Inachis io*
Irish Name: Péacóg

The Peacock is easy to identify by the four 'peacock eyes' on the upperside of its wings. It has very similar habits to the Small Tortoiseshell in that the adult butterfly enters houses looking for a suitable spot to hibernate for the winter. It can sometimes be found hibernating in tree trunks and piles of wood. The underside is darker in both species enabling them to hide in dark corners during hibernation. The eggs are laid in large groups or clusters on the underside of nettle leaves and hatch after 7–12 days. The new caterpillars will stay in a group until old enough to wander off on their own. The caterpillar can move quickly and if disturbed will raise the front of its body off the ground and form a hook shape. If it gets annoyed it will drop to the ground and wriggle like crazy!



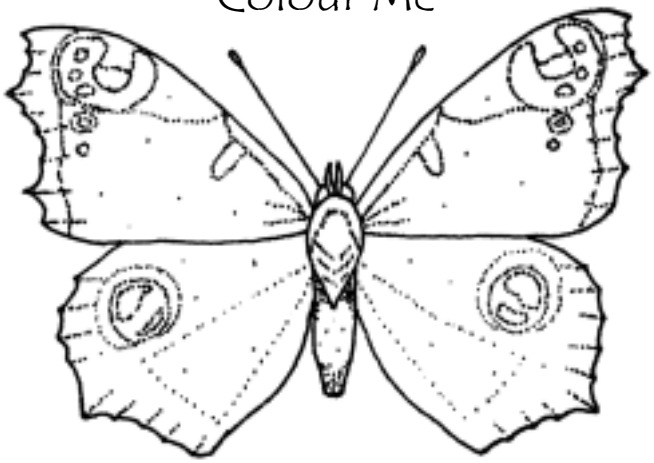
Peacock butterfly



A Peacock Butterfly feeding on the flowers of Buddleia, which is commonly known as the Butterfly Bush because butterflies simply love it!

Images courtesy of Sherkin Island Marine Station

Colour Me



FACT FILE

Wingspan: 5.4 – 5.8cm. Female slightly larger than the male.
Colour: Dark reddish brown with yellow and black markings; large lilac-blue spot, like an eye, on each wing.
Diet: Caterpillar feeds on nettles and adult butterfly feeds on the nectar of Buddleia (butterfly bush) and other flowers.
Winter Hibernating stage: Adult butterfly.
Caterpillar: Black and spiny.

Camouflage

The 'peacock eyes" on the upperwings of the Peacock butterfly provide protection by helping to frighten away predators such as mice and small birds. When the butterfly is viewed upside down, it looks like the beak and eyes of a large predatory bird.

However, the underwings of the Peacock butterfly are far from colourful and are almost black. This is the perfect camouflage for the butterfly when it is resting on a tree trunk or is hibernating. It helps it blend in with its surroundings, making it harder to see.

Colour In

Guiding Light at Sea

All in a Day's Work

Working at Mizen Head Signal Station

PROFILE

Mizen Head Signal Station is a visitor centre at Mizen Head, Ireland's most south-westerly point. It is where the waves of the Atlantic hit the land after 3000 miles of ocean. In gales, rain, fog or sun it is always different.

Mizen Head Signal Station
Mizen Head, Co. Cork.

Images courtesy of Mizen Head Signal Station

Image by John Eagle

The bridge to the Signal Station.

A model of the Fastnet Lighthouse.

Where do you work?
I am at UCC in the second year of a B.Sc course in Business Studies. Every year since I was in Transition year in Schull Community College, I have spent my summer vacations working at Mizen Head Signal Station. We live on a farm on the Mizen Peninsula so it has been a handy job, not too far away from home, to help me pay for books, uniform and, later on, my car insurance! A lot of young people have jobs at the Mizen in the summer. It is a very exciting place to be.

Can you describe the centre and signal station?
The visitor centre is at the top of the cliffs with a café, a gift shop and some displays about the Fastnet Rock, a famous lighthouse in the sea near the Mizen. From the centre, the visitors go along and down a steep path towards the Bridge, which is needed because Mizen Head Signal Station is on an island. There are steep paths up and down the cliffs and a sea arch. On the other side of the Bridge, the path goes up to the Signal Station at the very end. This fog signal station was like a lighthouse, but instead of a warning light to keep ships off the rocks, the fog signal gave a loud bang every two minutes while it was foggy. This was a hard job. For each bang they tied a stick of explosive to a device and set it off. Now there is no need for the Irish Lights Keeper to man the station and make a warning bang. With modern GPS Sat Nav, ship captains know exactly where they are, even in fog. This is why there is now a visitor centre at Mizen Head.

What's your work day like?
My job at Mizen Head is very varied. The visitor centre opens at 10am and we have to make sure everything is clean, tidy and working before the visitors come in. Usually I will go down to the Signal Station to tell people about life at the Station when it was open. The Keepers were here from 1910–1993; then the Station went automatic and the information that had been gathered by the Keepers was now computerised and sent up to Dublin. Mizen Tourism Co-operative took the Bridge and the buildings over to open them to the public. I have to know about the history of the Station and the Irish Lights, as well as local information and anything a visitor might ask.
It is very interesting meeting people from all over the world. Some days I work in the café, washing up or serving at table. Or another day I work in the gift shop and ticket office. In between we all have to go on patrol round the paths up and down the cliffs to make sure all our visitors are safe. The Mizen closes at 6pm in the summer and we have to make sure that everyone has come out before the gate on the Bridge is locked for the night. Each week the manager makes a rota that tells all the employees what their job will be on every day that week. I usually get five days' work a week.

What are the best and worst parts of your job?
The best thing about the job is seeing the seal families under the Bridge and maybe a whale in the ocean when I am on the way to work in the Keeper's Quarters. The worst thing is when there is a howling gale and we have to close the Bridge for safety. The weather can change very suddenly. Sometimes visitors are very upset after travelling so far to go across the Bridge, but their safety is our most important consideration.

Do you work alone or as part of a team?
I am part of a great team and it is very satisfying to see how delighted our visitors are with their visit. It is quite hard to get a job at the Mizen as staff tend to come back every year. But this will be my last year. Next year I hope to go to America for the summer, so I am going to save as much money as I can this year. Anyway, if you are interested, you can always give it a try.

What advice would you give to someone wanting to do your job?
In my life I know that my experience at Mizen Head will stand me in great stead. One thing that I have learned is that there's always a job to be done. If you get a job, don't keep asking what will I do next. Look around and find something that needs doing, even if it is just to sweep the floor. You will get a name as a self-starter, someone who can see what the job is and get on with it without being told. In life that will take you far. If you would like to know more about Mizen Head Signal Station and come to visit look at www.mizenhead.ie

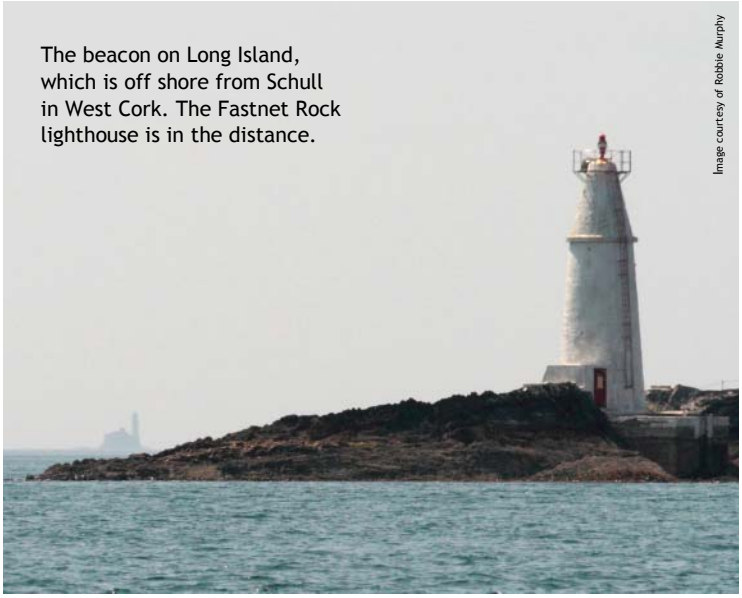
SAFETY AT SEA

Commissioners of Irish Lights

When you visit the Irish coast, it is likely you will come across either a lighthouse, a beacon or a buoy. These are known as 'aids to navigation' (AtoN) and are used for guiding marine traffic or warning about dangers or hazards in coastal waters. The people who look after these aids to navigation are the Commissioners of Irish Lights. They are a maritime organisation, providing an essential safety service around the coast.

Though they provide and maintain many of these aids, the Commissioners of Irish Light also help to set up and maintain local aids to navigation which have been provided by local authorities in ports, harbours and along the coastline.

By looking after all these lights, beacons and buoys, the Commissioners of Irish Lights are helping to protect the marine environment and support the marine industry and coastal communities. www.irishlights.ie



The beacon on Long Island, which is off shore from Schull in West Cork. The Fastnet Rock lighthouse is in the distance.

Image courtesy of Robbie Murphy

Aids to Navigation

The Commissioners of Irish Lights are responsible for carrying out the Irish Government's obligations under the SOLAS Convention 1974 to provide marine aids to navigation (AtoN) in the Republic of Ireland and the UK government's SOLAS obligations to provide marine AtoN in Northern Ireland.

Image courtesy of Commissioners of Irish Lights

Light Dues

"Light dues" is a fee that is collected from commercial vessels when they visit an Irish port. These fees are used to provide and maintain the aids to navigation around the Irish coastline. The fee charged is based on the weight of each vessel.

ILV Granuaile

Image courtesy of Commissioners of Irish Lights

The Commissioners of Irish Lights have their own vessel. When ILV Granuaile was delivered in January 2000, it was one of the most advanced vessels of its type in the world at the time. It can operate in difficult sea conditions and is fitted with very precise positioning equipment linked to a satellite-based navigation system. The vessel's main function is to place and service 150 offshore buoys, which warn mariners of the location of sand banks, reefs and other offshore hazards near shipping routes. The vessel also serves as a helicopter platform for servicing offshore lighthouses and is available to assist State agencies with search and rescue, emergency towing, oil pollution control, surveying and offshore data collection.

Aids to Navigation

Aids to Navigation help to keep seafarers safe at sea by making it easier for vessels to move around safely and efficiently. Aids to Navigation include lighthouses, buoys, beacons and lights, all of which have a fixed position on the earth's surface, which means they can be easily located on maps and electronic equipment. Seafarers can use them as guides around rocks, dangerous stretches of sea or to find safe harbours. Some Aids to Navigation are fixed stations on land, some are only accessible by boat or helicopter, while others are floating devices (such as buoys). Many of them have more than one purpose. The structure itself could be the guide, such as white beacon on a rock, but it may also be fitted with a signal light or other markings. Here are the locations of the Commissioners of Irish Lights' aids to navigation:

Lighthouses

The Commissioners of Irish Lights operate over 70 lighthouses around the coast of Ireland. All of these working lighthouses play a vital role in marine safety but are now automated and unmanned.

Buoys

Buoys are floating devices, which are anchored in position. They inform the seafarers of their surroundings, provide direction and warn of hazards. Equipment can also be added to buoys to provide data on such things as sea conditions.

Beacons

A beacon is a fixed manmade navigation mark that can be recognised by its shape, colour, pattern, topmark, or light character, or a combination of these. Irish Lights looks after 29 beacons around the coast.

Helipads

There are 8 helipads around the coast, which are maintained by Irish Lights. These are landing areas for helicopters when Irish Lights are accessing the lighthouses.

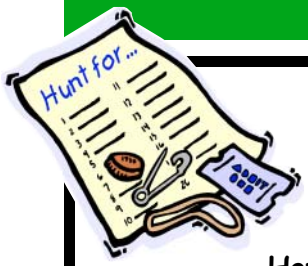
Great Lighthouses

Irish Lights are working in cooperation with local partners around the coast – north and south - to bring together 12 of Ireland's most spectacular working lighthouses, under a new brand called Great Lighthouses of Ireland.

Maps courtesy of Commissioners of Irish Lights

MetOcean

There are currently seven buoys and two lighthouses, fitted with special sensors to collect environmental data. This meteorological and oceanographic data is fed back to headquarters and made available online.



Spring Scavenger Hunt

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

- ☐ A tree bud 
- ☐ A young animal 
- ☐ A rainbow 
- ☐ A buzzing bee 
- ☐ A bluebell 
- ☐ A photo of a sunset 
- ☐ A crocus 
- ☐ A snail trail 
- ☐ A plant sprouting 
- ☐ Animal tracks 
- ☐ A daffodil 
- ☐ A warm breeze 

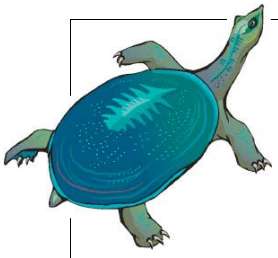
- ☐ A flower bud 
- ☐ A cherry blossom 
- ☐ A daisy 
- ☐ A flat stone 
- ☐ A rain puddle 
- ☐ A crescent moon 
- ☐ A forest 
- ☐ A flock of birds 
- ☐ A pond 
- ☐ A caterpillar 
- ☐ A wildlife book 
- ☐ A bird on a branch 

The World Around Us

"Foreign Correspondent" Michael Ludwig reports on some interesting goings on in the natural world.

"Alby" the Albino Turtle

For nine years the Coolum District Coast Care Group have been monitoring marine Green turtle nests on the Sunshine Coast of Queensland, Australia. While on a recent data collecting trip, they discovered something that made headlines around the world. The very last of 122 turtle hatchlings to dig out of their mother's nest was albino, meaning it was without colour. Albino turtles are very rare so this was a special sighting. What was even more exciting was that they managed to insure the turtle (named "Alby") scuttled safely to the sea and was filmed doing it!



Yangtze giant soft-shell turtles

Following the recent death of *Cu Rua*, the Yangtze soft-shell giant turtle that lived in Hanoi's central lake in Vietnam, there are now only three of these giant turtles left on Earth. *Cu Rua*, which means "Great Grandfather Turtle", was estimated at being over one hundred years old and was adored in Vietnam. Of the three remaining turtles, there is both a male and female in captivity in Changsa Zoo in China and another male in a lake near Hanoi in Vietnam. Attempts are being made to produce offspring but this may not be possible.

BEE Champions!

Ireland is buzzing as 68 organisations have come together to help save our bees. They are taking part in The All-Ireland Pollinator Plan 2015-2020. Their goal is to finds ways to stop the decline of bee populations in Ireland. Because there are fewer and fewer wildflowers to feed the bees many of them are starving. There are 98 species of bees in Ireland, all are in trouble, and one third are threatened with extinction. Bees are pollinators, which means they carry pollen from flower to flower, fertilising the plant so that it can produce fruit and seeds. Pollination is critically important for producing our food crops so we should all be doing what we can to help the bees. The All-Ireland Pollinator Plan 2015-2020 has a Junior Version which can be found at:
http://ark.ie/downloads/Junior_Pollinator_Plan_for_Web2.pdf

'Happy Socks' came floating back!

On 5 January 2016, Castletownbere Lifeboat were called out when a small boat was spotted drifting in Dunmanus Bay, West Cork. When located the carbon fibre rowing boat named "Happy Socks" was empty but inside it a note was discovered and it read: "Hello, if you find this boat, please contact Sarah Outen, who was picked up N4431 W029910443 due to hurricane forecast on 3/10/2015", along with her contact details. Sarah Outen is a British adventurer who set out from Tower Bridge in London on April 2011 on her *London2London: Via the World* expedition. Her goal was to row, bike and kayak around the northern hemisphere, starting in London and finishing in London, inspiring children and fundraising for charities.

One of the final stages of Sarah's expedition was to row solo across the North Atlantic Ocean from Cape Cod on the East Coast of the USA, home to the UK. With the approach of Hurricane Joaquin, bringing 60 knot (111 kph) winds and large waves, Sarah had to abandon the boat off the coast of Portugal. She sought help from a passing cargo ship and said goodbye to "Happy Socks". Amazingly, though, the carbon fibre boat, which cost about €78,000, drifted for 143 days and eventually arrive in Dunmanus Bay, still intact. It was retrieved by Castletownbere Lifeboat and returned to Sarah, much to her delighted.

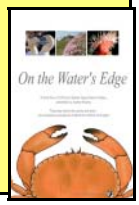
Learn More

Only €2.10 each including postage or €11.00 (plus €2.00 p&p) for all seven!

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. *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 €4.00 plus €1.30 p&p.*

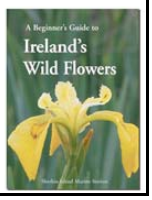


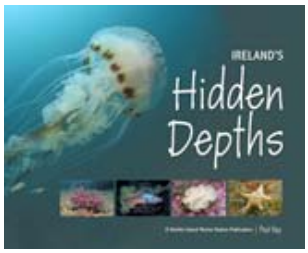
A Beginner's Guide to Ireland's Seashore is a pocket-sized guide, suitable for beginners of all ages. This book will help you to explore the wonders of marine life found on the shores around Ireland.

Only €8.00 inc postage

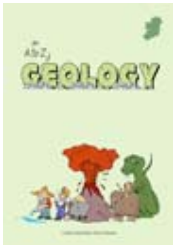
A Beginner's Guide to Ireland's Wild Flowers With the help of this pocket-sized guide, beginners of all ages will be introduced to the many common wild flowers found around Ireland. *206pp*

Only €8.50 inc postage





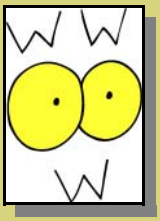
Ireland's Hidden Depths is published by Sherkin Island Marine Station. Ireland's amazing marine life, glorious kelp forests and spectacular undersea scenery are featured in over 200 spectacular photographs by nature photographer Paul Kay. 277 x 227 mm 160 pps
Only €10.00 plus €3.00 postage



"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 €5.99 plus €1.00 postage

To order books, visit: **www.sherkinmarine.ie** and pay by Paypal (no Paypal account necessary) 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

Baltimore Harbour: www.baltimore.ie http://sherkinisland.ie/ http://www.baltimorelifeboat.ie/

Carrageen Moss: http://www.seaweed.ie/descriptions/Chondrus_crispus.php
http://www.seaweed.ie/uses_general/carrageenans.php

Black John the Bogus Pirate & Ocean Literacy: www.explorers.ie http://oceanliteracy.wp2.coexploration.org/
http://www.irishcentral.com/news/extreme-coastal-flooding-in-ireland-predicted-as-irish-sea-levels-rise-156890325-237507771.html
http://www.climateadaptation.eu/ireland/coastal-floods/

The Peacock Butterfly: http://www.butterflyireland.com/Peacock.htm
http://www.ukbutterflies.co.uk/species.php?species=io

Mizen Head: http://www.mizenhead.ie/

Safety at Sea: http://www.irishlights.ie/ http://www.iws.ie/
http://rnli.org/aboutus/lifeboatsandstations/stations/Pages/Stations-a-z.aspx

"Alby" the Albino Turtle: https://noosacba.org/2016/02/10/rare-albino-green-turtle/

Yangtze Giant Soft-shell Turtles: http://www.bbc.com/news/world-asia-35358979

BEE Champions: http://www.biodiversityireland.ie/projects/irish-pollinator-initiative/all-ireland-pollinator-plan/
http://ark.ie/downloads/Junior_Pollinator_Plan_for_Web2.pdf

"Happy Socks" came floating back: https://www.facebook.com/RNLICastletownbere/

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 What two water features are in the Spring Scavenger Hunt?

2 Name the Commissioners of Irish Lights' ship.

3 Is Carrageen Moss green, brown or red?

4 Which cliffs in the UK are made of the shells of trillions and trillions of marine animals?

5 Mizen Head Signal Station is on an island. True or false?

6 Who had to abandon the rowing boat "Happy Socks" in the Atlantic, when a storm was approaching?

7 Who in Ireland looks after the Aids to Navigation?

8 Name the shrub, which is shown on page 5, that butterflies love.

9 "Alby" the albino Green turtle was green in colour. True or false.

10 The All-Ireland Pollinator Plan 2015-2020 is trying to stop the decline of which animal?

11 How many Yangtze Giant Soft-shell Turtle are left in the world?

12 What does a Peacock Butterfly look like from upside down?

13 The seaweed Carrageen Moss can be used to make a dessert. True or false?

14 What did the Keepers at Mizen Head Signal Station use to make the loud bang to warn ships during fog?

Answers: (1) A pond and a rain puddle; (2) ILV Granuaile; (3) Red; (4) The White Cliffs of Dover; (5) True; (6) Sarah Outen; (7) The Commissioners of Irish Lights; (8) Buddleia or Butterfly Bush; (9) False; (10) The bee; (11) Three; (12) The eyes and beak of a predatory bird; (13) True; (14) Explosives.

Think of a Title!

Can you think of a title for this photograph of a young Northern Elephant Seal in California?

(Image courtesy of Elaine R. Wilson http://www.naturespicsonline.com)

Nature Jokes

What type of house weights the least?
A lighthouse.

What do you call a butterfly without wings?
Butter.

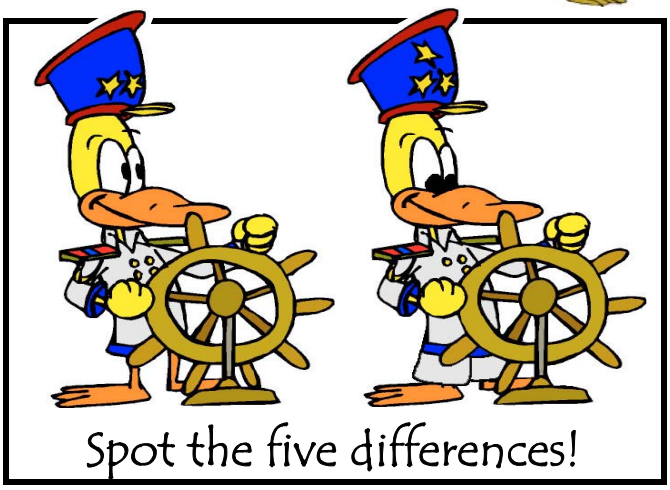
What was the spider doing on the computer?
Searching the web.

If a pig is injured, what should you put on the wound?
Oinkment.

Why did the rabbit go to the doctor?
Because it felt jumpy.

What was the first animal to go into space?
The cow that jumped over the moon.

Why did the scientist take out his doorbell?
He wanted to win the no-bell prize.



Spot the five differences!

A Crafty Caterpillar

You will need:

- A long sock
- Filling (an old pillow, cotton wool or soft rags)
- Pipe cleaners
- Eyes
- Beads to decorate
- Glue

1 A long, stretchy sock is good for this project - the brighter the better!

2. Fill the sock with the filling until you have a long sausage-like shape.

3. Tie a knot on the end of the sock to stop the filling coming out.

4. Roll both ends of each pipe cleaner that you use.

5. Create a ball at the top of the sock by tying a pipe cleaner around the top section. The end of the pipe cleaner will become the legs.

6. Tie pipe cleaners, equally spaced, down along the sock to create the caterpillar's body.

7. Fold a pipe cleaner in half and tuck the fold under the pipe cleaner near the head. Loop the folded pipe cleaner through itself to secure it and to create antennae.

8. Glue eyes on to the head.

9. Decorate its back with beads.

Nature's Web Wordsearch

Nature's Web Spring 2016 Wordsearch

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

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

Aids to Navigation

Green Turtle

Pollinators

Baltimore Harbour

Bees

Black John

Carrageen Moss

Caterpillar

Fish Burgers

Soft-shell turtle

Happy Socks

Irish Lights

Mizen Head

Peacock Butterfly

Safety at Sea

Sarah Outen

Scavenger Hunt

SOLUTIONS (Over,Down,Direction): Aids to Navigation (16,12,W); Baltimore Harbour (3,16,NE); Bees (16,9,SW); Black John (10,2,W); Carrageen Moss (1,16,NE); Caterpillar (13,15,W); Fish Burgers (7,1,E); Green Turtle (14,14,W); Happy Socks (3,2,S); Irish Lights (7,11,NE); Mizen Head (8,11,E); Peacock Butterfly (16,13,W); Pollinators (3,4,E); Safety at Sea (1,11,N); Sarah Outen (17,4,S); Scavenger Hunt (1,3,E); Soft-shell Turtle (1,15,NE).

Nature's Noticeboard!

Spring 2016

Sherkin Island Marine Station would like to thank the following for their help with this newsletter, especially the Commissioners of Irish Lights, Sue Hill, John Joyce, Michael Ludwig, Eimear Murphy, Robbie Murphy, Jez Wickens and Elaine R. Wilson.

We appreciate support from the EPA and the Geological Survey of Ireland toward the newsletter.