

# Nature's Web

Issue No. 19

Autumn 2010

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## Bird Counting!

We have so many wonderful birds in Ireland and to help us understand more about them it's important to survey them. BirdWatch Ireland are one of the co-ordinators of Bird Atlas 2007-2011 and are still interested in getting schools involved in submitting School Roving Records. Check out page 3 for details.



Photo courtesy of Robbie Murphy

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## Editor's Page

# Red holly berries in June?

Photo courtesy of Donie Sheehy



Our friend Donie came across an unusual sight in Baltimore, Co Cork, at the end of June. He thought Christmas had come early when he saw a holly bush full of berries – and a single red berry amongst the bunch! He sent us in this photograph (left) and wondered if we could find out what was happening. A gardening friend explained that it may have been attacked by some pest or fungal disease that caused a chemical change and thus ripened prematurely. Now that autumn has arrived, the green berries will soon be ripening and will turn red, just in time for Christmas! To read more about holly, check out the Winter 2007 issue of Nature's Web.



Welcome to the  
Autumn Edition of  
Nature's Web!



Dear Reader,

Welcome everyone to the autumn issue of Nature's Web. In this issue we learn from Brian Caffery what it's like to work as a birdwatcher and find out about a bird survey you can take part in. We look at alien and invasive animal and plant species in Ireland; Paul Kay tells us about gobies, tiny fish that are common in rockpools; and Captain Cockle beautifully illustrates the life of the limpet. Check out nature news from around the world on page 11 and enjoy a giggle 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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## SEAFOOD RECIPE

# Seafood Roast

### What's Needed:

- 450g/1lb fish of your choice
- 50g/2oz butter
- 2 scallions, finely chopped
- 110g/4oz mushrooms, finely sliced
- 110g/4oz couscous, bulgar wheat or rice - precooked
- 25g/1oz pine nuts
- 4 slices Parma ham or streaky rashers
- Salt & pepper

### What to do:

- Melt butter and gently sauté scallions and mushrooms. Season.
- Add to couscous and pine nuts.
- Season fish.
- Place stuffing onto fillets, fold and wrap in ham/rasher.
- Place on buttered dish, cover and roast in moderate oven for 20 minutes.
- Serve with roast potatoes & your favourite vegetables.



Photo: © BIM

Brought to you by BIM. [www.bim.ie](http://www.bim.ie).



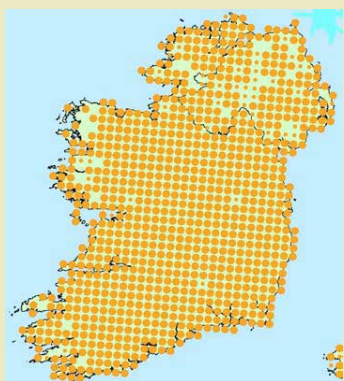
# Bird Atlas 2007-2011

### What is the Bird Atlas?

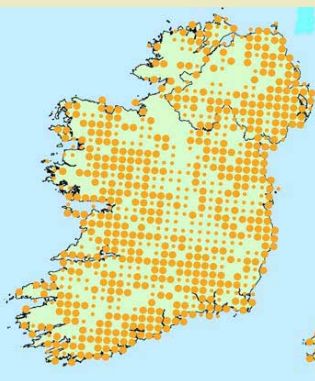
The Bird Atlas is a project to map all of Ireland and Britain's birds during both the winter and the breeding season. The Bird Atlas 2007-2011 is the biggest survey of birds ever to have taken place across the country and hopefully your school will join this exciting and rewarding work.

The project is a working partnership between BirdWatch Ireland, the British Trust for Ornithology and the Scottish Ornithologist's Club. The information collected from the survey will allow them to see changes in bird distributions. They will be able to compare this new information with information collected for previous breeding atlases in 1970 and 1990, and for the last winter atlas of the early 1980s.

The current project began in 2007 and continues until 2011. When completed, it will provide invaluable information on the state of our birds that will help guide conservation work for the future. Much has changed in our countryside and urban areas since the last survey 20 years ago, so it is really important for us to find out which bird species are doing well and which most need our help.



Goldfinch records from 1970



Goldfinch records from 1990



Image by Shay Connolly

The Goldfinch, one of the many birds being surveyed.



What will the Goldfinch records be for 2011?

Your school can play a vital role in protecting Ireland's birds by taking part in the Bird Atlas.

### How to take part

The project co-ordinators are keen to involve as many people as possible, including our younger generations. Hopefully your school will play an important part in helping fill the gaps on the maps. It's a perfect opportunity to learn more about the birds that can be found around your school and surrounding area and for you to be excited by Ireland's amazing birdlife.

Taking part in the Bird Atlas is simple. Just record the species seen in or around your school during both the winter (November to February) and summer (April to July). You may decide to dedicate 10 minutes each week to recording the birds after lunch from a classroom window or perhaps take a walk with your class in the school grounds each month recording the species you see. Whether you do this each week or month and for 10 minutes or 1 hour is entirely up to you. Known as Roving Records, these records are extremely valuable as they allow us to build a list of species for your local area.



Text and images courtesy of www.birdwatchireland.ie

You don't need to have a good knowledge of all birds to take part, as each bird record is important. All common species including Wren, Robin, Starling and Blackbird all contribute to the maps.



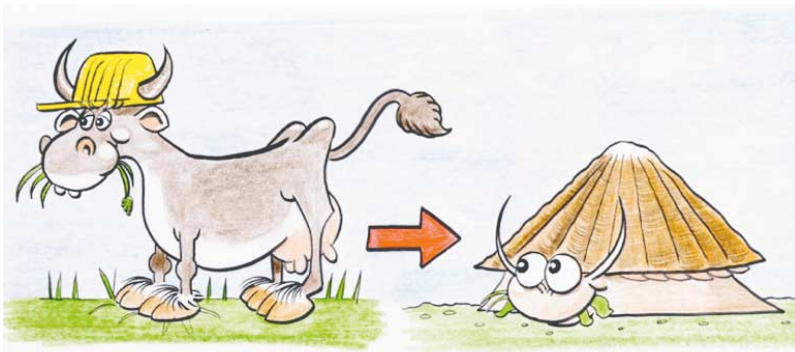
### Sending on School Roving Records

You can download the School Roving Records forms or email Brian Caffery, Atlas Co-ordinator at [bcaffrey@birdwatchireland.ie](mailto:bcaffrey@birdwatchireland.ie) to have one sent to you. You can fill it in electronically and email it at the end of each recording period to the Atlas Co-ordinator. You can also enter your records directly online at [www.birdatlas.net](http://www.birdatlas.net) which will allow your sightings to appear on the map very quickly. This requires a teacher from each school to register on the website.



# The Secret Life of Limpets....

Imagine a tiny cow with a helmet!



If you look on any rocky shore you'll see small cone-shaped shells stuck to the rocks. These are limpets and the best way to imagine them is as a tiny cow with a huge safety helmet and a large muscular foot.

Like cows, limpets eat plants that they scrape off the rocks. But, unlike cows, limpets have to withstand the heat of the sun, attacks by crabs, birds and fish, and the force of tonnes of water crashing down on them as the waves roll in.

## Finding their Way Home

Limpets feed at night, moving around their own "territories" on the rocks to feed on seaweed. Sometimes, on a low tide at night, you can actually hear them rasping away at the weed with their file-like tongues.

Limpets will also fight off other limpets they find in their personal "gardens" by bumping them with their shells. But when the tide goes out and the sun and waves attack them, limpets like to be back at their "home" spot, where their shell is perfectly matched to the shape of the rock and forms a perfect seal.

Scientists have now discovered that limpets find their way home by following the trail of slime their foot leaves as they move - which even contains chemicals telling the limpet which way to go.



## What's Afoot?

Limpets are members of the snail family and can live to be 20 years old. In that time, their shell becomes perfectly matched to their favourite spot on the rock, forming a watertight seal. So if you knock one off a rock, please put it back in exactly the same place!



## The Limpet Family Album

The Common Limpet (*Patella vulgata*) that we find on Irish shores has a number of relatives including the Keyhole Limpet (top right above), which has a single hole in its shell.

The Chiton (top left) has a shell in hinged sections and can roll into a ball like an armadillo to protect itself.

The Abalone (bottom centre) is a very valuable species, not only for the meat on its large foot, but also for the brilliantly coloured shell, which is used to make jewellery.

Abalone are now being farmed in Ireland, which protects the species from overfishing in the wild.

## Captain Cockle's Log

Welcome aboard shipmates!

Together, we'll be taking a look at the world's greatest natural

resource - the sea! [www.captaincockle.com](http://www.captaincockle.com)

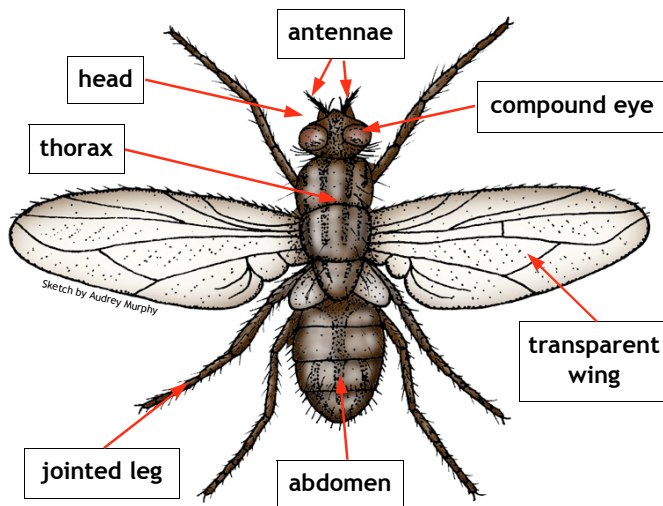
Copyright John Joyce 2010





# The House Fly

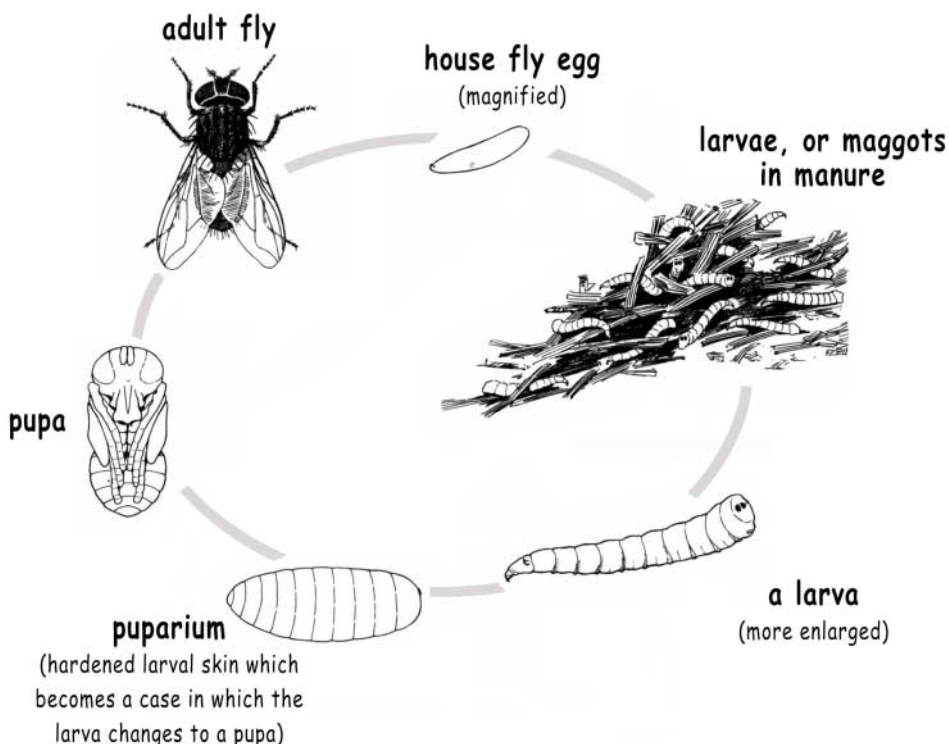
Latin Name: *Musca domestica* Irish Name: Cuil tí



Many people will have chased a house-fly around their kitchen at some time or other, often with a swatter in their hand! House-flies can be seen all year round but are more common in summer months. Though the house-fly does not bite humans, it does carry many germs on its legs and mouthparts from other surfaces on to our food. Using special substances in their body, called enzymes, the fly turns food in to liquid and then drinks it. It can lay roughly 150 eggs on any material on which the young larvae will feed (such as meat and vegetables). It is important to discourage flies by not leaving food out and uncovered. Throughout the world, it is considered one of the worst pests.

## The Life Cycle of a House-fly

The life cycle of the house-fly can take 10 to 21 days to complete and in one year, there can be 10 to 12 generations of house-fly. Imagine that family tree!



## How does a fly walk on the ceiling?

If you study a house-fly for a while, you will see that it is able to walk across the ceiling and up vertical walls with ease. To do this, it uses tiny bristles or hairs on the underside of its feet to grab on to microscope bumps or fissures on the surface of the wall or ceiling. If they come across a surface which is perfectly smooth, the fly can produce a sticky substance to help it hold on.

# Giant Rhubarb

**Latin name: *Gunnera tinctoria***

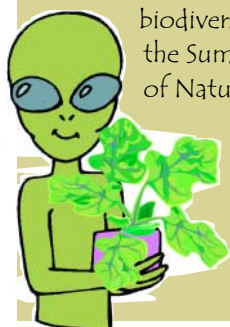
Giant Rhubarb is a plant which is native to South America. It has large, leathery umbrella-shaped leaves and thick stems (spikes cover the stems and the back of the leaves). The plant can grow up to about 2 metres high and can form large, dense colonies. It is an herbaceous plant, which means its leaves and stems die down at the end of the growing season to soil level. It is also perennial, growing back every year. Though it is similar in appearance to rhubarb, it is not related.

The plant was introduced into Ireland about 100 years ago, mostly likely as an ornamental plant for the garden. Since its introduction, it has escaped into the wild and has become a big problem in some areas of the country, particularly in the west of Ireland. The growing conditions there are very similar to those in its native home – warm and damp. As it has ideal conditions in which to grow, and its large leaves and early appearance in spring prevents native plants from growing, it has begun to take over large areas of ground. Native plants are being forced out of areas where it grows.

### An Alien Species

In Ireland, Giant Rhubarb, or *Gunnera*, is considered an alien species and it is also considered an invasive species. Its invasive behaviour is destroying the habitats of native animals and plants and upsetting the natural biodiversity of certain areas. To learn more about what

biodiversity is, check out the Summer 2010 issue of Nature's Web. You can also learn about other invasive species on page 14 of this issue.



Giant Rhubarb (also known as Chilean rhubarb), growing in Chile National Park, on the coast of Chile.

Courtesy of Stevage CC-A-SA3.0 Unported

### Why is it hard to control?

The plant grows from a horizontal plant stem, known as a rhizome. Underneath the ground the rhizome roots and above the ground it sends up shoots. These rhizomes can grow to 2 metres in length. The plant can reproduce from tiny fragments of the rhizome and also from seed. The flowerhead can produce over 250,000 seeds a year. This has allowed it to spread quickly and makes it hard to get rid of. Those working to stop the spread of the plant have to be extremely carefully how they go about it. They cannot simply dig it up as breaking the rhizome only creates more plants.



Courtesy of Mayo County Council

Giant Rhubarb has become a huge problem on Clare Island, Co. Mayo.

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# All in a Day's Work

## Brian Caffery – Bird Atlas Co-ordinator

**B**rian Caffery works for BirdWatch Ireland, a voluntary organisation that helps to protect Ireland's wild birds and their habitats. He is also Co-ordinator of the Bird Atlas project 2007-2011.



### Where do you work?

I work for BirdWatch Ireland in Banagher Co. Offaly.

### What type of work do you do?

I work on a project called the Bird Atlas (*see page 3*). With the help of thousands of volunteers we do a huge survey across every part of Britain and Ireland to map the locations of every single species of bird. At the end of the survey we can use the maps to tell which bird species are doing well and those that are declining in number.

### Have you always been interested in what you do?

For as long as I can remember I have been fascinated by wildlife and in particular birds. I remember getting a pair of 'proper' binoculars and a bird book for my 10<sup>th</sup> birthday, one of the best presents I ever got!

### What training did you do to get where you are today?

I went to University in Wales, where I completed a diploma in Countryside Conservation before moving to The University of Gloucestershire in Cheltenham to do a degree in Environmental Management. I also did some voluntary work along the way, working as a nature warden for The National Trust on Lough Erne in Co. Fermanagh.

### What is the best thing about your job?

The best part of working on the Bird Atlas is knowing that the bird survey work we are doing will provide us with the information needed to help protect Ireland's birds in the future. Many of our bird species like the Cuckoo, Barn Owl and Curlew are declining, so it is really important that we keep a check on their numbers so that we can help to protect them.

I also love getting out of the office every now and again to do some fieldwork; whether it is up in the hills looking for Hen Harriers, along the River Shannon counting wetland

birds or on the coast recording seabirds, it's great to be out counting birds.

### What equipment do you use?

When I am out doing fieldwork I always carry my binoculars. Sometimes I also use a telescope to help count birds that are difficult to get close to, on lakes or out to sea. I always have a map to help find my way around and a GPS can also be handy for when I get lost.

### Where does your work take you?

The Bird Atlas takes me all over Ireland. Over the last few years working on the project I have visited every county in Ireland meeting the local volunteers who carry out the survey work. It's fantastic to work in a job that takes you to such wonderful places and to meet such interesting people.

### What advice would you give someone wanting to do your job?

The first thing to do is learn more about birds. If you don't already have a bird book – put it on your wish list. A pair of binoculars is also very useful. They will help you to get closer to the birds. Every time you see a new species, look it up in the book and identify it. Before you know it you will be an expert

birdwatcher, able to identify every bird that you see! It would also be good to get involved in some bird survey work. BirdWatch Ireland has some great surveys, such as Spring Alive [www.springalive.net](http://www.springalive.net). Taking part in these surveys is great fun and will help you learn more about birds.



Photo courtesy of Steve Kneel [rsbp-images.com](http://rsbp-images.com)



Photo courtesy of Laurie Campbell [rsbp-images.com](http://rsbp-images.com)

**Top right: The Puffin** - many of Ireland's seabirds like the Puffin are declining.

**Bottom right: Curlew chick** - the Curlew is now one of Ireland's most endangered bird species.

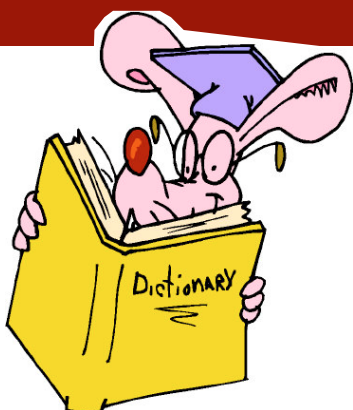
# Autumn Windfall



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# Nature's Web Wordsearch



## Nature's Web Autumn 2010

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

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

Autumn windfall  
Bird Atlas  
Brian Caffery  
Chilli peppers  
Fishy in a bottle  
Giant Rhubarb  
Gobies  
Gulf of Mexico  
Holly berries  
House Fly  
Invasive species  
Limpets  
Most unwanted  
Oil spill  
Peregrine Falcon  
Seafood roast  
Seed bank  
Southern  
Right Whale



**SOLUTIONS (Over, Down, Direction):** Autumn Windfall (1,16,E); Bird Atlas (5,1,SE); Brian Caffery (12,1,SW); Chilli Peppers (18,1,5); Fishy in a Bottle (2,4,SE); Giant Rhubarb (12,17,W); Gobies (14,9,N); Gulf of Mexico (14,12,NW); Holly Berries (16,13,N); House Fly (1,2,5); Invasive species (17,15,N); Limpets (13,7,NW); Most unwanted (4,15,NE); Oil Spill (8,1,SW); Peregrine Falcon (2,15,NE); Seafood Roast (1,18,E); Seed bank (12,15,W); Southern Right Whale (18,18,NW).

# Learn More

## A Beginner's Guide to Ireland's Wild Flowers

Have you ever wanted to put a name to the wild flowers you see about you every day, or while on a walk, or on holiday? With the help of this pocket-sized guide, you will be able to do just that. Beginners of all ages will be introduced to the many common wild flowers found around Ireland. 206pp



Only €8.50 including postage

## Sea Life DVD:

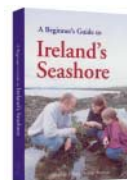
### "On the Water's Edge"

Sherkin Island Marine Station has launched a dvd called 'On the Water's Edge'. It is made up of a short film on life beside the sea and is presented by Audrey Murphy. It includes 6-10 hours of interactive material for children of all ages. Available from: Sherkin Island Marine Station, Sherkin Island, Co. Cork. €13.30 including postage.



**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 including postage



Only €2.10 each including postage or €12.00 for all seven! 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. *My Nature Diary* contains lined pages to fill in a daily record of sightings and nature news.



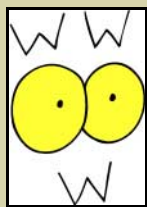
"An A to Z of Geology" explores the fascinating world of rocks and geology - a world of volcanoes, tsunamis, earthquakes, diamonds, gold and even dinosaurs! Produced by Sherkin Island Marine Station, in association with the Geological Survey of Ireland, the book aims to highlight the importance of geology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

Only €5.99 plus €1.00 postage

To order books, 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.

Visit: [www.sherkinmarine.ie](http://www.sherkinmarine.ie)



## 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:

Holly: <http://www.arkive.org/common-holly/ilex-aquifolium/info.html>

Bird Atlas 2007-2011: <http://www.birdwatchireland.ie/KidsZone/BirdAtlasSchoolsSection/tabid/559/Default.aspx>  
<http://www.birdwatchireland.ie/Ourwork/SurveysProjects/Atlas/tabid/487/Default.aspx>

Limpets: [www.captaincockle.com](http://www.captaincockle.com) [http://www.bbc.co.uk/nature/blueplanet/factfiles/molluscs/limpet\\_bg.shtml](http://www.bbc.co.uk/nature/blueplanet/factfiles/molluscs/limpet_bg.shtml)  
<http://www.arkive.org/common-limpet/patella-vulgata/info.html>

The House-fly: <http://www.npr.org/templates/story/story.php?storyId=94110463>

Giant Rhubarb: <http://www.mayococo.ie/en/Services/Heritage/GunneratinctoriaGiantrhubarb/>

Peregrine Falcon: <http://birdwatchireland.ie/Default.aspx?tabid=399>  
<http://www.rspb.org.uk/wildlife/birdguide/name/p/peregrine/index.aspx>

Seed Bank: <http://www.regjeringen.no/en/dep/lmd/campain/svalbard-global-seed-vault.html?id=462220>

Chilli Peppers and the Native Seeds Search: <http://www.nativeseeds.org/>  
<http://www.thefreelibrary.com/FROM+FIERY+N.M.+TO+FRIGID+NORTH.-a0232082826>

Oil Spill: <http://www.epa.gov/BPSpill/> <http://www.restorethegulf.gov/index.shtm>

Southern Right Whale: <http://www.southafrica.info/travel/wildlife/whale-watching.htm>  
<http://edition.cnn.com/2010/WORLD/africa/07/21/south.africa.whale.boat/index.html#fbid=YwmO59BXgBk>

Gobies: <http://www.marinewildlife.co.uk/wisscms-en-221.aspx>

Most Unwanted: [www.invasivespeciesireland.com](http://www.invasivespeciesireland.com) [www.noticenature.ie](http://www.noticenature.ie) [www.invasivespecies.biodiversityireland.ie](http://www.invasivespecies.biodiversityireland.ie)

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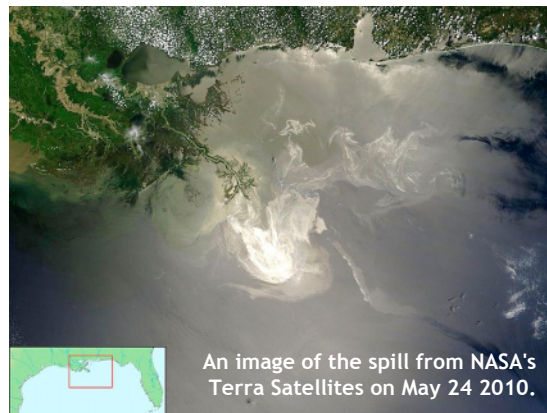
# The World Around Us



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

## Huge Oil Spill in the Gulf of Mexico

On 20th April 2010 a huge explosion on a drilling rig in the Gulf of Mexico, started the biggest ever offshore oil spill. Sadly, 11 people were killed and 17 others were injured in the explosion and sinking of the Deepwater Horizon drilling rig. Following the explosion, the owners of the well were unable to stop the oil flowing from the damaged drill hole until July 15th, 87 days later. From April to July, nearly 5 million barrels of oil flowed out of the well, resulting in an oil slick covering at least 6,500 km<sup>2</sup>. Huge underwater plumes of oil, not visible on the surface, were also created. The oil spill has had an impact on marine life and wildlife along the coasts of New Orleans, Louisiana and Florida. It has also had a terrible effect on fishing and tourism. No one knows how long it will take for the area and the organisms to recover and how much long-term damage there will be.



Courtesy of NASA

An image of the spill from NASA's Terra Satellites on May 24 2010.

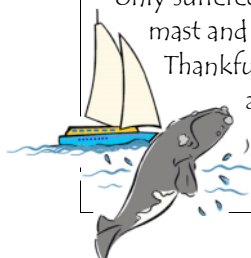
## Red Hot Seeds in Freezing Vault

In Svalbard, deep inside a mountain in the frozen Arctic, is a giant safety deposit box for seeds! The vault preserves seeds from as many variety of crops as possible. Should there be a crop failure the stored seeds will be available to help restore crop production after such a future disaster. In July, the vault received a "hot" delivery - chilli pepper seeds from the US. Some of the pepper varieties are heirlooms still farmed by elderly Native American farmers in New Mexico. They provided the seeds to Native Seeds Search, a US government organisation working with Native American communities. Also included in the delivery were soy, melon and sorghum seeds. Sorghum is an important part of the diet of 500 million people in over 30 countries. The crop is used for flour, bread, animal feed, beer and also as a fuel. Since it opened in 2008, the vault has obtained seeds from more than half a million of the planet's crops!

## Whale Onboard!

Paloma Werner and Ralph Mothes were sailing near Robben Island, off Cape Town, South Africa, when they had a whale watching experience they will never forget! In July 2010, while enjoying a sail in their 10m yacht "Intrepid", they noticed a southern right whale slapping its tail and lunging out of the water (breaching) about 100m away. When it reappeared it was only 20m from their yacht. The sailors presumed it would swim under the boat and Paloma rushed to the other side to see it emerging - but it didn't. Instead it leapt out of the water and crashed down on the deck of the boat. Luckily no one was injured, but they did get quite a shock! The boat is made of steel so it only suffered damage to its mast and rigging.

Thankfully the whale appeared unhurt and just swam away.



## A Good News Story for a Peregrine Falcon

On April 26th a badly injured Peregrine Falcon was found in a sea cave in Ferriter's Cove, Ballyferriter, Co. Kerry. The male bird of prey was rescued by two BirdWatch Ireland supporters (West Kerry Branch) and Pascal Walsh, a falconer from Farranfore in Kerry. A serious injury on its wing was heavily infected with pus and there was wing feather and tendon damage. Over the next two months Pascal treated the bird and, though wild, it became accustomed to his hands and care. As well as healing the wound, the bird needed to be restored to full fitness with daily exercise and appropriate feeding. This took a lot of hard work on Pascal's part but it paid off. On 20th June, the fully healed peregrine was released back into the wild. Even though it was hard to let the falcon go, his friends were delighted to see the bird flying off into the distance.

Courtesy of Jill Crosher



Pascal releasing the bird.

By Paul Kay

## Gobies

About 400 or 500 species of fish have been 'found' in Ireland's inshore waters (although quite a lot are deep sea species which have wandered away from the deeper offshore waters and some are rare visitors). Of these some 20 or so belong to the family gobiidae – better known as gobies.

### Black Gobies – *Gobius niger*

Black Gobies sometime appear in small groups. The males often have a black blotch at the top and front of the dorsal fins (on their back) which can be easily seen here (right). They can 'sit upright' using fins underneath them and along their sides to help them balance.



Photos courtesy of Paul Kay



### Fries' Goby – *Lesuerigobius friesii*

Fries' Gobies live in burrows in sandy/muddy seabeds. They can be seen, like this one (left), sitting at the entrance to their burrow watching what is going on. If disturbed they turn tail and disappear into their burrows.

### Leopard-spotted Goby

– *Thorogobius ephippiatus*

Leopard-spotted Gobies are to be found in crevices on rocky seabeds. They are pretty fish, and aptly named, especially when all their fins are displayed when swimming like in this photo (right).



### Jeffrey's Goby – *Buenia jeffreysii*

Jeffrey's Goby is a goby found on sandy seabeds, although it tends to like places with some pebbles and shells, under which it hides. Males of this species can have an iridescent blue colour on their dorsal fin and grow up to about 6cm long when fully grown. (Iridescent colours are colours that change in different lights.)

### Red-mouthed Goby – *Gobius cruentatus*

The Red-mouthed Goby is regarded as being rare, although it has now been found in various places around south and west Ireland. It is known from Lough Hyne, Ireland's marine reserve in County Cork, where it is easy to spot from its red mouth!



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# 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. Which marine animal is like a tiny cow with a helmet?
2. From which continent does Giant Rhubarb originate?
3. What presents did Brian Caffery get for his 10th birthday?
4. Where does the falconer Pascal Walsh live?
5. Name the fish that Paul Kay photographed in a bottle.
6. What type of nut is mentioned in the Seafood Roast recipe from BIM?
7. What is "hot" in the Svalbard seed bank in the Arctic?
8. In which month did Donie find a red berry on a holly tree in Baltimore?
9. What is the Irish name for the House Fly?
10. When the Bird Atlas Survey is completed it will provide valuable information on the state of our birds. True or false?
11. Which invasive species spread from the Caspian Sea in the 17th century?
12. Which rare goby is known to be found in Lough Hyne Marine Reserve, in Co. Cork?
13. For which voluntary organisation does Brian Caffery work?
14. What is the last stage in the life cycle of a House Fly before it becomes an adult?
15. Is Giant Rhubarb related to the rhubarb we eat as a dessert?
16. What type of whale crashed-landed on a boat near Cape Town, South Africa?

Answers: (1) A Limpet (2) South America (3) Proper binoculars and a bird book (4) Farranfore, Co. Kerry (5) Black Goby (6) Pine Nut (7) Chillies (8) June (9) Culi Ti (10) True (11) Zebra Mussel (12) Red-mouthed Goby (13) BirdWatch Ireland (14) Pupa (15) No (16) Southern Right Whale.

## What a Picture!

Have fun with your friends making up a title for this picture of starlings on a telegraph pole.



Courtesy of Robbie Murphy

## Nature Jokes

What did the squirrel say to the walnut?

You're a tough nut to crack!



Why did the fly fly?

Because the spider spied 'er!

What do you get if you cross a pelican and a zebra?

Across the road safely.



What do you give a sick bird?

Tweetment.

What do you get if you cross a cow and a jogging machine?

A milkshake.



Where was the fly when the lights went out?

In the dark.

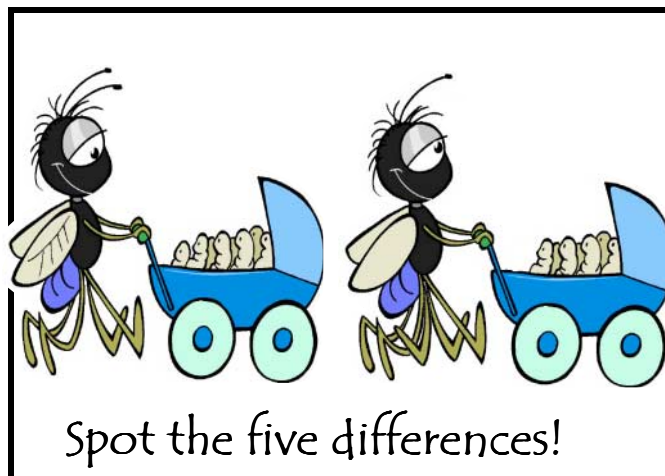
What did the love-struck limpet say to the rock?

I'm stuck on you!



What do you get if you cross a vampire and a mummy?

Something you wouldn't want to unwrap.



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## MOST UNWANTED!

### What is the difference between Native and Non-Native Species?

When the ice began to melt 10,000 years ago, following the last Ice Age, animals and plants migrated over landbridges from the rest of Europe. As the sea levels rose, Ireland was soon cut off and the species of animals and plants that then existed here became known as **native species**. Some of these species, such as the giant Irish deer and the wolf, died out over time, but others survived. Today, species native to Ireland include badger, hedgehog, red deer, otter, Irish oak, birch, hazel, elm, dandelion, buttercup, bluebells and foxglove, to name but a few! When man arrived in Ireland, he started to bring with him animals and plants from other parts of the world. Many of these species have since become established here and are known as **non-native species**. This list is long but includes sycamore, alder, fuchsia, mink, grey squirrels and brown rats. Many of these non-native species have lived happily alongside our native species, however that is not the case for all of them.

### INVASIVE SPECIES

Since people began travelling around the world, they have intentionally or accidentally brought non-native species with them to other countries. These species are now travelling further than they would naturally travel, often finding themselves in environments in which they are able to thrive. With few natural enemies and little else to stop them reproducing over and over again, they sometimes take over their new environments. Eventually, if they are not stopped, they can totally dominate large areas, destroying habitats that are really important for native species, and sometimes destroying the native species themselves. These species are known as **invasive species**. In Ireland, there are a number of organisations working together to help identify and locate these invasive species, as well as finding ways to limit their impact. The four species below are just a sample of the invasive species threatening Ireland's native species:



Courtesy of Benny Masur CC-A 3.0 Unported

#### AMERICAN GREY SQUIRREL

**ORIGIN:** North America. Six pairs were brought from England and released in Co. Longford in 1911.  
**FIRST IRISH RECORD:** 1911  
**FOUND:** Prefers mature woodlands, but also found in urban and rural areas.  
**IMPACT:** Threatens the native Red Squirrel as they out-compete them. Can damage woodlands.



#### RHODODENDRON

**ORIGIN:** Native to Europe and Asia (Spain & Turkey) and came to Ireland as a garden plant.  
**FIRST IRISH RECORD:** Not known  
**FOUND:** Found in gardens and forests throughout Ireland.  
**IMPACT:** Rhododendron form dense growth, making it hard for native plants to grow. Also produces toxins which are poisonous to herbivores.



Courtesy of Robbie Murphy

#### JAPANESE KNOTWEED

**ORIGIN:** Asia  
**FIRST IRISH RECORD:** Not known  
**FOUND:** Along watercourses, transport routes and waste ground.  
**IMPACT:** Has no natural enemies. A strong, rapidly growing plant that outcompetes native plants. Causes damage to tarmac and concrete and can act as a barrier in the movement of wildlife.



Courtesy of USGS

#### ZEBRA MUSSELS

**ORIGIN:** Spread from the Caspian Sea into Europe in 17th century. Thought to have come into Ireland from the UK or the Netherlands on boats.  
**FIRST IRISH RECORD:** 1997  
**FOUND:** Marine habitats, in many northern and western freshwater systems in Ireland.  
**IMPACT:** Eating food of native species, changing native ecosystems, blocking water intake pipes and boat motors.



# Features

Images courtesy of Paul Kay

## Fishy in a Bottle



### By Paul Kay

Gobies are mostly small fish (some are as small as 2cm in length when fully grown) and some can be difficult to tell apart. One particular goby that is usually quite easy to identify, especially from a close up photograph, is the Black Goby (*Gobius niger*). Despite its name it is not often very dark in colour, let alone black! Black gobies are curious little creatures, but, because they are small and probably tasty to other animals, they are careful to make sure that they have a refuge if anything approaches which looks dangerous. Usually this means a crevice in which to hide or a boulder to dart under. A burrow in a sandy seabed will also do, or anything else offering safety.

I was taking photographs of gobies one day when one particular black goby caught my attention. He was on the seabed and looking into an old beer bottle that someone had thrown into the sea. Although it might provide a good hiding place, the goby was rather stout and I doubted that it would actually be able to get into the bottle. As I approached the goby decide to try and sure enough it was a bit of a struggle! But after a lot of fishy tail thrashing and some obvious effort, the fish finally disappeared into the bottle.

I waited because gobies are curious as I've said and, sure enough, a couple of minutes later when I swam over to the bottle, there was the Black Goby peering out

of the bottle at me. It was a good place to shelter from danger. It was also probably easier to swim out of than in, because of the taper of the bottle, which should make

exiting less of an effort.

Since then I've always looked carefully into bottles when I see them underwater and sometimes find that a fish has taken up residence. This is nothing new because Butterfly Blennies (another smallish fish) have been known to lay and guard their eggs inside old Bovril bottles (the older ones especially, because they had a longer neck than today's) for many years.

### A Pretty Picture!

Paul Kay loves taking photographs of marine life, especially those that live underwater. He uses special equipment to keep his camera dry and lots of flashes to light up his subjects! You can check out some of his work on his website [www.marinewildlife.co.uk](http://www.marinewildlife.co.uk)



The Black Goby

Check out "Up Close" on page 12 for more information on gobies.

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# Nature's Noticeboard

## Autumn 2010



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Visit the Sherkin Island Marine Station website at [www.sherkinmarine.ie](http://www.sherkinmarine.ie)



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