

# Nature'sWeb

Issue No. 14

Summer 2009

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## Summer Paradise!



Photo courtesy of Robbie Murphy

On our summer holidays, many of us will stop off on the edge of a National Park or Nature Reserve for a picnic. Eating at a park bench, in a beautiful setting, is a wonderful escape from a car on a long journey. But beyond the park bench is a wonderful world, waiting to be discovered. Many of these parks and reserves have created beautiful walks for both the beginner and the more adventurous walker. In this issue we look at the six National Parks in Ireland and discover why they are so special and who looks after them. Clare Heardman, who is a conservation ranger at the Glengarriff Woods Nature Reserve, also tells us about her working day.

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## Editor's Page

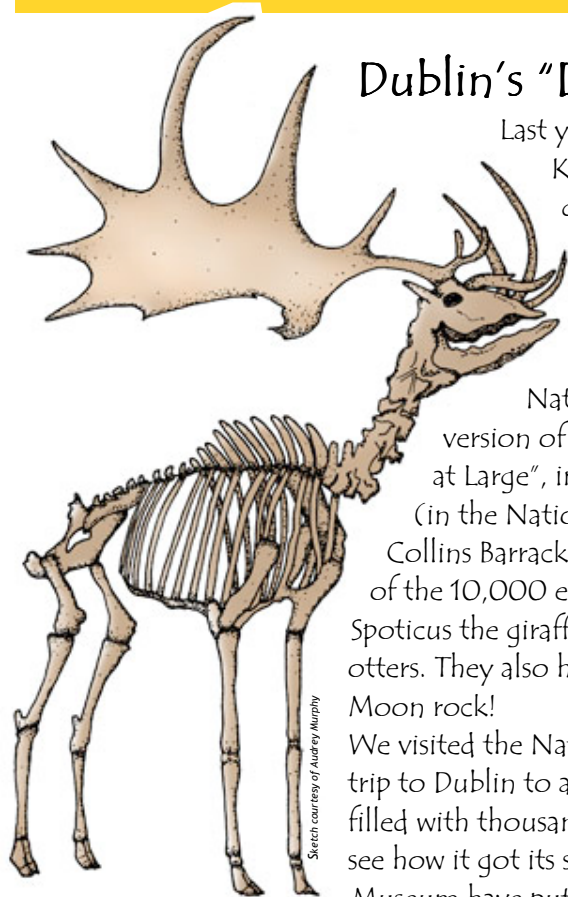
### Dublin's "Dead Zoo" is back!

Last year the Natural History Museum (in Kildare Street, Dublin) had to close its door to make structural repairs to the building and to give the whole museum a make-over.

Unfortunately it will remain closed until 2010 but thankfully the

National Museum has opened a smaller version of the exhibition, called "The Dead Zoo at Large", in another museum across the Liffey (in the National Museum of Arts & History, Collins Barracks). You can now see a wide selection of the 10,000 exhibits again, including a giant deer, Spoticus the giraffe and families of badgers, foxes and otters. They also have a new moose, a zebra and even a Moon rock!

We visited the National History Museum once, on a trip to Dublin to a concert. It was an amazing place, filled with thousands of specimens – all dead! (You can see how it got its scary name!) It's great that the Museum have put on this temporary exhibition. It is definitely something we want to see again!



Sketch courtesy of Audrey Murphy

Giant Irish Deer

### Welcome to the Summer Edition of Nature's Web!

Dear Reader,



Welcome everyone to the summer issue of Nature's Web. This issue we look at National Parks and what makes them so special, as well as looking at the work of Clare Heardman, Conservation Ranger. We check out the Carrot Family and find that the orange vegetable we enjoy at dinnertime has thousands of relatives! Read more about the corncrakes and eels, both of which are in danger, and find out from John Joyce what makes the sea light up at night.

Check out nature news from around the world on page 11 and enjoy a giggle with the jokes on page 13.

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

Susan & Audrey

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#### Foreign Correspondent:

Michael Ludwig

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Photo courtesy of www.bim.ie

## SURPRISE PARCELS!

#### What you need:

- 4 portions tuna, shark or salmon
- Sprigs of fresh herbs - choose from dill, parsley, coriander, marjoram, chives
- Green peppercorns
- 4 tbsps. white wine
- Salt & pepper
- Oil
- 4 large circles of foil paper

Serves 4

#### What to do:

- Place portions of fish on lightly oiled foil
- Scatter herbs and peppercorns on fish, season and pour wine over
- Fold over foil and seal edges
- Place on barbecue and turn regularly during cooking or cook in an oven for 12 - 15 minutes

Brought to you by BIM. For more fish recipes visit [www.bim.ie](http://www.bim.ie)





# Corncrakes

**Latin:** *Crex crex*

**Irish:** Traonach

## Summer Visitor

Corncrakes are visitors to Ireland, travelling a distance of 10,000km from sub-Saharan Africa (Zambia, Mozambique, Tanzania and Madagascar). Coming to Ireland to breed, they arrive during April and leave again in September to return to Africa for the winter. When they arrive here the males hide in long grass and call out their familiar sound to attract a mate. Once they find a mate, the female will lay its first brood in late May and another again in late July. By the time September arrives, the young chicks have grown big enough to fly back to Africa with their parents for the winter.



Corncrakes are famous for their distinctive call. The *crex-crex* sound has been compared with two cheese-graters rubbing together. They are very secretive birds and it is more likely that you will hear their call than see them. When in flight, they look weak and floppy and dangle their legs. They prefer to run through thick cover. Corncrakes are omnivores (see page 5), their diet consists mostly of animal food, with a small amount of plant material.

## Conserving the Corncrakes

Corncrakes were once a very common summer visitor to Ireland but are now threatened with global extinction. Having adapted to nesting in open farmland, the most likely place for a corncrake to build a nest is in a meadow. Due to intensive farming practices, nests were destroyed and corncrakes were driven out of their habitat. This resulted in a huge drop in the population. In Ireland, corncrakes are mainly found in small numbers in a few areas – the Shannon Callows, north Donegal, west Kerry and western parts of Mayo and Connaught. Great efforts are now being made to try and preserve the corncrakes' habitats. Since 1991, BirdWatch Ireland (with funding from the National Parks & Wildlife Service) have been running the Corncrake Conservation Project. They are trying to protect the existing breeding corncrakes by encouraging farmers to sensitively manage corncrake meadows.



## Fact File

**Colour:** Blue-grey colour on the face, neck and breast and a streaky brown back.

**Length:** 27-30 cm

**Diet:** Insects, spiders, invertebrates, seeds and grass.

**Habitat:** Grasslands during the breeding season and winter.

**No. of eggs:** 6-14.



## The Relatives

Corncrakes belong to the Rallidae Family, the same family as Moorhens, Coots and Water Rails. All of these species live in wetland habitats and are more commonly found in Ireland than the Corncrake.

Top left: Moorhen; Bottom left: Coot; Top right: Water Rail.



## Aquatic Life

# Algal blooms and living light...



During the summer, flashes of greenish light appear along the shoreline in the breaking waves, and even under foot on the wet sand. This is due to dense "algal blooms" of tiny living things called dinoflagellates (dino = armour, flagellate = living thread) that flourish in the warm water.

Some species contain poisons, which can build up in filter-feeding shellfish, making them unsafe to eat for a while. Others, like *Noctiluca scintillans* are completely harmless, unless their numbers are so dense that they take all the oxygen out of the water.

The greenish light comes from species like *Noctiluca*, which produce two special chemicals which, when mixed together, glow in the dark. Nobody really knows why these chemicals are produced. Some scientists think it is a defence mechanism that makes any animal eating *Noctiluca* glow in the dark also – making them an easy target for other predators.

### Captain Cockle's Log



Welcome aboard shipmates!  
Together, we'll be taking a look at  
the world's greatest natural  
resource -- the sea!

Words & pictures by John Joyce  
[www.captaincockle.com](http://www.captaincockle.com)  
© John Joyce 2004

## Stop Press

While *Noctiluca* is harmless to humans, some other species of algal bloom are toxic and can cause severe food poisoning from shellfish, such as oysters, scallops and mussels that have been exposed.

The Marine Institute regularly tests both the shellfish and the waters they come from for the presence of any poisonous algal blooms and sends text messages to shellfish producers to warn them of the danger. They also maintain a "Harmful Algal Blooms Database" of all recorded blooms.

Check it out at [www.marine.ie](http://www.marine.ie)

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By Jenna Poole

Every creature in the animal kingdom is a predator of some kind and can be divided into one of three groups according to their eating and food-finding habits – the carnivores, the herbivores and the omnivores. Each of these names has its origin in the old language of Latin, with the “vore” part of each word meaning “to devour” or “to eat”. Then in turn “carni” translates as “flesh”, “herbi” as “vegetation” and “omni” as “everything”, to identify exactly what makes up their diet.



## HUMANS

### Carni-herbi-or-omni-vores?!

Most people would agree that the natural human diet is omnivorous, and that a healthy diet should have a balance of those foods that contain all the essential vitamins and minerals our bodies need. We have incisors and canines at the front of our jaw to help us bite and tear meat, but we have large flat molars at the back that allow us to chew plant matter efficiently as well.

However some people chose an herbivorous diet as vegetarians or vegans, either for health or ethical reasons.

Others such as the Inuits of Canada, Alaska and Greenland have developed an almost completely carnivorous diet due to circumstance. Their natural environment produces little plant matter, though before the days of food transport they would have foraged for roots, berries and even seaweed. They therefore have a very high proportion of meat in their diets, from the animals they hunt and kill themselves.

Nutritionally this high-fat diet may help them keep warm and survive the harsh weather conditions that they experience day-to-day.

# Food for Thought!

## Herbivores

Herbivores are animals that feed on living or dead plants and lower plants (such as fungi, algae and bacteria).

Within this group there are *folivores* that eat only leaves, *frugivores* only fruit, and *granivores* only seeds.

As plant matter tends to be of a lower nutritional value than meat, herbivores need to eat a lot more of it to survive and will spend most of their waking hours devoted to looking for food. On the bright side vegetation is usually more readily available and doesn't run away when you try to eat it!

Plant matter is mostly made up of a compound called cellulose, which is not easily digestible for most animals. Herbivores have adapted to this problem by developing different types of digestive systems, with high levels of internal bacteria and microbes to help to break down the cellulose. Cows for example have several stomachs that help them get the most from all the grass and plants that they constantly graze throughout the day.



## Carnivores

In comparison to herbivores, carnivores eat only the meat or flesh of other animals. Some species hunt live prey, while others eat carrion (the dead bodies of other animals).

Mammalian carnivores have evolved very different teeth to those of herbivores. They have long, pointed canines at the front of the jaw, which together with incredibly strong muscles at the back of the jaw, ensure a strong and deadly bite. They also have specially sharpened pre-molars and molars, known as carnassials that effectively tear through flesh.

Meat is very slow to digest and uses a lot of energy. This is why species such as lions hunt in family groups, share the meal, and often sleep or relax for a long time before their next meal. Large snakes such as the Indian python have been known to last up to 2 years between meals!

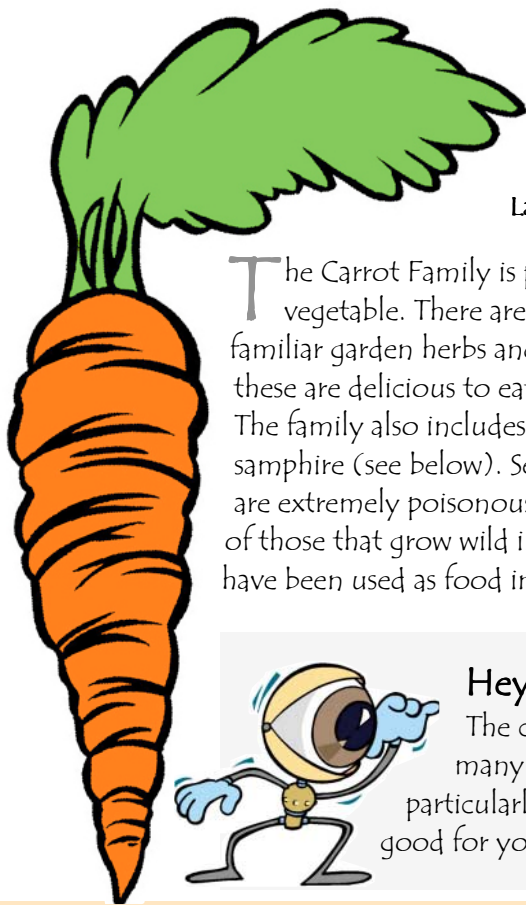
## Omnivores

Omnivores are those species that eat both plant and animal matter. These tend to be known as opportunistic species because they will eat almost anything that they stumble across, especially if their preferred food is scarce.

An omnivore's diet is often affected by seasons, the Grizzly bear for example is known to travel long distances for their favourite food (salmon) but will also forage for insects, grasses, plant roots and nuts along the way. They will also kill any moose, deer or bison that they come across, all before returning to their winter hibernation.







# Carrot Family

Latin Family Name: Umbelliferae

Irish Name: Cairéad

The Carrot Family is probably most famous for the long, orange root that we eat as a vegetable. There are as many as 3,000 species in the Carrot Family, and it includes familiar garden herbs and vegetables such as celery, coriander, dill, fennel and parsley. All these are delicious to eat.

The family also includes many wild flowers such as the wild carrot, hogweed and rock samphire (see below). Several members of the family are extremely poisonous and it is best not to eat any of those that grow wild in Ireland, even though some have been used as food in the past.



Hey, good looking!

The carrot provides us with many vitamins and minerals, particularly Vitamin A, which is good for your eyesight.

### What's in a name?

The mostly white or yellow flowers of the Carrot family are individually small but grouped in domed umbrella-shaped clusters or umbels. It is these umbels of flowers that give these plants their Latin family name - Umbelliferae.



## Wild Carrot

In summer, the Wild Carrot splashes dry grassland with white. It is a hairy biennial\* with tough, erect stems and fern-like leaves. Though most common near and along the coast, it also occurs inland on dry and lime-rich soils. The shop carrot is a cultivated form of this plant, bred for its thick orange roots. (\*Biennial = taking two years to complete its life cycle.)



## Rock Samphire

Rock Samphire is a seaside plant and is hard to confuse with any other Irish wild flower. It is a low-growing, hairless perennial with green to bluish-green leaves, deeply cut into narrow, pointed lobes. It grows in any rocky crevice, even on walls or piers. Despite the plant's strong oily smell, before the 20th century it was prized as a vegetable, and was usually eaten cooked or pickled.



## Hogweed

Hogweed is a coarse, rough-hairy perennial (comes back every year), and is one of the commonest plants of road verges, hedges and rough grassland. It sometimes forms great patches, especially on rich soils on the site of old gardens or farmland. Like several other members of this family, Hogweed has poisonous sap that can blister the skin in sunlight. It has in the past, however, been eaten as a winter green vegetable!



Photos courtesy of Robbie Murphy

Text extracts from "A Beginner's Guide to Ireland's Wild Flowers" by John Akeroyd

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# All in a Day's Work

## Clare Heardman – Conservation Ranger

Clare Heardman works for the National Parks & Wildlife Service (NPWS) as a Conservation Ranger for the Beara Peninsula. She is based in Glengarriff Woods Nature Reserve, Co Cork.



### A Day in the Life of Clare Heardman

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

Yes. I studied Zoology in Edinburgh and then did a project on otters in Nepal. My first 'real' job was on a sand dune system looking at Natterjack Toads. When I moved to Ireland I worked on contract to NPWS for a number of years, mapping sites and writing conservation plans. I became a Conservation Ranger 10 years ago.

#### What is a day in your life like?

Every day is different. I might be at sea counting harbour seals in Bantry Bay or even helping UCC tag seals in Kenmare River. In winter I could be underground, counting bats and in summer looking in attics for the rare lesser horseshoe bat. I also take part in some National surveys e.g. the Bird Atlas and the Butterfly Monitoring Scheme. If I'm not doing survey work, I might be working in one of the two nature reserves I am involved in managing; Glengarriff Woods and Vragh Wood. Or I could be out monitoring one of the 30 conservation sites in my area (Special Areas of Conservation, Special Protection Areas and Natural Heritage Areas). I also assess development applications to see if they will impact on conservation sites. Education is also an aspect of my job e.g. giving guided walks and talks. And then there's always paperwork to be done and reports to be written!

#### What's the best thing about your job?

The fact that every day is different means the job never gets boring. I also love being paid to work in one of the most beautiful places in Ireland. The variety of habitats on

the Beara Peninsula is fantastic: sea, islands, mountains, old oak woodlands, rivers, lakes, blanket bog, rocky seashores and more. Successful projects also create a real buzz. For example, in Glengarriff Nature Reserve we dug a new lake to benefit a very rare dragonfly, the Downy Emerald. Within 3 years the dragonfly was found breeding at the lake. And last winter, we had up to 70 rare lesser horseshoe bats using a new hibernaculum (winter roost) we had constructed the previous year.

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

I hate to see hillsides being burnt illegally (i.e. between 1<sup>st</sup> March and 31<sup>st</sup> August). It leaves a trail of destruction in its wake, destroying the nests of ground-nesting birds and killing small animals such as lizards and voles.

#### Where does your work take you?

My work takes me all over the Beara Peninsula from mountain top to offshore islands. Sometimes I join other Rangers eg. counting seabirds in their area or travelling all west Cork at night doing a hare or bat survey. I also travel further a field to attend training courses and meetings. Once I was even lucky enough to go on an exchange trip to Hungary for a tour of the National Parks there.

#### Do you work alone or as part of a team?

Often I work alone, but there is a great team around me. There are other Conservation Rangers covering neighbouring areas plus a District Conservation Officer. The team also includes three General Operatives who do all the hard work in Glengarriff Nature Reserve i.e. removing invasive Rhododendron and building footpaths.

#### What would you say to someone wanting your job?

It's very tough at the moment because the recession means that the posts are not being filled. However, in preparation for

when things get better it would be important to do a relevant third level course and also get some practical experience e.g. by volunteering in one of the National Parks.



Photos courtesy of Glengarriff Nature Reserve

**Top:** Wood and mountains in Glengarriff Nature Reserve.  
**Above:** The new lake at the Nature Reserve.  
**Left:** A tagged grey seal.



# Wordsearch



## Nature's Web Summer 2009 Wordsearch

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

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

**SOLUTIONS:** (Over,Down,Direction) Algal bloom (12,4,SW) Ballycroy (5,9,NE) Burren (2,6,NE) Carnivore (16,9,N) Carrot family (1,1,S) Clare Heardman (18,15,NW) Connemara (2,1,SE) Corncrake (11,16,W) Crab-eating macaque (17,1,SW) Earth Observatory (17,12,W) Eels (11,9,E) Glenveagh (17,2,S) Herbivore (10,11,NW) Killarney (6,13,E) Mobile library (18,13,N) Museum (13,8,N) National Parks (3,14,E) Omnivore (9,1,SW) Robo Croc (16,15,W) Wicklow (12,7,NW).

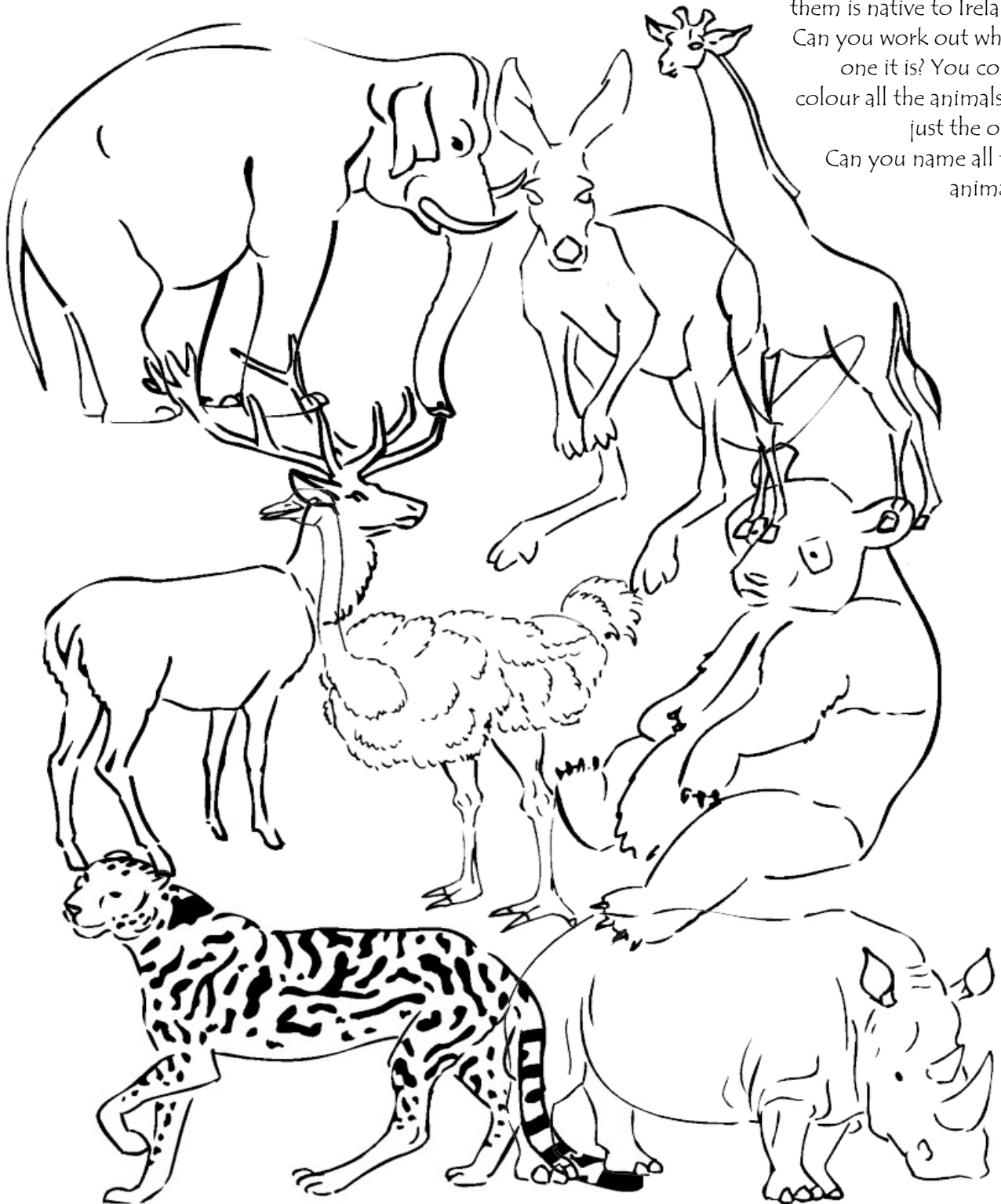
Algal Bloom  
Ballycroy  
Burren  
Carnivore  
Carrot Family  
Clare Heardman  
Connemara  
Corncrake  
Crab-eating Macaque  
Earth Observatory  
Eels  
Glenveagh  
Herbivore  
Killarney  
Mobile library  
Museum  
National Parks  
Omnivore  
Robo Croc  
Wicklow





# Odd One Out

In Ireland's National Parks there are many different animals to be found. Jumbled in the box below are drawings of eight animals, but only one of them is native to Ireland. Can you work out which one it is? You could colour all the animals or just the one! Can you name all the animals?



Killarney National Park is home to Red Deer.

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# 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

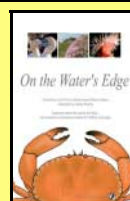


Only €8.50 including postage

## 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.

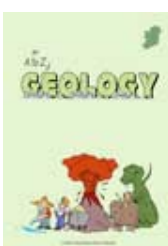


Only €8.00 including postage



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.

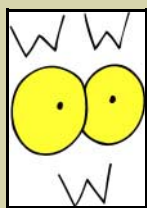


"An A to Z of Geology" explores the fascinating world of rocks and geology - a world of volcanoes, tsunamis, earthquakes, diamonds, gold and even dinosaurs! Produced by Sherkin Island Marine Station, in association with the Geological Survey of Ireland, the book aims to highlight the importance of geology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

"Dead Zoo", Natural History Museum: <http://www.museum.ie/en/exhibition/the-dead-zoo-at-large.aspx>

Corncrake: [www.corncrake.net](http://www.corncrake.net) <http://www.birdwatchireland.ie/Default.aspx?tabid=311>  
<http://www.ipcc.ie/infocrexcrex1.html>

Algal blooms and living light: <http://www.marine.ie/home/services/operational/phytoplankton/>  
<http://www.sdnhm.org/kids/lightsalive/index.html>

Herbivores, Carnivores & Omnivores: <http://www.nhptv.org/Natureworks/nwep10.htm>

Carrot Family: <http://www.floralimages.co.uk/apiaceae.htm>

Glengarriff Nature Reserve: <http://www.npws.ie/en/NatureReserves/Cork/GlengarriffWood/>

Earth Observatory: <http://earthobservatory.nasa.gov/>

Crab-eating Macaque: <http://news.bbc.co.uk/2/hi/asia-pacific/7940052.stm>

Mobile Library: [http://www.nytimes.com/2008/10/20/world/americas/20burro.html?\\_r=1](http://www.nytimes.com/2008/10/20/world/americas/20burro.html?_r=1)

"Robo Croc": <http://www.telegraph.co.uk/news/worldnews/northamerica/usa/5012080/Robo-Croc-the-crocodile-has-reconstructive-surgery-after-car-accident.html>

National Parks: <http://www.npws.ie/en/> <http://www.nationalparks.gov.uk/> <http://www.nps.gov/>

Eels: <http://www.fishbase.org/Summary/SpeciesSummary.php?ID=35>

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

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# The World Around Us



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

## Observing the Earth

NASA is celebrating the tenth anniversary of the launch of its Earth Observatory. Over the ten years NASA has been providing satellite images of the Earth, telling the story of our planet and helping scientists to understand it better. For the anniversary they have pulled together a series of images showing how the planet has changed over the decade. They include forests, oceans, human landscapes, and even the Sun! You can even see amazing animations showing the patterns of various everyday events including changing land and sea surface temperatures, vegetation cover, cloud cover and snow falls. Check out these images and animations on their site:

[www.earthobservatory.nasa.gov](http://www.earthobservatory.nasa.gov)



Photo courtesy of NASA

Though this looks like a patchwork quilt, it is in fact a satellite view of agricultural fields in Kansas, USA!

## A Mobile Library with a Difference!

Libraries are wonderful places, allowing readers to borrow books for only a small annual charge. Most towns in Ireland have a library, and those that don't are often visited by a mobile library. However, not every country is as lucky. In La Gloria, Colombia, a man named Luis Soriano wanted to provide a portable library for people living in remote villages in the surrounding area. A primary school teacher, Luis was always fascinated by books and he could see how important reading was to children and how it could improve their lives. So he began a mobile library, distributing books on the backs of two donkeys - Alfa and Beto! The library started with 70 books and he would travel out to the villages every weekend to lend books and read to the children. When people heard about his work, books and money were donated and his collection of books then grew to 4,800. A small library is being constructed near his home and he hopes to finish it when more funds are available. Meanwhile, Luis still continues to run his portable library with the help of Alfa and Beto!

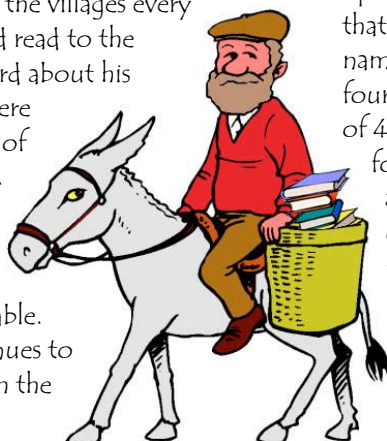


Photo courtesy of CC-A-SA 2.5 Chris Huh

## The Crab-eating Macaque.

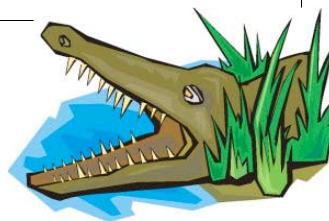
observed this behaviour at a shrine in Lopburi. There, crab-eating macaques were also observed spending twice as long flossing when their young were watching, suggesting that the adults were also teaching them

## Monkeys Flossing with Human Hair

To keep our teeth clean and avoid cavities, we must brush them every day. Not only this, dentists also encourage us to floss regularly. But humans are not the only species that do this. Would you believe there are monkeys in Thailand that floss their teeth using human hair! Scientists

## Florida's "Robo Croc"

Veterinary surgeons in Florida, who operated on an American Crocodile that had been run over by a car, named it "RoboCroc", because of the four steel plates inserted in its skull. Kept in place with the help of 41 screws, the plates were inserted after the crocodile was left for dead with traumatic injuries, including a crushed skull and a fractured body. The crushed skull meant it couldn't eat and would have starved to death if the vets hadn't performed the face reconstruction. Though the surgery was an amazing success, it was still not enough to save the crocodile's life and he died two weeks later. However, what surgeons learnt by doing the ground-breaking surgery may help other crocs in the future!



# IRELAND'S NATIONAL PARKS



## Killarney National Park

South and west of the town of Killarney in Co. Kerry is an expanse of rugged mountainous country. This includes the McGillicuddy's Reeks, the highest mountain range in Ireland which rise to a height of over 1000 metres. At the foot of these mountains nestle the world famous lakes of Killarney. Here where the mountains sweep down to the lake shores, their lower slopes covered in woodlands, lies the 10,236 hectare (26,000 acres), Killarney National Park. The distinctive combination of mountains, lakes, woods and waterfalls under ever changing skies gives the area a special scenic beauty.

## Glenveagh National Park

Glenveagh National Park lies in the heart of the Derryveagh Mountains in the north-west of Co. Donegal. It is a remote and beautiful wilderness of rugged mountains and pristine lakes. The 16,000 hectare Park consists of three areas, the former Glenveagh Estate, including most of the Derryveagh Mountains; to the west, the quartzite hills around Crocknafarragh and to the south, the peatlands of Lough Barra bog, Meenachullion and Crockastoller. Glenveagh is home to many rare and interesting plants and animals and is famous for its fine herd of red deer.



## Ballycroy National Park, Co. Mayo

Ballycroy National Park was established in November 1998. It is Ireland's sixth National Park and is located on the Western seaboard in northwest Mayo. It contains 11,000 hectares of Atlantic blanket bog and mountainous terrain, covering a vast uninhabited and unspoiled wilderness dominated by the Nephin Beg mountain range. To the west of the mountains is the Owenduff bog. This is one of the last intact active blanket bog systems in Ireland and Western Europe and is an important scientific and scenic feature of the National Park.

## Wicklow Mountains National Park

Wicklow Mountains National Park covers part of a mountain range that extends over most of County Wicklow on the east coast of Ireland. The upper slopes and rounded peaks are blanketed with heath and bog. The views are interrupted only by forestry plantations and the winding mountain roads. Fast-flowing streams descend into the deep lakes of the wooded valleys and continue their course into the surrounding lowlands. Over one million people visit the 17,000 hectare park each year. The most visited area is the scenic Glendalough Valley where the ancient monastic settlement of St. Kevin is located.



## The Burren National Park

The word "Burren" comes from an Irish word "Boíreann" meaning a rocky place. The Burren National Park is located in the southeastern corner of the Burren and is approximately 1500 hectares in size. The Park land was bought by the Government for nature conservation and public access. It contains examples of all the major habitats within the Burren: limestone pavement, calcareous grassland, hazel scrub, ash/hazel woodland, turloughs, lakes, petrifying springs, cliffs and fen.

## Connemara National Park

Situated in the West of Ireland in County Galway, Connemara National Park covers some 2,957 hectares of scenic mountains, expanses of bogs, heaths, grasslands and woodlands. Some of the Park's mountains, namely Benbaun, Bencullagh, Benbrack and Muckanaght, are part of the famous Twelve Bens or Beanna Beola range. Connemara National Park was established and opened to the public in 1980. Much of the present Park lands formed part of the Kylemore Abbey Estate and the Letterfrack Industrial School, the remainder having been owned by private individuals. The Park lands are now wholly owned by the State and managed solely for National Park purposes.





# 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 well-known mountains are within Killarney National Park?
- 2 Are algal blooms more likely to happen in warm or cold water?
- 3 How many species are there in the Carrot Family?
- 4 What do crab-eating macaque monkeys in Thailand use to floss their teeth?
- 5 How old is NASA's Earth Observatory this year?
- 6 What sound does the male corncrake make?
- 7 True or false? A herbivore eats meat.
- 8 What is the Natural History Museum in Dublin also known as?
- 9 Name the donkeys that carry Luis Soriano's mobile library.
- 10 Which animal was the odd one out on the "Odd One Out" page?
- 11 In her first "real" job, what animal did Clare Heardman, Conservation Ranger, study.
- 12 What is the world's largest National Park?
- 13 What did the crocodile "Robo Croc" have inserted into his skull?
- 14 What is the meaning of "Bóireann", the Irish word for the Burren?
- 15 Name the sea where eels are born.
- 16 Which vitamin, found in carrots, is good for your eyesight?

Answers: (1) McGillycuddy's Reeks; (2) Warm; (3) 3,000; (4) Human hair; (5) Ten; (6) Cretaceous; (7) False; (8) The Dead Museum; (9) Alfa & Beto; (10) Red Deer; (11) Natterjack Toads; (12) North-east Greenland National Park; (13) Four steel plates; (14) Rocky place; (15) Sargasso Sea; (16) Vitamin A.

## What am I saying....?

Have fun with your friends making up a title for this picture of a Silver Fox.



Courtesy of www.naturespicsonline.com CC-A-SA-3.0 unported

## Nature Jokes

What's small, furry and smells like bacon?  
A hamster.



Have you seen the new fishing website?  
No, it's not online yet.

When is the moon the heaviest?  
When it's full.



What did the summer say to the spring?  
Help! I'm going to fall.

What goes dot, dot, dash, squeak?  
Mouse code.

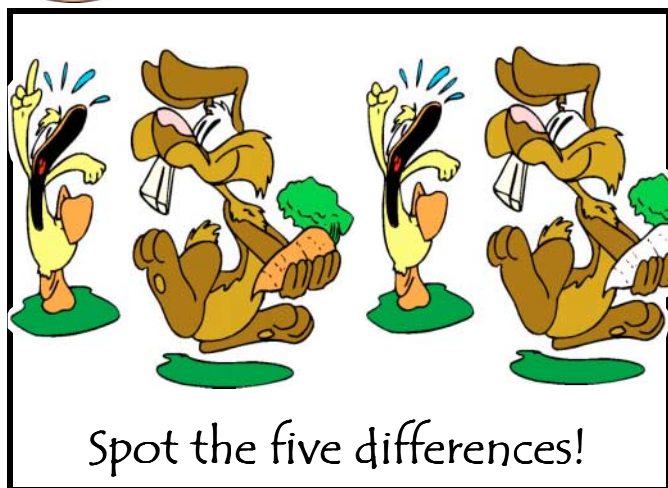


What happened to the leopard who took a bath three times a day?  
He was soon spotless!

What runs but never walks?  
Water.



What followed the dinosaur?  
It's tail.



Spot the five differences!

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## Special Feature

# NATIONAL PARKS

and others important areas

By Gillian Stewart & Mags Flaherty



Torc Waterfall in Killarney National Park

A National Park is a special place that has been set aside for its beautiful scenery, for its wildlife, and as a place for people to enjoy. National Parks are large – even the smallest (the Burren) is approximately 1500 hectares.

In Ireland, we have six National Parks (see page 12). Our first National Park was Killarney, which was established in 1932. Our newest one is Ballycroy in Co. Mayo, which was only set up in 1998.

All our National Parks are owned by the state, which means that we all own them! The National Parks & Wildlife Service looks after them for us. They manage the areas to protect nature and landscapes. This means that future generations will also be able to enjoy these amazing places.

### Park Rangers

There are Rangers all over Ireland, including in the National Parks. They work for the National Parks & Wildlife Service. Their job is to make sure that habitats and wildlife are protected. Clare Heardman a ranger in the Beara Peninsula describes her job on page 7.



We can all visit our National Parks, and they are free! Wildlife comes first, but there are many activities that do not harm nature and that are allowed. Many people use the National Parks to go hill walking, nature watching, or picnicking. Some of the National Parks have a visitor centre or a castle to visit, although you may have to pay to go in.

National Parks are a great place to go and see nature. Whether you are looking for rare pine martens in the Burren, insect-eating sundews in the bogs of Wicklow, or golden eagles in Glenveagh, there is lots of spectacular wildlife to be seen in our National Parks.

### Nature reserves and other important areas



In Ireland, the six National Parks are not the only areas set aside for nature. We also have nature reserves, NHAs (Natural Heritage Areas), SACs (Special Areas of Conservation), SPAs (Special Protection Areas), and more. All of these are areas that are protected by law in different ways and for different things. Nature reserves offer the highest level of protection in Ireland and are smaller than National Parks. Only very special places become nature reserves. NHAs are for habitats, SACs are for habitats and species, and SPAs are for birds.

### The Oldest and Largest National Parks

The world's first national park, Yellowstone National Park, in the USA, was created in 1872. Located in the states of Wyoming, Montana and Idaho, it covers 8,987 square km (898,317 hectares) and is home to a large variety of wildlife including grizzly bears, wolves, bison, and elk. It is also famous for its collection of geysers and hot springs, including one of the most famous – Old Faithful.

The world's largest national park is North-east Greenland National Park, covering 972,000 square km (97,200,000 hectares), and takes in the entire northeastern coastline and interior sections of Greenland. Created in 1974, much of the park's interior is covered by ice, but there are ice-free areas long the coast and to the north. It is home to such animals as polar bears, musk ox and walrus.



The Old Faithful geyser in Yellowstone National Park.



North-east Greenland National



# Conservation



**European Eel**

Latin: *Anguilla anguilla*

Irish: Eascann



The journey a young eel makes from the Sargasso Sea to Ireland.

## Eels

By David Crestin

The European eel is found along the coasts of the eastern Atlantic Ocean from Greenland right down to Morocco on the northwest coast of Africa. The American eel (*Anguilla rostrata*) lives in similar habitats in North America, from Newfoundland south to the Gulf of Mexico and several of the Caribbean Islands. Both species are extremely useful fishes as food for both humans and other fishes. As human food, however, it is much more important in Scandinavia and mainland Europe than in North America.

The life cycle of the eel is perhaps one of the most unusual and interesting of all fishes. In Europe and North America each autumn, adult eels

between six and thirty years old travel downstream from rivers and streams and leave estuaries to enter the ocean. Once they enter ocean water their reproductive organs start to fully mature while they swim across the Atlantic Ocean to where they were born in the Sargasso Sea, south of Bermuda. For an eel from Ireland, that's more than 3,000 miles. When they reach the Sargasso Sea, the females cast their eggs and the males their sperm in huge numbers directly into the ocean water. The number of eggs from a female eel ranges from five million to twenty million, depending upon her size, which varies a great deal. Females, on average are between 24 inches and 36 inches long, with some up to 48 inches long. Generally they are larger than males, which are mostly shorter than 24 inches.

After the eels shed their eggs and sperm they will die and are either eaten or

### Saving the Eels!

There is such concern about eel stocks in Ireland that the Government have banned the fishing of eels. It is hoped this measure, together with improving water quality in eel habitats, safeguarding their upstream routes and researching how they are affected by hydropower plants, will help increase the stocks again.



begin to decompose and sink into deep ocean waters. They have done their job. Adult eels swim across the ocean and spawn only once in their lives. But this process gives rise to a most fantastic fish story, for the baby eels that emerge from the eggs must somehow find their way across the Atlantic Ocean to enter Ireland's rivers and streams as their parents had done for thousands, if not millions, of generations.

### From larvae to elvers to eels!

After an eel egg hatches, the baby, or larva, is only 5 or 6 millimetres long. It is flat and transparent, like clear glass. While each can flip and flop about in the ocean water, their main movement results from drifting in the Gulf Stream right across the ocean. It takes larvae between seven and eleven months to make the trip to Ireland. All during the trip, they are feeding on tiny plants and animals called plankton, and growing until when about two or so inches long their flat bodies become round and their skin takes on colour from yellow to dark brown as they reach coastal waters in spring. It is during the spring and summer that the young elvers enter fresh water where they will grow for years before starting their own spawning migration process.



Counting elvers stocks.

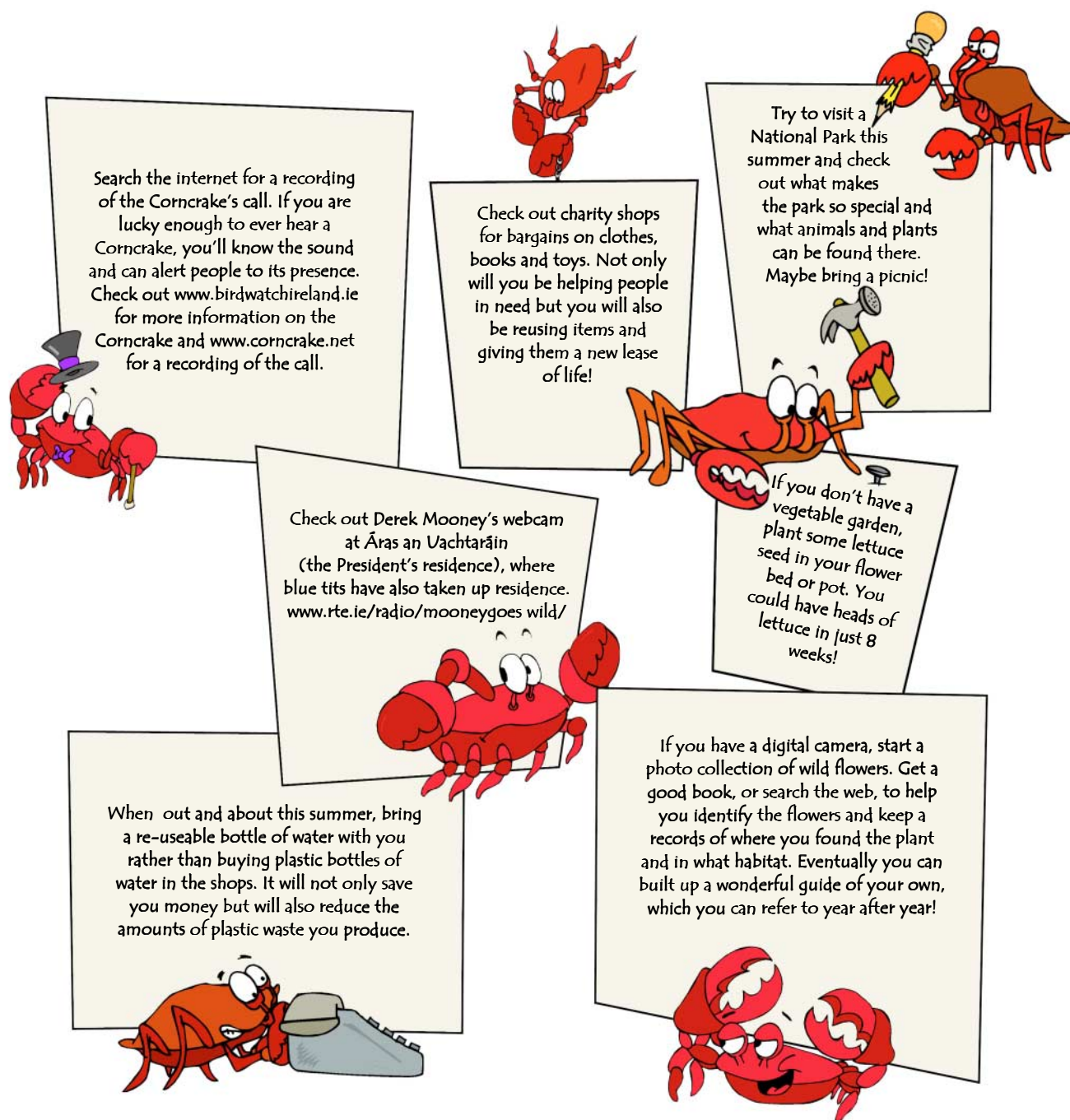
Courtesy of David Crestin

David Crestin helps count elver stocks as a volunteer with the Harwich Conservation Trust in Massachusetts, USA. ([www.harwichconservationtrust.org](http://www.harwichconservationtrust.org))

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# Nature's Noticeboard!

## Summer 2009



Search the internet for a recording of the Corncrake's call. If you are lucky enough to ever hear a Corncrake, you'll know the sound and can alert people to its presence. Check out [www.birdwatchireland.ie](http://www.birdwatchireland.ie) for more information on the Corncrake and [www.corncrake.net](http://www.corncrake.net) for a recording of the call.

Check out charity shops for bargains on clothes, books and toys. Not only will you be helping people in need but you will also be reusing items and giving them a new lease of life!

Try to visit a National Park this summer and check out what makes the park so special and what animals and plants can be found there. Maybe bring a picnic!

Check out Derek Mooney's webcam at Áras an Uachtaráin (the President's residence), where blue tits have also taken up residence. [www.rte.ie/radio/mooneygoeswild/](http://www.rte.ie/radio/mooneygoeswild/)

If you don't have a vegetable garden, plant some lettuce seed in your flower bed or pot. You could have heads of lettuce in just 8 weeks!

When out and about this summer, bring a re-useable bottle of water with you rather than buying plastic bottles of water in the shops. It will not only save you money but will also reduce the amounts of plastic waste you produce.

If you have a digital camera, start a photo collection of wild flowers. Get a good book, or search the web, to help you identify the flowers and keep a records of where you found the plant and in what habitat. Eventually you can build up a wonderful guide of your own, which you can refer to year after year!

Sherkin Island Marine Station would like to thank *PharmaChemical Ireland* for their support in making this newsletter possible. We would like to thank those who have contributed to this newsletter especially David Crestin, Mags Flaherty, John Fraher, Clare Heardman, John Joyce, Michael Ludwig, Robbie Murphy, Declan O'Donnell, Jenna Poole, Gillian Stewart and Jez Wickens.



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