

FOCUS ON PUFFINS

SUMMER ACTION PLAN POLLINATORS

> MAKE A MINI-POND





Welcome!

Welcome to our summer edition!

Long days and short nights... and school holidays! What more could you want?

"Well a few summer trips", I hear you say.

We have that covered too! Why not make a special excursion to see wonderful birds like Puffins. See inside for all the info you will ever need.

All around us you will hear and see the sounds of summer. Not just birds, but the countless whirring wings of busy insects, our most important pollinators. Get closer to bees and dragonflies.

And why not get gardening? You can then help yourself to some home grown delicious crops like strawberries and raspberries, and you will be doing your local bee population a favour too! To help you plan a great summer outdoors, why not check out the events below? They are all geared towards families, so just pack a picnic, a notebook, a camera (phone) and your binoculars.



The rare Great Yellow Bumblebee

And do let me know how you get on this summer. We always look forward to our bird detectives' reports.

Shelduck Holmes

Editorial Address: Bird Detectives, Unit 20, Block D, Bullford Business Campus, Kilcoole, Greystones, Co. Wicklow, A63 RW83.

Edited by Oran O'Sullivan, with special thanks to our contributors this issue: Brian Caffrey, Niall Hatch, Stephen Newton and Ricky Whelan. Design by Michael O'Clery.

Cover pic: Puffin by Andrew Kelly.

Events in Summer 2017

Bird & Biodiversity Events in the Phoenix Park 2017

Gardening for Birds and Wildlife Sunday 18th June, 2pm.

Badgers, Bats and Nocturnal Birds Wednesday 12th July, 9pm.

Meeting at the Phoenix Park Visitor Centre. Booking necessary, through the Phoenix Park Visitor Centre, Phone 01-6770095.



Rose Festival 15th & 16th July

Part of the Dublin City Urban Birds Project, in partnership with Dublin City Council, come visit us at the biodiversity village at St. Anne's Park Annual Rose Festival. Interactive displays, and guided walks and talks.

www.dublincity.ie



Cliffs of Moher Seabird Festival 19th to 23rd May

Join us to marvel at the spectacle of 60,000 breeding seabirds found at the Cliffs of Moher, Co. Clare. Events take place every day at the Cliffs of Moher Visitor Centre. For more information see www.cliffsofmoher.ie/seabirdfestival

Seabird Viewings with BirdWatch Ireland Guides

From the south platform; 19th to 22nd May, Also 9th to 11th June and 23rd to 25th June. 10am to 4pm each day.



Background image: Oilseed Rape in full bloom, Co. Wicklow, by Oran O'Sullivan



Liam's interest in wildlife started from an early age

My grandad lent me his

brilliant binoculars for

Killarney. I'm trying to

spot a sea eagle!

All photos: Ricky Whelan

Bird Detectives interviews Liam McPartlin

Hi Liam! Tell us how you first became interested in birds and wildlife.

I became so interested in wildlife when I got a David Attenborough video (not a DVD!) It showed gorillas and Humpback Whales. I loved the way Attenborough spoke about the animals. I think I was around four years old.

Tell me about your magazine "Wild Times" and why you started producing it.

I started my magazine because I wanted to share my love of wildlife with kids and adults. It is a little magazine with a quiz, a word search and a colouring page. It usually has information about four animals unless it is a



special like a bird, mammal or reptile, then I would add one extra animal.

What is the biggest threat to wildlife in Ireland do you think? I think rat poison-

ing is the biggest threat to Irish wildlife as it

can't really be stopped like hunting. We don't know how to stop it either which isn't good.

What was your best wildlife experience?

My best wildlife encounter was in the Pyrenees in France. We went on a ride through the Pyrenees

called *The Little Yellow Train*. We went through a tunnel and into this valley where everywhere you looked you would see a bird of prey flying over the train or beside the train. I think we saw pretty much every raptor there is to see in the Pyrenees including a Golden Eagle, a Red Kite and a Peregrine Falcon. It was amazing.

What's your favourite species and why?

My favourite species in general would be the Gyr Falcon. I love this animal because its

white coat makes it the falcon that stands out the most. I love its hunting technique as well. Like the Peregrine Falcon, it stoops at very high speeds.

Who is your wildlife hero and why?

My favourite wildlife enthusiast is either Steve Backshall, who does the kids' show *Deadly 60,* or David Attenborough. I find both men very interesting and Steve is so excited by everything he sees.



Bird watching on the Little Yellow Train in the Pyrenees



Dolphin Watching off Loop Head

Using just a few tools and materials, you can make a mini wildlife paradise!



Introducing new places for wildlife to live in your garden is a great way of attracting new wildlife visitors. Making a mini wildlife pond will create a habitat for amphibians such as frogs and newts as well as a lot of aquatic insects such as dragonflies. It will also provide a place for wildlife to have a drink. Best thing is, it's easy, and doesn't need to

Mini Po

Makea



take up a lot of room!

You will need a spade, an old basin or waterproof tub, some stones, sand or gravel and of course water.

'How to' steps:



1. Choose your location. The pond should be placed in a quiet corner of the garden where animals won't be disturbed often.

2. Mark the dig area by placing the tub on the

ground and trace the edge

using the spade to mark the ground.



3. Dig the hole in the shape of the tub and make sure it's deep enough that the edge of the tub sits level with the soil around the top.

4. Position your tub and make sure it sits level or else the water will pour out!



All photos this page: O.O'Sullivan

6. Fill your tub up to the edge with water (use rain water if you can). The water may need a day or so to settle and clear so don't worry if it seems murky at first.





7. Use a stick or some slate to make a ramp for animals to climb out of the water. Occasionally animals like shrews might stop by for a drink and accidently fall in.

The ramp will allow them to get out safely.

8. Sit back and wait for wildlife to find and colonise your new wetland habitat.



Make sure to keep your mini wildlife pond topped up with water, especially in the summer. Rain water is always best.



A member of the auk family, the unmistakeable Puffin

FACT FILE

lrish name Puifín

Latin name Fratercula arctica

Wingspan 47–63 cm

Average weight 459–600 g

No. of eggs Only 1 each year

Incubation of eggs 39–45 days

Fledgling period About 34 to 50 days

World breeding population 4,770,000-5,780,000 pairs

Puffin – dressed to impress

Irish breeding population c.21,000 pairs, in 8 counties. Co. Kerry hosts nearly half

the total

Food

Sandeels, small fish

Nest

In a burrow on offshore islands

Threats

Ground predators such as Brown Rats & Mink, gulls, marine pollution, climate change

Everyone knows Puffins

Standing stiffly upright in social groups on cliff tops, Puffins dress to impress, with the appearance of a dinner suit topped by a rainbowstriped cone of a bill. For good measure, these

rotund little birds have dark eyes adorned with bright linings, complementary bright orange feet, and short legs, perfect for a waddle around the entrance of a sandy nesting burrow.

Along with the Barn Owl and perhaps the Robin, Puffins are perhaps the most recognised of birds and are much loved. We often give them human and other qualities, and descriptive names such as, 'Clown' or 'Sea Parrot'.

Yet, despite their instant appeal and recognisability, we still have lots to learn about how and where Puffins live, especially in winter. This is not really surprising as they spend much of their lives at sea (8 months each year) and when they reach land, it's down into a dark, deep burrow to breed and rear a family.

Population

There are probably over half a million pairs in the world, all in the North Atlantic. The biggest colonies are in the Faeroes (550,000 pairs), Norway (1,500,000 pairs), and Iceland (2,500,000 pairs!). Britain supports around 560,000 pairs, while in Ireland we have approximately 21,000 pairs. The main colonies in Ireland are Puffin Island, Skellig Micheal and Inishtearaght in Kerry, the Cliffs of Moher in Clare, the Stags of Broadhaven in Mayo, Tory Island in Donegal, Rathlin Island in Antrim, Ireland's Eye in Dublin and Great Saltee Island in Wexford.

BIRD DETECTIVES 5

Best places to see Puffins?

East coast A small number of birds can be seen on the north slope of **Ireland's Eye**, off Howth Harbour in Co. Dublin.

West coast A boat trip to **Skellig Michael** is an experience of a lifetime – thousands of tame Puffins, the ancient monastery, VERY dramatic scenery AND Ireland's largest gannetry, the BirdWatch Ireland Reserve, Little Skellig).

For those not fond of sea crossings, plenty of Puffins can be seen at the **Cliffs of Moher, Co. Clare**, easily the best mainland site to view Puffins.

And when? May to July (it's very hard to see Puffins from August onwards).



Most of their lives spent far out to sea, or in a burrow!

Nesting and behaviour Puffins nest underground in burrows on soilcovered slopes. Puffins are able to dig their own

burrows, but also make use of those dug by rabbits or Manx

Thomas McDonnell

Shearwaters. But before any of that sort of activity starts, Puffins, having spent eight months at sea, have to overcome their fear of land. The first birds to arrive at colonies in early April spend most of the time on the sea looking up at the cliffs and slopes beyond. It is here, on the water, that pairs reform and there are rather touching sessions of well, bill touching, or 'billing', before they gather the courage to re-explore their burrows.

The single egg is laid in May and incubated in turns by both birds for about 5-6 weeks. It is only after the chick hatches in June that Puffins can be seen with multicoloured beaks full of fish before entering their burrows.

The chicks are black 'fluffballs' and grow rapidly as long as a decent supply of sandeels or other suitable prey fish is available close to the colony. Puffins have an unusual approach to fledging their young. Basically, the chicks are 'overfed' in the burrows, i.e., to a weight in excess of what they will actually fledge at, before the parents desert them and then, over a week or so, they slim-down, get hungry and under the cover of darkness in

late July or August head off to sea on their own. Some may walk, others flutter and jump down the cliff slopes on the way to their maiden flight. This journey can be hazardous and many become the prey of large gulls and Great Skuas.

Predation

Rats have colonised many of our seabird islands, arriving as stowaways onboard boats. Burrownesting seabirds on offshore islands cannot breed successfully if there are rats present as they will eat eggs and chicks. Another threat has presented itself on our seabird islands recently – American Mink – an escaped and unwelcome predator has been seen on Puffin Island, County Kerry, a BirdWatch Ireland reserve. Programmes targeted to clear rats from islands are very effective in rescuing populations of Manx Shearwaters as well as Puffins.

Movements and migration

Where do Puffins go after nesting? They are not in the Irish Sea in winter, and after September very few can be seen from Atlantic headlands. On the basis of a few sightings and occasional ring recoveries, it was thought many Puffins nesting on the Isle of May (in the North Sea, off Edinburgh) dispersed into the central North Sea.



Juicy

sandeels

New technology has recently revealed an amazing story. The 'technology' in this case is tiny geolocator tags which are attached to the Puffins' legs. It turns out that most birds used the North Sea to some degree in winter months, and that many made a 'migration movement' around the north coast of Scotland and spent a fair amount of time WAY out in the Atlantic, well off the Irish west coast.

We still have so much to learn about Puffins

Threats to Puffins

At sea, Puffins are exposed to all the potential mishaps and problems that can occur in often stormy waters. Also, pollution from oil is still a great threat, not necessarily from shipwrecked oil tankers as much as ships flushing out the remains of oil-based cargos at sea. And when they come to land to breed they face another set of threats.

The biggest threat to Puffins is probably a shortage or complete lack of suitable food. They rely on sandeels for survival and, unfortunately for Puffins, this cold water prey is shifting its distribution in the North Atlantic sea as warmer, sub-tropical water presses northwards, This also affects the cold water plankton that sandeels prey

on, so specialised feeders up the food chain, such as **Puffins and Arctic Terns** are badly affected.

Some colonies closer to home have fared better, where other prey such as sprats are an available alternative. Progress has been made in protecting the sandeels from over-

fishing, but the sandeels themselves have disappeared altogether from some traditional sand banks due to the change in sea conditions. In 2007, the Puffin colony on Skellig Michael 'failed'. Adult birds started to bring in Snake Pipefish (long, thin and bony fish) to feed their chicks. These were too difficult for the young to swallow and eventually the parents deserted their rather malnourished chicks, which hung around the entrances to their burrows waiting

nake Pipefish - no much nourishmen^t for a young Puffin

for better quality food (i.e. sandeels) to appear. It never did, and so few of the 2007 young made it to sea. In 2011, the Puffins were having a much better year. The Pipefish had gone but a new fish species made an appearance - the Garfish (or Skipper – they are very similar). These have not been recorded in Puffin diets before and we don't yet know the effect this might have on Puffins in Ireland.

Finding out more about all these issues pollution, change in diet, change in ocean currents, and clearing rats and mink from islands – is time-consuming and requires lots of people and money. Given the richness

of our seabird islands, this is a price we must pay!

Woah! Puffin Island Puffir colony, in the foreground, the Skelligs in the distance .

BIRD DETECTIVES

Sheld.Uck Holmes

Fish for dinner

Puffin

Clear

Check out that bill!







BIRD DETECTIVES 9

SAR Summer Action Plans Planting for the Pollinators

Insects of all sorts carrying out a vital job - pollination

Busy bees

Have you noticed bees around your house or school? Did you notice that they are usually around or near plants that have flowers in full bloom?

They are looking for food, both for themselves and for baby bees, called **larvae**. The adult bees sip **nectar** from

the plants. It is sweet and sugary and gives them lots of energy. They also collect a powder called **pollen**. This is where the bees make a great trade with the plants because by moving pollen from flower to flower, the plants can set seed, which means they can make new plants. Which means more nectar for the bees!

Honeybee on early flowering Aubrieta

Extra pollen that sticks to the hairy underside of the bee is rolled up in a ball and brought back to feed the baby bees in the nest.

To survive and grow, many plants depend on bees to pollinate their flowers. Fruit such as apples, pears, strawberries, tomatoes and blackberries which

we like to grow and eat, all depend on bees for pollination. So do important crops such as Oilseed Rape and Clover. How would those huge yellow fields of Oilseed Rape fare if there were no bees to pollinate them?

Who are the pollinators?

The main pollinators in Ireland are: Bees Hoverflies Butterflies and Moths Flies Clovers: M.O'Clery Small Tortoiseshell pollinating Blackberries

Summer Action Plan

What can we do to help bees? M.O'C We know that bees need flowers, so try to plant a wide selection of plants that will provide flowers in as many

months as possible.

Get planting!

Early-flowering plants Heather, Snowdrop, Crocus, Lenten Rose.

Early-flowering shrubs and trees Willow, Hazel, Blackthorn, Broom, Firethorn.

Late flowering plants Japanese Anemones, sedums.

Late-flowering shrubs Viburnum, Winter Jasmine, Winter Honeysuckle.

> Summer Action Plan Out with the pesticides!

Put that spray away! You can't have bees and other beneficial insects if you spray. Let the birds do the job for you. Blue Tits, Spotted Flycatchers and Robins, as well most other songbirds, will feed themselves and their hungry young on insect prey from the garden.

Blackthorn hedgerow

10 BIRD DETECTIVES

1. 1. 1. 1. 1. 1.

A field full of Oilseed

Rape needs lots of

pollinators

Did you know? We need to thank some very special pollinators!

Chocolate comes from the seeds of the small Cacao Tree, which grows in tropical South America, and their flowers are pollinated by MIDGES... Thank-FLY for that!

If your friends mention that **bananas** come from a banana tree, you can tell them, "It's not actually a tree, it's a HERB!" Also, the banana bunches don't hang down, they grow UPWARDS. And it's fruit bats which pollinate the banana flowers! Let's hear it for Banana-flavoured ice cream sundaes!

ore food for insects means more insects for pollination

Summer Action Plan Provide nest sites and shelter

inhk, Wiki Commons

'Bug hotels' and stacks of hollow

bamboo canes, cut and arranged in a simple frame, provide homes for Solitary Bees. Old logs arranged in a pile provide a habitat as the wood breaks down and insects thrive on the rot!

Yummy

chocolate.

Thank

you,

midges!

on



O.O'Sullivan

O.O'Sullivan

Summer Action Plan Plant in groups or clumps

The best way to encourage bees and pollinators is to group or clump a type of flower or shrub in one spot, rather than spreading them about randomly. It looks better too!



Summer Action Plan Plant different shaped

flowers and colours

More shapes mean more bees. Bell-like flower shapes, like Foxgloves, are classic for foraging bees. Different colours from the spectrum attract bees, especially, blues, purples and yellows.



The Bigger Picture

Just as we expect huge crop fields to feed us all, we need to scale up how we can provide for the pollinators, such as bees, in the wider countryside.

Anton Croos Wiki Commons

Action The Bigger Picture Hold on to your hedgerow!

Native species such as Blackthorn and Hawthorn have a traditional place in the landscape. And for good reason. They provide flowers for insects in summer and, later in the year, berries for birds, as well as shelter for nesting.

Hawthorn

Yummy

bananas.

Thank you,

fruit bats!

Action Grow and sow

Think of all the strips of grass along roadsides and driveways. No need to mow! Save time and fuel and let them grow and be colonised by wildflowers and provide a home and larder for bees and insects. Kestrels and

er Buzzard

Buzzards are especially fond of unmown grassy areas which provide great hunting areas for mice and voles!

Action Habitat buffers

An area of undisturbed habitat under hedges and left around the edges of fields provides a network, or corridor, for wildlife, including scarce farmland birds such as the Yellowhammer. A small price to pay for the top service.

Yellowhammer BIRD DETECTIVES 1)

O.O'Sullivar

Did you know? Insects can migrate too!

Most insects in Ireland, like our pollinators here, are resident, staying all their lives in one small area. Many more lie dormant in winter, or their pupae or larvae overwinter to hatch the following spring. Amazingly, some insects migrate to Ireland each spring, some from THOUSANDS of miles away! For example, a migrant moth, the **Hummingbird Hawk-moth**, actually flies by day, and can really look like a hummingbird as it whirrs in front of its favourite plants, such as Valarian, all the while searching for juicy nectar. The **Painted Lady**, a

migrant butterfly, travels a whopping 2,000km from North Africa to summer in Ireland.

This Lady has stamina! Painted Lady butterfly

Hoverflies and bees

on Goldenrod

So much life depends on these busy pollinators

Meet the pollinators

Hummingbird

Hawk-moth

Bees/Honey bees

DCoor

There is just one species of honey bee in Ireland. They live in colonies, or **hives**, and are the only species to produce commercial honey from nectar. Honey is stored in the hive as a food larder, and luckily, there's honey for us too!

Bumblebees

20 different types or species of bumblebee occur in Ireland. The queen bees emerge from hibernation in early spring and need to feed immediately and store food before laying eggs in a nest or colony. The larvae are looked after by worker bees.

Solitary Bees

77 species are in Ireland. Solitary by nature and name. The nest is located in a hole or hollow tunnel in wood, where the larvae self-rear by living off a food stash left behind by the adult bee.

Hoverflies and Flies 180 species have been recorded in Ireland. They Bumblebee

0.0'Sullivan Bumblebee shares a

flower with a Small Tortoiseshell butterfly

O.O'Sullivan

Shay Connolly

Solitary bee

Shav Cor

Hoverfly

look like wasps and that's a clever way of protecting themselves from predators. They have a distinct way of feeding, by hovering in front of flowers.

Common Blue butterfly

Silver Y moth, on

sedum flower

For good measure, the larvae prey on pest insects such as aphids.

Butterflies and Moths

Ireland's 34 species of butterfly lead a whirlwind life with four distinct stages to their life cycle: from an egg to a caterpillar, then to a pupa or chrysalis and finally the finished article, the butterfly or moth. Bees can carry more pollen but butterflies cover greater distances.

Small Copper butterfly



What to do if you find a baby bird

We see a baby bird on the ground and we think it is alone, helpless, small, cold, clumsy and fluffy. It's hard to resist the urge to rescue it. But often people intervene when, in fact, most chicks are **fledglings** that should be left alone.

Stop. Think. Is interfering the best thing to do in this situation? We might have the

best of intentions, but taking a chick with you can be a bad thing, as it is messing with nature, and can even make things worse for the chick.

Top tips

If the bird is a fledgling it is best to leave it alone, even if it looks awkward and cute and con't fly properly. Unlease These Wren fledglings may look helpless, but mum and dad are keeping a close eye on them

can't fly properly. *Unless*, in the very rare cases that:

• The bird is bleeding or visibly injured by a cat/car/ window. In that case, call your local wildlife rehabilitator or veterinarian (not a conservation organisation).

• It is in immediate danger (e.g. from a road, or a cat about to pounce), in which case, move it a few metres to somewhere safe (e.g. into a bush off the ground) where the parent birds can still hear or see it. Hand-rearing a bird is only ever the very last resort. It must be done by an expert, and is often not successful.

Paul Higgins

Hand-rearing chicks is always best left to the experts

Wild birds are not pets. Taking them to rear is often illegal.

Only 30% of songbirds survive their first year, but this is a natural strategy so only the strongest survive.

Myth buster

Birds do not abandon their chicks because of how they smell, so if you do have to handle a chick, it's ok!

A bird is better in nature than in your care!

For more advice on injured birds use the internet to find your local wildlife rehabilitator.



Sometimes you really need to intervene!





Spring Alive is a special project that we run with our BirdLife International partners all across Europe and Africa. The idea is to keep track of some of our most widespread migratory birds. So, when you see (or hear!) your first Cuckoo, Swift and/or Swallow of the year, please go to the Spring Alive website (**www.springalive.net**) and tell

us. The website is also full of great

information about bird migration, as well as tips on how you can help these amazing birds to survive their epic journeys.

The more you learn about migration, the more you can help



Swift

Go to www.springalive.net

Helping a helpless chick has to be done carefully

M.O'Clery

Just how old is the chick?

What does the bird look like?

Hatchling (0-3 days old)

• No or few feathers (bald, or partly so)

Eyes not yet open

Can hardly move

It is recently hatched and needs to be in a nest. old)

This tiny, helpless Stock Dove hatchling is only a few days old, and was returned successfully to it's nest

Nestling (3-13 days old)

• Eyes are open

• Some tiny feathers, and maybe in tube-like sheaths

It is young and still needs a nest – "Just put me back in my nest. Let nature do the rest!

A teeny tiny nestling

Fledgling (13-14 days old or older)

• Scruffy, can hop, flutter wings, grip its feet on a perch

• Has feathers (but they may be shorter than normal)

It has left the nest and can almost fly, but its parents are still feeding it – "If I'm a little feathery, leave me be, I've got my mum looking after me."





A scruffy Rock Pipit fledgling before going back in its nest

A special exception

Chicks of the Common Swift are sometimes found on the ground below their nest site, usually in a house or building, and require a slightly different approach.

This fast-flying bird should never touch the ground its entire life. They are not very good at walking either.



Swifts are all dark, with just a slightly paler throat. Swifts need a high platform to take off, so see if you can carefully place them on a high ledge or windowsill and see if they can take off.



Unfortunately, despite

our best efforts sometimes chicks do not survive, or are abandoned because of illness or lack of food. Often birds lay lots of eggs in the expectation that just the strongest chicks will survive.

It is sad, but sometimes a bird is a good meal for another wild animal's family (like a bird of prey or a fox – not a cat) and is all part of the circle of life.

Nature is harsh sometimes (but it is still amazing!)

You can increase chances of nesting success by planting bird- and insect-friendly native plants in your garden. See pages 10 to 12 for starters!

Shelduck Holmes Competition

Competition

Solve the Springtime Crossword Puzzle and win a Bumblebee I.D. Swatch, value €7.00

ACROSS

- 3. I hatch from an egg.
- 4. A small migratory bird associated with summer time.
- 5. The continent where you find the Sahara Desert.
- 7. I give protection to unborn chicks.
- 8. Swallows and other birds feed on these.
- 10. A swallow makes its nest from this.

Competition 2



Find the 11 Pollinator related words

BUMBLEBEE NECTAR HONEY POLLEN HIVE FLOWERS

Find all the pollinator words in the Word

8

10

DOWN

6. Birds build these.

Search and solve the Crossword (you can photocopy this page if you prefer, and you can enter both competitions).

1. A long journey to another country. 2. A bird known for singing its own name.

9. Where you might find a Swallow's nest.

Fill out your age, name and address on a blank sheet of paper.

Post it to: Bird Detectives Competitions, BirdWatch Ireland, Unit 20, Block D, Bullford Business Campus, Kilcoole, Greystones, Co Wicklow A63 RW83.

Closing date is 30th July 2017.

Win a copy of Ireland's Garden Birds, value €15.00 The updated second edition! MEADOW QUEENBEE BUTTERFLY HOVERFLY POLLINATION



Why not check out the Kids' Zone on www.birdwatchireland.ie for lots more fun activities