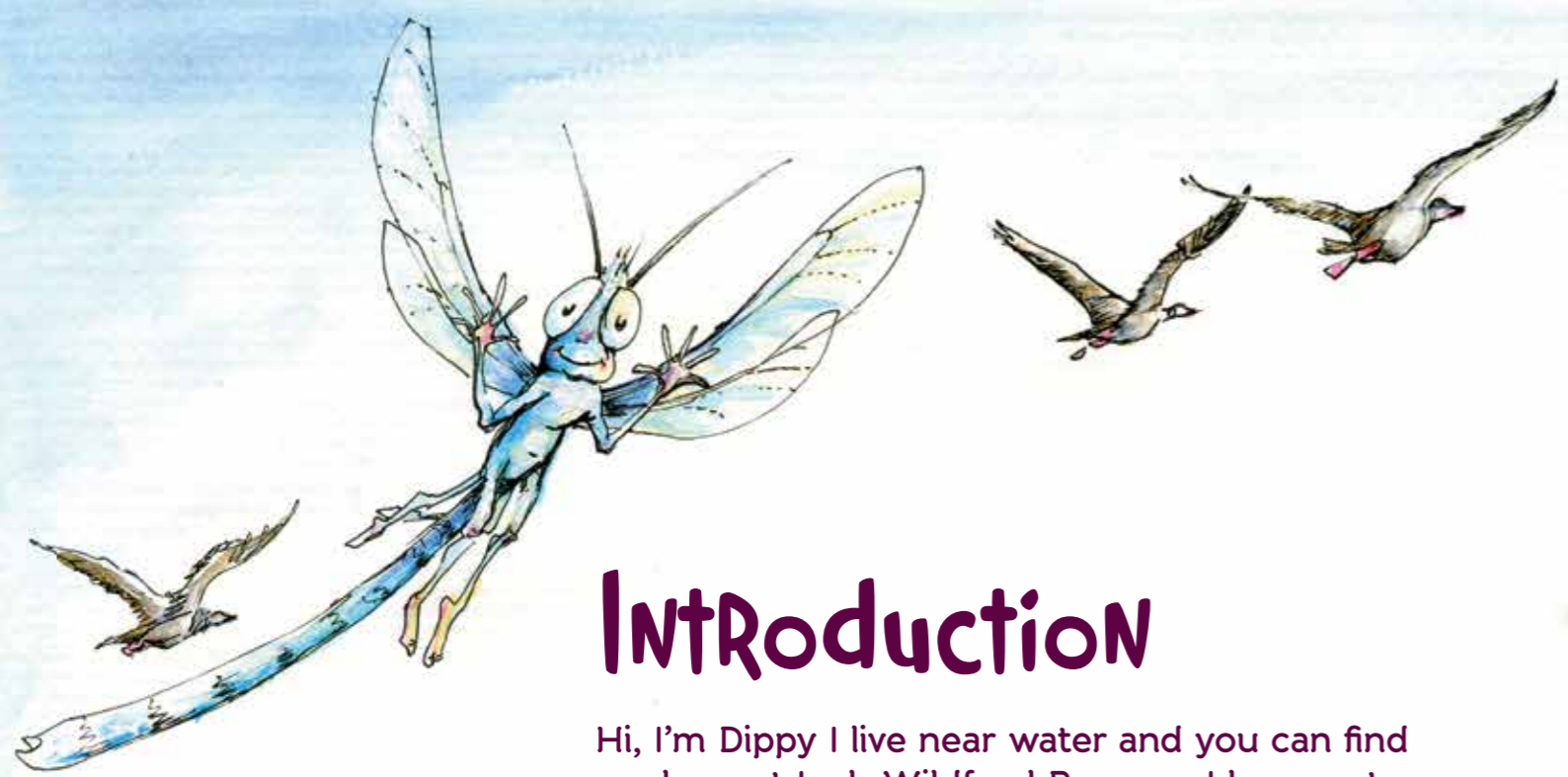


A Guide to the Birds of Inch Wildfowl Reserve



ILLUSTRATIONS by Eadain Madigan



INTRODUCTION

Hi, I'm Dippy I live near water and you can find me here at Inch Wildfowl Reserve. I have a story to tell you about where I live, and we can meet my friends along the way.

Since the earliest of times about 10,000 years ago, the land and water surrounding Inch Island and Inch Wildfowl Reserve has provided a safe haven for people, animals and birds.

Picture a land where people once hunted and gathered their food from the shores of the island and surrounding lands. This once was a place that was hidden under water, where the calls of the birds could often be heard.

A place where chieftains fought to defend their castle, and soldiers roamed while watching the great ships sail by. In more recent times the landscape was alive with the movement of people, as trains chugged along on their journeys to the stations, and ferries crossed the water to offload their cargo.



What you see today is very different, an island, a lake and a farm of 2000 acres. This was created over 160 years ago by people who wanted to farm the land. They built two embankments to hold back the tides, and one to separate the lake from the farm. Inch Wildfowl Reserve is now part of this reclaiming of the land from the sea.

So, come and meet our feathered friends who live here at different times of the year.

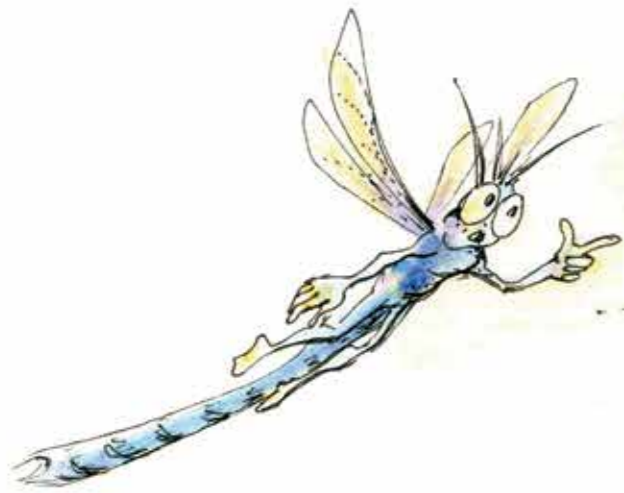
In the winter up to 13000 birds make Inch their home. You can see the majestic whooper swans and Greylag Geese flying over the land and feeding in the fields nearby. In the summer time, watch the Swifts swooping and dancing through the skies looking for food and feeding on clouds of flies. Find the Herron standing on the banks of the lake waiting to catch a fish for its tea. The Lapwings are seen in the fields that surround us looking for lunch amongst the grass. We have a special little bird called the Sandwich Tern that comes here every summer all the way from Africa, to make their nests and find a safe place for their chicks.

Welcome to our place of wildlife refuge, come on a journey along our pathways in a landscape of movement with the songs of the birds and the sounds of the lake.



Wetlands

Do you know what a “wetland” is? A “wetland” can be as small as a big puddle or as large as a massive lake. Hold on, there’s a clue in the name that a “wetland” is not just the water, but also the wet or damp “land” surrounding the water. A wetland is where land and water meet. So a wetland could be a wet corner of a field or a huge Wildfowl Reserve, just like here at Inch. Can you think of other examples?



Inch Wildfowl Reserve is a fantastic “wetland” reserve, which is protected by Law for its Wetland Habitats and also for the special birds which migrate to and breed here. Its habitats are managed to make them even more attractive for all the plants, insects, birds and animals that live here or visit it.

If you were to walk around the Reserve here at Inch it would take you about 2 hours, it’s over 8km in circumference! The lake is 179 hectares and the wet grassland is 95 hectares, making the whole site over 274 hectares in size, wow!

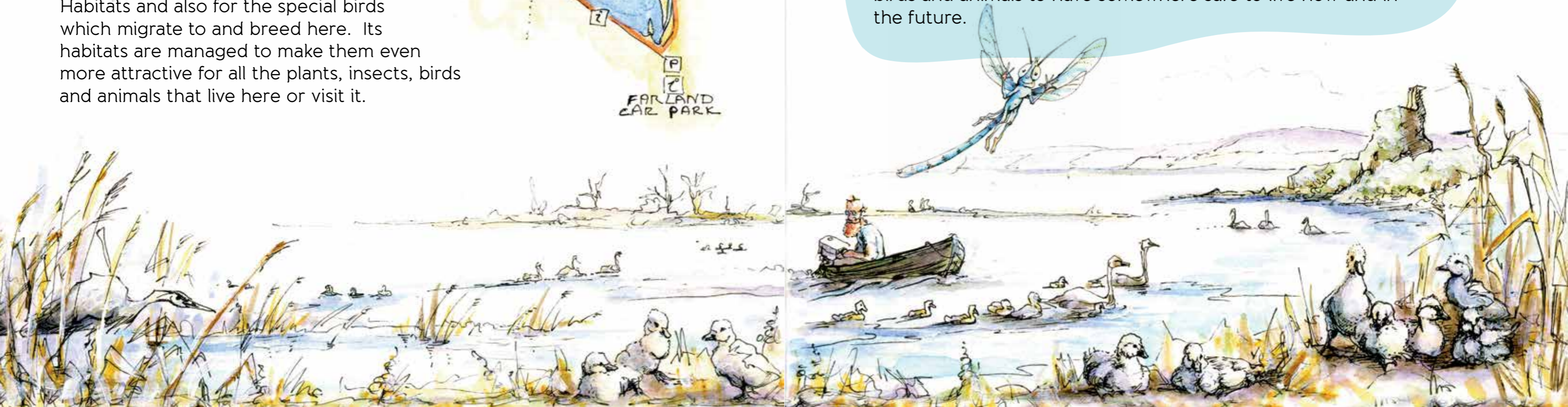
Do you think “wetlands” are really so important and worth protecting?

If you think for a second, all life needs water, all the plants, insects, birds and animals need water to drink. Did you know that they also need it for much more than that, such as, feeding, bathing, reproducing, protection, migration, hibernation, shelter **Can you think of examples?**

Wetlands have some of the highest levels of biodiversity in the world, the wealth of animals and plants that use them is mind-blowing!

We are losing wetlands throughout the world and as a result our native wildlife is getting squeezed into fewer and fewer wetlands, which means that there is more competition for that space to live in.

We need to work very hard to get people to protect these special places, so there is enough space for our plants, insects, birds and animals to have somewhere safe to live now and in the future.





TIPS FOR BIRD watching

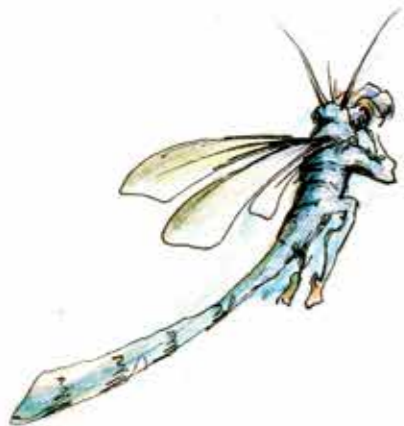
Now that we have met all the birds at Inch Wildfowl Reserve, take out some binoculars and see if you can spot them! Look at what the birds are doing – not just how they look. How are they behaving? How do they fly or swim? How do they walk or dive?

Birds don't like loud noises so try and stay as quiet as possible. The further away you are from them, the better. This helps you to see how they act normally when no humans are around.

Birds are very sensitive to movement because they have lots of predators such as hawks and cats. Because of this, trying to view them from a bird hide or from behind some plants can be helpful.



Adjust your binoculars to your own eyesight. Binoculars can be adjusted at both the eyepiece end and by a small wheel on the top of them. This allows them to be focused so you can see clearly. Binoculars are an important part of a birder's kit.



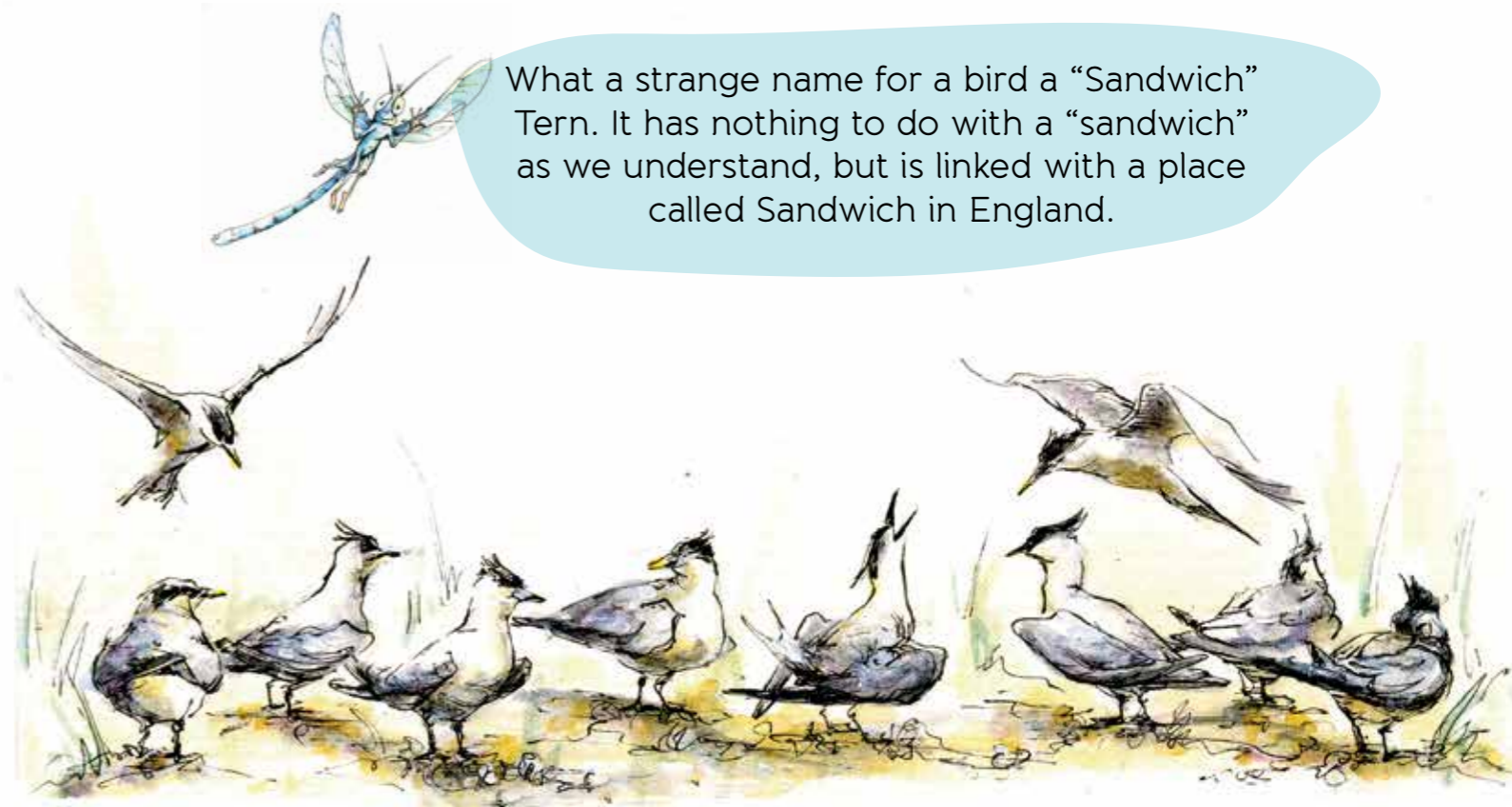
Sandwich Tern

One of the most important summer visitors to Inch is the strangely named Sandwich Tern. It is sometimes called the "sea swallow" because of its swallow-like shape when flying.

Sandwich Terns are a globally threatened species and as a result they are one of the most welcomed visitors to Inch. They arrive here in April each year and leave again in September or October depending on the weather, to begin their long migration back to western Africa. This is where they spend the winter months before coming back to us next spring.

We have over 400 pairs of Sandwich Terns breeding on a small island in the lake on top of an artificial platform made from sand, stones and wooden boards. The local people call this small island "Paddy's Bed", although no-one seems to know who "Paddy" was! The Sandwich Terns lay one or two eggs each year and feed their young on sand eels which they catch in the sheltered and shallow waters of Lough Swilly.

What a strange name for a bird a "Sandwich" Tern. It has nothing to do with a "sandwich" as we understand, but is linked with a place called Sandwich in England.





Lapwing

The lapwing is a beautiful farmland bird that can be found at Inch Wildfowl Reserve all year round. The lapwing is a special type of bird known as a wader, which means they have long legs and thin agile toes for walking gently in wet areas like marshes, flooded fields or soft muddy shorelines.

In the Wildfowl Reserve lapwing can be found nesting along the flooded lake edges, in pasture or in fields amongst the drills of crops such as carrots and potatoes. The male makes the nest, usually around April, which is just a simple hollow scraped in the ground. The female then lays three or four eggs which will hatch in about 4 weeks. The lapwing chicks are a small ball of fluffy feathers but have very large feet and can run only a few minutes after hatching. If you get close to a nest the lapwing has a clever trick and will pretend to have a broken wing to lure you away from the chicks.

The lapwing has beautiful feathers that change colour in the light... these are known as iridescent and change colour from purple to green in the sunlight. They also have a splendid crest of feathers on the top of their heads which stands up in the air like a crown. Lapwing's rounded wings and slow wing beats make it look lazy in flight. When disturbed a flock of lapwing will appear to burst into the sky in a cloud of black and white flickering.

The sharp call made by the bird in the sky 'Peeewwwit'... gives the bird its other name Peewit.



Lapwing like flooded fields and ploughed fields beside water as these are full of food. Lapwings eat mainly insects and other small creatures including leatherjackets, earthworms, spiders and snails. They are very helpful to the farmer as they eat insects that could damage the crops. Lapwing also feed at night... can you think why?... It is to escape predators, like black headed gulls, trying to steal their food... also lots of insects only come out after dark!



The lapwing was once a very common farmland bird but their numbers are falling due to their feeding areas being drained and a loss of habitat.

Can you draw a Lapwing?



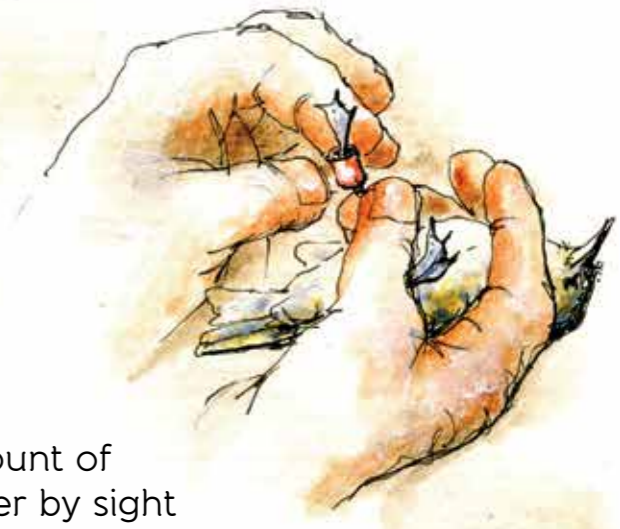
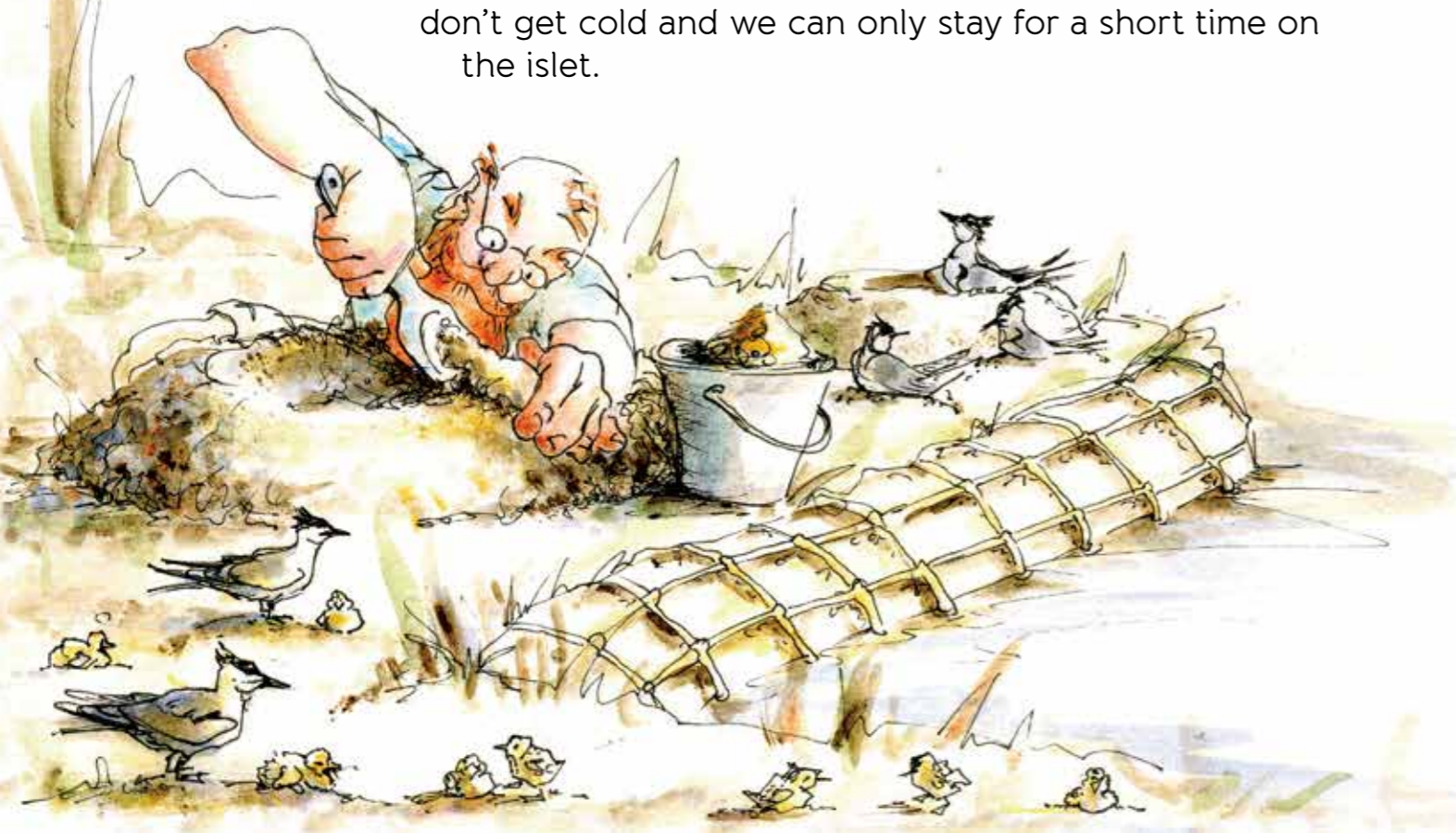


A Day in the Life of a Ranger

Hi I'm the Ranger here at Inch Wildfowl Reserve. One of our most important jobs at Inch is to protect the breeding Sandwich Terns.

All species of terns are incredibly faithful and loyal to the places they go. They nest in the exact same piece of sand from year to year! This is great from one point, that we know where they will be. However, they tend to nest on sand close to the water's edge and this is a real threat when water levels rise and flood the nest. We have raised the level of sand by creating a platform about half a metre above the average water level.

Every June we go onto the island to count the number of eggs and nests, then after a few weeks we go back to "ring" the chicks! We have to pick a sunny day so that the chicks don't get cold and we can only stay for a short time on the islet.



Here at Inch we have been marking the birds with small metal rings for over 30 years with the help of volunteers. The rings are put on their legs when they are a week or two old. These rings have an individual number which is unique to each bird. These numbers can give us a huge amount of information when they are rediscovered either by sight or when birds are caught. We have had reports of birds being seen and found in places like Freetown in Sierra Leone, West Africa and on the Cape of Good Hope in South Africa!

Another very important task for the Ranger at Inch is to make sure that all of the visitors have a safe enjoyable and most importantly an educational visit to the Reserve. This involves making sure that the paths, car parks and bird hides are clean and well maintained, we do this with the help of our caretaker and other volunteers who all help to make this place such a pleasant place to visit. Sometimes people do things that they shouldn't, they can disturb the birds, drop litter, let dogs of their leads, so it's very important that we educate and change people's habits so that Inch Wildfowl Reserve continues to be such a special place to visit, thank you for your help!





Whooper Swan

There are only seven species of swan in the world! A group of swans is called a 'bevy' but when they are flying, the group can be known as a 'wedge'. This is because of the shape they create which is almost like a slice of pizza or a wedge of cheese!

The Whooper Swan (pronounced Hoo-per) has a diet of water plants and gets an orangey, colour-stained neck from dipping its head underwater to eat them. It has also been found to graze grasses in fields as well as eat leftover potatoes on ploughed land.



A clever trick that baby swans use to help them hatch is an 'egg tooth'. When the swan inside the egg is ready to hatch, it forms a small tooth-like structure on the top of its beak. This gadget helps the tiny swan to tap the egg from the inside until the shell cracks open and it can emerge. The egg tooth then falls off after a couple of days when it is no longer needed.

Can you draw a Swan?



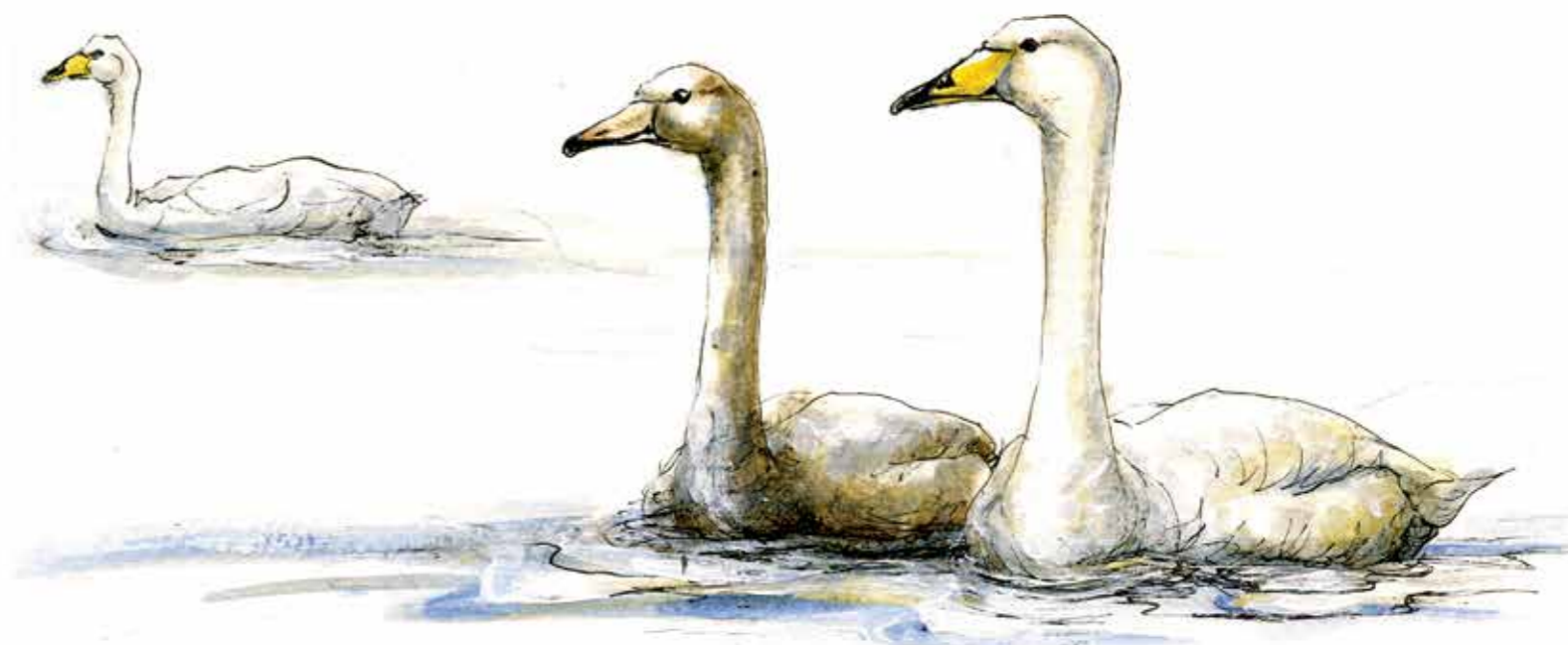
Whooper Swans seen at Inch breed in Iceland during the summer months. They use the banks of shallow water areas, close to the sea, to make their nests.

Whoopers visit Ireland during the wintertime, arriving in October and leaving again to fly back to Iceland in April. Why do you think they migrate?

Birds do not have teeth but swans have jagged edges along their beaks to help them grasp onto their food and pull it out of the ground!



The plumage or feathers of the adult and young swans are different. Young swans, called cygnets, have grey feathers and an orange & black beak. As they grow into adults, these feathers change. The adults have brilliant white feathers and a black & yellow beak. The yellow part of the beak is triangular in shape and extends beyond its nostrils. They make a 'Whoop whoop' call which sounds like a honking bark and gives them their name!





Migration

Do you like travelling or going on holiday? Why do we take holidays? Is it sometimes to get better weather or have a nice break? Is it to see family? What do you need on a long journey?

Migration is all about animals moving from one part of the world to another to get the best possible places to feed, breed, nest and rest. Just like we need to take breaks on long journeys, animals do too and birds make some amazing trips all in one year.

Swifts

Swifts arrive in Ireland in the last week of April or early May, and stay only long enough to breed. Autumn migration begins in late July or early August.

The start of the migration is triggered by the lack of enough insects high in the air. Not many swifts are left in September.

Our swifts migrate through France and Spain to spend their winter in Africa, south of the Sahara, where they follow the rains to take advantage of rapid changes in insect populations. These birds fly over 14,000 miles each year.



Whooper Swans

Whooper Swans are found on farmland close to the coast, on flooded fields, mudflats, lakes and small ponds and lochs and will graze on farmland in winter

Most of the whooper swans that spend the winter in Ireland come from Iceland.

During this journey they fly very high. A pilot flying a plane at 8,000 feet once saw a flock of swans, thought to be whoopers.

The estuaries and wetlands it visits on migration and for winter roosts need protection. At Inch there are nearly 7000 Whooper Swans passing through or stopping off for a rest on their journey as they fly further south. About 500 spend the winter here.

Sandwich tern

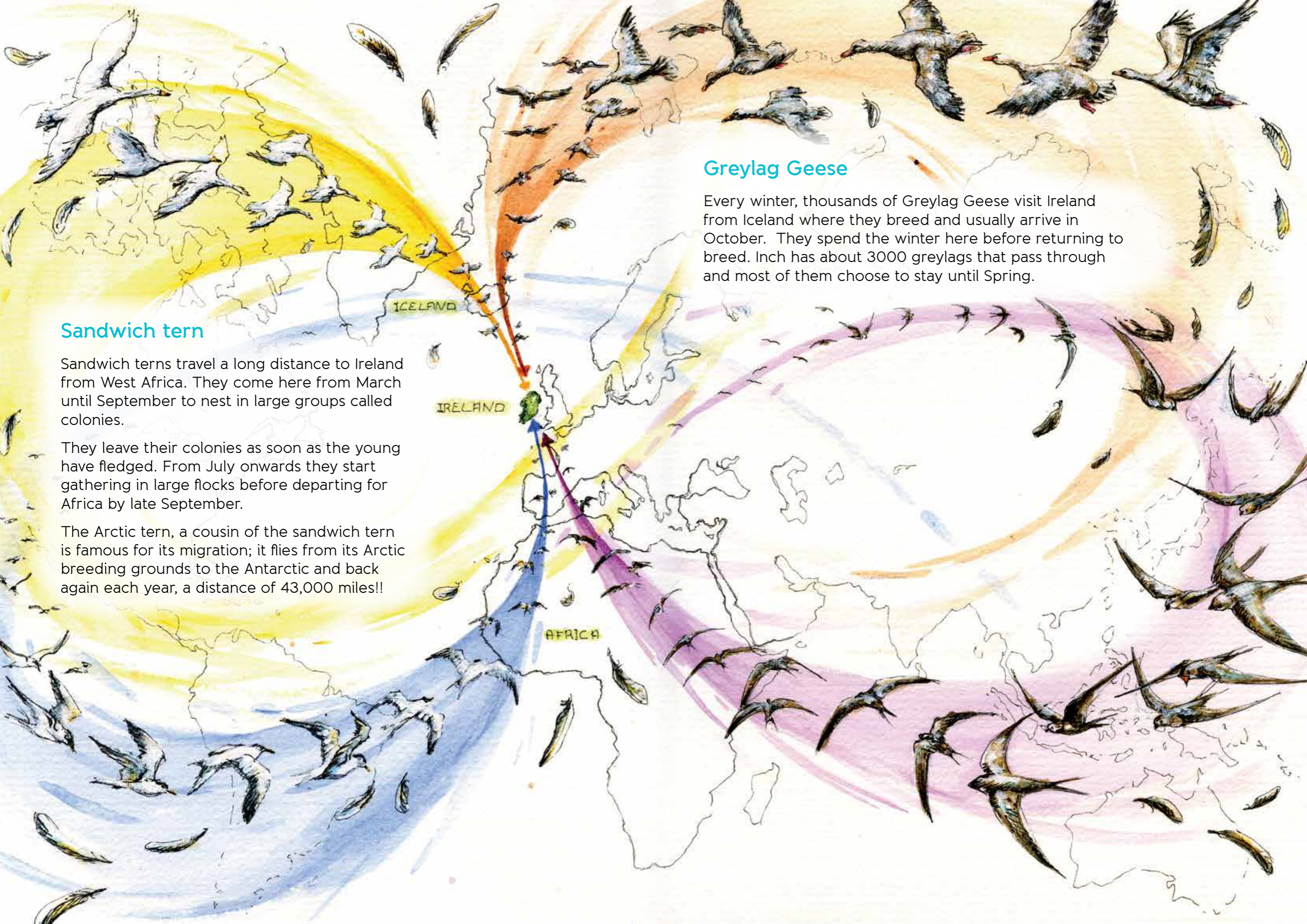
Sandwich terns travel a long distance to Ireland from West Africa. They come here from March until September to nest in large groups called colonies.

They leave their colonies as soon as the young have fledged. From July onwards they start gathering in large flocks before departing for Africa by late September.

The Arctic tern, a cousin of the sandwich tern is famous for its migration; it flies from its Arctic breeding grounds to the Antarctic and back again each year, a distance of 43,000 miles!!

Greylag Geese

Every winter, thousands of Greylag Geese visit Ireland from Iceland where they breed and usually arrive in October. They spend the winter here before returning to breed. Inch has about 3000 greylags that pass through and most of them choose to stay until Spring.

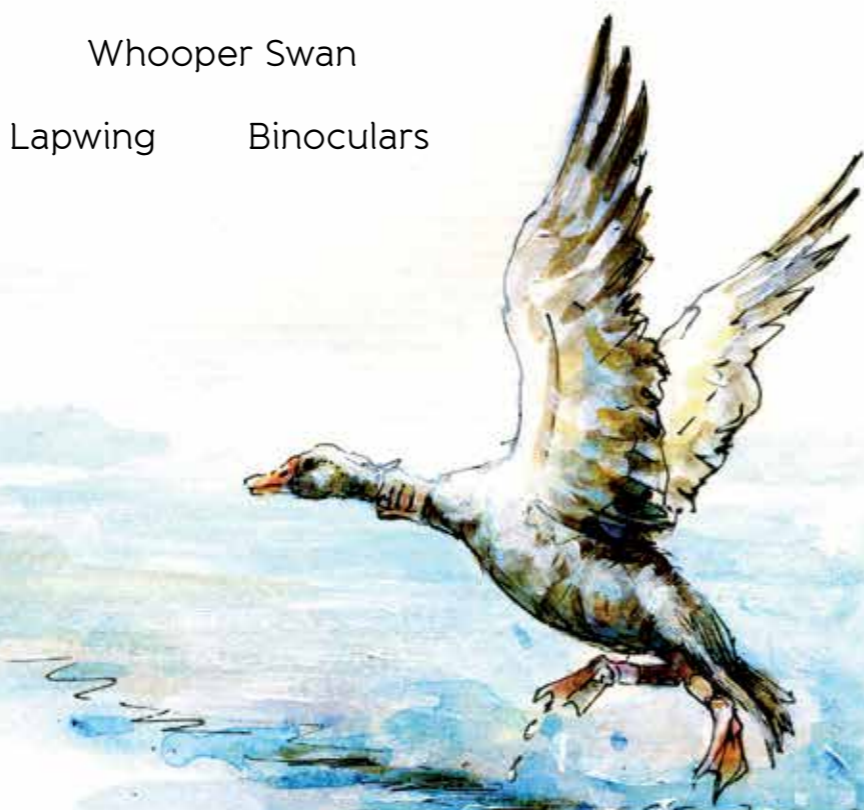




Wordsearch

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z	b	r	s	l	m	n	t	a	o	h
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Migration Field Lake Whooper Swan
 Greylag Goose Swift Lapwing Binoculars
 Bird Hide Grey Heron



BIRD FEATURES

Birds have different types of feet depending on what they do. Wading birds like herons have long toes spaced widely apart to stop them from sinking into the mud. Terns, swans and geese, on the other hand, have webbing in between their toes. This helps them to paddle and swim. The flippers that divers use to swim underwater are imitations of birds' feet!

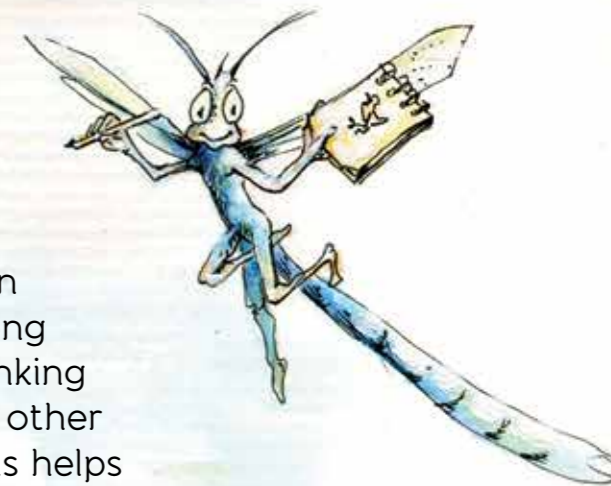


Wading Bird



Swimming Bird

We can also tell a lot about what a bird eats from the type of bill it has. 'Bill' is another word for beak. Terns have short, sharp beaks for quickly snapping up fish when they dive into the water. Herons have longer, sharp beaks for stabbing into the water as they stand at the edge. They also have extremely good eyesight and stab at the water the second they see the sparkle of a fish's scales! Swans and Geese have flatter, wider, more-rounded beaks for pulling plants up out of the ground.





Grey Heron

Ok everyone, its riddle time.

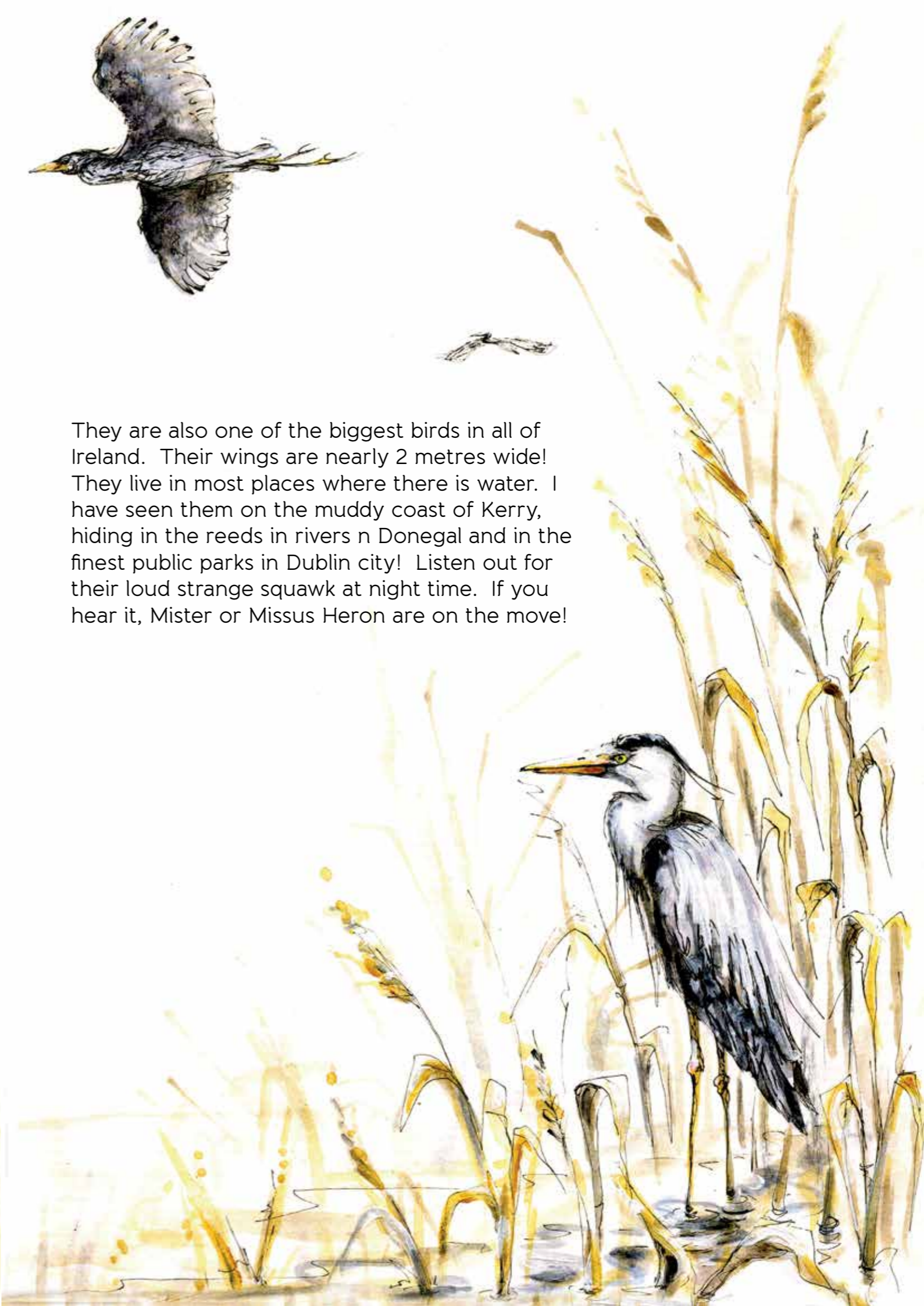
What's grey and tall, mean and lean and its bill is not so small?

Mr Grey Heron of course!

They will eat everything that swims, jumps, flies and dives past their long strong beak. And I mean everything! I've seen them eat frogs, fish, shrimp and eels, I even seen them eating any small bird that floats past! The have loads and loads of patience, they can stand still in very cold water with their long legs waiting for ages, without moving a feather. And when they strike, they are super fast! They can't catch me though, phew!

They are also one of the biggest birds in all of Ireland. Their wings are nearly 2 metres wide! They live in most places where there is water. I have seen them on the muddy coast of Kerry, hiding in the reeds in rivers n Donegal and in the finest public parks in Dublin city! Listen out for their loud strange squawk at night time. If you hear it, Mister or Missus Heron are on the move!

Hérons have a tough life when they are young. Their parents build huge nests high, high up in the trees near other Herons nests. The young herons have to sit in all weather for weeks! And when they are big enough to fly on their own all the adults chase them away. Every Heron has its own territory, which is its own patch that they hunt food from. Any young ones that come into an adults patch will be chased pretty quickly! But once they have found their own territory they can live quite happily for twenty years or more!





Swift

Swifts are amazing birds! They are amongst the fastest birds in the whole world and they hardly ever land! They sleep while flying, they catch all their food while flying and they eat when they are flying! They even find everything they need for their nests in the air while flying!

The only time they land is when they are having families. They like to make nests under the roofs of old houses. They find everything for their nest in the air like feathers and old bits of cobwebs. Then all those pieces are glued together with their sticky saliva. The saliva is the little bit of water that's always in your mouth. What a cosy nest!

Then they have to work very hard to catch enough bugs to feed their babies! Those little swift chicks are tiny when they hatch; about half the size of your thumb! After only a few weeks they are as long as your hand. When these chicks start to fly they have to learn to catch bugs on their own very quickly.



The most amazing things about swifts is that when the babies fly from the nest they won't land for at least two whole years! They won't touch the ground until they are old enough to have their own families.

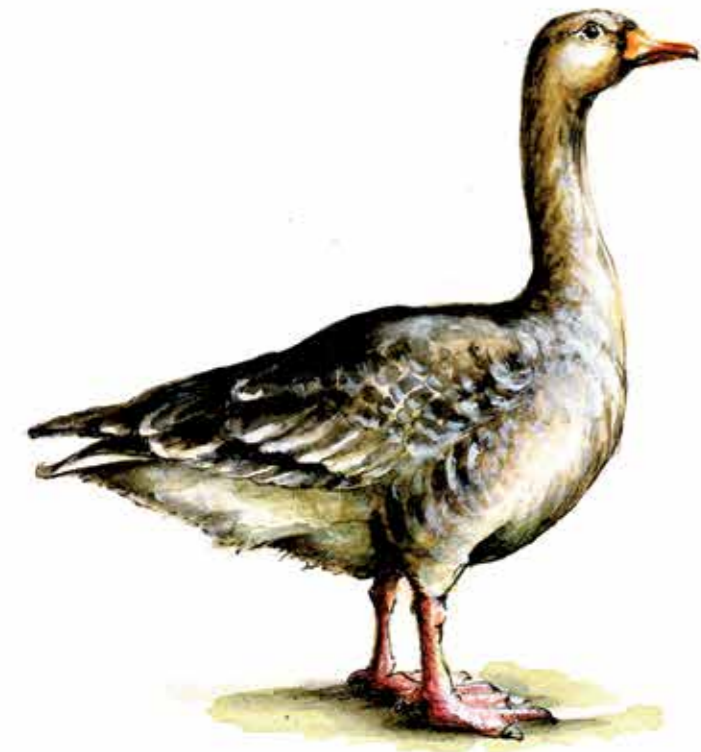
Swifts fly very big distances. A swift recently flew from Britain across Europe and all over Africa. It spent the winter flying from a country called Guinea on one side of Africa to another country called Congo.



Can you find these countries on the map? Then the same swift in the springtime flew from Congo to Britain in five days. That's over 1,000km per day, twice the length of Ireland!

Swifts only come here for a few weeks, from May to July. They love the Inch area because it has loads of tasty flies and bugs for them to eat in the summer. When they arrive in Ireland you'll hear them before you see them; they have a loud screeching sound. The best time to see them is early or late in the day. The rest of the time they are very high in the sky bug hunting. I hope they don't eat me!





GREYLAG GOOSE

This is Gary the Greylag Goose. He's a resident of Iceland but comes to visit us here in Ireland for the winter to escape the cold.

These birds feed mainly on grass, leaves and stems and can often be seen grazing alongside cattle and sheep at Inch Wildfowl Reserve. They are herbivores which means they only eat plants.

Greylag Geese build their nests alongside lakes, keeping them well hidden behind reeds for protection from predators. Can you think of any animal that might hunt a goose or eat its eggs? Hint: There are lots of animals around Inch such as Humans, cats, Mink and our native Red Fox.

These guys (and girls) have grey-brown and white feathers. The breast of the goose is paler in colour than the back with dull pink feet and an orange beak. Their call is described as 'honking', much like a domestic goose.

We usually see Greylags in Ireland between October and April each year. Like the Whooper Swan, they also return to Iceland once the winter has ended.

Unlike many other species of wetland birds, the male goose known as the gander stays with the family. Young geese are called goslings. The family will travel together when migrating back to Iceland and the gander will only chase away the young goslings when both him and the female need to find a new home to lay their next clutch of eggs.



These beautiful birds are one of the species that get collars to allow people to identify them. Have a look at AAJ – one of our birds collared at Inch in 2012! He has travelled from Lough Swilly here in Ireland and been seen in 2012 and 2013 in Dumfries in Scotland with his family.

Write a short poem on what you've learned about the Greylag:





Helping birds at home and at school

Helping birds is a good thing to do and you will get to see them much closer!

First thing to do is think what kind of help they might need. Birds do something different every season so we will start by looking at each season.

Winter

Birds are desperately trying to survive the cold and there is not very much food to be found. Some have gone to warmer countries but for the ones that are here, leaving out tasty food is a great help. Just remember that bread is not great for birds and salt is really bad for them! Winter is also a good time to clean out your bird boxes and check they are stuck well to the tree!

Spring

This is the time for nesting. Birds are busy singing, nest building and finding food for their babies. Did you know that some small birds like bluetits feed their babies over 1,000 meals every day? So keep feeding the birds, raising a family is hungry work. Don't forget to leave any nests that you find alone, they don't want to be disturbed at this busy time.



Summer

Lots of baby birds are about in the summer. Keep feeding them if you can and remember to clean and wash your feeders from time to time. This will help keep the babies nice and healthy. The most important thing in the summer is not to let anyone cut the hedges or trees. All birds need them for shelter and food, even when they are finished with their nest.

Autumn

Now is a super time to put up some nest boxes. Don't put the bird boxes too close to each other, they like their space when having a family. And try to keep your bird feeders away from the nest boxes too. When you put up bird boxes put them on the north facing wall, that way they won't get too hot in the good weather. Ask someone to help you find north with a compass. The other really helpful thing to do is to leave some of the tall grass and the plants with seeds for the birds. All those seeds are very good for them.

My ideas to help birds:

Winter Bird Feeders

Making bird feeders is fun, cheap and very easy.

What you will need is:

- 1 x small (less than 30 cm) stick or an open pine cone
- 1 x block of cheap salt free lard softened in a warm room
- 1 x handful of porridge oats
- 1 x handful of raisins or currants
- 1 x piece of string
- 1 30 cm x 30 cm piece of baking paper or brown wrapping paper
- Apron (this can get quite messy!)

Method:

Tie the string to the stick or dried and open pine cone (they open naturally after a few days in a warm room). Squish about 1/4 of the lard around the stick or into the gaps in the cone. Salt free lard is very important as salt is very bad for the birds. Push a few of the raisins or currants into the fat. Coat the whole feeder with the porridge oats. These can be the cheapest you can find in the shop. Wrap the bird feeder in the baking or brown paper and put it into the fridge overnight.

The next day, tie it to a tree, fence etc. but make sure it is out of reach of any cats. Sit back and enjoy the birds coming to your garden. They will also eat bugs and garden pests from your shrubs or vegetable patch if you have one. Why not take part in the Birdwatch Ireland garden bird survey? It's a great way to learn the birds, and you will be helping them by showing how many there are!

What have you seen?

All the best birders keep records of the species that they've spotted. There are even international competitions to see who can spot the most species within a given time. Recording your birdwatching adventures can help contribute to scientific studies that look at the distribution of birds around the world.



How many of these birds have you seen?

Greylag Goose	Sandwich Tern	
Whooper Swan	Lapwing	
Cormorant	Heron	
Swift	Black Headed Gull	

Place:

Date:

Time:

Weather:

You can record your findings online at:
www.birdwatchireland.com www.biodiversity.com

Draw your own bird



Farming and Wildlife

Inch Wildfowl Reserve is a special protected place for birds and is surrounded by a working farm. This farm contains a mixture of crops, such as potatoes and carrots, barley and wheat, grasslands and dairy cows that produce milk.

The National Parks and Wildlife Service work with the farmers to make sure there is enough grass to eat for the Geese and Swans that come here to feed every winter. Farmers also take great care not to disturb the nesting birds during the spring and summer.

Visitors are also asked to keep away from these areas during this time. The cow dung left behind by the cattle is also of use as it encourages beetles, clegs and other insects which recycle the dung back into the soil. These insects provide food for the lapwing and their chicks.

The Grianan Farm is famous in Ireland, because at one time it was the biggest farm in the country with some of the largest fields anywhere in Ireland (one field is bigger than the average farm in Ireland). You already know that its special also for the birds that it attracts, why do you think the birds like it so much? Here are a couple of things;

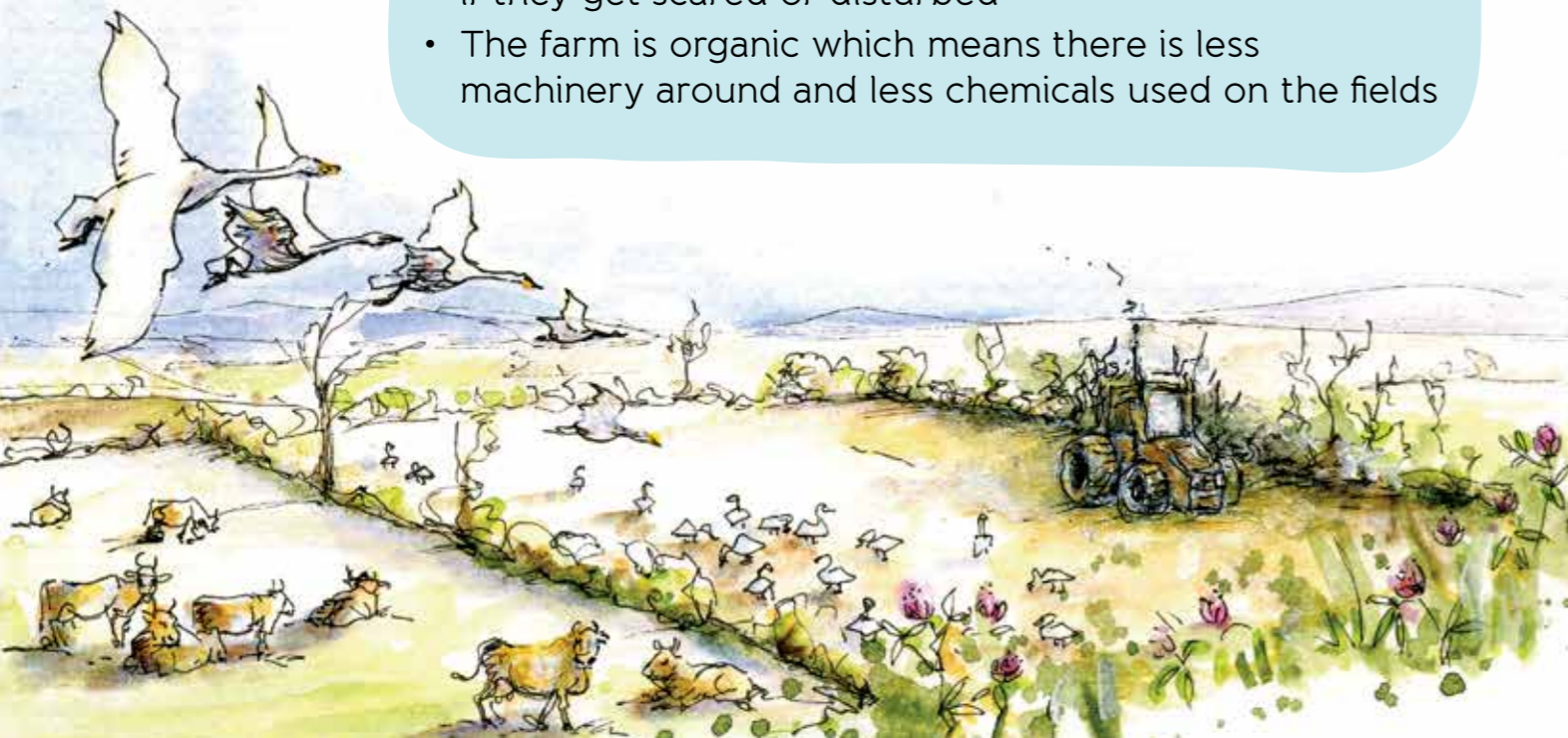
- They feel safe in the big fields, because they can see around them
- They like to feed on the grass and the leftover crops like potatoes
- It's very close to the Reserve where they can fly back to if they get scared or disturbed
- The farm is organic which means there is less machinery around and less chemicals used on the fields



Can you think of anymore?

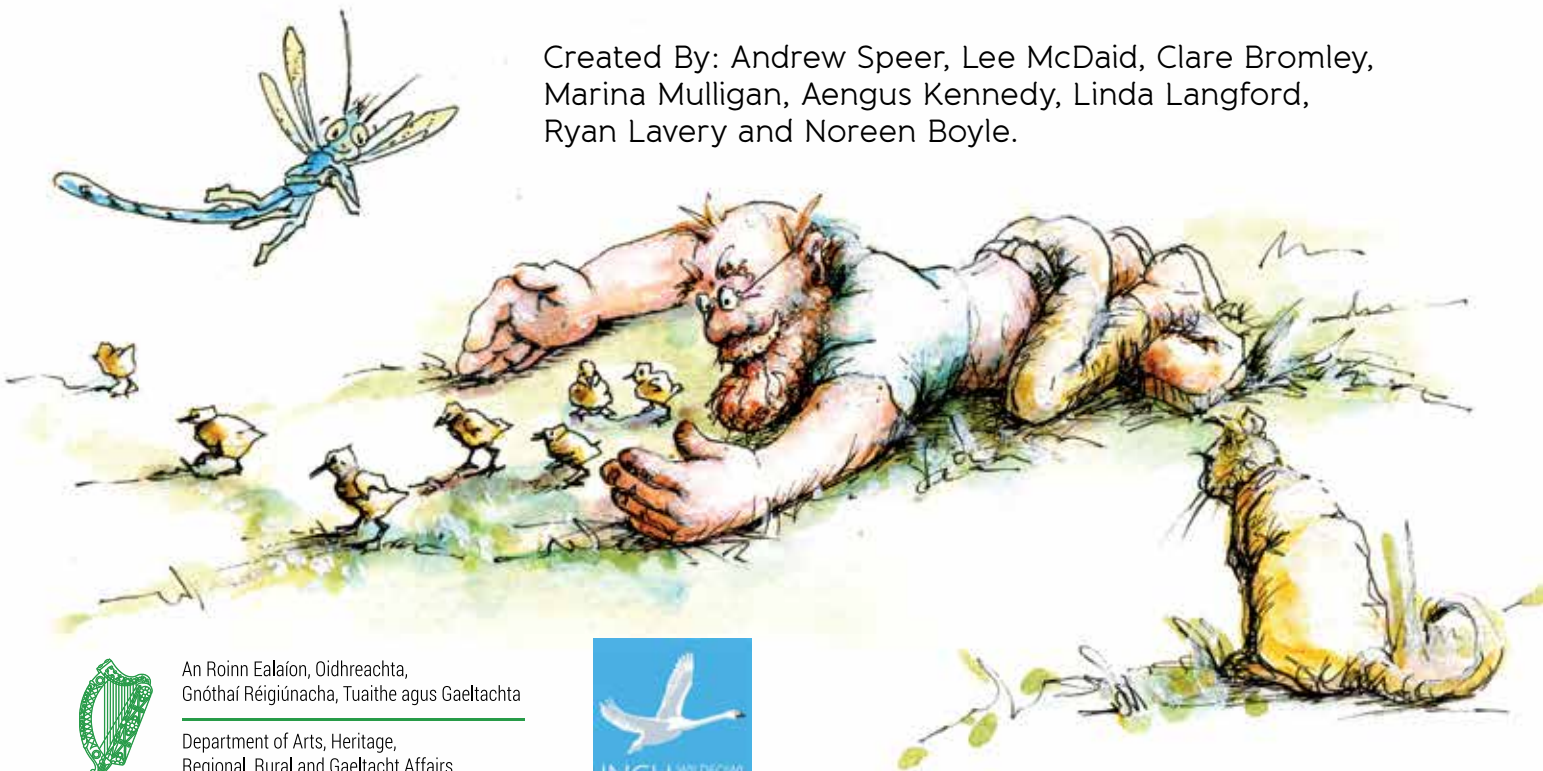
Farming and land management are used to help the resident birds and animals here at Inch Wildfowl Reserve. During the late spring and summer the lake edges are grazed by cattle to keep the grass and other plants at the correct height for lapwing and other ground nesting birds. The amount of cattle is kept at a low enough level to maintain the grasslands, but also to allow the birds to nest in without being disturbed. This is a traditional method of grazing that finds a balance between summer grazing and conservation!

Inch Wildfowl Reserve needs us all to work together to protect its past, present and future. You can help by spreading the story of this very special landscape and telling your family and friends all about it.





Created By: Andrew Speer, Lee McDaid, Clare Bromley,
Marina Mulligan, Aengus Kennedy, Linda Langford,
Ryan Lavery and Noreen Boyle.



An Roinn Ealaíon, Oidhreachta,
Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta
Department of Arts, Heritage,
Regional, Rural and Gaeltacht Affairs

