



RAPTORS!

All about birds of prey in Counties Clare, Galway & Tipperary

4th, 5th & 6th CLASSES



Hi! I'm Barney the Owl. I will be your guide for this book!

This is a Hen Harrier. It is one of the most spectacular birds in Ireland... but also one of the rarest. Learn all about Hen Harriers inside, and get to know the other raptors which you share your county with...



BirdWatchIreland

An Chomhairle Oidhreachta
The Heritage Council



Comhairle Contae an Chláir
Clare County Council



Comhairle Chontae na Gaillimhe
Galway County Council



Comhairle Contae Thiobraid Árann
Tipperary County Council





What is a Raptor?



Some raptors might look a bit different to each other, but if you take a closer look, you will see that they all have some common features...

A raptor is another name for a bird of prey or owl. The word raptor comes from the Latin word 'rapere' which means to 'seize.'... this will give you a clue what raptors are all about!

Raptors are powerful birds which hunt (or 'seize!') other animals or feed on dead animals, which is called **scavenging**.

Merlin



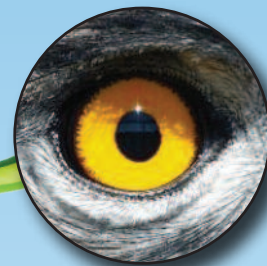
Sharp talons

So, all raptors have some similar features. But they look different because they are each specially designed to survive in different **niches** – the position an animal occupies in an ecosystem. These are called **adaptations**.



Check out their 'Eagle-eyes' and strong, hooked beak

Golden Eagle



Excellent eyesight

Adaptations

Look at all the cool adaptations which I have so that I can find and catch food at night-time!

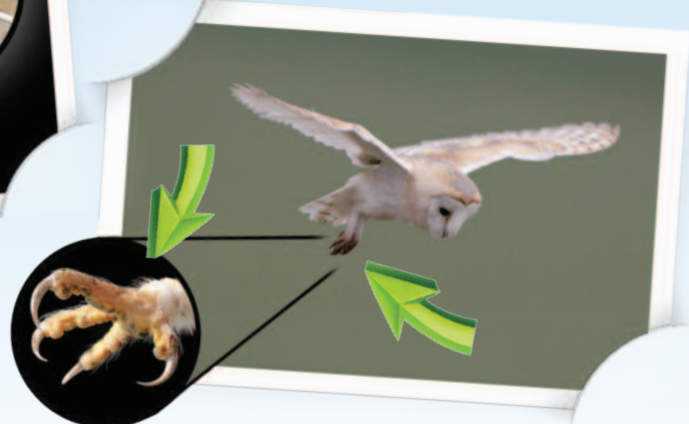
My wing feathers have special soft edges and barbs which makes my flight silent.

This means I don't scare away small mammals before I can catch them!



'I have amazing hearing! This is my best hunting tool. Look at my heart-shaped face. This acts like a satellite dish to help me hear the slightest noise... even

something which is as quiet as a mouse! My hearing is so good I can catch small mammals in pitch darkness by listening for them!



I have long legs so I can dive into deep vegetation, and sharp talons to catch rats and mice!



Where's Barney's food?

Barn Owls have to search far and wide to hunt for mice. There are mice hidden throughout this book... See if you can find them all and count how many there are. Answer on the back page.





What raptors live in Clare, Galway & Tipperary?



There are 11 raptors which nest regularly in Ireland. Ten live in your county! Some raptors definitely live close to your school or house... but you will need to have an 'eagle eye' to spot them!

Barn Owl *Scréachóg reilige*

Known as the 'white owl', Barn Owls are **nocturnal**, which means they only come out at night. Even though they are very rare and not many people have seen one, they are one of our best known birds.

They are also known as the 'farmers friend' because they catch rats and mice on farms. They nest in ruined buildings... like old castles. They often nest down really deep chimneys. Barn Owls don't make a 'twit-twoo' call. In fact, the adults screech, and the babies snore loudly all night long... not when they are sleeping... but when they want to be fed!



Barn Owl nest site

Fun facts: The Barn Owls name in Irish '*Scréachóg reilige*' means 'the graveyard screecher' because of their blood-curdling screech and because they sometimes live in old churches.



Caught a big rat!



Three hungry Barn Owl chicks



The legend of the Banshee

In Ireland, the eerie, blood curdling screech of the Barn Owl is likely to be responsible for the legend of the Banshee, a female spirit who foretold death by her mournful screams and wailing at night. Even to this day, ancient ruins are assumed to be haunted due to the strange 'hissing' and 'snoring' of Barn Owls from their nests sites within.

Long-eared Owl *Ceann cait*

Actually more common than the Barn Owl, but not as well known. Like the Barn Owl, they are nocturnal. They are difficult to see, but there is a good chance that they live close to your house or school. The only time that they are easy to find is the summer, when there are young chicks in the nest... because they are noisy! They make a high pitched 'squeak' which sounds like a squeaky gate!

Fun facts: They are called Long-eared Owls because of their ear tufts, but these aren't actually ears. It's ears are hidden behind it's feathers.



A busy nest!



You looking at me?





White-tailed Eagle Iolar mara

The White-tailed Eagle was native to Ireland. They once lived along our coast and on big lakes in different parts of the country. However, like many other birds of prey, White-tailed Eagles were driven to **extinction** just over 100 years ago.

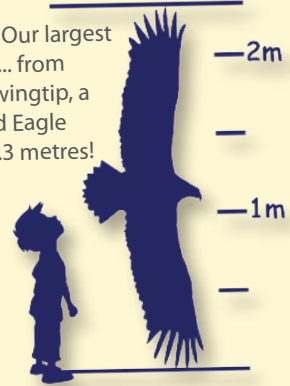
A **re-introduction** project was set up by the Golden Eagle Trust to bring them back to Ireland. 100 White-tailed Eagle chicks were brought from Norway to County Kerry.

Once the eagles grew up and learned to fly and find food, they spread out throughout the country. Big lakes which have plenty of fish and islands which they can nest on are perfect for them... Lough Derg has both!

In 2012, the first Irish White-tailed Eagle chick for over 100 years hatched in the wild at its nest on Lough Derg!! Woo-hoooo... something to be proud of!



Fun facts: Our largest bird of prey... from wingtip to wingtip, a White-tailed Eagle measures 2.3 metres!



Huge nest in a tree



The White-tailed Eagle is the biggest raptor in Ireland

Sparrowhawk Spioróg

One of our most common birds of prey in Ireland. One has undoubtedly visited your garden or near to your house! Sparrowhawks are incredible fliers... they have to be to catch their prey. They can zip through tiny gaps between trees at high speed! They hunt by surprising smaller birds. They build their own nest, mostly in woodlands.

Fun facts: Like in most birds of prey the female Sparrowhawk is bigger than the male... in fact 1/3rd bigger! She can catch much bigger birds like Woodpigeons and Jackdaws, while the male needs to focus on smaller birds like finches.



Successful male



Sparrowhawk's nest



Young Sparrowhawk



Welcome to the falcon family! All of these guys are closely related. They are all falcons

Peregrine Falcon Fabhcún gorm

The Peregrine is a very strong and powerful raptor. They catch big birds like ducks and pigeons.

Peregrines live along the coast on high cliffs and also in quarries. They will even nest on tall buildings in cities and towns which, from their point of view, are just like a big cliffs made by people. Nobody is going to bother them up there, so it's a perfect nest site!



Peregrine nest in Tipperary

Fun facts: Peregrines are actually the fastest animal on the planet... they can reach speeds of 320 km per hour... which is as fast as a race car!



A powerful falcon

Kestrel Pochaire gaoithe



Hovering while hunting

Often called 'the hawk' but it is actually a falcon. Kestrels are very adaptable and live throughout the country... you might have seen one hovering over the motorway verges!

They eat a range of prey including insects, birds, frogs and small mammals.

They can nest in loads of different places, on massive cliffs, in quarries, in cavities in trees, in ruined buildings and even in old nests built by other birds! Their adaptability is one of the keys to their success!

Fun facts: The Kestrel's name in Irish '*Pochaire Gaoithe*' means 'the wind puncher' which describes the way Kestrels can hang in the air on a windy day, while they scan the ground below for prey.



Kestrel nest

Merlin Meirliún

Our smallest raptor in Ireland. The male is only a little bigger than a thrush.

What they lack in size they make up for in attitude! Merlin's are fearless! They will attack and chase away much bigger birds, even White-tailed Eagles, if they come too close to their nest.

They are really agile on the wing. Merlin nest in the uplands and like quiet places like big open bogs. They are quite rare, but are also really difficult to find, so we don't know how many live in Ireland!

Fun facts: The name 'Merlin' has no connection with the King Arthur legend. It comes from an old French word which means 'stone-falcon'.



Watching for prey



Chicks in their nest in Galway



Having a good preen





Buzzard Clamhán

Fun facts: Imagine when your parents were kids... they would not have seen Buzzards in Ireland, but now you can!



Always on the lookout...

A long time ago Buzzards lived all over Ireland. Unfortunately they were driven to **extinction** in Ireland about 120 years ago because of poisoning and shooting (**persecution**)... which meant – no more Buzzards.

However, recently Buzzards have returned! They **re-colonised** naturally... from Scotland to Northern Ireland and, since then, they have slowly spread across the country.

Buzzards now live all over Tipperary again, and are slowly spreading across Clare and Galway.

They look like a small eagle... keep your eyes peeled!



This one caught... or scavenged... a big rat!



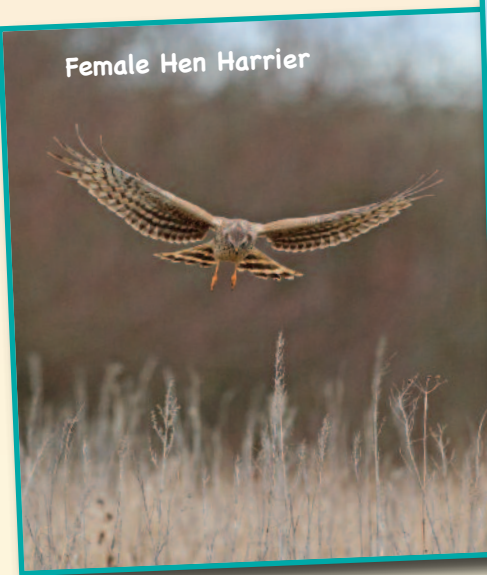
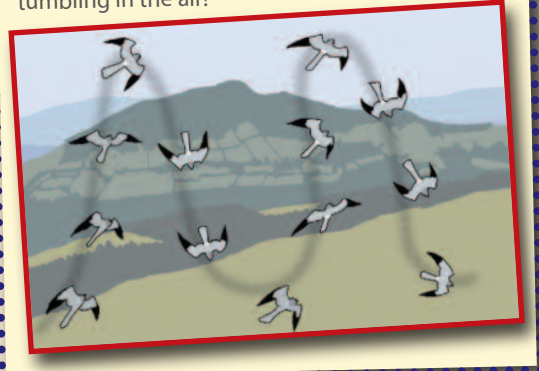
A Buzzard in Tipperary

Hen Harrier Cromán na gearc

Fun facts: In spring Hen Harriers show off how good they are at flying by doing an amazing 'skydance'! The male will rise really high in the sky before suddenly dropping and plummeting to the ground, twisting and turning and tumbling in the air!

One of our rarest birds of prey. There are not many left, but your county is still really important for Hen Harriers! They live in the uplands (hills) where they nest on the ground. This sounds simple, but they need a special type of **habitat** where they can hide their nest from other animals so their chicks will be safe, and where there is plenty of food.

The uplands used to be more suitable for Hen Harriers and other wildlife, but in many places this has changed... which means Hen Harrier **populations** are declining.



Female Hen Harrier



...and a male nearby

The male and female look very different. For a long time people even thought they were completely different species! The male is the more stunning, and the female is much bigger.

The food pass
The male delivers food to the female by transferring prey in mid-air. This is another impressive aerial display of Hen Harriers.

The female rises from the nest to meet the male as he returns with prey, she then flips upside-down as he drops the prey from above, which she skilfully catches in her talons.



Food pass

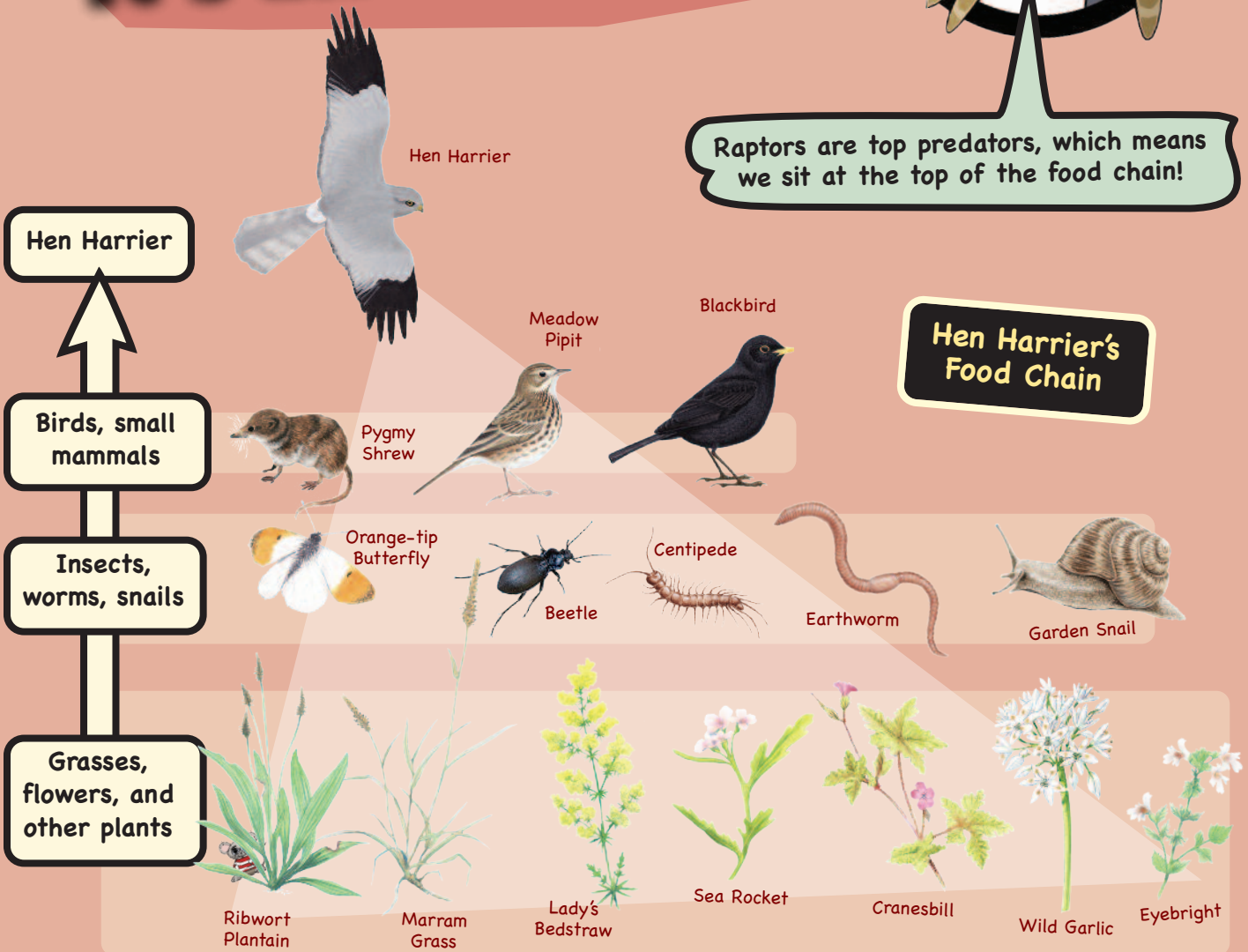


Top Predators

It's all connected



Raptors are top predators, which means we sit at the top of the food chain!



Its all connected! – Every living plant and animal needs energy. Plants rely on the soil, water and sun for energy. Animals need to get their energy from food. Some animals rely on plants for food, other animals (like raptors) rely on other animals for food. Everything is connected!

Take a look at a **food chain**. The plants are at the bottom, then insects feed on the plant matter, small mammals and birds feed on the insects, which are then caught by raptors and other predators.

Catching other animals might seem cruel, but raptors need to do this to survive... and this needs to happen in nature. It keeps the environment in

balance. Raptors might seem invincible because they are powerful hunters, but actually it is the opposite. Because they sit at the top of the food chain, they can be very vulnerable.

If there are problems at the lower levels of the food chain, this will affect the raptors at the top. This means that if there are no raptors in the countryside it is a sign that there are problems in the environment, but if raptors are doing well then it is a sign of a healthy environment.

In this way raptors are good **environmental indicators**.





Top predators

What's on the menu?

From beetles and worms, to rabbits and foxes and other birds! Look at some of the different prey that each raptor hunts.

Can catch fish, but also scavenges, and steals from other birds and animals. Can sit for days, just waiting, looking out for it's next meal!

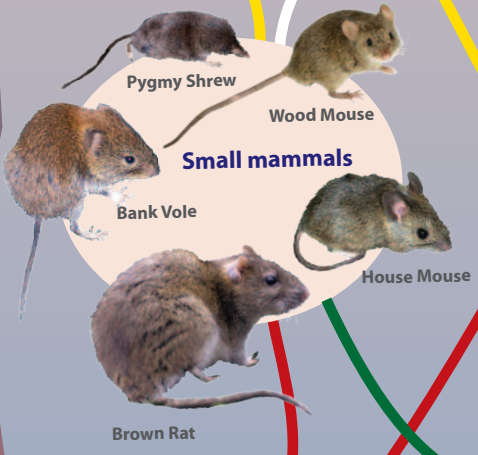
Uses its hearing for hunting, just like an owl, and even looks like an owl with its facial disc.



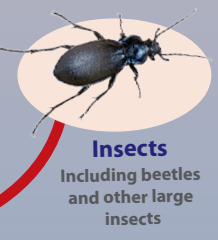
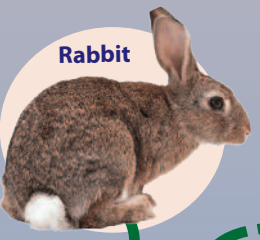
Has very good eyesight, much better than ours... especially when it is dark, but hunts mostly by hearing, homing in on tiny squeaks and rustles of small mammals



Small birds
Including Meadow Pipits, Wagtails, Starlings and more



Big birds
Crows, Wood Pigeons and duck



It can see in the ultra violet spectrum, which means it can see the urine trails of small mammals! Very useful to narrow down the search!



Will catch live prey, but also scavenges for dead animals.



Rises up really high in the sky, then when it sees a suitable opportunity below it tucks its wings in and dives like a bullet through the air at over 320 km per hour!



Threats to raptors



When you look at a raptor... especially a large powerful predator like a Golden Eagle, it's easy to think that nothing can effect it, that it is invincible... but this is definitely not the case.

Did you know that in the past in Ireland at least seven raptor species have become extinct? And some of the raptors such as Hen Harrier are in serious trouble at the moment. Lets take a look at some of the threats to raptors....

Persecution: You can see below how owls and other raptors can be accidentally affected by rat poisons.

Habitat loss: A habitat is the place an animal lives. Good habitats for raptors have suitable places to nest and plenty of food. If the habitat changes and there are no longer safe places to nest or enough food... then this is bad news!

Did you know that Hen Harrier populations are declining? One of the main reasons is because their upland habitats have changed. Open habitats with loads of small birds like Meadow Pipts and Skylark have been planted with conifer forests, or burned or hedgerows have been removed. All of this means fewer places to nest and less food for harriers.

Remember... raptors are environmental indicators, so if they are in trouble, it's likely that other wildlife is also in trouble.

Unfortunately, other raptors have been targeted and shot and poisoned on purpose. This is one of the reasons that so many raptors went extinct in Ireland in the past... but it still continues today.



Hen Harrier, which was shot

But there is good news too!

Re-introductions: So, even though White-tailed Eagles were once driven to extinction, they are now nesting in Ireland again because they were re-introduced.



Red Kites can be seen again in parts of Ireland - What a sight!



How rat poisons can travel up the food chain

Barn Owls can catch up to 25 rodents in a single night to feed their chicks.

If they catch a rat that has eaten rat poison though, it can be trouble. The poison can move up the food chain, from the rat's system into the owl's system when they eat the rat... not good!



Two other raptors also became extinct in Ireland but have been brought back through re-introduction projects.

They are the Golden Eagle and Red Kite. Golden Eagle chicks were brought over from Scotland to County Donegal, and Red Kite chicks were brought over from Wales to Wicklow and County Dublin.





Nesting

Now the fun starts... four of the eggs hatch in early June. That's four more hungry mouths to feed!

The busiest time of the year for us raptors, and probably the most important, is the breeding season. We need to find a mate, choose a nest, lay eggs, and then take care of and feed their hungry chicks!

Take a look at just how busy my breeding season is!

In February, Bernadette Owl and I choose a perfect nest, really deep down a chimney of an old castle



Bernadette lays six small white eggs at the start of May. She has to sit on them to keep them warm (incubation) pretty much non-stop for 31 days. I have to catch enough food to feed both of us.

For two days before the chicks hatch they call from inside the egg, so we know they are coming!



Every night I try and catch as many rats, mice and other small mammals as I can to feed the chicks... exhausting... thankfully I am an excellent hunter!



At the end of July, after around 60 days, the chicks are nearly ready to start exploring outside the nest and ready to take their first flight.



At the end of the summer, it's time for them to leave and to go and find a suitable place to live for themselves. I need a break before next breeding season!



Practice your identification skills!



Test your identification skills! See if you can name each raptor... I have given you some clues!



CLUE: Hovers!

Name?
Irish name?

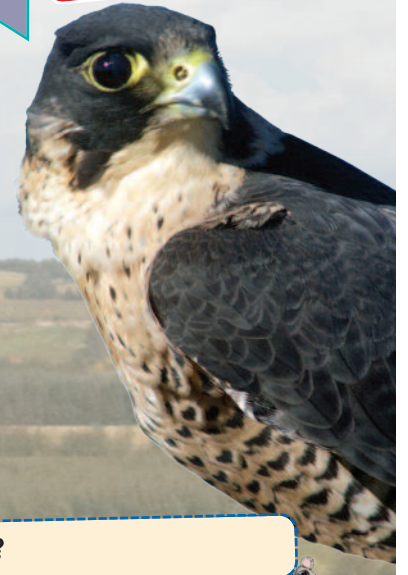


CLUE: went extinct in Ireland, but re-colonised

Name?
Irish name?

Name?
Irish name?

CLUE: The fastest!



Name?
Irish name?

CLUE: The farmers friend



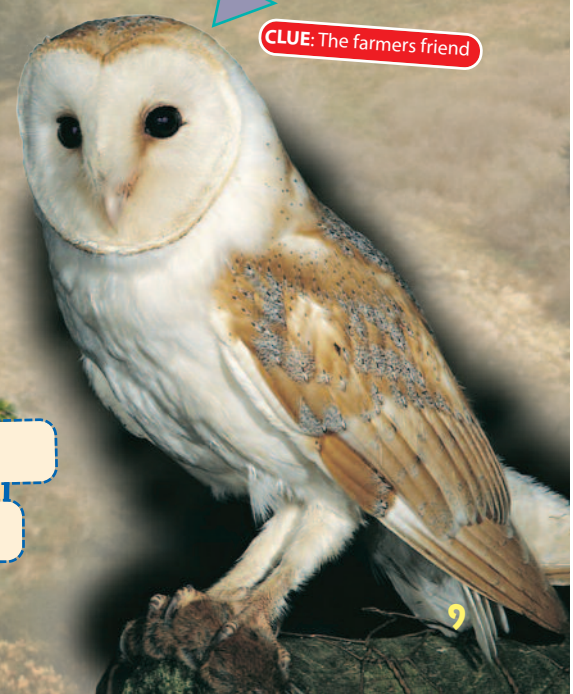
Name?
Irish name?

CLUE: Those aren't ears!



CLUE: dances in the sky!

Name?
Irish name?



CLUE: Eats more than Sparrows!

Name?
Irish name?

Name?
Irish name?

CLUE: The smallest... but fiercest!





See how many questions you can answer!

Raptor Quiz?



QUIZ

1. Name two raptors which were driven to extinction in Ireland?

2. What does the Kestrel's name in Irish mean?

3. Which is the most common owl in Ireland?

4. An animal that only comes out at night is called ...?

5. An animal which finds and eats dead animals is called a ...?

6. How many raptors regularly nest in Ireland?

7. In raptors, which is usually bigger, the male or female?

8. There are three falcon species which live in Ireland, can you name them?

9. Which raptor passes food to its partner in mid-air?

10. Which raptor has naturally re-colonised Ireland?

And finally...
Out of all the raptors in this book...how many have you seen in the wild?

WORD SCRAMBLE

Rearrange the five jumbled words below to make the names of raptors...

1. HI RARER HEN
2. A DIGITAL WHEEL TEE
3. SHOW ARK WRAP
4. WON LEG ORDEAL
5. MEN RISK RETELL

CLUE: Trick question - there are TWO raptors in this one!



SPOT THE DIFFERENCE
There are five differences between the White-tailed Eagle pictures

Can you find them?



Answers

Where's Barney's food? There are 11 mice hidden around the booklet. Did you find them all?
Answers from this page: QUIZ. 1 = There are three; White-tailed Eagle, Golden Eagle and Buzzard. 2 = 'The wind puncher'; 3 = Long-eared Owl. 4 = Nocturnal. 5. A scavenger. 6 = Eleven. 7 = The female. 8 = Peregrine, Merlin and Kestrel. 9 = Hen Harrier. 10 = Buzzard.
Word Scramble 1 = Hen Harrier. 2 = White-tailed Eagle. 3 = Sparrowhawk. 4 = Long-eared Owl. 5 = Kestrel, Merlin.

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Photos: Cover, Hen Harrier, Mark Carmody. **Inside front page,** Merlin, Cephas Wiki Commons. Golden Eagle, Wiki Commons. Golden Eagle head, Dick Daniels Wiki Commons. Barn Owl head, Mike Brown. Barn Owl feathers/talons, M.O'Clery. Barn Owl in flight, Barn Owl Trust. **P.1.** Castle, Barn Owl chicks, M.O'Clery. Barn Owl with rat, Long-eared Owl nest, R.T.Mills. Long-eared Owl chick, Dario Fernandez-Bellon. **P.2.** White-tailed Eagle with fish, John McCauley. White-tailed Eagle diving, Mike Brown. White-tailed Eagle nest, Finn Randhal Wiki Commons. Sparrowhawk male, Derek Lawlor. Sparrowhawk nest

John Lusby. Sparrowhawk juvenile, Peter Lamb. **P.3.** Peregrine nest, M.O'Clery. Peregrine Thomas McDonnell. Kestrel, M.O'Clery. Kestrel nest, Dario Fernandez-Bellon. Merlin, Niel O'Reilly, Merlin nest, John Lusby. Merlin preening, Shay Connolly. **P.4.** Buzzard, Francesco Veronesi Wiki Commons. Buzzard, Derek Cooney. Buzzard Tipperary, M.O'Clery. Hen Harrier male and female, Mark Carmody. Food pass illustration, Mike Langman RSPB. **P.6.** Hen Harrier, Mike Brown. Kestrel, M.O'Clery. Small mammals, R.T. Mills, George Shukiln Wiki Commons, David Perez Wiki Commons. Rabbit and Beetle, Wiki Commons. White-tailed Eagle, Jacob Spinks Wiki Commons. Meadow Pipit, Pied Wagtail, Buzzard, Peregrine, Mallard, Wood Pigeon, M.O'Clery. Barn Owl, RSPB-images.com. Bat, Wiki Commons. **P.7.** Dead Hen Harrier, Barry O'Mahoney. Red Kite, M.O'Clery. Barn Owl, R.T.Mills. **P.8.** Background, M.O'Clery. Adult Barn Owl with chicks, R.T.Mills. All other photos, J.Lusby/M.O'Clery. **P.9.** Background, M.O'Clery. Female Kestrel, Michael Finn. Buzzard, Shay Connolly. Hen Harrier, Shay Connolly. Peregrine, Michael Finn. Barn Owl, Mike Brown. Sparrowhawk, wikimedia.org - Pierre Dalous. Merlin, Shay Connolly. Long-eared Owl, Richard T. Mills.