



The Falconry Centre, Hagley

Kidderminster Road South, Hagley

West Midlands, DY9 0JB.

Telephone: 01562 700014

Website: www.thefalconrycentre.co.uk

Email: info@thefalconrycentre.co.uk

www.facebook.com/thefalconrycentre

Registered Charity No: 1191207

Company Number: 12682959

FACTS ABOUT EAGLES

It's time to learn about eagles! Use this fun fact sheet to find out about these magnificent predators. Look out for words in **bold** text and see what they mean using the 'glossary' section. Finally, put your new knowledge to the test by answering the quiz questions at the end.

Introduction

There are over 60 species of eagle spread all over the world. The Harpy Eagle, found in central and southern America, is the most powerful eagle; they can catch prey up to the size of monkeys and sloths. The smallest eagle is the South Nicobar Serpent Eagle, native to the Nicobar Islands in India, which stands around 38 to 42cm tall and weighs around 450g.

Eagles are predators, which means that they catch and eat other animals, known as 'prey'. They have a number of amazing **adaptations** to help them hunt and survive in the wild, and can be found in many different **habitats** around the world.

There are only two species of eagle that are native to the United Kingdom; the largest is the White-Tailed Sea Eagle, which is slightly bigger than the second species, the Golden Eagle, which is shown in this photograph.

Both of these species can be found in the wild in some parts of Scotland, and the White-Tailed Sea Eagle is being reintroduced to the Isle of Wight, south of England.



Types of Eagles

Eagles are grouped into four different categories, depending on their adaptations and the type of prey that they hunt.



Firstly, there are the 'booted' eagles, and they get this name from the fact that these eagles all have feathers covering the tops of their legs down to their feet. Most **raptors** have bare legs. Eagles in this group include the Golden Eagle, Steppe Eagle, Tawny Eagle, Verreaux's (or Black) Eagle (photograph to the left) and the Wedge-Tailed Eagle. Some members of this group are also known as 'hawk-eagles', which are eagles with adaptations or characteristics similar to a hawk; usually they are much smaller than other eagles, with long tails and shorter wings (like a hawk) as they live in forests and need these adaptations for agility to chase their prey around obstacles like tree branches. Look up our fact sheet on "How Do Birds Fly?" for more information about this.

'Hawk Eagles' are eagles that have characteristics like a hawk; similarly, there are 'Buzzard Eagles' which is an eagle that has features which are similar to those of a buzzard. An 'Eagle Owl' is therefore not an eagle, but is instead an owl that is large like an eagle!



This Chilean Blue Buzzard Eagle is an eagle with features that make it look a bit like a buzzard. The first name, 'buzzard' tells you what it looks like; while the second name, 'eagle' tells you what species it really is.

This Turkmenian Eagle Owl, on the other hand, is not an eagle - it is an owl that is very large, like an eagle. Again, the first name, 'eagle' tells you what it looks like, while the second name, 'owl' tells you what its species actually is.



As this group of eagles has the highest number of species, they are the most widespread and live in many different regions. They also have the most varied diet. Some, like the Golden Eagle, mostly hunt medium-sized mammals but they will also take birds, reptiles and even up to the size of young deer. The Tawny and Steppe Eagles will both **scavenge** and will also eat things like termites, as the insects emerge from their nests.

The second category of eagles is the sea, or fish, eagles. This group has some of the largest species of eagle, and the largest one of them in this group is the Steller's Sea Eagle, native to Japan. Other eagles in this group include the White-Tailed Sea Eagle, the Bald Eagle and the African Fish Eagle. Eagles in this group have a very rough texture on the undersides of their feet, which feels a bit like sandpaper, and which helps them to grip slippery fish more easily. However, sea eagles do not just eat fish; some will also catch birds and mammals or feed on **carrion**.

The third type of eagle is the Forest Eagles; this is a small group which includes the most powerful of all eagles; the Harpy Eagle. The eagles in this group tend to hunt animals that live in trees, such as monkeys and sloths; as these animals can grip very tightly to trees, the forest eagles have extremely powerful feet and their weight helps them to dislodge prey. Another eagle in this group is the Philippine Eagle, which will sometimes hunt by gliding over the tree tops looking for monkeys or large birds, such as hornbills. This eagle is classified as endangered, and a lot of work is being done by people to ensure its survival in the wild. Birds are being captive bred and then released into the wild. As these eagle species all live in the rainforest, they are in danger of extinction as the rainforests are destroyed.

The fourth and final category of eagle is the snake or serpent eagles; as the name suggests, they specialise in catching snakes but also lizards, frogs and birds. Most of these species have extra thick feathers and layered scales on their legs to try and stop a snake from biting their skin. They generally have large heads with long feathers that fan out, like the Bateleur Eagle in this photograph. Their toes are short and stubby which can help them catch and hold on to wriggling snakes. The eagle then kills the snake by crushing the head with its talons or beak; smaller snakes can be swallowed whole! The snakes' venom does not harm the eagle.



About Eagles

Eagles are generally old enough to breed at around four or five years old - their **plumage** usually gradually changes up until that time. This means that baby eagles look very different to their parents until they are mature – for example, it takes a Bald Eagle five to six years to get the distinctive white head and tail that shows it is an adult.

The three baby Bald Eagles below hatched only a few days apart, so you can see how quickly they grow! They reach full size, like the middle picture, at about 3 months old.



However, it takes five to six years for the baby Bald Eagle to get the white head of the adult, as shown in the third photograph, below. You can see that the beak and eye colours also change with age.



It has long been believed that eagles pair for life. No studies have demonstrated this for definite, but it is generally believed to be true. However, if one of a pair dies, then the surviving eagle will try to find another mate.

The exact lifespan of eagles is unknown in the wild, but it is believed that if they survive to maturity, they will live around 20-30 years. Eagles in zoos and bird of prey centres can live much longer than this, sometimes up to 50 years or more, because it is a much easier life in a zoo – they do not have to hunt for prey as they get fed every day, and they are not at risk from any of the dangers that they would face out in the wild.



Some species of eagle (mainly fish eagles, like the African Fish Eagle in this photograph) will perform spectacular **courtship** displays, where the male and female will interlock feet while up high and drop down towards the earth or water, only releasing each other at the last possible moment.

Most eagle species will build nests either in a tree or cliff face. Occasionally some eagles will nest on the ground if no tree or cliff is available. Fish eagles tend to build the largest nests and will generally reuse the same nest each year and keep adding to it. One Bald Eagle nest in Florida was recorded at being over 20 feet (that is over 6 metres) high!

Most eagles lay 2 eggs but sometimes 3 or 4. The Harpy Eagle will only lay 1 egg every 2 years, as the young can stay with their parents for up to 18 months. Most **eaglets** leave the nest around 3 to 4 months old. They usually stay with their parents for another 2 to 3 months learning how to hunt and then they are chased away from the parent's territory, as the parents do not want their baby 'hanging around' and trying to take over their territory!

Feet & Beak

Eagles have very strong feet and sharp claws, or **talons**, which they use to catch their prey. They will often grab and crush their prey to kill it before they can eat it. Once an eagle has got hold of its prey, they will grip very tightly to stop it from escaping. Having strong feet also helps them to hold on to perches when they are not flying.

Eagles have a hooked beak, like all birds of prey. They use this along with their strong feet to tear up their prey and then swallow the pieces. When an eagle eats, the food does not go straight to their stomach in the way ours does when we eat – they have a storage pouch in their throat called a 'crop'. Once they have eaten, they then move their head and neck around to push the food from the crop into their stomach, where they then start to digest it. Once they have digested their meal, they will **regurgitate** a pellet. This pellet is made up of all the bones, fur, scales, feathers or other bits of their prey that they cannot digest. Lots of people know that owls cough up pellets, but not many people realise it is something that all birds of prey will do.

A Future for Eagles

You might think that an eagle has no predators or enemies. Sadly, it does – and its greatest enemy is human beings. Throughout the world, we have destroyed many of the eagles'

homes. We have cut down the trees where they used to nest and we have built many roads, cities and resorts where they used to hunt. We have polluted the rivers and lakes with chemicals that kill the fish they feed on.

In many parts of the world, farmers and fishermen will shoot or poison eagles because they believe that they catch their animals and harm their livelihoods, but this has been shown many times to be untrue. It is against the law in many countries, including the United Kingdom, to hurt an eagle, but people continue to persecute them.

Fortunately, there is still hope for the eagles. Many people care about them and are committed to their survival. Conservation groups, such as the Worldwide Raptor Conservation, are fighting around the world to protect the areas where eagles live, and to pass laws to control pollution and stop the shooting and trapping of these magnificent birds.



GLOSSARY

Adaptation	An 'adaptation' is a feature or process that an animal has to help it survive better in its environment. The process of adaptation takes place over many generations, which is also known as 'evolution'. When we talk about adaptation, we mean a 'feature' which helps the animal to survive.
Carrion	This means animals that are already dead – scavengers will often feed on carrion. After all, if they find something that is already dead this saves them the effort of having to hunt and kill something else!
Courtship	The way in which an animal attracts a potential mate is called 'courtship'. This might involve putting on elaborate displays, building a nest or a den, or even bringing their possible mate gifts of food to impress them.
Eaglet	This is the name given to a baby eagle.
Habitat	This is the name given to the environment an animal lives in out in the wild. There are lots of different habitats, such as woodlands, marsh land, grassland, etc – why not do some further research and see how much you can find out about different habitats?
Plumage	This is the name given to feather colours and patterns. Some baby birds have different feather colours compared to the adults; this is known as 'juvenile plumage' so you can tell if you are looking at a young bird or a mature adult.
Raptors	The word 'raptor' means 'bird of prey'. Not all meat-eating birds are raptors; to be classed as a raptor, a bird must use its feet to catch its prey, just as an eagle does. Other meat-eating birds, like herons or kingfishers, which eat fish, will use their beaks to catch their food – so they are not raptors.
Regurgitate	To regurgitate means to cough something up; a bird of prey 'coughs up' a pellet from its stomach, getting rid of anything that it cannot digest. If you do an internet search for "owl puke" you can learn a lot more!
Scavenger	A bird or animal may hunt and scavenge or just scavenge – this means to just eat whatever they can find, rather than going to the effort of catching something. For example, eating carrion – something that has already died.
Talons	Talons are the special name given to the long, sharp claws on the end of a bird of prey's toes. It is these talons, along with powerful muscles in its legs and feet, that allow a bird of prey to grab and hold on to their prey.

FACTS ABOUT EAGLES: QUIZ

Test your new-found knowledge about eagles by answering the quiz questions below. When you are finished with the quiz, why not try and write a short story or a poem about an eagle using the facts you have learned, or perhaps draw a picture of one?

1	What are the largest and smallest species of eagle in the world?	
2	Which species of eagle are native to the UK?	
3	What is the most powerful eagle in the world, and what does it eat?	
4	What are the four different categories of eagle, and can you give an example species from each one?	
5	What do Tawny Eagles eat?	

6	What adaptation helps a sea or fish eagle to catch fish?	
7	How can you tell the different between a baby Bald Eagle and an adult Bald Eagle?	
8	How long do eagles live in the wild, compared to in a zoo?	
9	What is 'courtship'?	
10	What makes a raptor different from other meat eating birds, such as kingfishers?	
11	What is the greatest threat to eagles' survival in the wild, and why?	