

TEACHERS HANDOUT

WHAT IS A RAPTOR?

A raptor is just another term for a bird of prey! So a raptor is a bird of prey!

WHAT IS A BIRD OF PREY?

A bird of prey is a carnivore (meat eating) bird that hunts for food using their keen senses, especially vision. Their talons and beaks tend to be relatively large, powerful and adapted for tearing and/or piercing flesh. The term "raptor" is derived from the Latin word "*rapere*" which means "snatch", "grab", or "carry off".

WHAT ARE THE DIFFERENT TYPES OF BIRDS OF PREY?

We have five types of birds of prey in the world:

- Eagles
- Hawks
- Falcons
- Owls
- Vultures

WHAT IS THE DIFFERENCE BETWEEN BIRDS OF PREY AND OTHER BIRDS?

The main difference between birds of prey and the other birds is the way they will capture their preys. A bird of prey will capture its preys with its feet. Birds of prey have very strong feet and sharp talons that they use to capture and kill their preys. The other birds are going to use their beaks to capture their preys. Think about the Loon, catching a fish out of the water, the Robin, pulling a worm out of the ground, or the Woodpecker, pecking bugs out of a tree, all these birds will use their beaks to capture their preys, while birds of prey use their feet.

HOW CAN WE TELL THE DIFFERENCE BETWEEN A MALE AND A FEMALE?

Unlike songbirds, we cannot rely only on sexual dichromatism (when the two sexes are of different colors) to distinguish males and females. There are only three birds of prey with a significant color difference in their plumage: the American Kestrel, the Everglade Kite (also called the Snail Kite) and the Northern Harrier. All the other birds of prey, males and females, look identical once they reached adulthood. So we have to rely mainly on sexual dimorphism (this is when the sexes are of different sizes or shapes). And in the bird of prey world, the females are usually larger than the males – up to one third larger. It's basically a biological reason. The females have to be the egg layers, the incubators, and most of the time the nest defenders. During the nesting period, the males usually have the role of food providers.

DO BIRDS OF PREY FLY A LOT?

Funny thing! Unlike songbirds, birds of prey do not fly just for the pleasure of it. They fly only when they are hungry and hunting. We have to remember that birds of prey are solitary animals and predators to each other. Every time they come out to hunt, they are a potential prey for other birds of prey. So they need to hunt quickly, they will gorge themselves and then go back to safety where they will sit and wait until they feel hungry again to hunt again.

WHAT IS THE MAJOR DIFFERENCES BETWEEN THE DIFFERENT TYPES OF BIRDS OF PREY?

Apart from physical appearances between the different types of raptors, one major difference relates to their hunting style.

Eagles will mainly rely on their strength to overpower their preys. They also have exceptional vision that allows them to pinpoint their preys at many kilometers away. Eagles can see approximately eight times in more details than we can.

Hawks, like eagles, will usually use their physical strength to overpower their preys.

Falcons will rely on their speed to capture their preys. The fastest bird on the planet is the Peregrine Falcon and has been clocked at speeds of over 200 miles per hour in a dive! They go so fast that they will even distort their body in their dive. Falcons usually capture their preys in the air and will eat them on the ground.

Owls, being a nocturnal (active during the night) species, have good vision, but will mainly rely on their sense of hearing to find their preys. An owl can pinpoint their preys at over 50 meters away in total darkness and even under one to two feet of snow. This is due to their ears being placed at different levels. The right ear is generally placed higher

than the left one allowing the owl to capture all frequencies of sounds. Plus, they have a completely silent flight which helps them sneak up on their preys and also hear better. Their feathers are equipped with guard hairs that allow the air to pass through the feathers and therefore make no sound.

Vultures, being the only bird of prey with a sense of smell, will use this sense to detect their deceased preys. They do not have and do not need strong feet like the other birds of prey since they are eating carrions and do not hunt live preys.

HOW FAR CAN BIRDS OF PREY TURN THEIR HEAD?

Contrary to popular beliefs, birds of prey cannot turn their heads all the way around! But they can turn their heads at 270°! That is about $\frac{3}{4}$ in each direction. And remember, all birds of prey are equipped with such flexible necks, not only the owls. This is due to their eyes being fixed in their orbits. They are not able to move their eyes upside down or sideways like we can, therefore the need to move their necks around!

WHAT DO BIRDS OF PREY EAT?

Birds of prey are carnivores, meaning that they are solely meat eaters. The types of prey will depend on the species of bird, but will vary from insects, to small mammals, birds, fish, and large mammals.

ARE ALL OWLS NOCTURNAL (active during the night)?

Most owls are nocturnal, but there are a few exceptions. The Snowy Owl and the Burrowing Owl are diurnal birds (active during the day time). These owls will mainly hunt from dusk to dawn.