Raptors

Birds of Prey

1) Birds of prey, or raptors, are birds usually hunt other animals and birds for food. These include eagles, hawks, falcons, vultures, and owls. Vultures don’t actually hunt but will search for and eat animal carcasses (carrion).

2) Hunting styles vary between species. Some birds hunt animals on the ground and others catch their prey in the air. Falcons often catch small birds in flight while hawks will view their prey from a perch or the air high above and then attack.

3) The raptor’s body is designed to make them efficient hunters. Raptors have amazing eye-sight. They are able to see 5 times better than humans. A red-tailed hawk can see its prey up to a mile away. Raptor eyes are fixed within their eye sockets and these birds cannot look from side to side. Instead, they have about 2 times the number of neck bones than people have so that raptors can turn their heads around 180°.

4) Owls have fringe on the leading feathers of their wings to make their flight silent. Owl ears are asymmetrically positioned on their head to allow for triangulation of sound.

5) All birds of prey have talons. Talons are different from claws because they are often used for carrying prey. The talons are incredibly sharp and are connected to four muscular toes (digits). Most raptors have zygodactyl toes which means that three toes point forward but the first digit is positioned toward the back. This first digit is called the killing talon because it is used to pierce the body of the prey animal.

6) Raptor beaks are strong and hooked. The beak is used by raptors to kill their prey by biting at the base of the neck. Meat is then ripped off the carcass during feeding. Most raptors do not use their beaks to carry food or to grip objects.
7) Hawks store some of their food in their crop which is a storage area in their esophagus located in the neck. Food that an owl eats goes straight to the stomach. Birds have two stomachs, the proventriculus and the ventriculus (gizzard). The proventriculus is like a human stomach where food is digested as it is exposed to gastric (stomach) enzymes. The ventriculus wall is thick with muscle and this is where food that is hard to digest (bones, whole seeds, insects) goes. The muscles of the ventriculus grind the food into small particles so that they can go back to the proventriculus for digestion. Hawks are able to digest more of their food than owls because only part of their meal goes to their stomach as one time. The rest of the food is stored in the crop and only moves to the stomach when the stomach is empty. This way, the hawk's stomach can digest small amounts at a time even though the hawk ate as much as an owl. Since all of the owl's meal goes to the stomach when eaten, the stomach is not able to digest all the food as well.

8) Raptors eat whole prey which means that they eat the fur, feathers, bones, and teeth of their animal meal along with the muscle and organs. Bones and fur are hard to digest. To get rid of these indigestible parts, raptors cast (regurgitate or vomit) a pellet of fur and bones every 1-2 days. The regurgitated pellet is called a cast. You can sometimes find these on the ground and with close examination, tell what the raptor had to eat! You will find more bones in an owl's cast because they haven't been digested as well as those from a hawk.