Birds of Prey Lapbook
by Tina Franks

Books used:
ZooBooks – Birds of Prey by John Bonnett Wexo
A First Look at Owls, Eagles, and Other Hunters of the Sky by Millicent E. Selsam & Joyce Hunt

Library List
Raptor! by Christyna M. & Rene Laubach & Charles W.G. Smith
Birds of Prey by Laura Evert
Amazing Birds of Prey (DK Eyewitness Juniors) by Jemima Parry-Jones

Research and Lessons

Day Hunters vs. Night Hunters
There are many different kinds of birds that are considered birds of prey (over 400!) but they can be grouped into several main types of birds. The day hunters are mostly eagles, hawks, ospreys, falcons and vultures. The night hunter category consists mainly of owls.

Important Birds of Prey Facts
According to ZooBooks, there are over 420 different kinds of birds of prey. Most of them are eagles, hawks, falcons and vultures. Owls are also birds of prey and there are close to 140 of those.
The smallest bird of prey is the Bornean falconet. It weighs about an ounce and is less than 6” long.
The largest bird of prey is the Andean condor, which weighs around 30 pounds and has a wing span of over 10 feet.

Why are they called birds of prey?
These birds are named for their skills and ability to catch live prey. That is what separates them from other hunting birds.

Predator and Prey
A predator is an animal that hunts others for food. Prey is the animal being hunted. Predators are an important part of nature. Their job is to get rid of
insects and nuisance animals and to weed out the animals that aren’t able to survive in nature on their own (survival of the fittest). The predators that make up the birds of prey family do their jobs well and their prey does not suffer.

**Flight Facts**
All birds fly in two ways. First, they flap their wings. In order for them to be able to fly while carrying prey, birds of prey have very strong flight muscles. The primary flight muscles are attached to the bird’s breastbone. These are the muscles that do most of the work when the bird hovers, takes off, maneuvers and lands. Second, they glide. Older children may wish to investigate a bird’s use of thermals in flight. (This can be found on and around page 13 in the Birds of Prey Zoobook.)

**Birds of Prey and Their Wings**
Some birds of prey can fly very high. Some can fly very fast, as fast as 80 miles per hour sometimes! How a bird of prey uses its wings depends a lot on how they fly. Falcons and other smaller birds of prey are very fast flyers and have thin wings that help them to fly fast. Hawks and some owls fly often have to navigate in and around forests so they have short, stubby wings that give them some speed, but more lift. Eagles, vultures and buzzards fly very high and glide for long periods of time. (Gliding is flying without flapping the wings.) Their wings are big and broad and provide them with a lot of lift to help them glide.

**Skeleton Facts**
To make them lighter and able to fly more easily, all birds have many hollow bones. Even as light as they are, though, a bird of prey’s skeleton is very strong.

**Which Bird of Prey Does Not Catch Its Food?**
Vultures do not catch their food. They search for animals that are already dead and then eat everything but the bones. They are part of the clean-up crew in the animal world, removing dead and decaying animals that would otherwise take a long time to go away.

**How Do They Catch Their Prey?**
First, a bird of prey will swoop down and try to grab its prey with its sharp talons. If the bird is successful and the prey is caught, the force of the impact and the sharp, piercing talons will usually kill the prey instantly (so the prey
really doesn’t suffer). However, 9 out of 10 attacks are not successful and the prey escapes.

**Bird of Prey Bodies**

**Eyes** – Birds of prey usually have large, bright eyes with 3 eyelids to protect their eyes: an upper eyelid, a lower eyelid and the “nictating membrane”. Owls are most like humans, in that they move their upper eyelids down like we do. Hawks close their eyes by moving their lower eyelids up... the exact opposite of what we do. Their 3rd eyelid is called a “nictating membrane” and it closes from side to side. It is specifically designed to clean the bird’s eyes and keep it moist.

**Vision** – Overall, the vision of a bird of prey is 8 to 10 times better than that of a human being. Eagles can see small animals clearly from several miles away. Owls’ eyes are created to see at night, so their eyes are very sensitive. They can see anywhere from 10 to 100 times better than us in the dark.

**Beak** – A bird’s beak is dependent on the kind of prey they hunt. Birds with short beaks, like the American kestrel, eat insects and small animals. Birds with long, curved beaks, like the Everglades kite, are likely to eat things like snails and other animals with shells that they have to pick at. Beaks that are heavy and strong, like that of the bald eagle, are for tearing apart large pieces of meat (larger animals).

**Talons** – Talons, too, depend on the type of prey. Birds with small talons usually hunt and eat rats, mice and other small animals. The barn owl is one example of this. Birds with large talons, like the harpy eagle, have talons as big as a bear’s claw and can even hunt and carry a small sheep!

**What Do They Eat?**

The main prey of birds of prey are rats, mice, insects, birds, snakes, fish and other vermin. Sometimes they do go after larger animals such as rabbits and small farm animals.

**Moms, Dads and Babies**

Birds of prey are usually considered to be excellent parents and a large amount of their hunting is done to feed their offspring. Not all birds of prey mate for life. The amount of time they stay together depends on how many seasons they’ll have to spend raising their young. Condors usually do mate for life, or a really long time at least. Smaller birds only mate for a season or two.
Their eggs vary in all aspects: size, shape color and texture. Most species lay somewhere between 1 and 4 eggs. Certain owls can lay up to 12, provided there is enough food available. Larger birds, though, rarely lay more than 2, probably because their young will require much more food. Mom keeps the eggs warm until they hatch and, while she’s doing that, dad does the hunting for them both.

Nests can be found in many places; usually parents choose locations that can best protect their young. Many owls build their nests in holes in trees, though some prefer holes in the ground (the burrowing owl) and the elf owl builds its nest in a giant cactus. Other birds of prey more commonly build their nests high up in the trees.

Birds of Prey Picture Cards (answer key)
- Owls – 1
- Eagles – 2
- Hawks – 3
- Ospreys – 4
- Falcons – 5
- Vultures – 6

Birds of Prey are Endangered

Endangered means that an animal is in danger of dying out and becoming extinct, never to be seen again.

People kill birds of prey in many ways and for many reasons, and often indirectly. Some people think it’s okay to shoot and trap them because they believe that these predators kill lots of farm animals. Although they do sometimes take chickens or other small farm animals (like small sheep), it is very seldom. In reality, birds of prey really help farmers by killing millions of pests and crop-destroyers every year. Pesticides that are put down to kill off vermin are absorbed by prey and can build up in the birds’ systems and slowly but eventually kill them. Commercial development, too, can disrupt hunting and nesting territories and either drive the birds away or starve them to death.
Cut out each shape (cut along the dark black lines; do not cut any gray lines). Fold each book in half on the gray line (three small books and one large book). Glue the back sides of the small books into the inside of your large book.

When you are finished, you can write a title on the front of the large book and open it to learn three things about your subject. See diagram below to help you visualize what your opened book will look like.

falcons and other small birds of prey
hawks and some owls

eagles, vultures and buzzards
Birds of Prey and Their Wings!
Which bird does NOT catch its prey?
How do birds’ bones make them lighter?

How strong is a bird of prey’s skeleton?
How long do they stay together?
What about the eggs?

Cut out the rectangle on each page. Stack together with the smallest on top and the largest on the bottom. Staple at the top.
Where do they build their nests?
Cut books out. Fold matchbook style.

**PREDATOR**

**PREY**

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Cut pocket out as one piece. Fold back up. Wrap flaps around the back and glue down. Match the picture cards to their descriptions and glue the descriptions to the back of the picture cards.
<table>
<thead>
<tr>
<th>Owls</th>
<th>Eagles</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Owl Image" /></td>
<td><img src="image2" alt="Eagle Image" /></td>
</tr>
<tr>
<td>Hawks</td>
<td>Ospreys</td>
</tr>
<tr>
<td><img src="image3" alt="Hawk Image" /></td>
<td><img src="image4" alt="Osprey Image" /></td>
</tr>
<tr>
<td>Falcons</td>
<td>Vultures</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>round, flat faces</td>
<td>wide, rounded wings for</td>
</tr>
<tr>
<td>big round eyes</td>
<td>soaring/floatating on the air</td>
</tr>
<tr>
<td>heads that can turn almost all</td>
<td>short, fan-shaped tails</td>
</tr>
<tr>
<td>the way around</td>
<td></td>
</tr>
<tr>
<td></td>
<td>They do not have tufts of</td>
</tr>
<tr>
<td></td>
<td>feathers on their heads but</td>
</tr>
<tr>
<td></td>
<td>do often look like they are</td>
</tr>
<tr>
<td></td>
<td>wearing feathered pants.</td>
</tr>
</tbody>
</table>

These birds of prey have... These birds of prey have...

These birds of prey hunt at night.
<table>
<thead>
<tr>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>These birds of prey have... wide, rounded wings for soaring/ floating on the air.</td>
<td>These birds of prey have dark marks on their wings.</td>
</tr>
<tr>
<td>short, fan-shaped tails</td>
<td>Their wings look bent when they fly.</td>
</tr>
<tr>
<td>These birds of prey are smaller than eagles.</td>
<td></td>
</tr>
<tr>
<td>Their names usually tell them apart.</td>
<td></td>
</tr>
<tr>
<td>These birds of prey are built for speed and every part of their body is long and streamlined, from their pointed wings to their long, straight tails.</td>
<td></td>
</tr>
<tr>
<td>The fastest-flying bird in the world (the Peregrine) is a member of this group. It can also dive through the air at very high speeds!</td>
<td></td>
</tr>
<tr>
<td>These birds of prey hunt for dead animals on the ground.</td>
<td>They have...</td>
</tr>
<tr>
<td>They have...</td>
<td>sharp eyes</td>
</tr>
<tr>
<td>heads that are very small, with no feathers.</td>
<td></td>
</tr>
</tbody>
</table>
Fun Facts

How many different types of birds of prey are there?

Which is the smallest bird of prey?

Which is the largest bird of prey?

How many different types of birds of prey are there?
Cut out rectangle as one piece. Fold on solid lines. You should have a book that opens like the "shutters" on a window.
Define “endangered” under the printed flap. Under the remaining three flaps, list reasons why birds of prey are endangered.
Cut out as one piece. Fold in half.
Cut book out. Fold on lines (matchbook style)

Why are they called birds of prey?
Cut out book as one piece and fold matchbook style. Under each flap, write the different types of birds of prey that hunt during that time period.

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Cut out each piece. Stack together with cover on top and punch hole as indicated. Attach with a brass fastener.

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Beaks

Eyes

Talons

Vision