



## Birds

### *Fine feathered friends*

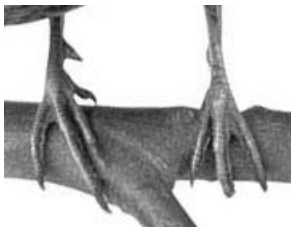
Supply list:

- 1 copy of “God Made Birds With Special Beaks” for each child (pg. 27)



**B**irds are some of the most interesting and easy to watch animals in God’s creation. These warm-blooded feathered vertebrates can be found in every region of the world. There are approximately 9,000 different species of birds. Birds lay eggs and breathe with lungs. Most birds are excellent flyers, although some birds do not fly. God designed birds’ bodies to be efficient flying machines. Birds have strong yet lightweight bones; many bones have hollow spaces to make them lighter. Birds also have a rigid or stiff backbone that supports the strong muscles used to move the wings.

With 9,000 different species of birds, it is helpful to group the birds by some common characteristics. Birds are often grouped as perching birds, birds of prey, water birds, game birds, tropical birds, and flightless birds. The design of the feet and beaks of these different groups reflects the different ecosystems or environments in which they live.



Approximately 60% of all birds are perching birds. Songbirds such as the thrush, robin, bluebird, and sparrow are just a few of the many perching birds. A few perching birds such as the hummingbird and woodpecker do not have songs. Perching birds have feet with 3 toes facing forward and 1 toe facing backward for grasping branches. Many have triangular-shaped pointed beaks for eating seeds and



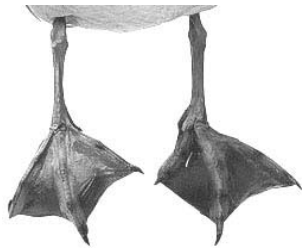
insects. Some of these birds, such as hummingbirds, have long narrow beaks for sucking nectar from flowers.



Birds of prey like eagles, hawks, falcons, and owls are designed to catch small animals such as rodents. They have very sharp eyesight, as well as hooked beaks and sharp talons (claw-like feet) that allow them to catch and kill their prey. Many



birds of prey, particularly owls, also have very keen hearing that allows them to pinpoint prey in the dark.



Water birds, such as ducks, swans, and geese, are specially designed for life on and near the water. They have rounded beaks for catching fish and other food in the water and they have webbed feet for swimming. They also secrete oil that helps make their feathers water resistant.



Game birds are birds that are often hunted for meat. They have very strong flight muscles making them difficult to catch but good to eat once they are caught. These include wild turkeys, quail, and pheasant. Although ducks and geese are considered water birds,



they are game birds as well.

Tropical birds include parrots, parakeets, and toucans. These birds live in the tropical rain forests. Most are very brightly colored and have large hooked beaks. They have similar feet to perching birds since they spend most of their time in the trees.



Finally, a few birds are flightless. These birds have wings but are not able to fly. Flightless birds include ostriches, emus and penguins. Most of these birds have strong legs and feet and can run or swim very swiftly.





### **Examining Beaks and Feet:**

Examine the pictures in this lesson as well as pictures of birds in other books to get a better idea of how different birds' beaks and feet look. Then give your child a copy of the "God Made Birds With Special Beaks" worksheet and have him draw the different types of beaks and feet that God gave to birds.

Help your child recognize the various uses of the different shaped beaks and feet and how they help the birds to survive in their environment. Add this page to your animal kingdom notebook.

### **Other Optional Activities:**

1. Put up a bird feeder and enjoy watching the birds come close on a regular basis.
2. Find abandoned nests and dissect them to find out what birds use to build their nests.



## **What did we learn?**

How do birds differ from mammals? (They have feathers, eggs, wings, and can usually fly.)

How are birds the same as mammals? (They are both warm-blooded and breathe with lungs.)

How can you identify one bird from another? (By their size, shape, color of feathers, beak and feet design, calls, and songs)

## **Taking it further**

What birds can you identify near your home? (Use a field guide to help you.)

Why might you see different birds near your home in the summer than in the winter? (Many birds migrate to live in a warmer area in the winter and a cooler area in the summer so different birds may be in your area at different times of the year.)

## **FUN FACTS**

1. There are between 100 and 200 billion birds on the planet.
2. The largest bird is the ostrich, which can be up to 9ft. tall and weigh as much as 160 lb.
3. The heaviest flying bird is the Andean condor at 27 lb.
4. The smallest bird is the bee hummingbird from Cuba at 0.056 oz.

## God Made Birds With Special Beaks:

For eating nectar

For eating fish

For eating prey

For eating bugs

For eating nuts and seeds

## God Made Birds With Special Feet:

For swimming

For perching in trees

For catching prey

For walking or running