

Adaptations of the Bird

The environment plays an enormous role in determining the characteristics of the organisms that live there. This can easily be seen in the variations of beaks and feet found on differing species of birds. Changes in the environment lead organisms to adapt in order to increase their chance of survival. The surviving organisms then pass these adaptations on to their offspring.

Answer the following questions based on what you already know about birds. **All answers should be written on answer sheet.**

1. In what types of environments are birds typically found?
2. What foods are birds that live near a lake, pond or the ocean most likely to eat?
3. What types of organisms serve as a food supply for birds walking in your lawn?
4. Why do dead or diseased trees serve as a food source for some birds?

Part 1: Bird Habitats

The place in which a bird lives supplies the animal with food and shelter and is known as its habitat. For each of the birds listed on the chart, determine the type of area in which they live. **List the habitat for each bird in the first column of the chart marked "Habitat".**

Part 2: Beak Adaptations

The shape of the beak of a bird is based on its function or job. Examine the pictures of the birds, paying close attention to their various beak types. Using the descriptions below, determine the type/use of each beak based on its shape and function. **List the type of beak for each bird in the second column of the chart marked "Beak Use".** Some beak types may be used more than once.

Beak Types:

- a). short cracking --- eating small seeds.
- b). long and spear --- spearing fish
- c). pointed chisel --- drilling for insects
- d). hooked --- catching prey
- e). tubular --- sucking nectar
- f). long and stout --- scooping fish
- g). multipurpose --- can do many things.
- h). crossed --- chopping nuts.

Part 3: Foot Adaptations

Like the beak, the structure of the foot of a bird is also determined by its function or job. Examine the pictures of the birds, paying close attention to the various foot types. Using the descriptions below, determine the type/use of each foot type based on its shape and function. **List the type of foot for each bird in the third column of the chart marked "Foot Use".** Some foot types may be used more than once.

Foot types:

- a) 2 toes in front and 2 behind, for climbing.
- b) 3 toes in front and 1 behind, long, for walking in water.
- c) 3 toes in front and 1 in back, webbed, for swimming
- d) 3 toes in front and 1 in back, long claws (talons) for catching prey.
- e) 3 toes in front and 1 in back, for sitting on a branch.
- f) 3 toes in front and 1 in back, for walking.
- g) 2 toes in the front, for running.

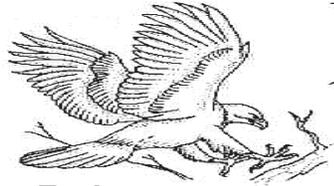
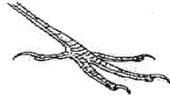
Summary

Answer the following questions based on what you have learned about birds. **All answers should be written on answer sheet.**

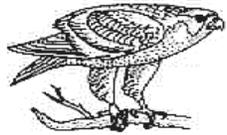
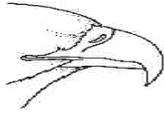
1. What is a possible explanation for the heron having such long legs?
2. Why do birds with talons also have hooked beaks?
3. What is a possible reason why a woodpecker would be "pecking" on your house?
4. Owls are birds of prey. Which beak and foot combination do you anticipate them having? Why?
5. Ostriches are unique animals, long legs, a long neck and a multipurpose beak. How does this combination of adaptations allow the ostrich to survive?



Crossbill



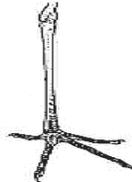
Eagle



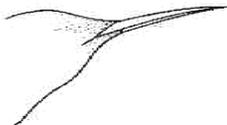
Falcon



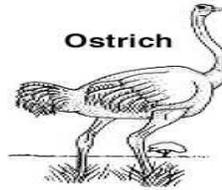
Heron



Hummingbird



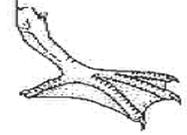
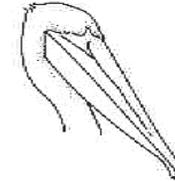
Jacana



Ostrich



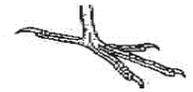
Pelican



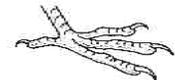
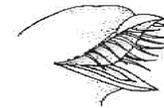
Quail



Robin



Whippoorwill



Woodpecker

