

Biology Chapter 42: Birds Study Notes

Name _____

Birds are different from reptiles in that they are **endothermic**; have **feathers** covering their bodies rather than scales, and have **four-chambered hearts**.

The **bones** of birds are thin and hollow.

Digestive System

- A bird's **crop** temporarily stores food.
- Food taken into a bird's body is ground up in the **gizzard**.
- Birds excrete most of their nitrogenous wastes as uric acid.



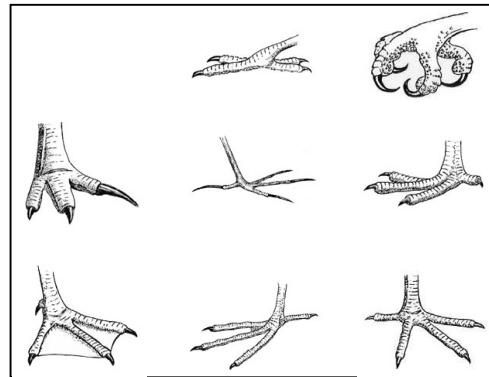
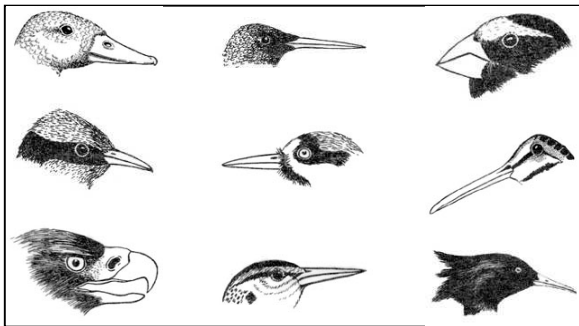
Respiratory System

- Gas exchange is necessary in all animals because oxygen is needed to break down food molecules, carbon dioxide is a waste product that must be eliminated, and there is more oxygen in the environment than in animal bodies.
- Bird respiration is very efficient because birds' system of air sacs permits air to flow in only one direction through the lungs.

The **syrix** of a bird functions in producing songs. The syrix is located in a bird's trachea. Males do most of the singing.

Adaptations

- **Beak** size and shape is an adaptation for obtaining food. Beak size and shape can provide you with a clue as to a specific bird's diet.



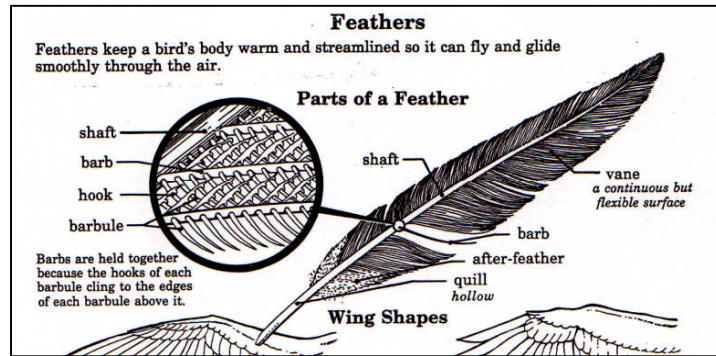
- **Foot** size and shape is an adaptation for getting around within a bird's habitat and for obtaining food. Foot size and shape can provide you with clues as to a specific bird's habitat and diet.

Long incubation times are associated with **precocial** young, who are relatively independent when they hatch, while short incubation times are associated with **altricial** young, who are dependent for some time after they hatch.

Feathers

Be able to locate and identify the following parts of a feather:

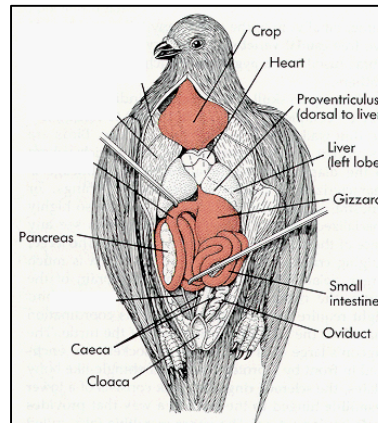
- After-Feather
- Barb
- Barbule
- Hooklets
- Quill
- Shaft / Rachis
- Vane



Internal Anatomy

Be able to locate and identify the following parts of a bird's internal anatomy:

- Crop
- Gizzard
- Heart
- Liver
- Lung
- Small Intestine



Classification

- Anseriformes: waterfowl
- Apodiformes: hummingbirds & swifts
- Ciconiiformes: herons
- Columbiformes: pigeons & doves
- Falconiformes: raptors
- Galliformes: fowl
- Passeriformes: songbirds (*Largest order of birds. Most of the birds we see at the bird blind are Passeriformes.*)
- Piciformes: woodpeckers
- Psittaciformes: parrots
- Sphenisciformes: penguins
- Strigiformes: owls
- Struthioniformes: ostrich