

Unit A: Introduction to Poultry Science

Lesson 1: Exploring the Poultry Industry

Terms

- Broilers
- Chick
- Cockerels
- Drake
- Duckling
- Gander
- Goose
- Gosling
- Hen
- Layers
- Poult
- Poultry
- Pullet Producers
- Pullets
- Roosters
- Tom
- Turkey
- Duck

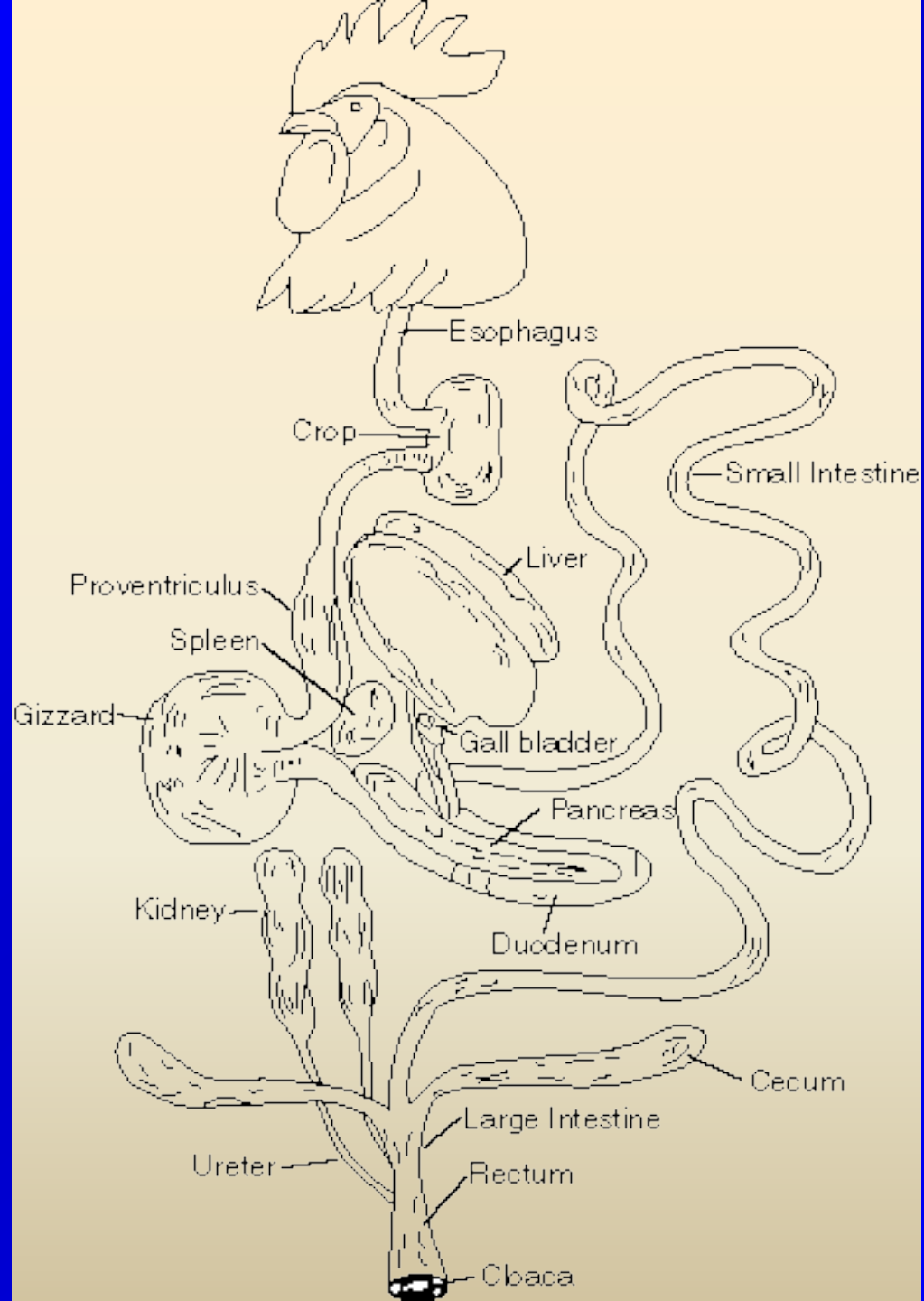




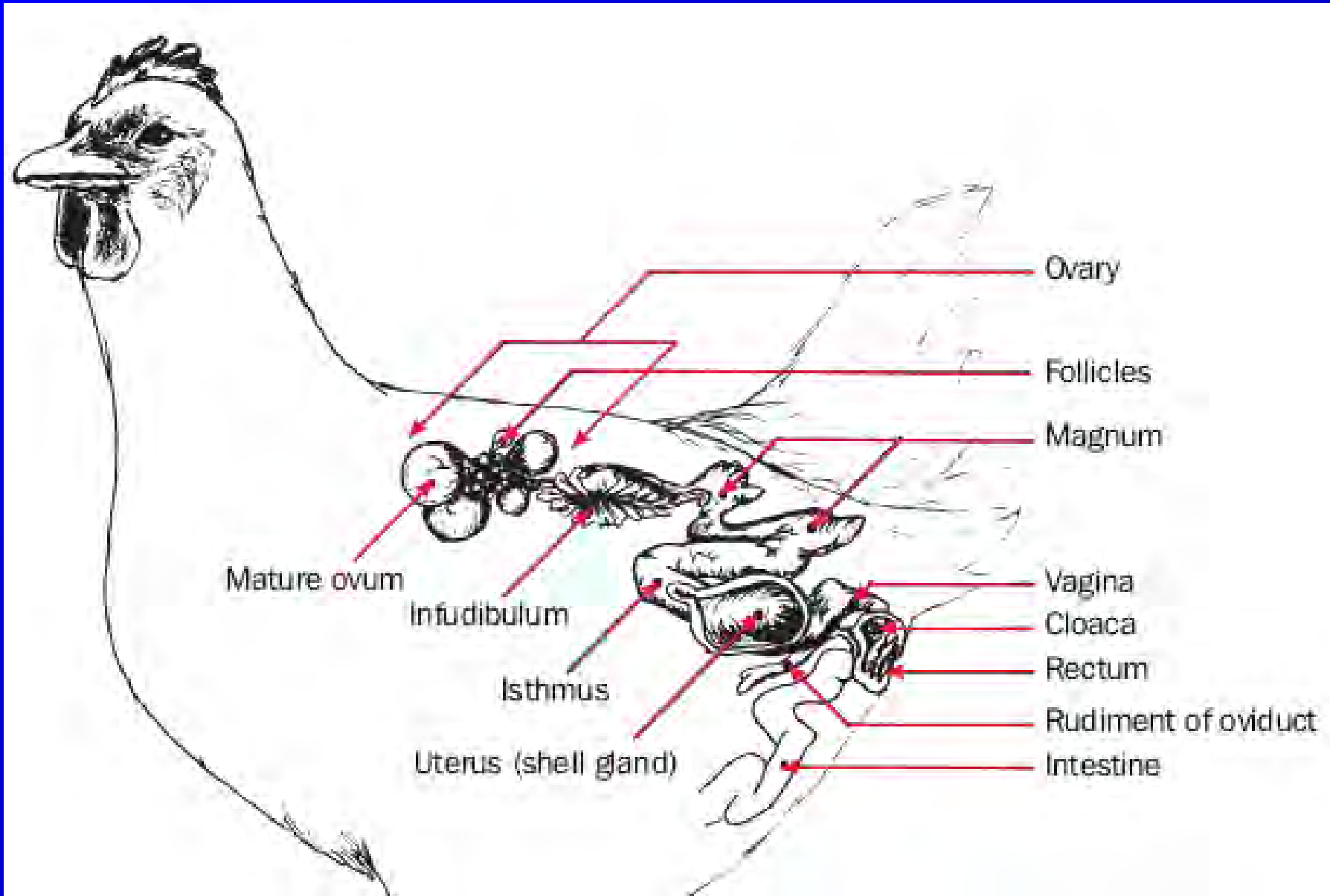
I. What is Poultry?

A. ***Poultry*** is the group name for all domesticated birds used for meat, eggs, and feathers. Poultry are also referred to as birds and fowl. These birds have wings, backbones, and feathers; some can even swim.

1. The main difference between poultry and other animals is they have different digestion and reproduction systems.
 - a. Their digestive system includes a gizzard to make up for not having teeth.



b. Reproduction entails laying eggs after mating for fertile eggs.



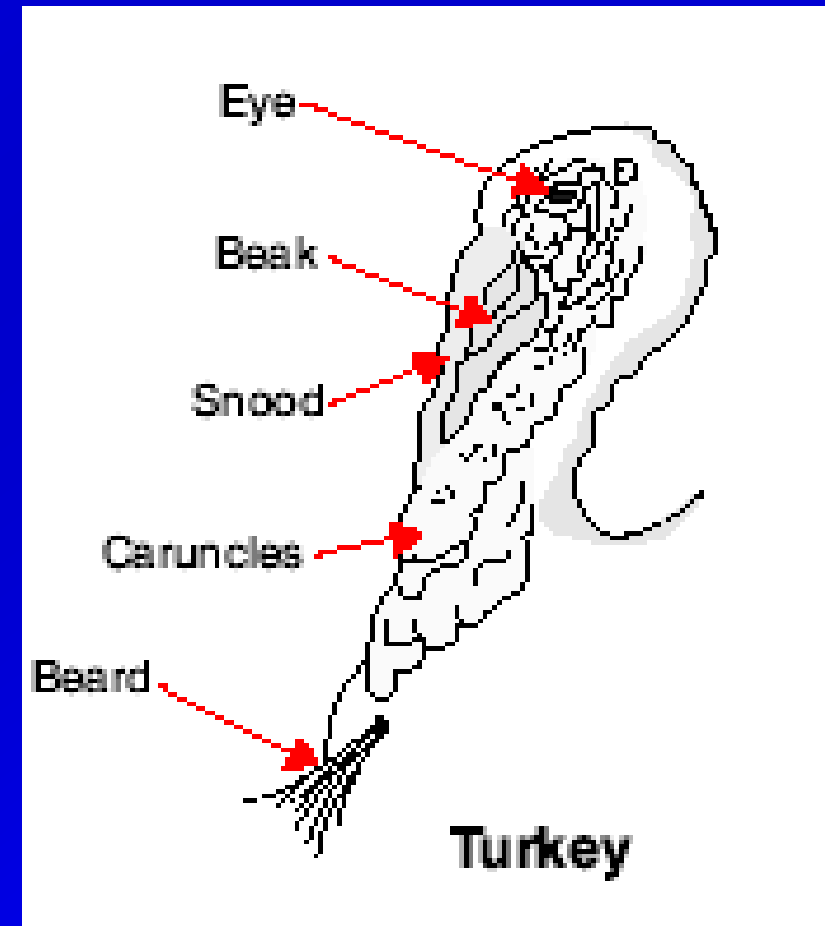
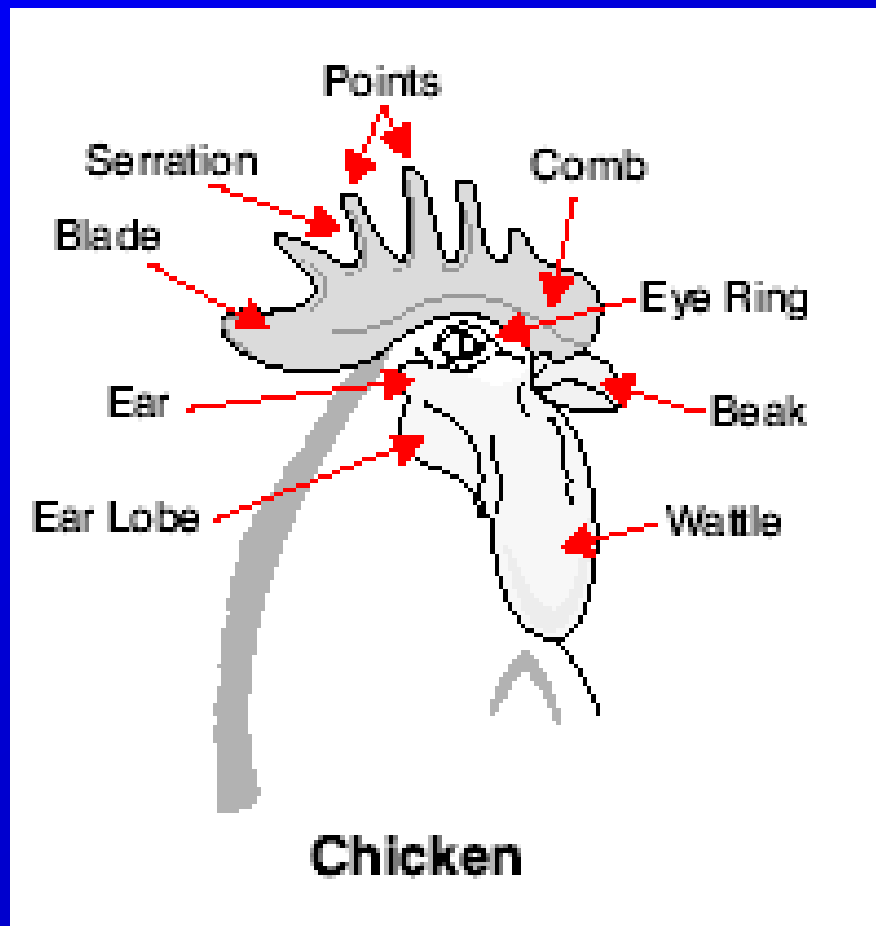
2. Another interesting point on poultry reproduction is that artificial insemination is needed because some birds are unable to mate naturally because of their mass of flesh. Turkeys are the best example.



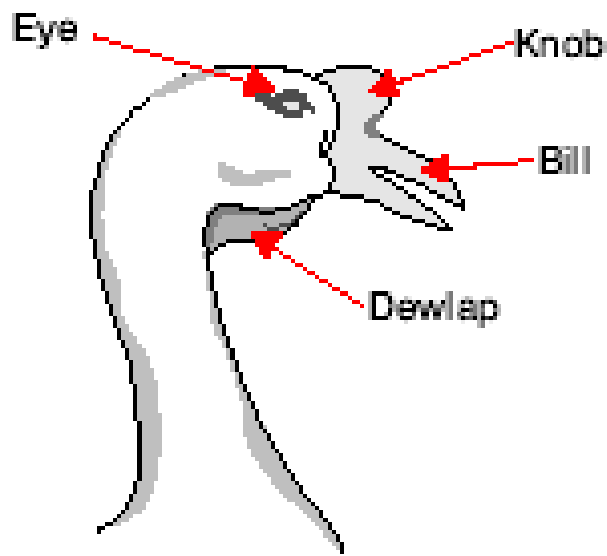
3. The chicken and the turkey are similar in two main ways. They both have feet called claws. These claws are very strong for scratching the earth and finding food. They also look like fingers/toes that allow them to grip or hold onto objects for roosting.



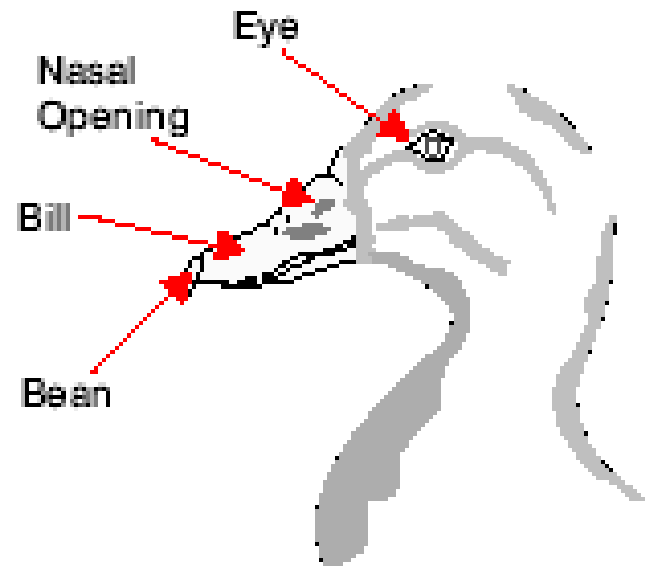
a. They also both have sharp beaks for pecking at insects and grain.



4. The duck and the goose are also similar to each other. They both have bills, which help them to eat certain types of food. The duck's bill allows it to feed in water while the goose's bill allows it to pick up grass.

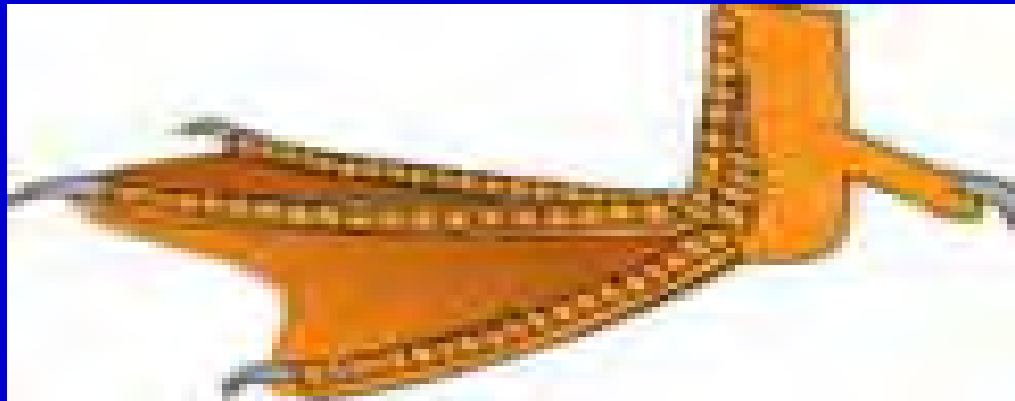


Goose



Duck

a. Both the duck and the goose have webbed feet, which help them to swim.



5. Although most birds use their wings to fly, chickens are not good at flying. They can fly up onto their perches or over a fence but they spend most of their lives on the ground. Ducks and geese can fly very well. If they are being kept in an open-topped pen, they must have the feathers of one wing shortened so that they cannot take off. Clipping the feathers is like getting a haircut and doesn't hurt the bird.

II. What are terms associated with poultry?

A. Chickens are classified as layers or broilers. **Layers** are chickens that are used to produce large quantities of eggs. Eggs are used for food and to produce chicks. **Broilers** are young chickens that weigh about 1.8 kg, are 6 to 7 weeks old, and are used for meat because they are tender. Chickens are grouped by sex and age. A baby chicken of either sex is called a **chick**. Young male chickens are called **cockerels**.



Layers



Broilers



Chicks



Cockerel

B. Mature males are called **roosters**. Young female chickens are called **pullets**. Mature females are called **hens**. A **hen** also refers to a mature female duck, and turkey.

Rooster



Hen

Pullets



C. Turkeys also have names for specific types. An adult male turkey is called a ***tom*** or a gobbler. An adult female is called a hen and a young turkey of either sex is a ***poult***.



Tom



Hen



Poult

D. Ducks have down that grows under the feathers. A **drake** refers to mature male ducks. A female duck is a Hen and **ducklings** are young ducks of both sexes.



Drake

Ducklings



Hen



E. Young geese are referred to as ***goslings***. The male at maturity is called a ***gander***. A female at maturity is called a ***goose***.



Goslings



Gander



Goose

III. Poultry Production Systems in Afghanistan

A. Poultry production systems evolve or transition over time due to the prevailing conditions in a given country. Conditions include macro and micro-economic factors, availability of appropriate education and support services, and market demand for products. The following four types of systems are defined in general terms from the basic requirements of one system transitioning to a more intensive system.

1. Backyard scavenger system.

- a. The primary poultry production system in Afghanistan is by far the traditional backyard system where women raise small numbers of domestic fowl for home consumption while small, mostly seasonal surpluses are sold in village markets.
- b. Birds scavenge around the household for whatever source of food they can find. Flock size is usually less than 10 birds and hens each produce about 60 eggs per year.

- c. Domestic fowl, compared to improved breeds, are relatively disease resistant; however mortality rates are high due to a lack of knowledge and veterinary services.
- d. This backyard system is defined as an extensive system, whereas commercial systems are defined as intensive systems.



2. Semi-scavenger system.

- a. In this system, dual purpose birds (bred for meat and egg production) are managed in rudimentary housing with basic equipment, are supplied with at least fifty percent of their feed needs, and receive medications.
- b. Flock sizes range from 10 to 150 birds with mixed breeds and average egg production in the range of 125 to 150 eggs per year.
- c. Poultry producers need additional poultry management practices appropriate for a semi-scavenger system.



3. Semi-commercial system.

- a. A semi-commercial system transitions the poultry producer to more intensive management practices.
- b. Typically, these systems are small-scale and range in size from 500 to 5,000 birds that are housed in total confinement and are provided with all of their feed needs.
- c. This system is usually utilized by producers that have transitioned from semi-scavenger systems and have developed their management capabilities, found market outlets for their products, and can obtain working capital for purchasing their feed needs.

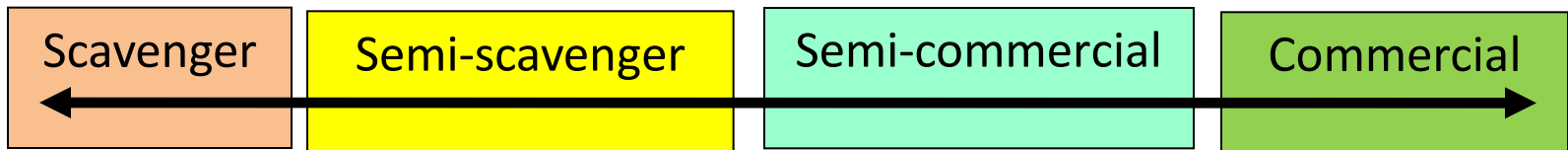
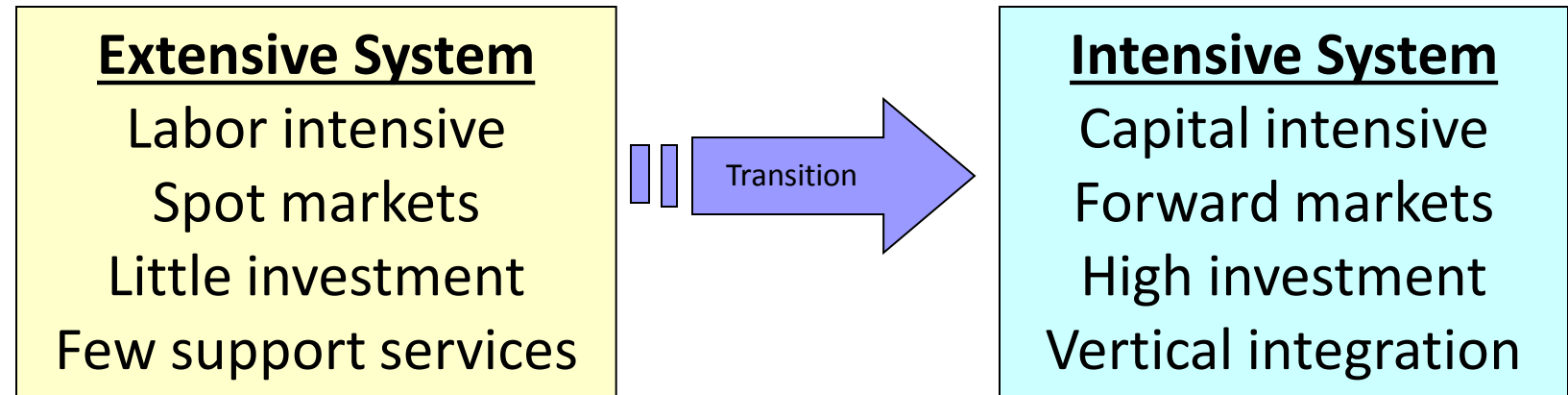


4. Commercial system.

- a. Commercial systems are large-scale production operations utilizing capital intensive equipment and technologies.
- b. These systems often vertically integrate production, processing, hatchery, and feed mill functions into a self contained and independent system.



Types of Poultry Systems



Review/Summary

- What is poultry?
- What are terms associated with poultry?
- What are the four poultry production systems?