HAS YOUR family ever been shopping for a household pet? If so, you probably faced many of the same decisions in choosing the pet as you would in selecting a swine breed for a farm. You might have asked: Is the breed the right size for the area where it will be housed? Is the environment conducive to the breed’s structure? Does the breed have any characteristics that would lead to disease or health problems? Let’s explore the variety of breeds within the swine industry.

**Objective:**

Identify common breeds of swine in the United States and grasp the selection of superior animals.

**Key Terms:**

- Berkshire
- Chester White
- Duroc
- Hampshire
- Landrace
- Pietrain
- Poland China
- prolific
- Spotted Swine
- Tamworth
- Yorkshire
Common Breeds in the Swine Industry

BERKSHIRE

A black body, six white points, and erect ears are classic characteristics that identify the Berkshire breed of swine. The six white points are the four feet and legs, the tip of the tail, and a stripe on the face. In addition, a Berkshire’s face is dished, with its nose upturned. With its medium-sized frame and long, high-quality carcass, the Berkshire breed is often classified as meat type. Much of the meat produced from the Berkshire breed is exported to Asian markets. Animals of the Berkshire breed are resilient and can withstand harsh climates. Originating in Berkshire County, England, the Berkshire breed was first imported to the United States in 1823 by John Brentnall, of New Jersey.

FIGURE 1. Berkshire. (Courtesy, Prairie State Semen, Inc., and www.showpigs.com)

CHESTER WHITE

All-white hair and skin are major characteristics in identifying the Chester White breed of swine. In addition, the Chester White has droopy ears, a dish in the face, and sound feet and legs. The Chester White breed is very durable, with a top-quality carcass that has good muscling. A swine producer appreciates this breed’s good mothering ability and very prolific litters capable of producing large numbers of offspring. This breed originated in Chester County, Pennsylvania.

FIGURE 2. Chester White. (Courtesy, Prairie State Semen, Inc., and www.showpigs.com)
DUROC

The Duroc breed of swine can be identified by its characteristic red color, which can vary in shading from light to dark. In addition, the Duroc has ears that droop forward over the eyes and has a well-known disposition of aggression. The Duroc is often selected in breeding programs because of its heavy muscling, high feed conversion, and top-producing retail-cut carcass. Originating in New Jersey and New York, the Duroc breed that we know today emerged from two breeds of swine—the Jersey Red and the Red Duroc. From its namesake state of New Jersey, the Jersey Red was large framed, hostile, and prolific. The Red Duroc was developed by Harry Kelsey in 1823 as a smaller, more polished breed of swine. In the 1860s the two breeds were crossed, and eventually today’s Duroc was formed.

HAMPShIRE

The Hampshire breed is widely known for its erect ears, its black body, and the white belt that encircles its frame. It possesses an aggressive personality, high energy, and hardiness. Swine producers often select the Hampshire breed for its exceptional meat quality. The breed originated in Hampshire County, England, and was brought to the United States between 1825 and 1835.
The Landrace breed of swine can often be confused with the Yorkshire breed because of its all-white skin and hair. The primary distinguishing factor, however, is its droopy ears. Yet, the Landrace breed has other features that stand out to producers. For example, this breed is known for its extremely long body, which produces high-quality bacon. In addition, Landrace swine are long lived and very prolific, combined with a strong mothering ability. Originating in 1895 in Denmark,

ON THE JOB...

CAREER CONNECTION: Animal Geneticist

Animal geneticists can greatly affect the quality of a breed in the swine industry. A geneticist can select specific traits in one breed and insert those traits into another breed to improve that breed’s quality or even to develop a more modern breed of swine for today’s consumer market. Often, geneticists monitor specific traits desired by the consumer meat industry and strive to merge those traits into distinct breeds to develop more efficient, viable breeds for producers. For example, in the late 1980s and early 1990s, consumers began to desire lean cuts of meat. This influenced a change in focus of swine genetic trends from bigger animals to more lean and heavily muscled animals.

An animal geneticist must have a doctorate degree in animal science or genetics and must have experience in the animal industry. An individual in this career area often earns between $75,000 and $150,000 annually. Much of the work is centered in a laboratory.
the Landrace breed was introduced to the United States in 1934, when the USDA imported several animals for a university experiment.

PIETRAIN

The Pietrain breed is easily recognized by its short legs and white coat with black spots. Around the spots are rings of lightly pigmented skin with white hair. The markings are often described as piebald. Originating in Pietrain, Belgium, this medium-sized breed was first imported to the United States throughout the 1980s and 1990s for its combination of leanness and heavy muscling. This meat-type breed is very prolific but lacks good mothering ability and has poor milk production. Pietrain swine are often prone to diseases.

POLAND CHINA

Forward-drooping ears and a black body with six white points on the feet, face, and tip of the tail usually distinguish the Poland China breed. This breed, often selected by producers for its desirable traits, has a large frame and long body, yet a very lean carcass with heavy muscling. Originating in Warren and Butler Counties of Ohio, the Poland China breed tops the industry in pounds of meat per sow per year.

SPOTTED SWINE

A characteristic black-and-white spotted pattern easily identifies the Spotted Swine breed. This breed is known for its bulky, droopy ears, as well as for its aggressiveness. Spotted Swine are good mothers that pass along their superior traits to their offspring. This makes them very viable in cross-breeding programs. Quick growth with efficient feed conver-

FIGURE 6. Poland China. (Courtesy, Prairie State Semen, Inc., and www.showpigs.com)

FIGURE 7. Spotted Swine. (Courtesy, Prairie State Semen, Inc., and www.showpigs.com)
sion is a trait of this excellent carcass breed. Originating in Putnam and Hendricks Counties of Indiana, the Spotted Swine breed was developed from lines of the Poland China breed in the early 1900s.

**TAMWORTH**

The Tamworth breed of swine is one of the oldest breeds due to its close lineage to wild boars. This breed, distinguished by its ginger color, long face, and erect ears, is very hardy and heat tolerant. In addition, this breed has a long, lean body, making it an excellent producer of bacon. Well suited for foraging, the Tamworth breed has excellent grazing ability on pastureland. Tamworths are also good mothers that are very prolific. Originating in England, the Tamworth breed was first imported to the United States in 1882 by Thomas Bennett, of Rossville, Illinois.

**YORKSHIRE**

All-white skin and hair and erect ears are identifiable characteristics of the Yorkshire breed. Yorkshires are often referred to as the “mother breed” because of their extreme hardiness, good mothering ability, and prolificacy. Yorkshires are long-bodied and large-framed animals known for their leanness yet good muscling. Swine producers select Yorkshires for their muscling and their quick-growing ability. Originating in Yorkshire County, England, the Yorkshire breed was first imported to the United States in 1830 to areas of Ohio.

**Summary:**

Breeds of swine are selected by producers for their productivity and marketability. The Berkshire breed has a medium-sized frame and long, high-quality carcass. The Chester White is very durable, with a top-quality carcass that has good muscling. The Duroc is often selected in breeding programs because of its heavy muscling, high feed conversion, and top-producing retail-cut carcass. The Hampshire breed characteristics include high energy, hardiness, and exceptional meat quality. The Landrace breed is known for its extremely long body, which produces high-quality bacon. The Pietrain is known for its combination of leanness and heavy muscling. The Poland China has a large frame and long body, yet a very lean carcass with
heavy muscling. Quick growth with efficient feed conversion is a trait of Spotted Swine, an excellent carcass breed. The Tamworth breed has a long, lean body. This makes it an excellent producer of bacon. The Yorkshire breed is long bodied and large framed. It is known for its leanness, yet good muscling.

Checking Your Knowledge:

1. What breed of swine is known for its top-quality bacon yields?
2. What breed of swine is identified by its black body and white belt that encircles its frame?
3. What breed of swine has a black body, six white points, and erect ears?
4. What breed of swine is often prone to diseases?

Expanding Your Knowledge:

Eight of the 10 breeds covered in this E-unit have breed associations. Research each association on the Internet. List requirements and restrictions each association has for membership. How does each association determine whether a particular animal can be registered?

Web Links:

- American Berkshire Association
  http://www.americanberkshire.com

- Chester White Swine Record Association
  http://www.cpsswine.com

- National Swine Registry—Duroc, Hampshire, Landrace and Yorkshire
  http://www.nationalswine.com

- Poland China Record Association
  http://www.cpsswine.com

- National Spotted Swine Record
  http://www.cpsswine.com

- Prairie State Semen, Inc.
  www.showpigs.com)