BREEDS OF SHEEP

A prospective sheep producer not only must decide upon a particular phase of the sheep industry to enter, but also must determine the class and/or breed of sheep to produce. The sheep industry is grouped into two major categories, lamb production and wool production. This means that sheep are raised either for meat or wool purposes.

Classification of sheep can be made in many ways, including their degree of suitability for meat or wool production, type of wool produced, face color (white or black), presence or absence of horns, or their productive function or commercial use. Classifications of commercial use are “Ewe breeds,” “Ram breeds,” and “Dual Purpose breeds.”

The most common method of classifying sheep breeds in the United States is by type of wool produced (see Table 1). Classification by type of wool is the method used in this topic.

### Table 1. Breeds of Sheep Classified by Type of Wool Produced

<table>
<thead>
<tr>
<th>Fine-Wool Type</th>
<th>Medium-Wool Type</th>
<th>Crossbred-Wool Type</th>
<th>Hair Type</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaine Merino</td>
<td>Cheviot</td>
<td>Columbia</td>
<td>Barbados</td>
<td>Blackbelly</td>
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<tr>
<td>Debouillet</td>
<td>Dorset</td>
<td>Corriedale</td>
<td>St. Croix</td>
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<td>Rambouillet</td>
<td>Finnsheep</td>
<td>Polypay</td>
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<td>Hampshire</td>
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<td>Tunis</td>
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</tbody>
</table>

All types of wool fibers (fine to long) and fur types are graded to determine the quality of the wool by several methods. The Bradford Numerical Count System designates a numerical number of fineness or fiber diameter, as demonstrated by the length of yarn spun from a given weight of wool. The numerical system is measured in hanks. Numbers range from 80 hanks for the finest in diameter to 36 hanks for the coarsest in diameter. Another method to grade wool is by the diameter or thickness of the wool fibers, which is called the Micron System. One micron is 1/25,000 of an inch.

*Underlined words are defined in the Glossary of Terms.*
SELECTED SHEEP BREEDS OF FINE-WOOL TYPE

The Delaine Merino, Rambouillet, and Debouillet are the most common fine-wool breeds of sheep produced in the United States. All of these breeds are descendents of the Spanish Merino. Fine-wool types of sheep produce wool with the smallest diameter fiber. Fine-wool breeds usually grade 60’s and finer bases on their spinning count. The dense fleece contains a large amount of yolk, or oil.

**Delaine Merino**

Three types of Merino sheep originated from the same Spanish parent stock, known as A-type, B-type, and C-type. The A-type and B-type, known as American Merinos, have wrinkles or skin folds at the neck. The C-type, known as the Delaine Merino or Texas Delaine, has a smooth body. A few breeders specialize in producing “A” and “B” type Merinos, but over 95 percent of the Merinos are smooth or nearly smooth types. The “C” type, or Delaine Merino, has become the most practical Merino on the average farm.

The Delaine Merino is the largest of the three types ranging from 175 to 235 pounds for rams and 150 to 175 pounds for ewes. Breeders are more concerned with producing maximum weight of long, dense, fine fibered fleeces than larger sized sheep. The Delaine Merino is white-faced with white legs. The head and legs are covered with wool. Most rams are horned, but polled strains are present. Ewes should be free of horns or scurs.

Merinos are extremely hardy; they are popular where poor grazing conditions and adverse weather exist. Ewes breed out of season and have long productive lives that can last 10 to 12 years, which is much greater than any other breed. No other wool breed can compare with the wool of the Merino in its color, uniformity, strength, density, and fineness. The annual fleece weight of a mature sheep ranges from 12 to 20 pounds. The fleece should grade from 64’s in spinning count to as high as 80’s. Fleece should be from 2.5 to 4 inches long in one year’s growth.

**Debouillet**

The Debouillet breed was developed about 1930 on the ranches of A. D. Jones of Roswell and Tatum, New Mexico by crossing Delaine Merino rams to Rambouillet ewes. The Debouillets were developed under practical range conditions. They produce an acceptable amount of wool and mutton under adverse conditions.

The sheep are open-faced and smooth-bodied. The face and legs of a Debouillet are white in color. Rams may be horned or polled, but the polled trait is demanded more by breeders. Ewes are polled. In size, Debouillet ewes weigh 125 to 170 pounds. Rams weigh 150 to 250 pounds. Fleece production of a Debouillet is fairly uniform in grade; the annual fleece weight ranges from 8 to 16 pounds.
**Rambouillet**

The Rambouillet was developed as a breed in France, but it is a descendant of the Spanish Merino. Rambouillets were first introduced into the United States in 1840.

A Rambouillet has a large, wide head with white hair around the nose and ears. Wool covers most of the face and legs. The body fleece is close and compact. Generally, rams are horned, but polled strains exist. Ewes are polled. In size, Rambouillets are the largest of the fine-wool type. The ram weighs 190 to 300 pounds, and the ewe weighs 120 to 210 pounds.

Ewes are recognized as being prolific, good mothers, and unequaled for range qualities. Fleece production of the Rambouillet is very acceptable with the annual fleece weight usually ranging from 8 to 18 pounds. A large percentage of range sheep contain some Rambouillet blood.

**SELECTED SHEEP BREEDS OF MEDIUM-WOOL TYPE**

Medium-wool types of sheep produce fleece that is medium in diameter and length when compared with fine-wool types and long-wool types. Medium-wool breeds usually grade from 50 to 58 hanks and some in the 60’s.

**Cheviot**

Two strains of Cheviot sheep originated in the Cheviot Hills between England and Scotland. The first importation of Cheviot sheep into the United States occurred in 1838. The North Country Cheviot was imported into the United States in 1944. The modern day North Country Cheviot has been infused with Merino, Ryeland, and Southdown blood.

The Cheviot and North Country Cheviot are the most distinctive breeds of sheep in appearance. They are stylish with the head carried high, erect ears, and a rapid coordinated stride. The head and legs are free of wool but are covered with white hair. Wool-free faces make them immune to wool blindness. The nose, lips, and feet are black in color.

The North Country Cheviot has a slightly Roman nose. The North Country Cheviot sexes are generally polled; however, rams are sometimes horned. North Country Cheviots are medium to large in size with mature rams weighing up to 300 pounds, and mature ewes weighing up to 200 pounds.

The Cheviot is smaller in size with mature ewes weighing 150 to 225 pounds and mature rams weighing 200 to 275 pounds. Both rams and ewes are polled. The fleece of a Cheviot is light and averages 5 to 8 pounds annually. Cheviot ewes are good mothers with a lambing percentage of 125.
**Dorset – Polled & Horned**

The exact history of the Dorset is not distinguished, although the principal home of the Dorset breed is in southern England in Dorset, Somerset, and Wiltshire Counties. The first importation of the Dorset to the United States occurred in 1885.

The face, ears, and legs are white in color and practically free from wool. Both horned and polled strains of Dorsets exist. The modern Dorset is a medium-sized sheep. A mature ewe weighs 150 to 200 pounds; a mature ram weighs 225 to 275 pounds.

Dorsets are among the lighter shearing breeds with an annual fleece weight of 4 to 10 pounds. Dorsets will breed out of season. Because of this characteristic, ewes are very prolific and average a 150% lamb crop, making them widely used in the United States.

**Finnsheep**

The Finnsheep, or Finnish Landrace, breed of medium-wool type sheep was developed from homebred stock in eastern and northeastern Finland. The USDA along with the University of Manitoba, Canada imported Finnsheep in 1968. The breed is characterized by a short tail, short ears, head and legs free of wool, and white color. Both rams and ewes are polled, but a few rams have light horns. A mature ram weighs 160 to 200 pounds; a mature ewe weighs 130 to 160 pounds.

Finnsheep ewes are prolific; each ewe averages 2.5 lambs per lambing. The breed reaches sexual maturity at an early age. These two factors account for the breed’s popularity in crossbreeding programs. The annual fleece weight of a mature Finnsheep is 10 pounds.

**Hampshire**

The Hampshire breed originated in Hampshire County, England, and several importations were made to the United States prior to 1860. Hampshires are widely accepted and popular in the United States.

The Hampshire is distinctive in appearance because of its bold head and prominent ears. The color of the face, ears, and legs of Hampshires is a rich deep brown, approaching black. The ears, face, and legs below the knees are predominately free from wool.
Both sexes are polled, although rams sometimes have scurs. Hampshires are among the largest of the medium-wool type sheep. Ewes weigh over 200 pounds and rams weigh over 275 pounds.

Selection of the Hampshire is based on production and then appearance. The Hampshire is a widely used breed noted for its carcass cutability as a market lamb. The fleece is of medium quality, usually averaging 8 pounds annually. Hampshire ewes are prolific and possess good mothering ability.

**Montadale**

This medium-wool type breed was developed by E. H. Mattingly of St. Louis, Missouri in 1932. The Columbia ewe and the Cheviot ram were adopted as the foundation stock for the Montadale breed. However, it took nine years of selective culling and linebreeding to develop the breed.

Montadale sheep are white in color. The head and legs (below the knees) are free from wool. Other distinguishing characteristics include black nose and hoofs, black spots in ears, and both sexes polled. Montadales have a good mutton conformation. Emphasis in selection stresses prolificacy, lamb weights, and wool weight. The annual fleece weight averages 11 pounds per sheep.

**Oxford**

The Oxford breed originated in Oxford County, England as a result of crossing Cotswolds and Hampshires. The first introduction of Oxford sheep to the United States was in 1846.

The Oxford is easily distinguished by a top knot or long tuft of wool in front of the ears and between the eyes. The head and ears are small relative to its overall body size. The face, ears, and legs vary in color from gray to brown. Both rams and ewes are polled. The Oxford is the largest down breed. Oxford ewes weigh about 225 pounds. Rams weigh about 275 pounds. The breed produces the heaviest fleece of any of the down breeds. Annual wool weight ranges from 8 to 12 pounds. Lambing percentages of 150 are common for Oxford ewes making them very prolific.

**Shropshire**

The Shropshire breed established itself in Shropshire and Stafford Counties, England. The breed was developed by crossing several breeds of sheep that included Southdowns, Leicesters, and Cotswolds. The first importation of Shropshires into the United States occurred in Virginia in 1855.

The face, ears, and legs range in color from dark brown to soft black. Both rams and ewes are polled with dense wool covering well over the poll. The Shropshire is small in size compared to other medium-wool type sheep. A mature ewe weighs from 160 to 190 pounds. A ram weighs from 225 to 275 pounds.

The Shropshire is considered a good dual-purpose breed; it produces a very desirable carcass and an annual wool weight that averages 10 pounds.
Southdown

The Southdown breed originated in the hills of Sussex County, England. Importation of Southdowns to the United States first occurred in 1803.

An acceptable color of the face, legs, and ears is a light brown (mouse brown). Wool covers the face and legs. Both sexes are polled, although rams sometimes have scurs. The Southdown is small to medium in size. Mature rams weigh about 210 pounds; ewes weigh about 160 pounds. Southdowns have short legs, wide chests, straight tops, deep twists, and bulging rear quarters.

The Southdown excels in carcass quality and body conformation. Due to early maturing, Southdowns are used extensively in producing hothouse lambs. In terms of wool production, the Southdown is criticized for its lightweight fleece. The annual fleece weight ranges from 3 to 8 pounds per animal.

Suffolk

The Suffolk breed originated in England. The breed was developed by crossing improved Southdown rams and Old Norfolk ewes native to the area. Introduction of the Suffolk breed to the United States occurred in 1888.

Its black face, legs, and ears, all of which are free from wool, easily identify the Suffolk. The head is small, and both sexes are polled. Suffolk sheep are comparatively large animals. Ewes weigh from 200 to 225 pounds; rams weigh over 300 pounds. Ewes are very prolific and produce a 150% or greater lamb crop. Suffolk wool is not considered the most desirable because black hairs from the face and feet contaminate the fleece when sheared. The annual fleece weight ranges from 5 to 8 pounds.

Tunis

The Tunis originated in northern Africa in the area of Tunisia. The United States imported the breed in 1799. The Tunis breed is one of the oldest and smallest breeds of sheep.

Tunis sheep are open-faced with a tan or red colored face. They have long drooping ears, and the head is free from wool. Both rams and ewes are polled. Rams weigh an average of 150 pounds, and ewes weigh an average of 120 pounds. Tunis sheep mate during almost any season of the year.
SELECTED SHEEP BREEDS OF CROSSBRED-WOOL TYPE

Crossing fine-wool types with long-wool types developed the crossbred-wool types of sheep. (Some long-wool types are the Cotswold, Leicester, Lincoln, and Romney. The long-wool type breeds of sheep are not as common today and therefore are not listed.) The purpose of this crossing was to get the size from the long-wool types and the wool quality of the fine-wool type. For exhibition purposes, crossbred-wool types usually are classified in the medium-wool type class rather than in a separate class. Crossbred wool type fleeces usually grade from 56 to 62 hanks.

Columbia

The Columbia was the first breed of sheep developed in the United States. Lincoln rams were crossed with Rambouillet ewes to develop the breed. The first crosses were made in 1912 on the King ranch at Laramie, Wyoming. The breed organization officially started at the Bureau of Animal Industry in 1917.

The Columbia is identified by an open face and white hair on its face and feet. Hooves are either white or black in color. Both rams and ewes are polled. The Columbia is the largest of the crossbred-wool type breeds. The breed is suited to western rangeland conditions. Mature ewes weigh from 130 to 225 pounds. Rams weigh from 175 to 300 pounds. Although considered rangy sheep, Columbia lambs are good market-type sheep. Columbia sheep produce a high-quality fleece weighing from 10 to 18 pounds annually.

Corriedale

New Zealand breeders developed the Corriedale breed in 1880 by crossing Merino ewes with Lincoln and Leicester rams. A group representing the National WoolGrowers’ Association imported the first Corriedales into the United States in 1914.

The Corriedale appeals to breeders because of its open-faced characteristic. Face, ears, and legs are white in color. Both sexes are polled. The Corriedale is a hardy breed, producing good wool and mutton.

Corriedales are medium-sized and early maturing. Mature ewes range in weight from 105 to 205 pounds. Rams weigh from 150 to 250 pounds. An outstanding characteristic of the Corriedale is its excellent fleece. The annual fleece weight averages up to 17 pounds.
Polypay

The Polypay is a composite of four breeds developed in the 1970s to meet the needs of producers to develop a sheep, which would produce two lamb crops and one wool crop per year. The Polypay was developed from existing breeds consisting of the Finnsheep, Rambouillet, Targhee (another crossbred-wool type not very common in the United States), and the Dorset. The name Polypay means multiple (poly) and return on labor and investment (pay).

The Polypay inherits high prolificacy rate, early puberty, and short gestation from the Finnsheep. Their adaptability, hardiness, and fleece qualities are contributions from the Rambouillet. Its size comes from the Targhee. The Dorset provided the superior mothering ability, carcass quality, and long breeding season.

OTHER BREEDS

Barbados Blackbelly

The Barbados Blackbelly was imported to the United States from the Island of Barbados. Evidence shows that its origin is from West Africa. No known record of more than four ewes and one ram has been found since their introduction to the United States by the USDA in 1904. Due to a variety of crossing them with other species of sheep, nearly 500,000 descendents have been found in Texas alone. The Barbados Blackbelly is a small-sized, hair breed of sheep that is brown, tan, or yellow in color with black underparts extending down the inside of the legs. Mature lambs have a neckpiece of long hair extending down to the brisket that reaches lengths of six inches. Both sexes of the Barbados Blackbelly are polled.

Dorper

The Dorper breed was developed in South Africa in the 1930s and 1940s from the Horned Dorset and Blackheaded Persian. The Dorper breed contains two distinct strains, the Dorper (black head) and the White Dorper (white head), produced primarily for mutton production. The coat is a mixture of hair and short wool, which is shed, eliminating the need for shearing. The Dorper is excellent in adapting to range grazing conditions, heat, and insect tolerance. Lambing rates of 180% can be reached due to their long breeding seasons with rapidly growing lambs.

St. Croix

The St. Croix originated in the United States in the Virgin Island and is believed to have descendents from West Africa. This hair breed of sheep is unique to North America and very few are found. They are white with a minimum amount of wool on the back and sides that sheds if not shorn. Both sexes are polled.

Texel

The Texel originated on the Isles of Texel off the coast of the Netherlands in the early nineteenth century. The Texels were imported to the United States by the Meat Animal Research Center at Clay Center, Nebraska and after five years of quarantine they were released for purchase. The Texel is of medium size, white-faced with no wool on its head or legs. The most outstanding feature of the Texel breed is its extreme muscling and high carcass cutability. It produces a medium–wool type fleece.
The Oklahoma State University Department of Animal Science Web site has photographs of breeds of sheep that can be viewed and used as a learning resource. The following are addresses of breeds of sheep associations.

**Fine-Wool Types**

American Delaine-Merino Record Association  
1026 County Road 1175  
Ashland, Ohio 44805-9523

Debouillet Sheep Breeders’ Association  
P. O. Box 67  
Picacho, New Mexico 88343

American Rambouillet Sheep Breeders’ Association  
2709 Sherwood Way  
San Angelo, Texas 76901

**Medium-Wool Type**

American Cheviot Sheep Society  
Rural Route 1 Box 100  
Clarks Hill, Indiana 47930-9726

National Finnsheep Breeders’ Association  
HC 65, Box 495  
DeRuyter, New York 13052

Montadale Sheep Breeders’ Association  
P. O. Box 603  
Plainfield, Indiana 46168

American Shropshire Registry Association  
24905 Streit Road, P. O. Box 635  
Harvard, Illinois 60033

United Suffolk Sheep Association  
17 W. Main, P. O. Box 256  
Newton, Utah 84327

Continental Dorset Club  
P. O. Box 506  
North Scituate, Rhode Island 02857-0506

American Hampshire Sheep Association  
1557 173rd Avenue  
Milo, Iowa 50166-9667

American Oxford Sheep Record Association  
1960 East 2100 North Road  
Stonington, Illinois 62657-5338

American Southdown Breeders’ Association  
HCR 13 Box 220  
Fredonia, Texas 76842-9702

National Tunis Sheep Registry  
819 Lyons Street  
Ludlow, Massachusetts 01056

**Long-Wool Type**

American Cotswold Record Association  
18 Elm Street, P. O. Box 59  
Plympton, Massachusetts 02367-0059

American Border Leicesters’ Association  
9838 Gribble Road  
Canby, Oregon 97013-8563

National Lincoln Sheep Breeders’ Association  
1557 173rd Avenue  
Milo, Iowa 50166-0000

American Romney Breeders’ Association  
P. O. Box 247  
Corvallis, Oregon 97339-0247

**Crossbred-Wool Type**

Columbia Sheep Breeders’ Association of America  
P. O. Box 272  
Upper Sandusky, Ohio 43351-0000

American Corriedale Association Inc.  
P. O. Box 391  
Clay City, Illinois 62824-0378
Acknowledgements

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REFERENCES


GLOSSARY OF TERMS

Down breed - Any of the Hampshire, Suffolk, Southdown, Shropshire, and Oxford breeds because of their origin in the “downs” or range of hills in southern England.

Dual-purpose breed - A breed that is recognized for both mutton and wool production.

Hank - Measurement for the Bradford System of determining the length of wool that can be spun from one pound of clean wool (a hank is 560 yards in length).

Hothouse lamb - A lamb born in the fall or early winter, finished for market when 6 to 12 weeks old, weighing from 30 to 60 pounds.

Lamb - A young sheep usually less than one year of age, without permanent teeth.

Micron - A unit of measurement used in determining the diameter of a fiber, which equals 1/25,000 of an inch.
Mutton - Meat of a mature sheep (the sheep is normally more than a year old).

Open face - In reference to sheep, a face free of wool.

Prolific - Productive; abundant reproduction; in sheep, producing offspring (often twins) at reasonable intervals.

Scur - A small, loosely attached horn that sometimes appears on polled animals.

Spinning count - Indicating the number of hanks of yarn that can be spun from one pound of clean wool (one hank is 560 yards of yarn; for example, a clean pound of 50’s quality wool spins 50 X 560 or 28,000 yards of yarn).

SELECTED STUDENT ACTIVITIES

SHORT ANSWER / LISTING: Answer the following in the space provided or on additional paper if necessary.

1. List two methods of grading the wool fibers of the different breeds of sheep.
   a. _________________________________  b. _________________________________

2. List five different factors by which sheep may be classified into different breeds.
   a. __________________________________________________________________________
   b. __________________________________________________________________________
   c. __________________________________________________________________________
   d. __________________________________________________________________________
   e. __________________________________________________________________________

3. List two major productions for the sheep industry.
   a. _________________________________  b. _________________________________

4. The fine-wool breeds of the United States are all descendents of this ancestor?
   _________________________________

FILL IN THE BLANK: Complete the following statements.

5. Crossing Delaine Merino rams to Rambouillet ewes developed the _____________________.

6. Rambouillrets are the ___________________ fine-wool type breed in size.

7. There are three types of ________________ sheep that originated from Spanish parent stock.

8. Finnsheep ewes are prolific averaging __________________________ per lambing.

9. _____________________ are identified by black face, black legs, and black ears, which are entirely free from wool.

10. Crossing a Columbia ewe and a Cheviot ram developed the _______________________.
11. __________________________ are used in production of hothouse lambs.

12. The __________________________ and __________________ are distinctive breeds in appearance with erect ears and faces and legs free of wool.

13. The __________________________ is considered a good dual-purpose breed.

14. The __________________________ is the largest down breed, and is easily distinguished by a topknot of wool over the head.

15. __________________________ is one of the oldest and smallest breeds of sheep known and originated from Africa.

16. The __________________________ breed of sheep is produced primarily for mutton production with a coat mixture of hair and short wool, which is shed eliminating the need for shearing.

17. The __________________________ is noted for its carcass cutability as a market lamb and one of the most popular breeds in the United States today.

18. The __________________________ has both horned and polled strains.

19. Crossing Lincoln rams with Rambouillet ewes to get the __________________ developed the largest of the crossbred-wool types.

20. The National WoolGrowers’ Association first imported the __________________________ into the United States in 1914.

**ADVANCED ACTIVITIES**

A Rambouillet ewe’s annual fleece weight is 14 pounds with an average spinning count of 64 hanks. The annual fleece is raw wool, which means it contains certain impurities that must be extracted. The extracted matter is called shrinkage, leaving the yield of clean wool. (Shrinkage % + Yield % =100%) The average shrinkage for this Rambouillet ewe is 55%.

1. What is the yield of clean wool produced in pounds from the ewe’s fleece annually?

2. How many yards of yarn does the ewe produce per year? (Refer to glossary of terms)

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Texas A&M University  
2588 TAMUS  
College Station, Texas 77843-2588  
http://www-ims.tamu.edu  

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