

SHEEP PRODUCTION

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1. History

Sheep (*Ovis aries*) are ruminant (cud-chewing) mammals. Most sources agree that domestic sheep originated from mouflon. There are two wild sources still in existence: the Asiatic mouflon, which is still found in the mountains of Asia Minor and southern Iran, and the European mouflon on the islands of Sardinia and Corsica. Sheep were among the first animals to be domesticated. An archeological site in Iran produced a statue of a woolled sheep which suggests that selection for woolly sheep had begun to occur over 6000 years ago. Sheep are the only species of livestock unable to return to a feral or wild state. However, there are wild species sheep around the world, many at high altitudes, in inaccessible and remote locations. Selection for wool type, flocking instinct, and other economically important traits has resulted in more than 200 distinct breeds of sheep worldwide. Modern breeding schemes have resulted in an increasing number of composite or synthetic breeds. It has been estimated there were more than 1 billion sheep in the world in the late twentieth century. Domesticated sheep are raised for their fleece (wool), for milk, and for meat.

2. Breeds of Sheep

Sheep breeds are generally classified as medium wool, long wool, fine wool and hair.

The long wool breeds, including the Cotswold, Lincoln, Leicester, and Romney were all developed in England and, in addition to meat, produce wool of unusually long fiber length that is suitable for rugs and coarse fabrics.

The original fine-wool breed was the Merino, developed in Spain from stock native to that country before the Christian era. Today the Merino is prominent in Australia, USA, Russia, South Africa, Argentina, France, and Germany. The Merino was the main ancestor of several breeds of sheep around the world, which have some degree of fine wool breeding.

Most commercial (non-purebred) sheep, managed for lamb meat production, today are two-breed or three-breed crosses, with white-faced crossbred ewes preferred as maternal flocks with black-faced sires, such as Suffolk or Hampshire, preferred for market lambs to be finished for slaughter. Hair breeds are managed mainly for meat production.

The principal breeds of sheep are listed in Table 1. This is obviously not a complete listing since there are reported to be over 200 distinct breeds worldwide. As discussed later, the majority of sheep breeds are of limited interest except in local areas.

Name	Distribution	Characteristics	Comments
Black-faced Highland, also Scottish Blackface	originally Scotland, now also USA, Italy, Argentina	Black or mottled, horned	Stylish
Columbia	developed U.S., since 1912	large, white-faced, hornless, high wool yield	Meat acceptable
Corriedale	developed N.Z., now also USA, Australia	White-faced, hornless	Soft fleece, good quality lambs
Cotswold	Originally England, now USA	Large, white-faced, hornless	Coarse fleece, meat acceptable
Dorset	developed England, now UK, USA, Australia	Medium sized, white-faced, horned and hornless	Small wool yield
Hampshire	developed England, now also USA	Large, hornless, dark face	Meat superior, limited wool
Karakul	originally Central Asia, now also Africa, USA, Europe	Medium sized, fat-tailed	Coats of very young lamb are known as 'Persian lamb'
Leicester	originally England, now UK and N. America	Massive body, white faced	Heavy fleece
Lincoln	originally England, now also Australia, N.Z., N. and S. America	World's largest sheep, hornless	Coarse wool
Merino	originally Spain, now also Australia, North America, South Africa	Horned and hornless, head wool	Excellent fine, soft fleeces
North Country Cheviot	originally Scotland, now widespread	Chalk white, large, deep bodied	Hardy, superior fleece
Polypay	developed in US	White faced, medium	prolific, breed

		sized	out of season
Rambouillet	developed France from 18 th century, now also USA	Smooth-bodied, horned or hornless	mature rapidly. Bred from Merino
Romney	originally England, now also N.Z., N. America, Australia	hornless with white face and legs	raised mostly for meat, wool has various uses
Southdown	originally England, now also N.Z., Australia, N. America	small rounded bodies, hornless	raised for meat, short fleece
Suffolk	developed England, now also USA	black face and legs, large, hornless	fine meat breed, wool acceptable
Targhee	developed in USA	large, white-faced, hornless	medium to fine wool, meat acceptable

Table 1. The principal breeds of sheep around the world, and their distribution and characteristics

Examples of hair sheep breeds are as follows:

- Africana
- Barbado
- Barbados Blackbelly
- Blackhead Persian
- Brazilian Somali
- Damara
- Dorper
- Katahdin
- Masai
- Morada Nova
- Pelibuey
- Rabo Largo
- Sahel-type
- Santa Ines
- Somali
- St. Croix (Virgin Island White)
- Tonabire
- Uda
- West African Dwarf
- Wiltshire Horn

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Visit: <http://www.eolss.net/Eolss-sampleAllChapter.aspx>

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Biographical Sketches

K.E. McClure is Assistant Professor Emeritus, Department of Animal Sciences, Ohio State University. His research efforts have involved sheep management systems from complete confinement to no confinement in corn-belt farm flocks. Investigations have included reproductive physiology, internal parasite control, respiratory diseases, and dietary regimens. His specific research interest is ruminant nutrition with emphasis on forage digestibility and utilization. The specific research program has involved investigations with lambs that compare all-concentrate diets fed in confinement with counterparts grazing legumes or grasses. This research area has developed into collaboration with other scientists, not only from the United States but also from other parts of the world.

Outreach to sheep producers has been accomplished by farm visits and sheep field days. Much of the accomplishments of the research program have been possible through collaboration.

Ken McClure and his wife Marge have four children and five grandchildren. They also have a flock of 80 ewes which keep them busy during retirement.