The remaining Spanish colonial influence on sheep, goats, hogs, and asses in the United States is less than what remains for horses and cattle. Part of the reason for this is that these species have never been as economically important as horses and cattle, nor have they ever held the same societal prestige as horses and cattle.

**SUMMARY**

The Spanish colonial influence on sheep populations in the United States is minimal at present (Olson, 1988). The original influence of Spanish colonial sheep was greater historically than it is currently, and consisted mainly of two populations of churro type sheep. These populations were centered in New Mexico and in the southeast.

The New Mexico Churro Population was the basis of the subsistence sheep industry that characterized both Navajo and Hispanic economies for centuries (Blunn, 1983). These sheep were valued mostly for their production of carpet wool and meat. Milk production was not characteristic of these systems of use. The churro type sheep were hardy and durable, and adapted well to the harsh desert environment of New Mexico. The Churro Type was the predominant sheep type in this region until well into the 1800s.

During the late 1800s and early 1900s the pattern of settlement and livestock exploitation changed from the Navajo and Hispanic ethnic groups to an Anglo dominated culture. With...
this shift the Churro Type became less desirable, and was nearly bred out of existence by the use of finewool, Merino type sheep. This finewool type, itself of Spanish origin, was of less use to the Navajo and Hispanic cultures in this area since it is less hardy. The Merino wool is also ill suited for use in local textile production that is so important to both of these cultures. In the late 1980s the trend away from the Churro Type was reversed with more value placed on the original sheep type in an attempt to regain it as a common sheep type in the Navajo and Hispanic flocks.

The Navajo Churro sheep is a smallish sheep and is adapted to the harsh desert environment of the Southwest USA. It has a typical carpet wool fleece. Rams are typically heavily horned, and in some instances have multiple (8 or 6) horns. Ewes are either horned or polled. Colors vary widely, although most are white. Various greys, browns, and blacks also occur, as do spotted animals.

The other main population of Spanish sheep from the colonial era occurred in the Southeast of the United States. This churro type persists in some areas of Florida, Georgia, Alabama, Mississippi, and Louisiana. These sheep were originally of churro type, but then experienced centuries of selection in a humid subtropical environment. This has resulted in a sheep different from the southwestern sheep, and these are now called Gulf Coast Native sheep.

The Gulf Coast Native, in contrast to the Navajo Churro, is probably more removed from its churro origin. These sheep were never the basis of a large sheep industry, and were exploited as a local subsistence commodity for consumption locally or on the farm of origin. The breeding was haphazard and these flocks show the influence of a wide variety of non-Spanish genetic material. Detailed studies are not finished on these sheep, but they are phenotypically variable.

Included within the general classification of Gulf Coast Native are many fairly distinctive flocks from various farms in the area. They have scant wool, which is usually fairly coarse. The main breed characteristic is a resistance to gastrointestinal parasites, and it may be this trait that is the most useful of this otherwise very nonstandardized genetic stock. This resistance may also have kept the sheep relatively uncontaminated from outside genetic influences, since few other sheep breeds can thrive in this humid subtropical environment.

The general pattern of sheep breeding in the United States includes an early introduction of Churro Type Sheep. Later the Merino was introduced, but this tended to occur through importation to the Anglo dominated areas and to proceed from them to the areas more traditionally Hispanic. Finally the Merino and its crosses were displaced by the British breeds in all areas except the West and the Southwest, but by then the original Churro Type was already very rare.

GOATS

The Spanish colonial influence on goats was important in the USA. This
COLONIAL SPANISH SHEEP, GOATS, HOGS, AND ASSES IN USA

is especially true of the feral goats that occur on islands (Mcknight, 1968). These were generally introduced onto islands during the age of discovery, and were used as a ready food source by subsequent voyagers. The goats descended from these colonial goats are generally small to medium sized, and very rugged and resistant. They usually have a fairly robust conformation suitable for selection as a meat producing goat. They occur in a variety of colors, but combinations of tan and black are very common. The horns are usually heavy in the bucks and curve outward and upward. Ears are erect, or more frequently horizontal.

Feral goats have recently become a problem for conservationists since they are so effective at brush utilization. They can devastate island flora, and for this reason are generally the target of eradication schemes, since these feral goats descend from Spanish goats they are unique among goats in North America, and are therefore themselves a genetic resource worthy of conservation. This is being amply demonstrated currently by the recent interest in goat meat production in the USA.

Important populations of feral colonial Spanish goats are on the Caribbean island of Mona, and the California islands of San Clemente and Santa Catalina. The populations of the California islands are now maintained as mainland herds since the island herds are slated for eradication.

Nonferal Spanish type goats also persist throughout the southwest in flocks that are used for local subsistence. This is so much the trend for this area that any scrub goat is called Spanish, when in fact many of the goats so designated are crossbreds, still, the Spanish type does occur in many flocks, and is a widespread type in the southwest. In the southeast there are also remnants of the Spanish goats, and some of these flocks are relatively uncontaminated. These are called Scrub or Ball Field Goats, since they are frequently used for brush control in softball playing fields. Finally, there are some remnants of the Spanish Type goats in the US Virgin Islands, where they persist among a larger crossbred population of goats.

The pattern of distribution of Spanish goats in the USA is discontinuous, and in isolated groups. There has never been an effort to standardize nor conserve these, and they have been the frequent target of crossbreeding to northern European dairy types and to Nubians. The original Spanish type does persist, though, and is available as a unique genetic resource for North American goat breeders. Some few breeders and organizations are now beginning to appreciate these goats of Spanish origin as an unique resource, and conservation efforts are underway.

SWINE

Spanish colonial swine have established feral populations in a pattern similar to that for goats, and for largely the same reason: to be an island larder for subsequent visitors, (Mayer and Brisbin, 1991) and
McKnight, 1968). The swine have been only poorly studied, but spanish types persist on a few islands such as Mona in the Caribbean, and Santa Rosa and San Clemente off of California. One important population is that on Ossabaw island off the Georgia coast.

The Caribbean and California feral hogs are large, brown, and well adapted to their environments. They are incompletely studied. The Ossabaw hogs are better documented. They have adapted by different means to an environment that is harsh, with food availability being strongly seasonal. These hogs are small (50 to 70 kg), usually black, and have the capacity to store incredible amounts of fat. This fat is then metabolized for energy during the periods of food shortage. The Ossabaw hogs have accomplished this by virtue of having mild noninsulin dependent diabetes mellitus.

Nonferal descendants of spanish hogs are much more rare than the feral ones. The Choctaw tribe still raises black spanish type hogs in their present homeland in Oklahoma. These hogs are large and fat, and are raised extensively on the range.

The Choctaw hogs frequently have wattles on the neck, and are also frequently mule footed (syndactylyous). They are becoming more rare as fewer and fewer people raise hogs on the open range. They are caught by the use of dogs, and one of the dogs frequently used for this is the Catahoula Leopard dog, which may itself be of spanish origin.

The spanish hogs may also have influence such breeds as the Mulefoot hog and the Red Waddler, but this is largely conjectural and these breeds are themselves very very rare. As hog breeding more favors the industrial organization and breeding of white hogs for lean pork production these remnants of the spanish strains that were adapted for extensive systems are becoming rarer and rarer.

**ASSES**

The influence of spanish livestock on ass breeding in the USA has two major impacts (Briggs, 1965; Hall, 1975 and McKnight, 1968). One of these involves both feral and nonferal ass breeding in the Southwest which involves what are termed *burros*. These are generally 120 cm or so in height, with very exceptional ones being 180 cm. The taller ones are usually not from the feral herds, but rather from herds that have been owned and carefully bred for the intervening centuries. These burros vary from being very heavily conformed to being of more tapering, linear conformation. Both types occur side by side in feral herds. The more compact ones served mostly as pack animals, with the taller rangier types being used for riding or mule production.

A more important spanish influence in ass breeding came, paradoxically, through later importations into the anglo areas. Large spanish asses began to be imported during the presidency of George Washington, with the gift of two Catalanon Asses from the

*Archivos de zootecnia, vol. 41, núm. 154 (extra), p. 418.*
King of Spain. These Spanish asses were an integral part of the development of the American Mammoth Jack. These jacks are used specifically for mule breeding, and are among the largest and most highly developed jackstock in the world. While they do have influence from other Mediterranean strains of asses, they are predominantly of Spanish origin.

Mammoth Jacks in the past were all black with white points, but now other colors are becoming more common, with chestnut, or sorrel jacks being especially prized in the current market. The Mammoth is up to 160 cm tall.

REFERENCES


