UNITED HORNED HAIR SHEEP ASSOCIATION

Around the 1950s woolen sheep in the United States numbered in excess of fifty million. With the replacement of wool and other natural fibers by synthetic fibers by the end of the century the total numbers of sheep dipped below nine million.

According to the USDA New Mexico Agricultural Extension Service report census numbers for cattle at 1.5 million beef and 200,000 dairy cows and 300,000 sheep for the year 1996. The Spanish Merino was a foundation breed for many of the one thousand breeds of sheep worldwide and the fifty odd breeds in the USA. New Mexico's first principal export was sheep. While "Texans and Californians favored beef cattle and horses, New Mexicans originally concentrated on sheep ever since Don Juan de Oñate and the first Spanish colonizers brought 5,400 head of sheep and 1,200 head of cattle to New Mexico in 1598. For one thing, sheep were far better suited than cattle to the mountainous terrain, and even though Indian raiders occasionally stole sheep - or slaughtered a flock to gall the Spaniards - the animals could not be stolen in large numbers because it was difficult to round them up and drive them away... The hardy Churro sheep fed, clothed, and supported the first settlers when there was nothing between them and starvation. Winifred Kupper, in his book, *The Golden Hoof,* writes that, "Sheep were the real conquerors of the Southwest." In good years as many as 500,000 of the animals were herded to market in Chihuahua, capital of the state of Coahuila."

There are a number of web sites, which detail varying versions on the origins of both Churro and Merino sheep as they were shipped from Spain to the Americas. There are many authoritative references in the literature as well as “on line” for woolen breeds per se. However, a considerable amount of uncertainty is still attached to the precise origin of Churro sheep. The best reference I find is the one where Rodero extrapolates from Old Spanish archives and explains that, “the Churro Breed, probably belongs to the Lebrijano Churro type, today near extinction. Boezio (1990) considered that the Criollo Sheep from Uruguay before 1794 descended from either the Churro Sheep or from the Pirenaica Breed, both belonging to the descendents of *Ovis Aries studery*, while the Merino was introduced soon after. It is possible that these two branches were introduced to America at the same time, but each of them occupied different ecosystems; the Merinos were located on table lands and valleys with long displacements, and the Churros occupied the mountains in wet and cold areas.”

"**...**Churra is a milk production breed of great hardiness, well suited to the continental climate of Castile and León, with long, severe winters, very short springs, and hot dry summers. The original Spanish Churra was a tough sheep, adapting quickly to the harsh conditions of the American Southwest." Because this sheep maintains features of hair sheep, such as adaptability, hardiness, and growing both hair and wool, it could almost be considered an evolutional link between those first wild hair sheep domesticated by ancient Iberians and the breed, which came to be known as the Spanish Churra(o) sheep. This may help explain the etymology of the word "Chamorro" which according to the Velasquez Spanish-English Diccionario defines the word as meaning shorn, or bald. "Chamorra" refers to a woolen blanket and "chamorrear" is the infinitive form of the verb to shear or cut wool. In Rodero's discussion about the evolution of the first cattle and sheep-driving practices from isolated locations in the Iberian Peninsula to slaughterhouses and markets, he sites Chamorro sheep being valued for its meat as opposed to wool. This would make sense at a time thousands of years ago when hair sheep first domesticated would have been more of a meat and milk source, then later selectively bred to improve its' wool qualities. The word Chamorro may have originally referred to the precursors of more modern churros whose natural condition was closer to that of its ancient hair sheep ancestors, e.g., wild European Mouflon sheep. Today, Chamorro in the sense of "bald or shorn" would be a contradiction to the clear observation of a modern woolie churro, which is quite the opposite of bald. I refer here to a verbatim passage of Rodero's, which makes the connection between the Chamorro and Churro. Again, so as not to influence the translation I have not edited nor corrected grammar or syntax, so that his semantics are left entirely up to the reader; *"nevertheless, two facts changed the mentioned isolation. On one hand the apparition of the organized and institutionalized movements of animals (transhumancia), not only with respect to the Merino Sheep coming from the north (Castilla and León) of the provinces of Córdoba and Jaén, but also for livestock taken out for these shephersess, bought in Andalusia. The latter was called* ***chamorro*** *and they was famous for their meat but not their wool, very basting, they correspond to the* ***Churro Sheep***."

On Columbus' second voyage to the New World he stopped at Gomera, one of the Canary Islands, on October 5, 1493, to take in supplies. There he purchased calves, goats, and sheep, to stock the island of Hispaniola then Cuba. From these islands sheep were carried to the Isthmus of Panama, and in 1521, one of the conditions required of those who proposed to found new settlements on that isthmus was that some responsible person come forward with whom an agreement for settlement could be made; and the terms were that "within a time

specified there must be from 10-30 settlers, each with 1 horse, 10 milk cows, 4 oxen, 1 brood mare, 1 sow, 20 ewes of Castile breed, 6 hens and a cock."

From these two localities, Panama and the city of Cuernavaca, went forth sheep of great numbers, from which it was reported to the home government that much "woolen cloth was made in New Spain in 1560." These Spanish sheep were the progenitors of the immense herds in Mexico, *New Mexico,* Utah, and Texas. In 1736 there numbered over 1,500,000 sheep in the Mexican State of Nuevo Leon, and sheep-raising had risen to great importance because of the rapidly increasing woolen manufacturers of Queretaro, Puebla, and Valladolid. Sheep formed the chief element of agriculture in New Mexico. By 1750, these animals were being raised in large numbers, both for wool and meat.

The traditional Churra Spanish sheep breed was one of the very first breeds of sheep in the New World. Introduced to North America in the early 1500's by Spanish explorers and conquerors to serve as food and fiber (clothes, blankets, etc.) for the exploring soldiers, and in 1598, by the Spanish explorer Juan de Onate, into the American West through New Mexico. The word for Churro originated as Churra, Spanish for scrub sheep, eventually being corrupted in the American West into Churro. As Native Americans and settlers acquired sheep from the Spanish explorers, the breed's popularity as a food and fiber source grew and the sheep became a major economic asset. Also used as a meat source, the Navajo-Churro remains best known for its wool. The fleece is composed of an inner coat of fine wool fibers providing good insulation and a protective outer coat of long coarse hair, which sheds the snow and rain.

The Spanish vaquero/overjero introduced and taught the American Indians to shepherd sheep. The Navajo Indians not only quickly became proficient at sheep herding, moreover they became dependent on these sheep for their very livelihood. This influence helped transform the Navajo from a nomadic, warring culture to a ranching culture. Prior to the arrival of the Spanish, the Pueblo Indians complained that the Navajo would raid the farming cultures of the Pueblo Indians. The name Navaho originates from the Pueblo name, "Abache Nabahu." Abache or Apache meaning "enemy" and Nabahu or Navajo meaning "farm fields," or "the raider of the field," Alvin M. Joseph and William Brandon, *The American Heritage Book of Indians,* American Heritage Publishing Co, 1961.

Sheep and cattle together helped to shape and evolve the livestock ranching history, but not without their own battles for turf in the lands of cowboy ranches as well as between the pages of history. Both have dominated the ranching industry first in the Iberian Peninsula prior to Columbus' arrival in America, taking turns having the upper hand, then again in the Americas, again

taking turns dominating the grazing ranges. New Mexico was first a sheep state rife with battles between cattlemen and sheep ranchers. My father told me a number of stories often about his sheep ranching antecedents, in one case his great grandfather having been ambushed and shot to death while tending his sheep. In another instance, grandfather Juan Chavez y Trujillo, his maternal grandfather in Lemitar, New Mexico who had been a judge, was confronted in a bar by cattlemen still stewing over a former stiff sentence handed down to a convicted cattleman. Following the unavoidable fight against overwhelming numbers, Juan Chavez y Trujillo grabbed my father, a young boy of ten years, threw him up onto the horse behind him and made a hasty escape among poorly placed bullets. My father's biggest complaint seemed to be that as the horse took one long stride after another, the saddle, behind which he was sitting, was pinching his inner thighs. No matter how loud he complained to Grandpa Juan Chavez y Trujillo his cries fell on deaf ears.

Amos Dee Jones developed Debouillet Merino in New Mexico in the 1920s by crossing Delaine Merino sheep with Rambouillet. Rambouillet sheep are a French version of the Spanish Merino. French King Louis XVI imported over three hundred Spanish Merinos for his estate at Rambouillet, France in 1786 crossing them with his native French sheep.

Sheep are still raised in many places in the original cradle of the west and have had a sub species named after the state where they were introduced into what is today's US of A. It is a hair (meat) sheep, Ovis Dalli Novo Mexicanus, or the New Mexican Dahl Sheep, developed by descendents of the Belen Land Grant founders of 1742, (original founder Diego de Torres), at Terra Patre Farm, Belen, New Mexico, USA; http://terrapatrefarms.com/newmexicodahlsheep.html.

The First Domesticated Hair Sheep

Hair Sheep History

While there is a lack of precise certitude in the case of Churro Sheep history, **where "hair" sheep are concerned** there appears to be utter confusion around the country. One hour on the internet reading assorted hair sheep web site' descriptions of the history of hair sheep and you will find almost as many arbitrary variations, descriptions, and histories as there are web sites. An effort to site proper authorities on hair sheep here should narrow down the parameters and lend some credence and consistency to the real true history of hair sheep.

According to Jim Morgan and Susan Shoenian writing for Virginia State University, "hair sheep numbers in the United States have increased dramatically in the past fifteen years as documented by breed registry data. Two hair sheep breeds rank among the top six breeds for numbers of sheep registered in the USA from 2002-2004 and one since the year 2000. The

increase in hair sheep registrations occurred while the vast majority of wool sheep registries experienced declines of 25 to 75% in their registration numbers from 1990 to 2004." "Hair sheep have made significant contributions to sheep production in the U.S. over the past several years and are poised to expand their role in the future. Hair breeds successfully address several of the production constraints currently faced by the sheep industry in some regions of the U.S."
Virginia State University has one of the more informative web sites on hair sheep in the United States. This excerpt from Virginia State University continues discussion regarding the growing number of US hair sheep.
"Accurate numbers for commercial and registered hair sheep are unavailable due to the National Agricultural Statistics Service (NASS) not differentiating between hair and wool sheep production. (Note: in 2007, the NASS census will identify hair sheep operations separate from wool sheep).
Numbers of registered sheep are an indirect measure of hair sheep numbers, but currently are the best available indication of how many hair sheep there are, their rate of increase and their distribution in the USA. Since hair sheep are less likely to be in the show ring than many wool breeds, the numbers of registered hair sheep are not being driven by markets for club or show lambs, as is suggested for wool sheep. Hair sheep breeders are localized in the Southeastern, Midwest, and Texas regions and are low in numbers in the states noted for wool sheep (ID, NV, MT, WY, UT, AZ, and NM).

This is particularly significant for the census of hair sheep numbers since much of their growth has occurred in the southeastern states that are not traditional sheep production areas and therefore, not as adequately surveyed. For example, the numbers of Suffolks registered in the USA is over three times that of the Katahdin in 2004. But in eight southeastern states, the numbers of Katahdin hair sheep registered are ten times greater than Suffolk registrations. Currently, hair sheep are being raised in areas that are not typically associated with wool sheep production. Since hair sheep in the USA are derived from genetics adapted to heat and humidity, this distribution is not surprising."

Between six and ten thousand years BC sheep, goats, and cattle were being domesticated. Domesticated woolen sheep, "woolies," are so ubiquitous that it is probably safe to assume that most non-ranching folks are of the mind set that woolies have always been "woolies." As a matter of clarification, I should begin this section by stating that it is not natural for sheep to have a heavy fleece all year round. Wild sheep were repeatedly selectively bred for more wool until they lost their shedding gene.

The history of hair sheep: The first sheep domesticated by our ancestors were wild **hair** sheep. Hair sheep to varying degrees, depending on climate naturally

grow warm insulating wool as well as hair (like that of a goat) during the cold months of the year. As the weather warms, the wool fleece sheds leaving only the hair behind. This is a practical adaptation. Over the past eight thousand years, mankind has selectively bred sheep more for its' ability to produce wool and less for its hardiness. That is why the Churra sheep imported from the Iberian Peninsula which still carries some of these attributes of more primitive sheep like fecundity, hair plus wool, as well as hardiness were so successful over other strains of sheep and were a perfect strain to maintain by the first ranchers, Hispanic ranchers living through many spells of hard times. The hardiest people kept the hardiest livestock.

There are many species of these wild sheep ranging in habitats in what is referred to as the Great Arc, (like the shape of ram horns), of the Wild Sheep, beginning with Mouflon sheep in western Europe across the Boering Straits to the American Bighorns in southwestern USA. James L. Clark has published a great book on these ancient wild sheep called The Great Arc of the Wild Sheep, University of Oklahoma press, 1994. The ancient sheep domesticated by man originated globally north of the equator and have been disseminated by nomadic people all over the world. One example mentioned above sites the French who borrowed sheep from Spain when French King Louis XVI imported over three hundred Spanish Merinos for his estate at Rambouillet, France in 1786 crossing them with his native French sheep and naming them after the French community "Rambouillet." And so went the practice of borrowing and renaming animals until there are far too many subspecies to mention.

Since the decline of the wool industry in the twentieth century, domesticated hair sheep, also referred to as meat sheep have become more popular for a number of reasons. They are great sheep for the beginner or hobbyist. As mentioned above, hair sheep are more resistant to disease, parasites, and climate changes. They are less expensive and easier to keep because they need no shearing, are hardy, prolific, and more forgiving than woolies. Finally, their meat lacks that mutton taste some people find distasteful.

The first reference to hair sheep appears in Spanish journals, references to their discoveries in West Africa and the Canary Islands. The best reference to the origins of hair sheep comes from translated archives. This is a direct verbatim quote, (albeit a bit awkward), from Spanish to English by A. Rodero, J.V. Delgado and E. Rodero - El Ganado Andaluz Primitivo Y Sus Implicaciones En El Descubrimiento De America. *"It is clear, because of in the archipelago there did not exist cattle, horses, asses or camels before the (Spanish) conquest and the pre-Hispanic canary sheep had special characteristics* ***(they present hair,***

not wool), not mentioned in America's farming at this time." Although these hair sheep are not described any further to give us a clue as to whether they were related to modern St. Croix sheep, Blackbellys (AKA Barbados), Wiltshire Horn, New Mexico Dahl or any other of the known older hair sheep species, these are the hair sheep the Spanish shipped to the Americas. He continues…*"The Spaniards found the Canaries inhabited by a mythic people called the Guanches, coming from the vicinal Africa as was shown by their racial characteristic (Mediterranean) and their language (similar to the Berberlanguage), at though with the precedence of other ethnic groups in a lesser degree (Nordics, Negroids and Cro-Magnon), all of them with a difficultly explicable origin. The Guanches were principally farmers, and the waitings there mentioned the presence of goats, pigs, sheep, and a high abundance of dogs, (canines); the last probably gave the name to these Islands: Canarias, from the Latin Canis. The characteristics of these livestock showed a clear African roots."*

The location of the archipelago as a crossroad between continents and the demand of products from the new colonies brought good commercial profits to the Islands, after the Discovery of America." "*The Canary Islands were a necessary stop on the way to America. In 1404 Castilla occupied it permanently. It was the beginning of their colonization and europeatization."*

When Spanish livestock arrived on the other side of the Atlantic in the Americas they referred to them as Criollo, a wide all encompassing term applied to all species such as cattle and sheep, and horses, e.g., Cuban Criollo horse, Mexican corriente cattle, and Navajo churro sheep. As time progressed some species took on the names of their specially bred characteristics and others kept the Criollo name. According to I.L. Mason's World Dictionary of Livestock Breeds, Third Edition. C.A.B. International, Criolo is also known as: "*Creole, Chilludo, Pampa, Colombian, Lucero, Tarhumara, Uruguayan, Venezuelan.* The Criollo breed developed in the highlands of Bolivia, Colombia, Ecuador, Guatemala, Mexico, Peru and Venezuela over hundreds of years. The ancestors of the present day Criollo is believed to be the Spanish Churro, which was brought to this area in the mid-1500. The present day breed has a coarse fleece of carpet wool type. They are typically white, black or pied.

There are a number of species of hair sheep around the world, both tropical and temperate subspecies. As they specialize, registries are being established and standards set as guideposts for differentiating one from another. For our purposes here I will concentrate on breeds popular to the United States of America, with particular emphasis on the Mouflon, Barbados Blackbelly, and

Rambouillet, (French for Spanish Merino), which are the foundation stock of the vast majority of our horned American Hair Sheep breeds; Corsican, Black Hawaiian, Painted Desert, and, Texas Dall to name a few trophy hunt sheep. The Katahdin, Dorper, and St. Croix, which are also hair sheep but, are polled, (hornless), are considered exclusively meat sheep. The New Mexico Dahl is uniquely bred to appeal to both meat and trophy hunt customers with large muscular bodies sporting massive horns.

St. Croix sheep are like the Barbados an old breed brought to the Americas by the Spanish and Portuguese merchants and explorers. Katahdin sheep date back to the late 1950's with the importation of St. Croix sheep from the Caribbean by Michael Piel, to Maine, U.S.A. His goal was to combine the shedding coat, prolificacy and the hardiness of the Virgin Island sheep, with the meat, conformation and rate of growth of the woolen breeds. He experimented with crosses between the hair sheep and various British breeds, especially the Suffolk. Later, he collected a flock of Wiltshire Horned Sheep (*initially borrowed from prehistoric Iberia by Celtic tribes driving them to England*) in the mid 1970's, from England incorporated them into the flock in order to add size, and improve carcass quality even further. He named his sheep "Katahdin" after Mount Katahdin in Maine.

History of Barbados Blackbelly Sheep

According to R.I. Rastogi, H.E. Williams, and F.C. Youssef in their Origin and History of the Barbados Blackbelly, "in tropical America there are two quite different types of sheep. In the highlands there is a wooled sheep, called Criollo, which originated from the coarse-wooled Churro imported from Spain during the period 1548 to 1812. It is a small to medium-sized animal producing a small quantity of coarse wool which is important for the cottage wool industry. The males have horns. Color is often white but colored and pied animals are common.

This is the principal breed in Mexico, Guatemala, Nicaragua, Colombia, Venezuela, Guyana, Ecuador, Peru and Bolivia. There are also small populations in Haiti and the Dominican Republic.

The second type of sheep is a **woolless or hair sheep** whose color is commonly tan (red-brown), white, or patterns involving tan. Males lack horns but are characterized by a shoulder and throat ruff of long hair. This hair sheep is found in many Caribbean islands and in mainland countries along the north coast of South America. Populations will be described from Barbados, Virgin Islands, Bahamas, Cuba, Mexico, Dominican Republic, Colombia and Brazil. The hair

sheep is of African origin but, in countries where wooled Criollo sheep do not occur (e.g. Cuba); it may be termed "Criollo" which tends to be confusing."

Rodero's citation of Spanish discovery of hair sheep as being of African origin and "the location of the archipelago as a crossroad between continents and the demand of products from the new colonies brought good commercial profits to the Islands, after the Discovery of America," makes it reasonably clear that these sheep were exported and marketed in the Americas by Spanish and Portuguese merchants, beginning with the Caribbean Island chain between Antigua to Barbados, and St. Croix.

R. Lydekker in The Sheep and its Cousins, London: George Allen Press wrote about the Guinea long-legged sheep: "Early in the seventeenth century these sheep were carried by the Portuguese to the northern districts of Brazil, while about the same time, or perhaps still earlier, they were introduced by the Spaniards into the West Indies and Guiana…."

Notwithstanding the obvious connection with the Spanish, R.K. Rastogi, H.E. Williams and F.C. Youssef do not credit the Spanish or the Portuguese with the introduction of hair sheep to the Island of Barbados. They do state, however, that, "it is generally agreed that these hair sheep were introduced into Barbados from West Africa. They have existed in Barbados for well over three hundred years." Another well known African hair sheep introduced in the 1500's by Iberian explorers is the St. Croix sheep. Instead of crediting the Spanish or Portuguese predecessors they cite Ligon who guesses that the Blackbelly hair sheep "must have been introduced between 1624 and 1657." That is the time when British explorer Sir William Curteens during a storm accidentally blew onto on the Isle of Barbados after the Portuguese and Spanish had come and gone.

R.K. Rastogi, H.E. Williams and F.C. Youssef go on to quote Ligon, "we have here, but very few [sheepe]; and these do not like well the pasture, being very unfit for them; a soure tough and saplesse grasse, and some poisonous plant they find, which breeds diseases amongst them, and so they dye away, they never are fat, and we thought a while the reason had been, their too much heate with their wool, and so got them often shorne; but that would not cure them, yet the Ews bear always two Lambs, their flesh when we tried any of them had a very faint taste, so that I do not think they are fit to be bred or kept in that Country: other sheep we have there, which are brought from Guinny and Binny, and those have haire growing on them instead of wool; and are like Goates than Sheep, yet their flesh is tasted more like mutton than the other".

"Guinny" is clearly Guinea, the Gulf rather than the present country of that name. "Binny" may be-Benin, or Benny on the Niger Delta.

…It is clear that wool sheep did not thrive; nothing is said about the thrift of the hair sheep. The curious thing is that the high fertility is attributed to the wool sheep whereas it is now the hair sheep which exhibit this characteristic. Could this have been a result of crossbreeding combined with selection? A hundred years later the wool sheep had apparently died out since Hughes (1750) wrote: "The Sheep that are natural to this climate and are chiefly bred here, are hairy like Goats. To be covered with Wool, would be as prejudicial to them in these hot Climates as it is useful in Winter Countries for Shelter and Warmth".

At present the Ministry of Agriculture estimates that there is something over 30,000 sheep in Barbados; about one-third is purebred Blackbelly …, another one-third are grade Blackbelly (off-type in colour or with white spots) and the remaining are "others" (see Frontispiece). The last category includes hair sheep of other colors such as, white, tan, black or pied, and crosses with Blackhead Persian and wool sheep (mainly Wiltshire Horn). In fact in or around 1950, simultaneous importations of Wiltshire Horn sheep from the U.K. occurred in Barbados (Patterson, 1976), Tobago (Trinidad and Tobago, 1953) and Guyana (Devendra, 1975) with the objective of improving the quality of local sheep by crossbreeding. It has been estimated in Barbados that about 10 percent of the lambs born from woolless sheep at present are more or less woolly and these are not kept for breeding.

The Blackbelly was the most common breed on the estates surveyed by Patterson and Nurse (1974). Sixty-three percent had only this breed and on the others the dominant type was Blackbelly crossbred. A few farms kept Wiltshires. The Blackbelly was the dominant breed on all the small farms in the survey; Blackbelly crosses were next in importance and Wiltshires were present on only 12 of the 97 farms surveyed."

North American Hair Sheep History

Finding evidence of any particular subspecies of sheep let alone hair sheep in the literature is a rare and lonely experience because so little history was reduced to writing and so much history was passed on in the form of oral history that more specific details tend to become lost from one telling to the next. Evidently, hair sheep flocks have quietly maintained their existence tucked away behind the scenes in distant pastures on remote wild New Mexico mountain ranges and ranches/farms(large Spanish Land Grants) like so many

other livestock pursuits in the isolated state of New Mexico, a saving grace as it turns out in the preservation of many aspects of cowboy/ranching history. John O. Baxter in his book, Las Carneradas who suggests that the first sheep in the US Southwest arrived with Fernando Vasquez de Coronado y Lujan. He states on page two, "Early in 1540, when Fernando Vasquez de Coronado began his long march northward to the Zuñi Pueblos, large numbers of horses, cattle, and sheep accompanied is entourage."

Family journals, when they can be found are a rich source of history and should be preserved and published at any cost. The first mention of hair sheep I found was in the family journals (provided in 1998 by the Mascareñas family of Belen, NM) of some of the founding families of New Mexico. Specifically, the family of Juan Lopez Holguin, born in Extremadura, Spain, 1560 who traveled to Mexico City where he married Catalina de Villanueva. Their daughter, Ana Maria Ortiz, born circa 1570, wife of Cristobal Baca, born 1567 in Mexico City refers to one of the few most portable animals salvaged during one of the many Indian raids and massacres as they fled the Santa Fe area. She makes a point of identifying los "Chamorro borregos pelados," as the ones selected to make the trip, as opposed to the slower unshorn "borregos de lana," woolies, abandoned in Santa Fe. In another later passage, in the early 1700s there is mentioned by Maria Hurtado, wife of Manuel Baca, born in Santa Fe a list of animals brought with them from Bernalillo, NM to the new town of Alburquerque, NM which included, "una media docena de vacas, e once borregos pelados." Hitherto, these are the only references to hair sheep specifically which I find documenting the importation of hair sheep in North America other than St. Croix and Barbados.

The wool sheep industry has so dominated sheep ranching in America that there is hardly any mention of hair sheep in historical accounts. An effort to revive the New Mexico Hair sheep breed is being made at Terra Patre Farm, Belen, NM since the 1980s. About a half dozen hair sheep were discovered on the farm of retired career cowboy Leon Morris in Los Lunas, New Mexico. Mr. Morris, (about eighty years old in the 1980s) reported that he worked on an old Spanish Land Grant cattle ranch in northern New Mexico from the time he was a young wrangler to the time he retired. Over the decades working cattle in the high Sierras they regularly observed "white Bighorn sheep" which were elusive when pursued into rocky cliffs. The only time they could catch these sheep was when the sheep, while grazing intermingled with the cattle were rounded up and caught in the confusion of the large numbers of moving cattle. During the past thirty years observing many sheep going through the livestock auction houses in New Mexico and other parts of the country I noticed some distinctive sheep only in New Mexico bearing a similarity to the sheep on Leon Morris'

farm and those described in Rodero's, archival research which makes the connection between the Chamorro and Churro. These sheep were generally being brought to auction during dry years from the more remote ranches, suggesting there are still foundation flocks in existence.

In his dissertation identifying sheep which evolved in isolation in the Iberian Peninsula Rodero (archivista español) describes the Merino sheep, (*coming from the north (Castilla and León) of the provinces of Córdoba and Jaén),* and another sheep genus which sounds like a lost link between the first wild caught then domesticated sheep, and what, through specific breeding practices began to evolve into the Iberian Chamorro sheep, ("*livestock bought in Andalusia famous for their meat but not their wool"),* eventually called Spanish Churro sheep. By the time Churro sheep reached the Americas under the more generalized term "Criollo" sheep, they had also earned a reputation for being good wool bearers and dairy animals. One significant missing piece of this evolutionary chain exits between the rugged wild wool-shedding domesticated Mouflon type sheep referred to in Spanish archives as **Chamorros** and the **Churro** sheep which were different insofar as they maintained their hardiness and adaptability to harsh conditions, but at least partially evolved into woolies producing far more wool than the annually shedding "Hair" sheep we are familiar with today. Complicating this puzzle was the introduction of the true hair sheep the Spanish discovered on the Canary Islands. Both of these hardy sheep were exported to the Americas and no doubt out crossed on their journeys, then back crossed after arriving on the North American continent. There is an abundance of evidence that the Churro sheep arrived in large numbers to the US through New Mexico. The few remaining *Chamorro borregos de pelo* hair sheep referred to in New Mexico family journals are virtually undocumented but still occasionally seen on remote ranches or brought in for auction have all but disappeared. A concerted effort has been made over the years with those last remnant Chamorro hair sheep to purchase and preserve them as much as practicable, notwithstanding their having been crossbred almost to extinction with various woolen breeds. Having lost much of their distinctive look, Terra Patre farm, in an effort to revive this old breed has taken steps to breed out the wool and restore the hair sheep qualities which more typified this ancient breed. To this reinvented Chamorro sheep we have given a more modern name after the Ovis Dali Dali sheep of Alaska and common Texas Dall; we christen the *Ovis Dali Novo Mexicanus* or New Mexico Dahl hair sheep; http://www.terrapatrefarms.com/.

Professor Lemuel Goode at North Carolina University experimented with crossbreeding Mouflon, Rambouillet (Merino), and Barbados Blackbelly sheep in 1971. The cross resulted in a subspecies which is generally referred to as the Corsican sheep. It has a wide variety of colors and color patterns ranging from pure black, pure white and spotted combinations. The state of Texas enjoying a healthy "canned hunt" industry has bred these variations in turn into more sub species with larger more impressive horns for trophy hunts. As noted above the black strain is called "Black Hawaiian," the white, "Texas Dall," and the spotted, "Painted Desert." The states assigned to the names are not where these sheep originated. They were arbitrarily assigned as a marketing strategy.

RAISING "HAIR" SHEEP VERSUS RAISING "WOOLIES"

At this point readers who are considering getting into the rewarding sheep business are begging the question "what next." This section provides an overview of the pluses and minuses of raising hair sheep.

Selling Points:

The hair sheep industry is experiencing a wave of popularity since the synthetic fabric industry has displaced much of the wool industry. Several relatively new hair breeds have emerged that have spurred more interest. Consequently hair sheep numbers have shown a dramatic increase in numbers. What's more, the phase-out of government wool subsidies has made the harvesting of medium quality wools from typical farm flock operations less economically feasible, and shearing has became a major deterrent. Consequently, there is a growing shift in the sheep industry towards "easy-care" sheep that perform well under forage-based systems with limited managerial inputs, which are in line with the production traits of hair sheep breeds.

Hair sheep have several unique traits that appeal to livestock producers who want to diversify their enterprises.

- They are easy keepers, being more hardy and disease/parasite resistant than woolies; lambs having fewer birthing complications and being more vigorous with low mortality rates.
- Horned hair sheep tolerate heat better for two reasons. 1., Most conspicuously, they lose their insulating wool in warm months, but, 2, they cool themselves more efficiently by radiating body heat into the atmosphere through their horns like other hot climate animals like native African wild Watusi cattle.
- Their meat is tastier, leaner, and healthier. Taste studies show a preference for the taste of hair sheep meat over the mutton flavor of woolen breeds.

- Sheep meat is considered to be one of the healthiest types of meat available. It ranks higher than Chicken, Beef and Pork on all Health Charts. Hair sheep meat, particularly New Mexico Dahl Sheep is not known for its mutton flavor or sharp mutton smell. The meat contains very little fat and is preferred for its low fat “better than mutton taste. Owing to their lack of wool they have less, if any, lanolin tainting the meat.
- New Mexico Dahl sheep frequently have dark colored hooves which require less maintenance as they wear longer.
- They make money for the producer. By comparison, they are cheaper to feed as 20% of food consumption goes into the production (growth) of wool in wooled breeds.
- They are cheaper to feed also because they require lower levels of protein to achieve the same weight gains and growth, surviving on low quality grasses and weeds. In fact they thrive on low nutrient browse that other sheep breeds would suffer and die on, and prefer weeds and short grasses that horses and cattle will not eat.
- They are compatible with most other livestock in terms of shared space and diet.
- They are seasonal breeders, with strong mothering instincts, more often than not twinning.
- They are easier to manage than goats.
- They are more alert and possess a strong herding instinct which reduces losses due to predation. Rams frequently will turn and fight feral dogs and other canines.
- Pelts of these sheep produce high quality leather that has a high potential for sales. Hair sheep leather is prized for strength, elasticity and lack of blemishes caused by wool follicles. Leather from hair sheep has the softness of wool sheep leather, but the strength and elasticity of leather from haired livestock species. Hair sheep leather combines the best attributes of both haired and woolen species. This market is in the early development stage.
- The growing ethnic market demand for sheep has made them a desirable enterprise with increased cash flow by the October through Easter price premiums for sheep. The proportion of lamb consumed by the ethnic markets is steadily increasing. These markets generally prefer the leaner, lighter carcasses typical of hair sheep and their crosses.
- They are less labor intensive as intact males may be desired, so docking and castration practices are minimized. They require little or no worming depending on pasturing practices.
- Numbers of available breeding animals for most hair sheep breeds are limited, so demand and prices are high. Thompson Temple, the

marketer who started the hair sheep trophy ram book, estimates that 15,000-20,000 4 yr old plus rams wholesale priced at $350-$500 a head average sell each year. Retail hunts range from $1,200.00 to $30,000.00 per hunt. This agri-tourism business is grossing $5,000,000 to $10,000,000 per year just in animal sales and not including hunting fees, outfitting and other incomes for the producer. Trophy ram prices ranged between $1,500.00 and $3,000.00 each in the 1990s and now are in the tens of thousands for a trophy ram with horns in excess of 40 inches in length.

- Vegetation and Pest Insect Control: Increased use of sheep to manage pest plant and insect species is particularly well suited to hair sheep as contamination of wool by organic or vegetable matter decreases value of the clip. Data provided by Dr. Pat Hatfield of Montana State University indicates that grazing sheep can provide substantial control of sawfly in wheat and alfalfa weevil. Of particular interest is the short term grazing of alfalfa by sheep, which resulted in significant decrease in weevils with no decrease in alfalfa yield. Sheep are being used around the USA for control of pest plants such as kudzu, brush, spotted knapweed and leafy spurge. In areas where herbicides are not an option, easy care hair sheep function well.

In short, these breeds normally have strong tendencies for no wool, internal parasite resistance, prolific lamb production, good mother habits, grazing low quality forage and browse. A recent comprehensive literature review (by D.R. Notter at Virginia Polytechnic Institute and State University, Blacksburg 24061-0306 and published in the American Society of Animal Science, 1999) discusses these traits and origins in more detail. All domestic hair sheep in the U.S. originated from hair sheep from Africa first imported by the Spanish and Portuguese colonists beginning in the 15th century.

These sheep tend to store fat internally, reach market conditions on forage, and contain more healthy fatty acids with less fat on commercial cuts with a unique desirable flavor. Thus, they have their own unique market for meat. That market is the ethnic market which is as high and seasonally higher, price wise, as the traditional lamb market. Very light lambs are often in high demand in this niche market. Meat associated preponderance such as fatty acid contents, HDL/LDL cholesterol levels and total fat show in early studies of hair sheep, the pure hair sheep breeds have been shown to have a more healthy meat that is similar to goat meat. Both animal species tend to store their fat internally.

Minimally, you can expect 150 percent lamb crop (one lambing) with the ewes which bear a single lamb, and three lamb crops in two years. Ewes which consistently twin will produce twice those numbers or 300 percent lamb crop.

The potential value of the pelts in the leather market is improving as buyers are more and more recognizing that hair sheep pelts are of a better quality, comparable to goat leather.

On the negative side with the exception of Wiltshire Horn, Stumberg, and New Mexico Dall in general, these breeds are smaller, thin muscled and slower growing than many of the wooled or wooled crossbreeds. They are generally more stressed when in confinement such as maintenance work or pen feeding.

NEW MEXICO DAHL SHEEP

New Mexico Dahl sheep appeal to both the meat and hunting industries, sporting trophy size horns on large muscular bodies. They are characterized by all the attributes outlined in the list of selling points above. These sheep are described as **never** shear, white in color, with both ewes and rams horned, ewes' horns averaging length around six to nine inches. They are excellent flockers, with high lamb survivability. Majestic Rams quickly grow long beautiful horns with massive horn bases. Their average weight ranges between 190 and 225 pounds, roughly 50 to 70% increase in size over other horned hair breeds. The ewes are excellent mothers that are prolific seasonal breeders which often twin. They do well in feedlots or on the range. They are being bred selectively to include these good qualities as well as their frequency of multiple births. They are being selectively bred to exclude the spindly, bloated appearance of some otherwise handsome trophy hunting breeds. About one out of ten lambs from this gene pool have brown and black coloring much like the popular Painted Desert hair sheep. These are referred to as Coronado sheep.

In the sixteenth century in the north of New Spain and what is now the Southwest US, Spanish colonial expeditions moved at a pace slow enough for people to walk alongside carretas or in tow behind draft animals, and slowed even more to help woolen sheep breeds cross swollen rivers on (made on the scene) rafts. Expeditions took the time to navigate around large regions of rocky terrain or even hold over long enough to allow sore hooves to heal after covering rocky spans. However, exploration expeditions had different objectives and different priorities. In 1540 Francisco Vásquez de Coronado y Luján did not have the luxury of building rafts in wet months nor sheering wool in hot months, and frankly time was of the essence. These sheep had to be far hardier than the livestock brought to lush green Florida, as the desert southwest was harsh and unforgiving. Not knowing the distances they had to cover, they needed to move quickly and before their live food source (namely the sheep) was expended. They took the most expedient direct practical route. They needed the most expedient animals. NM Dahl sheep fit this ticket perfectly. What's more, when faced with hostile Indians, speed was the key to survival and only hair sheep could have met such a challenge and kept up with horses on the run. Again, woolen breeds in hot months on a sustained run would perish

from heat prostration. Nor could they, as previously established, crossed bodies of water (running arroyos & rivers) in a hurry.

For producers interested in further pursuing hair sheep ranching there exist two significant hair sheep meat-marketing groups, both centered in the southeastern or south central USA, as well as the United Horned Hair Sheep Association, Inc. dedicated to high standards in the hair sheep industry; http://www.unitedhornedhairsheepassociation.org/newmexicodahlsheepgallery.html. The Scott County Hair Sheep Association in southwestern Virginia with over 200 members and 7,000 ewes has signed a contract to provide lamb to the Food City Supermarket Chain. Marketing hair sheep: the Hair Sheep Market Managing Group (HSMMG) incorporated in Arkansas and is centered in Oklahoma and Texas, but has members ranging from Texas to Nebraska to New York. As of 2006, the group has over 50 members and 10,000+ ewes. HSMMG is marketing both meat products and breeding stock and has the potential to collect 60-110 pound lambs and move them between the markets in their extensive geographic areas. A significant component of the income of both hair sheep marketing groups in 2005 is the high demand for commercial hair sheep breeding stock.