Chapter II-1
"Acampao": the Breed Description

"Acampao" is a term that is frequently used by the admirers of the **Chilean Horse** breed. I have often asked people what, exactly it means and, invariably, they struggle to describe its somewhat vague significance. I think part of the reason for this is that the word "acampao" encompasses a very broad sentiment.

The word "campo" means country, as in "out in the country", "countryside", "rural surroundings", etc. The Spanish prefix of "A" would refer to "from" or "pertaining to", thus "acampao" would refer to something that is from the country or pertaining to the country environment. In reality, the term should be "acampaDO, but true to the "huaso" vernacular the letter "D" is suppressed. This is suggestive of the strong Andalusian influence in the "huaso" formation, as even today the suppression of letters is commonplace in the diction of Andalusians.

Thus, in the strict sense, the term "acampao" would indicate that whatever it describes comes from the countryside. However, in the Chilean context of the word, there is a more profound significance that implies something that is pleasing and appreciated by the country folk. This falling in favor with whatever is being described is not a personal opinion, but a traditional interpretation of what has best represented the objectives and the ideals of this sector of the culture over the years.

Thus, a house may be described as "acampao" if it has an admirable Chilean architecture and surroundings. Ideally, it would be a thick adobe-walled house with clay tile roof and a perimeter corridor. In the adjacent landscape there would be a fountain, a wagon wheel and huge earthen urn lying on its side, all strategically placed in a garden full of flowers. Preferably, there would be plenty of surrounding space in a piece of property lined with poplar (called "Alamos" in Chile) trees and backdrop of snow-covered mountain peaks. Many individual characteristics may cause one house to differ from another, but to find these essential ingredients in a residential setting would assure its "acampao" nature.

How one can apply the same adjective to a home and a horse might seem strange, but it is in the context of judging what is pleasing under the traditional rural concept that can also qualify a horse as "acampao". There is much merit that the Chilean Horse emphasized this term so strongly in their breed description, as it assured that the traditional parameters of the breed take preference over temporary whims of what judges might consider fashionable at the time.

The Chilean Horse Puts a Strong Emphasis on Breed Type

The **Chilean Horse** industry has tried hard to avoid the detrimental effects of not sticking to their original breed type by incorporating the word "acampao" in their breed standard. The **Andalusian** breed offers an interesting experience with this potential problem. Various influential people or organizations in its history have tried to change the characteristics of the **Andalusian** breed. The "Old Iberian Factor", which Silvia Loch summarizes so accurately in her book *The Royal Horse of Europe*, is a phenotypic description of traits that have long been fixed in the desirable genotype of this early breed. As influential people toyed with changing things such as the refinement of the "sub-convex head with a long narrow finely curved nose" that is a characteristic of this breed, they also diminished the strengths of this breed in strong hock action, impulsion and the old war-horse temperament.

One has to wonder if a well-defined description of the traditional concept of breeds such as the **Quarter Horse** and **Morgan** had been emphasized early on in the their history, whether we would see such a diversity in their breed type today. The founders of these breeds had a clear understanding of the conformational objectives. The **Morgan** breeders had their breed standard personified in the unique founder of their breed that looked nothing like the "American Saddlehorse look" so often seen in modern strains of **Morgans** today.

The predecessors of the **Quarter Horse** breeders had for centuries identified the type that was associated with short distance speed and cowhorse aptitudes. Yet, seeing a 17-hand (1.72m), 1,250 pound (568 kg), leggy, narrow and angular **"Quarter Horse**" hunter jumper, stand beside a 14.2-hand (1.48m), 1,150 pound (523 kg), moderately-muscled, short-legged "**Quarter Horse**" cutter, who, in turn, is beside a 16 hand (1.62m), 1,450 pound (659 kg), extremely thick and over-muscled "**Quarter Horse**" halter horse, one would be hard-pressed to understand how they all could be representatives of the same breed.

If, in fact, a breed is a group of animals of a related genetic pool that reproduces the defined type and related aptitudes with a high degree of consistency, then it would seem that all breed organizations need to have a very concrete idea of what "breed type" should be. In so many breeds, the type has been changed constantly according to the fads of the time and the personal preferences of the judges. Too often, either through questionable merits of open registries established in the by-laws of breed organizations, or through the dishonesty of breeders that introduced crosses of other breeds to gain unfair advantage in the show ring and performance arenas, the genetic pool was expanded to include an abnormal amount of genetic variation.

So it is refreshing to see this Chilean breed that has consistently strived to breed towards an unwavering objective of this somewhat inconclusive term of "acampao". If there is some subjectivity in this, it is narrowed by the fact that the term is determined more by tradition than by contemporary opinions. This establishes a clear definition of what has been desired in the past and should continue to be preferred in the future. Each subsequent year of results should further fortify the characteristics that have defined this breed since its inception. The fact is that a **Chilean Horse** that is described as "acampao" today would have been considered every bit as "acampao" in the mid 19th century.

The Reasons for a Steadfast Position Regarding Purity of Breed and Representative Type

In all fairness, I must make the observation that breed purity has not been totally due to the virtues of the Chilean breeders. The fact is that Chile is a geographically isolated country and, as a result, it has always had a very limited number of breeds within its boundaries. For all practical purposes, the only equine breed that existed throughout much of the country's history has been the **Chilean Horse**. The **Thoroughbred**, the **Percheron** and the **Arab** breeds joined the exclusive territory of the **Chilean Horse** in the middle of the 19th century. Even after their introduction, the majority of the national equine inventory was comprised of the **Chilean Horse**. This is in spite of the fact that the **Chilean Horse** had been the source of the majority of the equine casualties in times of war, and after the war years it had been exported in considerable numbers as well. History would indicate that the **Chilean Horse** population had rarely comprised less than 70% of the purebred horse inventory of this country.

An undeniable merit of the **Chilean Horse** breeders was having established a closed registry (one whereby new registries must be the product of two individuals already in the registry) upon its inception. Certainly, the country made numerous efforts to crossbreed the **Chilean Horse** in effort to create a larger, more aesthetic military mount. These repeated efforts were all in vain, as no cross could outperform the **Chilean Horse** in the arid mountainous terrain that was scarce in nutrients. The halter and saddle horse classes in fairs around the country during the 19th century stipulated minimum heights that unfairly culled a great many **Chilean Horses** from competing. This not only provoked the temptation to cross breed, but also to some extent deviated the initiative to maintain the unofficial standards of this breed that had proved so effective as warhorse, stock horse and trail horse.

By 1892, there was little doubt in the mind of the founders of the Chilean Registry that a closed book was required. In more than 300 years of experience, no other breed or crossbred had proven itself capable of performing anywhere near the aptitudes of this trustworthy little horse of Chile. In part, it is for this reason that the "acampao" terminology has never separated itself from the breed standards. It would be viable to have crossbreds within the breed standards of height, girth and cannon bone circumference. However, the **Chilean Horse** is so unique in

certain breed characteristics that it would be difficult to have crossbreds that are stamped with all the components described by the term “acampao”.

Most likely, the advantage of a purebred breeding program was well accepted by the time the official registry was established. Yet in all fairness, the temptation in subsequent years to crossbreed was restricted due to two main reasons. One is the already mentioned fact that Chile has had little representation of other breeds within its boundaries. Even as other breeds were occasionally introduced, most of the time these were warm bloods for use as a carriage horses or in stadium jumping and other English seat disciplines. No other stock horse breed was readily available except for the Argentine Criollo, which for centuries the Chileans felt was a less pure, coarser and an inferior alternative for the characteristics that were found useful in the Chilean topography.

The second reason is the unique specialization of the **Chilean Horse** breed. It is doubtful that there is another stock horse breed that is so focused on the aptitudes of a single performance event. Moreover, the event this breed was selected for was not practiced in other countries, so it was very unlikely that any other breed would be better suited for the function of a corralero driving and pinning steers in the medialuna. It is worth noting that the stature and conformation that is advantageous in this sport make the original phenotype of the short-legged, long-bodied horse a very desirable end product. As a result, the breed’s emphasis on the aptitudes of a good corralero horse guaranteed that crossbreeding only diminished the possibility of producing an effective horse for the Chilean rodeo.

So, with a very specific selection pressure, the **Chilean Horse** has been bred for basically the same breed type that has existed since its origins. These traits not only included the anatomical characteristics that gave the best results in the medialuna, but also included breed characteristics that were indicative of the presence of the genotype that assured the low metabolism, hardiness, and temperament that made the **Chilean Horse** the most suitable equine for the type of performance that was expected of them.

Formalizing the Breed Standard

On the 22nd of November of 1920, a definitive commission of six respected experts of the **Chilean Horse** breed was formed in order to formalize the breed standard. Slightly more than a year after the first efforts to create this commission were initiated, Julio Bernard, Alberto Correa, Miguel Letelier, Uldaricio Prado, Juan de Dios Rodriguez and Diego Vial presented the official “estándar de la raza” (Breed Standard). This standard would be changed slightly only once, on the 2nd of August of 1977.

It has always been the objective of this Breed Standard to determine what aspects of breed type and character make the **Chilean Horse** distinct. The *breed type* is exemplified in things such as the abundance of forelock, mane and tail, the sub-convex head, the small ears, and the proportions of the neck, back and legs that are typical of the breed. The *breed character* refers to the intelligence, the bold-yet-calm temperament and the trainability that favors the **Chilean Horse** in being an ideal saddle, stock and trail horse.

The Breed Standard also defines the *morphological factors* that influence the breed’s soundness and durability for the principle uses it is given. Here, the ideal structural and muscular conformations are determined for a balanced and stable individual. In addition, the Breed Standard hopes to determine what are the *aptitudes related to function*. These would include the athleticism and speed required for western reining, the cow savvy and courage for competing in the Chilean Rodeos and the sure-footedness and self-confidence to deal with hazardous mountainous terrains.

According to the Federation of **Chilean Horse** Breeders, the “Rules Regarding the Standards for the **Chilean Horse**” are the following:

1- Height

a. *ideal is 1.40m (13.3 hands) for mares.*
b. *ideal is 1.42m (14.0 hands) for stallions.*
c. *the acceptable range for the breed is a minimum of 1.36m (13.1+ hands) and a maximum of 1.48m (14.2 hands).*

2- Girth

a. *girth measurements for a mare should range from 1.64m to 1.84m.*
b. *girth measurements for a stallion should range from 1.62 to 1.82m.*

3- Hair coat colors

a. *all hair coat colors are acceptable except for total or partial albinos (white or cream) but solid colors are preferred.*

4- Skin

a. *a thick skin is desirable.*
b. *an abundant wavy haired mane.*
c. *slight of feather.*

5- Head

a. *light headed with a head of medium length and a wide flat forehead.*
b. *the profile of the head should be slightly convex or straight.*
c. *concave profiles of heads should be eliminated.*
d. *alert eyes slightly covered by the eye lids.*
e. *small to medium sized ears that are very mobile of average texture.*
f. *wide nostrils.*

6-Neck

a. *medium length that has a wide base tying in strongly into the shoulder blade.*
b. *slightly convex in the dorsal line.*
c. *straight in the ventral line.*
d. *refined throatlatch.*

7-Withers

a. *clean withers free of muscling.*
b. *with a subtle profile that smoothly prolongs itself into the back.*

8-Shoulder

a. *medium length, sloped with an unperceivable union at the withers.*
b. *points of the shoulder should be well separated from each other.*
c. *should tie into a strong short forearm that forms an open angle with the shoulder blades.*
d. *humerus should tend to lie horizontally.*

9-Back

a. *a strong, wide, solid back of a well-proportioned length.*
b. *ties into a short, wide, well muscled loin.*

10-Thorax

a. *well-developed with well-sprung ribs.*
b. *deep and full underline.*
c. *short and full flanks.*

11-Croup

a. *long, with very strong, wide muscles.*
b. *slightly sloping.*
c. *smooth insertion of the tail with a low tail set.*

12-Forearms

a. *firmly attached to the humerus with abundant, strong muscling.*
b. *extending long enough to tie into a knee that is close to the ground.*
c. *the knee should be short and robust and well-conformed.*

13-Legs

a. thick-boned with an ideal of a 20cm circumference for the mid cannon bone of the foreleg. An acceptable range of 18-21 cm has been established for both sexes.

b. straight, strong and well-defined tendons, that should be as short possible.

14-Hindquarters

a. deep, well-muscled hindquarters with the posterior to anterior view showing two straight parallel external lines that are well distanced from each other.

b. the buttocks should be as distant from each other as possible without being too tightly muscled

c. good muscle definition on the inner leg.

d. good spacing between strong hind legs.

e inner hind legs should tie together strongly to a properly angled hock.

15. Joints

a. tight, well-defined round joints.

16. Pasterns

a . short but not exaggerated, with enough slope to offer elasticity.

17. Hooves

a. preferably black and of proportional size.

b. concave sole and normal size frog.

18. "Acampao" breed type and character

a. *the preferential characteristic of breed type is found in the characteristics and profile of the head.*

b. the "acampao" character is a result of a combination of conformation and temperament; the vigor, the look or expression of the animal, and quality of hair (length, density and thickness of the forelock, tuft of mane over withers and tail).

c. other qualities that may not strongly influence the anatomy and physiology of the horse, but that add to the traditional character of the breed are also taken into consideration.

Note*:*

The "acampao" breed type and character are incorporated into the Breed Standards of the ***Chileno Horse*** *breed, so that when they are taken into consideration along with structural and physiological conformation the end product is a horse that is suitable and functional as a stock horse.*

In this manner, when the conformation is judged, consideration of the "acampao" breed type and character are automatically taken into consideration simultaneously. The inverse is also true. In selecting the best individual in breed type, consideration must be given to the conformation and harmony of the horse as described in the Breed Standards.

The above rules have been translated from the official publication of the Federation but I would like to comment on some of the practical, rather than theoretical, aspects that are seen in the breed as it is viewed today.

Height

The minimum acceptable height is stated as 1.36m, but there are examples of excellent **corralero** horses that have been no taller than 1.34m (slightly under 13.1 hands). The reader of the breed standard is not informed why such a small stature (between 1.40m and 1.42m) is considered ideal for the **Chilean Horse**. The explanation is that the horses need to pin the steer or heifer to the wall with their chest. If the horses are too tall, the contact with the steer is low on the horse's anatomy.

The other problem this causes is that the contact on the steer is also too high on the bovine anatomy. Pushing high up on the steer increases the chances of knocking the steer to the ground, which would result in no points earned. On the other hand, the smaller equine makes contact on the lower part of the steer's side and can thrust upwards. The result is a pin that

pleases both the crowd and the judges, by rolling the opposite side of the steer up and over the pinning cushion and lifting the steer off the ground with the impulse of the charge. This follow through is called "remate" and it is a required part of all pins against the cushion, even if steers are pressed to a standstill rather than lifted in the air. However, the more exaggerated the manner in which a steer is lifted off the ground in one clean impulse, the less is left to interpretation by the judges.

In an article titled "El Caballo Chileno en el Deporte Huaso" ("The **Chilean Horse** in the Huaso Sport") the famous Ramón Cardemil (with a record number of wins in the Champion of Chile competition) made an interesting commentary on height. In contemplating the importance of genetics in the success of the corralero horses, he stressed good performance families and horses that don't surpass 1.42 m (14.0 hands). He listed 15 top horses he had ridden in his long and successful career, and their heights ranged between 1.38m (slightly under 13.2 hands) and 1.42m (14.0 hands). He only had two great horses that measured 1.44m (14.1 hands) and he said they were very difficult and uncomfortable to compete on.

Figure II.8
Two Chilean mares evidencing different heights within the breed standard

It is worth mentioning that one of the changes made in the Breed Standards of the Chilean Horse in 1977 was to reduce both the ideal height and the range of acceptable heights by 2 cm. Prior to this date, the original Breed Standard determined the ideal height to be 1.44cm (14.1 hands) for stallions and 1.42 (14 hands) for mares with an acceptable range of 1.38-1.50m (13.2-14.3 hands). This old standard coincided more with the Interamerican Federation of Criollo Horse Breeders (FICCC).

This organization established the ideal height of all the **Criollo** horses of the Americas as 1.44 (almost 14.1 hands), with an acceptable range of 1.38-1.50m (13.2-14.3 hands). If we look at the height of all the horses that were sold in the Palermo Sale of 2003 and the Autumn Argentine Sale of 2004, the average was precisely 1.44m (almost 14.1 hands). Clearly, the **Criollo** breed is taller than the **Chilean Horse** and as I am about to point out, the Chilean Horse is actually shorter than the ideals stipulated by their own Breed Standard.

So, as it stands, **Chilean Horse** breeders are currently striving for horses that not only have smaller ideal heights than the FICCC members, but also have an acceptable range that is smaller on the top and lower end. The fact is that a page will withstand anything that is written on it, but perhaps more significant than the theory is the veracity of what is functioning best in the **Chilean Horse** breed. Let us see what realities the horses of the past and present have projected.

Some have wondered why such a minor change was implemented in the new Breed Standards of the **Chilean Horse** breed. However, if the breed standard is, in fact, supposed to be representative of breeders' objectives, then it would seem that at least extending the acceptable range to include smaller horses was warranted. I have already mentioned that some magnificent **Chilean Horses** have even been smaller than this "acceptable range". There is also

evidence that the average of the breed and the average of the really good Rodeo horses are smaller than what the 1921 committee stipulated.

An interesting study was done by Eduardo Porte (1992) comparing the height of a group of 410 adult halter horses from three different eras: between 1950-1959; 1960-1963; and 1987-1991. The stallions from the oldest period averaged 1.435m in height (14+ hands), while those from the middle period were a bit taller at 1.446m (slightly under 14.1 hands). However, the horses in the most recent period studied averaged only 1.383 (13.2+ hands). The mares in this interesting summary averaged 1.420m (slightly under 14 hands), 1.417m (slightly under 14 hands) and 1.372m (13.2 hands) respectively, and they also evidenced the tendency towards a lower height in the contemporary representatives of the breed.

In the same year, in another effort to determine the average height of the **Chilean Horse** breed, Eduardo Porte looked at another larger group of 701 adult representatives of the breed. Here, he determined that the average height was 1.401m (13.3 hands) for the males and 1.398m (13.3 hands) for the females, showing that perhaps the figures represented in the period from 1987-1991 in the aforementioned study might slightly underestimate the height of the modern representatives of the breed.

Other researchers have also looked at the average height of the breed. In 1978, the Federation of Chilean Rodeos published the average height of all the horses that made it to that year's National Championship. The males averaged 1.397 m (13.3 hands) and the females had an almost identical height of 1.398 m (13.3 hands). In 1979, Herrera looked at 55 males and 67 females and determined their average heights to be 1.402m (13.3 hands) and 1.399m (13.3 hands) respectively. Pinochet (1980) looked at the measurements of 150 adult Chilean Horses and reported that the 50 males averaged 1.403 m (13.3 hands) and the 100 females once again averaged a very similar 1.40 m (13.3. hands).This coincides with Eduardo Porte's 1985 study that looked at 53 horses that made it to the National Championship and found the 36 males to average 1.405 m (13.3+ hands), while the 17 females averaged 1.401 m (13.3 hands). Significantly smaller results were obtained when Paula Aguirre F. (2003) took measurements of 456 Chilean rodeo horses participating in the classifying rodeos for the 2003 National Championships. She found males to average 1.388m (13.2+ hands) and females averaged 1.385m (13.2+ hands). The fact that the better performing horses of either sex have very similar heights may indicate that under ideal conditions, the height difference between the sexes is either non-existent or certainly less than what the ideal Chilean Breed Standard would indicate.

In the very worthy reference book *Caballos Chilenos: Genealogia de una Raza, 1837 a 1997*, the author Arturo Montory G. lists a total of more that 300 stallions from the 161-year period covered. Forty-five of these stallions had height measurements reported, and the average of these animals with data was 141 cm (slightly over 13.3 hands). The tallest stallion measured 148 cm (14.2 hands) and the smallest was a mere 134 cm (13 hands). It is interesting that after more than 160 years of the recorded existence of this breed and practically four decades of an official Breed Standard, the average figures of the breed representatives have been even smaller than the ideals stipulated in both the original and revised versions of the breed standard. Nonetheless, all figures have stayed within the original range of acceptable heights stipulated in 1921. This not only shows the good judgment of the members of the first Breed Standard committee, but it also indicates the sensible approach **Chilean Horse** breeders have had ever since.

In a series of articles begun in 1949 in the annual publication of the **Chilean Horse** Breeders Association, Joaquin Larraín Prieto presented an in-depth study that appreciated the motor functions of the "blue collar" performance horses. In citing various authors he pointed out how the center of gravity is determined by the intersection of a specific vertical and horizontal axis in the horse's anatomy. His accompanying illustrations make it easy to realize that the taller the horse, the further from the ground the center of gravity moves. Since the **Chilean Horse** has to combine speed with force, and much of this power is implemented while galloping laterally, stability is a very important criterion in the breed objectives. It is interesting that in a world that has bred so many horses to be unnaturally tall, the Breed Standards of the **Chilean Horse** have not succumbed to contemporary pressures, as it describes a range of heights that coincide with most wild *Equus*, both before and after the appearance of man. It would seem that

aside from the obvious practicality in the Rodeo arena, horses of this size also offer phenotypical specifications that have been tested over time…in fact, millions of years!

Girth

It is interesting to note that there are formulas by which scientists can determine the approximate weight of horses by measuring the circumference of the girth. However, by industry standards, horses and ponies are differentiated exclusively by the measurements of height at the withers. This would seem to be an unfair judgment of the **Chilean Horse**, since this is a short-legged breed through selection pressures that are related to the criteria of function. On the other hand, this breed selects for a "discreetly profiled" withers. The same body size with prominent withers would easily add another two or three inches in height, making a greater proportion of the representatives of this breed above the minimum height defined as a horse breed.

The fact that so many **Chilean Horses** have hips that are taller than the withers is further evidence that the wither height alone is not a good evaluation of whether they classify as "horse" or "pony". Many contemporary **Chilean Horses** also have cylindrical thoraxes and they diminish the opportunity that the girth measurements effectively represent the body mass of the representatives of this muscular breed. Even so, the standards for girth circumference of the breed vary between 1.62 m (63.18 inches) and 1.84 m (72.44 inches). Such depth of girth would indicate that we are looking at a horse versus a pony.

Figure II.9
Two Chilean Horses showing a difference in girth shape and circumference

Even though the Breed Standard does not specify an ideal girth measurement, there are multiple studies that show what the average figures for the breed are. The Chilean Rodeo Federation reported that the horses that participated in the 1978 National Championship had an average girth circumference of 1.70 m (slightly under 67 inches) for adult males and 1.734 m (68 inches) for adult females. The study by Pinochet (1980) reported that adult males had an average girth circumference of 1.721 m (67.75 inches) and the adult females averaged 1.752 m (69 inches). The distinguished Chilean animal scientist Eduardo Porte also reported the measurements of participants of the 1985 National Championship in which the males averaged 1.721 m (67.75 inches) while the mares averaged 1.728 m (68 inches). Porte's 1992 work showed girth circumference over the 41 years he studied have declined in recent years. Adult males in the period from 1950-1959 averaged 1.793 m (70.59 inches), those from 1960-1963 averaged 1.827 m (72 inches) and the ones from 1987-1991 averaged 1.715 m (67.52 inches). Adult mares in those same periods averaged 1.80 m (70.86 inches), 1.789 m (70.43 inches), and 1.734 m (68.27 inches). In his other study of the same year, where a greater number of **Chilean Horses** were measured, Porte found that adult males averaged 1.744 m (68.66 inches) and adult

females averaged 1.758 m (69.21 inches). However the tendency for height and girth circumference to continue to decline with time was seen when the Paula Aguirre F. (2003) study showed males to average a girth circumference of 1.714 m (67.5 in.) and females 1.734 m (68.3 in.).

It is no coincidence that this short-stature breed has such a large girth circumference. One of the members of the original Breed Standards Committee, Uldaricio Prado, expressed his opinion that the girth circumference squared was a good representation of the body surface and that this was strongly correlated with the area of the muscular components of the body. As a result, he was a proponent of giving more importance to girth circumference. Traditionally, perhaps more from experience than scientific reasoning, the "huaso" also had an appreciation for this trait.

Like all versatile saddle horse breeds, the **Chilean Horse** breeders were looking for a breed that combined speed and power. Any good cowhorse would benefit from both these components, but the **Chilean Horse** in particular has to have the speed to drive a steer at a full gallop and the strength to then pin an animal of similar body weight, by immobilizing it against the wall of the medialuna.

The animal scientists Crevat and Baron came up with a useful coefficient by dividing the squared girth circumference by the height. They found that a lower coefficient indicated a predisposition to speed, while a higher figure was representative of power or strength. It was their opinion that the optimal mechanical aptitude a saddle horse had to have for a balanced dose of speed and strength was a coefficient of 2.1125. In a study carried out by Porte in 1978, the coefficients for **Chilean Horse** males varied from 1.8395 to 2.4335 and females ranged from 1.8395 to 2.4719. It was determined that the ideal coefficient for the **Chilean Horse** may be closer to 2.200. For the purpose of comparison, Mr. Porte indicated a typical coefficient for Chilean **Thoroughbreds** was 2.0250 and Chilean draft horses had typical coefficients of 2.9876.

Crevat and Baron also provided the formula: "56 x girth circumference squared divided by the height" to determine the highest optimum carrying capacity of a saddle horse. If we look at the range of **Chilean Horses**, we can determine that the smallest representatives of the breed should be able to carry a total of 108 kg (238 lbs.) between tack and rider. On the other hand, the largest representatives of the breed could handle a maximum of 128 kg (281 lbs.) of tack and rider. Perhaps this fact, more than any other, substantiates the importance that Chilean breeders have given girth circumference. Obviously, in the minds of Chileans, this is a HORSE that has been bred to be of small stature due to the specificity of its functions, and that this in no way limits this stout little breed from carrying a full horse's load.

It is rather interesting that the Breed Standard specifies that mares should have 2 cm more of girth circumference than stallions. Of the eight different horse groups studied above seven had females showing a greater circumference than males and the average of all males was 1.741 m while the females averaged 1.753 m. The logic expressed is that a deep girth represents ample space in the thoracic cavity. It is suggested that this is also correlated with a greater abdominal capacity and pelvic width that would assure more efficient reproductive function. Since a larger girth circumference should coincide with a greater body weight, I am not sure that information of both girth circumference and corporal weight of male and female specimens of the breed clearly back up this suggested difference. Still, even though the difference is not equal to what the Breed Standard stipulates, in the studies we have found all but one seems to verify that **Chilean Horse** mares have a greater girth circumference even when depth of girth figures are pretty much the same for the two genders.

The horse-like figures stipulated for girth circumference have been corroborated by the data compiled for body weights in this breed. Unfortunately, this is a physical parameter that is not stipulated in the Breed Standard and perhaps a future revision might be wise to consider the inclusion of mature corporal weights.

In a series of works reported by Eduardo Porte in 1989 and 1992, the author looked at adult horses on private breeding farms, as well as the herd of the Criadero Rinconada that belongs to the College of Agriculture and Forestry of the University of Chile. Estimating that full development was obtained at four years of age (a debatable conclusion which Mr. Porte

admitted to me personally he felt is really not reached until six or seven years of age), the author found stallions to average 455 kg (1001 lbs.), and mares averaged 442 kg (972 lbs.). The same author followed many of the mares that have foaled at the University farm for many years and his data shows that the average weight after foaling is 454 kg (999 lbs.). These same mares averaged 458 kg (1007 lbs.) when weaned at seven months post-partum.

More times than not, this breed would be classified as a pony by the heights at the withers of its representatives. However, what little data exists regarding actual body weights, as well as the corporal weights one could estimate from ample figures of girth circumference, would all indicate that in fact more credence should be given to the idea of this being a small HORSE breed.

Hair Coat Colors

From the time Columbus arrived with the first shipment of 34 horses in his second cross-Atlantic voyage in 1493, a variety of colors was assured in the breeds of the Americas. The deceptive substitution by bloodstock agents provided a disillusion for Columbus' expectations of high-caliber specimens being the first equines reintroduced into New World. Yet the unexpected switch provided America with a foundation of smaller, hardier, more convex-headed horses of dun, grulla, chestnut and gray coloring, many of which had dorsal lines down their backs and zebra stripes on their forearms.

As more importations followed, important breeding centers were established in Santo Domingo, Puerto Rico, Cuba, Jamaica, Panama and Nicaragua. As the conquistadors laid claim to new lands, they continued to propagate an equine population of a wide variety of colors. Solid colors, as well as paints and appaloosas, were included in the genealogy of the early importations to the Americas. Bernal Díaz de Castillo's notes on the arrival of Hernán Cortés to the port of Veracruz, Mexico in 1519 include the description of the 16 horses that accompanied the 600 foot soldiers in 11 ships. From his notes, we can conclude there were four dark bays or browns (25 percent), four grays (25 percent), three bays (18.75 percent), two chestnuts (12.5 percent), two paints (one of which had a roan gene), (12.5 percent) and one black (6.25 percent).

Although hundreds of years of human selection could surely increase or diminish the possibility of different hair coat colors, it is clear that the foundation of our American breeds had the whole spectrum of equine colors represented. Nowhere is this better demonstrated than the wild herds on the ranges of North America and Patagonia, where solid, gray, roan and spotted color patterns are witnessed. The Chickasaw ponies that were taken from Florida all the way up to the islands off the coast of the Carolinas and actively traded with the early English colonists of America also had both solid and spotted color patterns. The ponies from the island of Assateague that rightly or wrongly are said to descend from survivors of a shipwrecked Spanish galleon also show a high percentage of spotted colors.

In both Chile and Argentina there have been **Chilean Horse** and **Criollo** breeders that have distinguished themselves by having a preference for spotted horses. William Henry Hudson writes in 1874 of the famous Gándara herds of over a 1,000 spotted and white broodmares that made up the inventory of over 3,000 spotted **Argentine Criollo** horses on one ranch. This individual effort may be largely responsible for Argentina having the highest percentage of paints in their **Criollo** population. The 12.70% spotted **Criollos** in Argentina stands out next to the 2.57% in Brazil and only 0.40% in the **Chilean Horse**. Poems such as "En Un Overo Rosao" by Estanislao del Campo (1859) also give evidence that the appreciation some gauchos have for their native paint horses is not a new fad.

In Chile, the more recent efforts of breeders such as Leonardo García S. have also emphasized the production of the **Chilean Horses** with spots. It is doubtful that the spotted **Chilean Horses** will ever regain the 5.86% of the population they comprised between 1884 and 1909, but the statistic does show a slight trend to increase their numbers since their all-time low between 1936 and 1961. In spite of this reality, and a Federation that has stood solidly behind this being one of the official colors of the breed, there is no denying that a sector of Chilean breeders are desirous of eliminating all spotted horses from registered representatives of the

breed. Such thinking has not been more popular because famous corraleros of the past, like ***Alcatraz***, ***Flotador*** and ***Floreado*** were all clearly spotted. Over the course of history, many other famous paints have also helped make a name for the native breeds of the Americas.

In 1889, the seemingly undefeatable American endurance rider, Frank T. Hopkins was challenged to compete in a traditional thousand-year-old race against the best **Arabian** horses of the Middle East. This 3,000-mile race against the best endurance **Arabians** was the only time in history that an **Arabian** horse had not arrived first in this contest that started in southern Arabia and finished in Syria. Mr. Hopkins, riding his spotted **American mustang** (North American criollo), was the winner by 33 hours over the second-place horse. Since the movie *Hidalgo* brought this fabulous accomplishment to public light, albeit with a much more dramatic Hollywood ending, a book was written that brought doubt as to the veracity of this feat, which was evidently most publicized by Frank T. Hopkins himself. Accurate or not, there is plenty more evidence of the hardiness and resistance of the feral horses of the Americas.

In 1925, the **Argentine Criollo** breed gained international recognition, as the Swiss schoolteacher Aimé Tschiffely made a more than 10,750 mile (17.200 km) journey alternating on his **Criollo** mounts, ***Mancha*** (spotted) and ***Gato*** (dun) accumulating 504 travel days from Buenos Aires to New York City. Averaging 21.3 miles (34 km) a day these hardy horses crossed mountain passes 19,175 ft. (5,900m) a.s.l., endured the freezing nights of the Andes Mountains, the smoldering dry deserts of western South America and the humid heat of insect-infested jungles in the Central American tropics.

I go into these details to demonstrate that the spotted genes are genuinely a part of the genotype of the native breeds of the Americas, even though there has always been some prejudice against the spotted patterns. In most of Latin America, the breeders of native breeds have discriminated against too much white in the hair coat color.

In Chile, it is known that many of the aristocratic parade horses that were ridden by the high society of Spanish descent were of overo coloring. When the War of Independence gave rise to an independent republic much of what represented the mother country was scorned and, as a result, a bias against the spotted hair coat color probably took hold. Even in Argentina, where the color was more acceptable, discrimination existed against tobiano spotted patterns since it was felt that these represented genes from Northern Europe. It is known that between the years 1630 and 1654 a substantial number of spotted draft and warmbloods were introduced into Brazil when the Dutch had a strong influence in territories around Bahia. To this day it is thought that southern Brazil, northern Argentina and Uruguay have felt the effect of this genealogy that has crossed into their borders.

Moreover, the specific incidence of Tobianos seems to be more noticeable in the **Criollo** population after British Brigadier General Raphael Tobias brought in a herd of Dutch spotted horses into Sao Paulo, Brazil in 1842. Thereafter the term “tobiano” has described this unique regular-edged spotted pattern that is readily propagated by a “T” locus that acts through complete dominance. The fact that the tobiano and appaloosa colors are present in the horse populations on the eastern side of the Andes but are not existent in registered **Chilean Horse** denotes another difference in the genetic pools of the **Criollos** and the **Chilean Horse**.

Perhaps the same bias would have occurred in North America had it not been for the invincibility the Native American Comanches, Cheyennes and Nez Percé felt when riding their spotted ponies. In fact, the spotted patterns of many of their horses served a purpose of better camouflaging in native surroundings, thus helping these Native Americans to be more effective hunters and warriors.

So, when we read the Breed Standard of the **Chilean Horse,** we must respect the fact that the predilection of the founders of this breed was to keep the hair coat patterns solid, in preferably dark colors. However, what must not be overlooked is that, in spite of obvious partiality, when these genes crop up, or in some cases are even chosen, they should not deny the pure lineage of these breed representatives. Some breeds, such as the **American Quarter Horse**, for a time restricted these animals from registry. Others, like the **Thoroughbred**, negate the existence of these unusual occurrences of all white and spotted horses, registering them under colors that deny the reality.

The **Chilean Horse** has taken a middle-of-the-road position, in which it states all colors except "incomplete" albinos (these are horses born with pink skin and a cremello, perlina or smoky cream hair coat, with blue eyes, which are not a true albino but rather recipients of a double dose of the dilution gene "C_{cr}"), and "complete" albinos* (these are horses with total or partially unpigmented skin, brown, hazel or blue eyes, and pure white hair coat that are not true albinos but instead either recipients of a single dominant "W" gene or in some cases a different remote genetic possibility in all white overo patterns) are acceptable. It is clearly stated that dark solid colors are the preference and thus to some extent there is even a bias against chestnuts (especially sorrels), palominos, grays and roans, but the only coat colors excluded from the breed are the pure white or washed out, creamy hair coats. However, this breed definition still makes spotted patterns an acceptable option.

In an effort to disguise the incidence of the less-desirable spotted pattern, it has occurred that horses were registered in the color of the solid portions. However, in identifying the markings, the spots on the body are drawn along with the white on the head and legs. As a result, a horse like ***Alcatraz*** is registered as a grulla and his classical "Medicine Hat"-colored son, ***Flotador***, is put in the books as a chestnut. The important thing is that the readers realize that this idea of not readily accepting spotted patterns is not a limitation of the rules of registration, but more likely an intentional "oversight" of breeders or inspectors of the times. Nowadays, the overo color is chosen without a second thought in registration procedures, and in reality the option to do so has always been available. The fact is that there are too many examples of spotted horses that have made an important contribution to the objectives of the breed. Regardless of what color they are registered as, their spots are a valid part of the **Chilean Horse** genealogy.

Some other interesting color-related things worth mentioning in this breed is that the dun, buckskin and palomino all receive the same basic color description of "bayo". It is descriptive adjectives that differentiate between a common dun and a "duck egg-colored dun", which is the old fashioned manner to describe a yellow colored version with either black or white points. "Golden dun", "butter dun", "white dun" and "Isabella" are also terms used to describe the palomino (a word of Spanish origin in our North American vernacular which, strangely, is rarely used in Chile or Spain). It seems the term palomino originates in California where a variety of grape with a golden color was used at the time. It is fascinating to learn that formerly in North American history, horsemen referred to palominos as "light buckskins", and the term "dark buckskin" was used to describe what today we think of as buckskins and duns. So it seems Chile has simply kept up a tradition that at one time was common throughout the Americas.

There is some genetic justification for this, as both the buckskin and the palomino have the incomplete dominance dilution gene "C_{cr}" in their make up. The buckskin is the result of a single dilution gene acting upon a bay foundation and the palomino is the result of it acting upon a chestnut foundation. If horses of either or both of these colors are crossed with each other there is 25% chance of having a cremello or perlina offspring.

One clarification is that when one "C_{cr}" gene appears (heterozygous condition) on a black genotypic foundation it has no dilution affect, even though individuals known to have this genotype are referred to as "smoky blacks". There are some phenotypic hints that divulge the existence of a "C_{cr}" dilution gene, such as foals born with blue eyes that with age darken or turn to an amber gold. Golden colored tufts of hair on the inside of the ear, or golden colored dapples as the horse martures, are more reasons to suspect a smoky black genotype. Although

(*) a true albino would have pink skin, pink eyes and totally white hair, but in 1969 it was proven that in the equine this is a lethal gene that causes death soon after conception, and thus a moot point in this registry as it will never occur. In conversing about the complete and incomplete albinos, one of the advisors of the Federation of Chilean Horse Breeders told me that as a boy he had seen a complete albino foal that was born with a white hair coat as well as pink skin and pink eyes. So it seems the proviso of not accepting complete albinos for registry has been included not only to account for a white hair coat but also because there are those that think that a true albino is a genetic possibility.

very rare, a black genotype with a double dose (homozygous) of the "C_{cr}" dilution gene will result in a washed out hair coat color with rust, brass or reddish points. This color is similar to a Perlina and it is identified as smoky cream.

The true dun, on the other hand, is a result of a simple dominance dilution gene "D". When found in a horse with a chestnut foundation, it is responsible for a red dun color. When found in a horse with a bay foundation, it is responsible for a yellow or cream dun. It is important to distinguish that the mode of action of the "D" dilution gene will not result in washed out coat colors of cremello, perlina or smoky cream. On the other hand, the "D" dilution gene is strongly correlated with dark well defined dorsal stripes, shoulder stripes and zebra stripes on the forearms and the "C_{cr}" gene is not. If a buckskin or palomino has a bold, incessant dorsal stripe you can assume it is probably also carrying the "D" dun gene in its genetic makeup. Such horses that carry both dilution genes have been termed "Dunamino" (palomino with dun factor) and "Dunskin" (buckskin with dun factor).

Figure II.10
Red dun, grulla, line-back dun and palomino represent some of the dilution genes present in the Chilean Horse breed

By classifying all these colors together, the **Chilean Horse** registry is treating all these horses with a dilution gene as one category. It is revealing that these dun colors that many feel are the colors of the original *Equus ferus* are the most common colors of the South American native breeds when the overall numbers of Chile, Argentina and Brazil are taken into account.

When the "D" gene is found in a black genotype, the result is a color known as grulla. This color is treated independently in the **Chilean Horse** breed (it is termed "barroso" in Chile, "gateado" in parts of Central America and "lobuno" in Argentina) and one would have to suspect that in the past horsemen were not aware that it too was a product of a dilution gene. At any rate, it is an appreciated color that is also rather prehistoric in its origins, as it is said this was the most common color of the **Tarpans** and **Sorraias** and may also have been the mouse gray color described in the early **Celtic Ponies in** the northern Iberian Peninsula.

It is also interesting to note the number of blacks that exist in this breed. The percentage of black Chilean Horses is much greater than what is seen in the Arabian breeds and Thoroughbreds or breeds there of. By the same token, this fact makes it easy to understand that there is a lower incidence of homozygous recessive chestnut genes. This would explain the low numbers of this color in the **Chilean Horse** breed. Knowing there is some **Andalusian** influence (probably more human than equine) in the "**Chileno**" breed that has a preponderance for many blacks while holding a discrimination against chestnuts (the **Andalusian** breed organization has prohibited registry of the chestnut color since 1970), many might find it perplexing that a higher proportion of grays are not evident.

This baffling idea is based on the modern vision of the **Andalusian** breed being largely gray in color. Although this has not always the been the case, it is a valid generality when studying the founders of the **Andalusian** breed that purposely selected the gray color due to the belief of the time that correlated hair coat color and temperament. The gray color was attributed the noblest of characters that could diminish the risks for the Royal Family when riding the products of this regal breeding program.

In reality, the percentage of grays in the **Andalusian** breed has varied greatly over time. Once the breed was well established, the noted **Andalusian** horse expert Juan Carlos Altamirano tells us that nearly 73 percent of the Andalusians were gray. This persisted until the invasion of Napoleon put more emphasis on bays, reducing the grays to only a bit over 20 percent of the horses in the Royal Stables of Córdoba. By the end of the 19th century, an outstanding horse named ***Solo*** would be responsible for the reactivating the popularity of the gray color that thrived throughout the 20th century. In 1974, 70 percent of the **Andalusian** stallions were gray. Recently, there has been another surge for black and bay colors in the breed.

Perhaps what best explains the unusually low percentage of grays in the native American breeds is the fact that while more than 70 percent of the foundation animals that originated from the efforts in 1567 to create the **Andalusian** breed were gray in color, more than 93 percent of the rest of the horse population in the Iberian Peninsula were either black or bay. Due to the dates the horses were exported from Spain to the Americas, there is no possibility that purebred **Andalusians** had an early influence in our American breeds. The distribution of colors in horses from the time would provide additional evidence that even the "**Andalusian** prototypes" were rarely among the animals sent abroad. With such a predominance of black and bay hair coats in the Spanish grade horse populace, one must consider that the larger variety of colors seen in the early equine history of our hemisphere is most likely the result of sending abroad what was not readily marketable in Spain.

In Chile, there are less than two percent gray **Chilean Horses**, while there are more than 10 percent blacks. Argentina has twice the number of grays and less than half the number of blacks in their **Criollo** population. In Brazil where over 21 percent of the **Criollos** are gray, they only have two percent more blacks than Chile. What is clear throughout the South American native breeds is that grays have been, and continue to be, a minority in the distribution of hair coat colors.

The selection pressure for the dark colors in Chile has some logic, as the temperate to cold climate makes these colors more adaptable. As a result, there is nothing more appealing to a "huaso" than a dark or bronze dun, a blood bay or dark bay, brown or black horse. For the same reason, the gray color is the favorite choice of grade horses in the rural communities in the hot tropics, where the light hair coat helps reflect the sunlight. Chile is the most temperate of the countries that breed purebred native horses and the incidence of grays and roans in is around 4.5 percent of the population. In Argentina, where the summer temperatures are much higher, the incidence of grays and roans is more than double Chile's, being just under 11 percent of the population. In Brazil, on the other hand, where it is largely a tropical climate, the prevalence of grays and roans in the **Crioulo** population soars to almost 39 percent!!

Let me just stop here and clarify a point that I so often find horse people confused about. Gray is NOT a horse with black and white hairs that progressively becomes whiter with age. That description does in fact fit for one of many types of gray horses, but it is important to realize that the gray gene is not a color gene but rather a color degenerating gene. So if the gray gene is inherited, no matter what the base color of the horse, it will progressively have more and more of the solid color hairs turned to white. Many people have been influenced by the common knowledge that most of the Lipizzaners and Percherons are usually born black and turn white with age, but that is simply because they have a preponderance of the black gene in their genotype. What you must grasp from this paragraph is that <u>any color can be affected by the graying gene</u>. So, you can have a horse born as a lined-back dun, a sorrel with a flaxen mane, a pinto or a leopard hair coat and they will all progressively turn white in the presence of the graying gene. So a gray is not defined by what hair colors you see mixed in with white, instead it is defined by a hair coat, any color hair coat, that will gradually turn lighter over the course of time. As I have pointed out in earlier, the grulla is very much a gray colored tint, but this is a

color that in absence of a graying gene will not change during the course of the horse's life. Yet, we probably have had important historical errors in describing grullas as grays when in fact they possessed no graying gene at all.

Regardless of personal preferences, we all know that good horses come in many colors. The native breeds have the ample assortment of colors inherited from their Spanish ancestors. Perhaps the best way to determine the distribution of the official colors is by the statistics of the horses that have participated in official Federation-sponsored events. In a study done of the corralero horses that participated in the "Champion de Chile" over the last 25 years, the valuable observer of the **Chilean Horse**, Dr. José Luis Pinochet found the following distribution of colors:

23.0% dark bay or brown
22.2% duns, buckskins and palominos
18.9% bays
17.2% blacks
7.7% chestnuts
5.9% grays and roans
5.1% grullas (Pinochet, 2002 per.com)

Figure II.11
Bay

Figure II.12
Strawberry roan

In an even larger study that looked at over 43,000 Chilean Horses between 1884 and 1987, Porte and Garibaldi (1987) found the following distribution of colors on this breed:

29.40% duns, buckskins and palominos
20.80% bays
20.30% dark bay or brown
10.88% blacks
6.04% chestnuts
5.63% grullas
2.64% roans
1.91% grays
0.40% spotted

Figure II.13
Overo or possibly Sabino

Figure II.14
Grulla

When the Chilean Horse Breed Standard officially accepted all colors except complete and incomplete albinos, it conveniently brought together a wide mix of colors that were part of the genealogy of horses from Iberian descent. Entire books in South America have been written strictly on this subject whereby they compile all the colloquial names for the multitude of hues. In the book *El Color de la Capa o Pelaje del Caballo y sus Características en el Criollo Chileno (2004)*, the authors point out on page 9 that there are 95 colors that are recognized for registration in the Rural Society of Argentina (SRA). I'd say the founders of the Chilean Horse established a much more practical solution.

Skin (Also Implies Hair)

Although the Breed Standard stipulates that the **Chilean Horse** should be slight of feather it should be clarified that this does not mean clean of feather. In fact, there are breed experts who clearly state that some feather (long hairs in the lower leg) should be found around the ergot and behind the fetlock, as this is a characteristic of the Spanish horses that have had a large influence on the **Chilean Horse** breed. There is definitely more abundance of long hairs in this region than in the hot-blooded breeds like the **Thoroughbred** and **Arabian,** and in general terms I also think they surpass the amount of feather in the **Quarter Horse** breed.

Figure II.15
Typical amount of feathering

Because it is felt that some hair behind the fetlock serves a functional protective purpose, horses are not trimmed for competition. In fact, a horse with a totally clean fetlock will be frowned upon, while raising doubts as to the purity of ancestry. On the other hand, long hairs should not be evident along the posterior side of the pastern or down the superficial flexor tendons, as this is interpreted as the influence of draft horse genes. One safeguard is that this judgment is best made in spring, summer or early fall months, as in the winter many **Chilean Horses** put on a heavy winter coat that will include long hairs all up and down the back portion of the legs.

It is also worth noting that the **Chilean Horse** breed has much thicker hair fibers than the stock horse breeds of North America. Undoubtedly, this is due to the fact that these breeds in North America have been strongly influenced by the **Thoroughbred** breed and, directly or indirectly, by the **Arab** as well. As a result, the hair is not only less dense, but also thinner and often silky in appearance.

It is important to emphasize that the **Chilean Horse** is not simply another breed with a thick mane and tail. It is the epitome of a thick mane and tail!!! I have heard this description for other breeds that, no doubt, have long manes and tails. **Andalusians** are noted for this quality and 17th and 18th century paintings often emphasized long flowing manes and tails. Many other breeds offer length of mane and tail. However, since their hair texture is finer and silkier, they undoubtedly have less volume than the **Chilean Horse**. Even the **Andalusian** breed standards that call for long, wavy and silky manes and tails, insinuates a thinner hair fiber diameter.

Figure II.16
Valdiviano displays an ideal example of Chilean "decorations"

The **Chilean Horse** mane and tail are comprised of wavy, coarse hairs that are made up of extremely broad hair fibers. In grooming a **Chilean Horse** mane and tail and combing one's fingers through their generous mass of stiff hair, it becomes clear that this is the antithesis of "silky". These coarse mane and tail characteristics are much more common in the breeds and

types of the northern Iberian Peninsula, as well as many of the Scandinavian and Germanic horse types that were introduced to these regions by the Barbarians.

Figure II.17
Chilean Horses evidence beautiful "ice tails".

Many draft horses or heavy carriage horses such as the **Friesian** have manes and tails that compare to those of the **Chilean Horse**. Nonetheless, the respective historical background and exaggerated differences in size and conformation leave little room for thought of common origins. Conversely, the forelocks, manes and tails of the **Chilean Horses** are so abundant they do compare with and surpass those seen in the old fashioned **Morgans**, **North Swedish Horse**, and **Hukul** breeds, all of which are thickly built small horse specimens. Very similar manes and tails can be seen the **Bardigiano** breed, another small horse that came about as a result of equines introduced during the Germanic invasions of Italy.

One cannot overlook the fact that these are also characteristics of the **Exmoor**, **Gotland**, **Fell**, **Highland**, **Dales**, **Dartmoor** and **Takut** ponies, all of which are medium to large, hardy Nordic pony varieties that descended from horses that seemed to have survived the equine crisis after the last Ice Age. When one looks at the hundreds of large pony and horse breeds from around the world, it is amazing that so few have manes, tails and forelocks that can be compared to those of the **Chilean Horse**. Surely, this must offer some sort of phenotypic marker as to the origin of many of the genes that have been selected in this unique breed.

Although the moustache mentioned by Uldaricio Prado in 1914 as a characteristic that was seen in horses of many parts of Chile is now extremely rare, its presence is another indicator that the Chilean Horse has a strong Nordic influence. When horses had to fend for themselves through harsh winters that required searching for nutrients under frozen layers of snow, the growth of a seasonal moustache certainly could have been advantageous for equines adapting to extremely cold environments.

There are other notable differences to be found in grooming the **Chilean Horse**, as they do not shed their hair as readily. The hair coat of the "**Chileno**" has an extremely thick undercoat and a longer-haired superficial layer. The combination of thick skin and dense hair coat can benefit from a harder metal currycomb to achieve what is readily accomplished with a rubber currycomb in the North American stock horse breeds. The thick layer of undercoat hair does not permit the currycomb from penetrating to the base of the superficial hairs, and thus they are not eliminated as easily as in thinner-coated breeds.

Even once the superficial hair is eliminated, the short, thick undercoat will remain, offering protection and insulation as a reward for the greater grooming effort. I suppose that the best comparison is that their hair coat is much more akin to the warm (as opposed to hot-blooded) and cold-blooded breeds. Those of you who have dealt with such breeds will understand the difference readily, while those of you that have only dealt with **Thoroughbreds**, **Saddlebreds**, **Arabs**, high percentage **TB-Quarter Horses** and the like, will be surprised to see such a distinct hair coat in a horse breed with so much energy, athleticism and speed.

Figure II.17(a) This horse with a moustache was found in Alto Rio Senger in Argentina

Obviously, this means they are excellent cold weather horses. However, even in the summer when they can shed down to a short hair length, their hair coat is still extremely thick. As sheep breeders can attest, short thick growth is insulating under both hot and cold conditions. In areas where there is an abundance of rain, **Chilean Horses** can last longer before succumbing to the problems of rain rot. They are less apt to skin themselves or suffer the slight abrasions that are so common in most light horse breeds. An added advantage is that they are much less prone to show worn spots on the tips of their hocks and elbows, as well as under the pressure points of tack. Well cared-for individuals will never have the hair length of a sale-prepped **Thoroughbred**, but their hair color will always have a healthy, deep and rich tone created by the greater density of hair.

Chilean Horse breeders have taken particular pride in thick, wavy and voluminous tails. Generally, they are shown with these tails trimmed to an abrupt horizontal ending somewhere between the union of the cannon bone and hock and the mid cannon bone in length. The fact that at this distance the tails are still at their widest diameter, assures that most "**Chilenos**" surely would have tails that reach the ground if permitted to grow out.

Figure II.18
The author's stallion Demetres not only has a beautiful tail, but his roached mane is between 7.5-10 cm (3-4 in.) wide.

Just how thick a **Chilean Horse's** tail should be can only be answered by saying "the thicker the better". Many winners of the "Sello de Raza" have tails so thick that most of their hindquarters and all of their hind legs are covered when seen from the rear. Once again, these qualities combine practical and impractical aspects for the horse owner. The **Chilean Horse** has a natural protection from bothersome insects. Rarely will you find a **Chilean Horse** that has rubbed his tail to the bone and much less precaution is needed when trailering. At one time, the thick tail was even a practical place to tie the end of lariats to, as huasos skillfully roped wild cattle with flimsy saddles that made the rear end of the horse the best anchor for manipulating the roped bovine.

True to the origins from Nordic breeds that influenced the horse types in the northern part of the Iberian Peninsula, the **Chilean Horse** has the characteristic "ice tail" that offers protection from inclement winter weather. In seasons with sub-zero centigrade temperatures or

freezing rains, the broad thick tails that fan out over the genitals will protect then from frostbite. Thick and long forelocks will also protect the eyes from the excessive glare of snow-covered grounds. Most of the regions with cold winters also have heavy insect populations in the summer months, and the thick forelock, mane and tail offer sensitive horse anatomy protection from these nagging pests.

However, most of all, one must point out the beauty of having such a majestic appendage emphasizing the graceful movement of this athletic breed. Obviously, making the most of this natural beauty requires a routine upkeep in disentangling the tail only by hand and maintaining it tangle-free with very light brushing. The huasos have much to teach most horse owners about ideal tail maintenance and care. The additional work this breed requires to look better while being more adaptable to harsh climates is the price that must be paid by the horse owner.

If the working environment were thick thorny brush, such a broad majestic tail could be a disadvantage in offering more area for getting hung up. It is thought that this may have been the reason for the popularity of the docked tail in the early colonial days when cleaned, cleared pastures were a rare commodity. The convenience of docked tails for carriage and workhorses must also be taken into consideration, as in those days horses were often multipurpose. Even the thrashing mares worked cleaner with tails that were docked above the height of the piles of unprocessed wheat. Many of the early photographs of **Chilean Horses** display this tail style, which may have been started for practical means and later gained popularity.

In the colonial days, Chilean broodmares were also a continual source of horsehair for the demands of an established market. Their manes were roached and their tails docked at the level of the flank, in order to provide the raw material for ropes, reins, halters and other tack, as well as additional domestic uses. One must conclude that this market also gave rise to a selection pressure for thick manes and tails, as breeding horses with these characteristics offered an interesting supplemental income.

This horsehair market also encouraged the traditional manner in which **Chilean Horses** were groomed and presented for competition. Up until the turn of the 20th century, tails were often docked in the short **jaca** style that still is used in Spain. Even tails that were left long were cut straight across, leveling them with the bottom of the hocks. This style still predominates today. If such a practice was not promoted, there is no doubt that most **Chilean Horses** would have their voluminous tails sweeping the ground below them.

The mane of the **Chilean Horse** is partially roached when shown in competition. The mane is either cut low or left with a short arch in the hairs coming out of the crest of the neck, all the way from the ears to 8-12" (20-30 cm) from the withers. There is some personal taste involved as to just where the cut-off point should be. Some prefer that the roached portion should progress two handspands ("cuartas") or 18" (almost 46 cm) from the base of the ears.

The uncut portion at the base of the neck and over the withers is referred to as the "gatillo", a Spanish term for trigger. This is never cut, and some horses in competition have "gatillos" that reach well past the elbow of the horse. The gatillo gives an indication just how abundant the entire mane would be if grown out. Preventing the laborious upkeep of such a mane and also preventing it from getting in the way during routine ranch chores is most likely the practical reason that this stock horse breed chose to keep most of the mane roached.

Coinciding with the mane and tail, the forelocks are extremely long as well. A good representative of the **Chilean Horse** breed should have the forelock as long as the length of the head and some hang past the muzzle. It is an impressive sight to see these horses chasing after steers at full speed as their forelocks sail back behind their ears.

Seeing long wavy tail, thick "gatillos" that hang down to the elbow of the horse and forelocks that fill the forehead while draping over the muzzle are not just appealing reminders of classical Velázquez paintings. These are also the kinds of horses that in the past offered a good harvest of horsehair to help cover their maintenance expenses.

Head

The muzzle of the **Chilean Horse**, ideally, should not be long like the **Andalusian**. Being up to a maximum of medium in length, measurements by Pinochet (1980) and Porte (1985 and

1991) found the average head length to be 54.15 cm (21.32 in.). The popularity of certain lineages with longer muzzles may be influencing this aspect of the Chilean Horse of late as the most recent biometric study by P. Aguirre F. (2003) found head length to average 59.35 cm (23.3 in.) for males and 58.82 cm (23.1 in.) for females. Although the **Chilean Horse** has a broader head, there is a similarity with many breeds of Spanish heritage. The P. Aguirre F. (2003) did offer new data in this regard letting us know the 456 specimens of the breed that she sampled averaged 20.2 cm (7.95 in.) between the orbital cavities. Most of the Spanish breeds exhibit a downward curvature at the end of the nose, with nostrils that are contained within the confines of the profile of the nose. If one were to focus on the profile of the nose at the end of the muzzle alone, there would be a great deal of similarity between the **Chilean Horse** and the **Andalusian**. Old timers used to describe these muzzles as "eagle-like", because they did make a slight break downward at the end of the nose. This is not to be confused with the classical Roman nose that is acutely convex throughout its entire profile, oftentimes with a nose that had an abrupt break of almost 90 degrees from the trajectory of the muzzle.

Figure II.19
Tan Gallo

Figure II.20
El Encuentro

Figure II.21
Valdiviano

Although the "**Chileno**" in some ways resembles certain strains of **Quarter Horse** with sub-convex and straight profiles, with the wide flat forehead, alert but kind eye and large but not protruding nostrils, there is a distinct difference in the jowls. Although there is some mandibular definition in this breed, it is not looked upon as desirable to have the huge jowls of the **Quarter Horse** breed. It is thought that a horse with exaggerated muscling in the cheeks will not flex its head well for collection and may also be more heavy-headed in its movements.

Neck

A common conformational "fault" that is often seen in the good corralero horses of the rodeos is a type of ventral ewe-neck. I say "fault" because it is not stipulated as a desirable trait in the Breed Standard, and in the minds of most horsemen any type of ewe-neck is not to be strived for. In the **Chilean Horse** it is common to see the break in the underside of the neck before entering the throatlatch, but the top line of the neck makes a smooth insertion into the poll without the excessive length seen in full-fledged ewe-neck horses. Interestingly, this is a trait that is also common in one of the ancestors of the breed, the **Camargue** horse.

Figure II.22

The **Chilean Horse** tends to have a medium-length neck that is often thick in width. So, it is possible that perhaps the ewe-neck in the ventral part of the neck gives the horses a little bit more flexibility in the throatlatch, making them more responsive to the bit. It is a rather distinctive characteristic, since this trait is usually associated with long-necked horses, which the **Chilean Horse** definitely is not.

As a generality, I would also point out that, representatives of this breed often appear to have a low insertion of the neck to the shoulder. This is more a result of the depth of the base of the neck than it is a low inset of the neck as a whole. As a result, the

head carriage is not lowered, as it might be in a low inset of both dorsal and ventral lines of the neck. In this sense, the Breed Standard is accurate in saying that the ventral part of the neck is slightly convex. There is a nice fluid trajectory from the back, over the withers, and up into a slight crested dorsal portion of the neck.

However, this same guideline indicates that the ventral line of the neck should be straight. I dare say that this is not the case most of the time. In defense, let me say it is not the case because of the requirements of good function. In fact, it is the depth of the base of the neck that requires that the ventral line make a distinct break before tying into the more-refined throatlatch, giving the classical ewe-neck appearance. If this did not occur, many of the horses would have unduly thick throatlatches that would greatly limit their ability to collect themselves.

Withers

The standard of excellence vaguely states that the withers should be “discreetly profiled”. However, in a practical sense, what the Chilean fanatic looks for is a smooth top line all the way from the poll of the neck to the point of the hips. This means that as your eye follows the neck down over the roached mane, there should be a continuous line over the withers that slowly slopes smoothly into the short of the back and then up again through a strong loin that ties into the top of the hip. Ideally, there should be no rise in this line as it crosses over the withers. Neither should there be a flattening into the type of “mutton withers” we used to see in the “bull dog”-type **Quarter Horses** of the past.

Shoulders

Most of the time, the angle of the shoulder is a reflection of the angle of the pasterns. In looking at **Chilean Horse** pasterns, one would tend to think this breed must have a terribly jolting gait. Luckily, most of the time, the angle of the shoulder does not coincide with the angle of the pasterns. In breeds like the **Thoroughbred**, we would tend to think that if this conformation were observed, there is evidence of some contraction of the superficial flexor tendons during some stage of growth. The **Chilean Horse** is proof that this inconsistency between shoulder and pastern angles can also be the result of selection pressure. As a result, most of the time, the **Chilean Horse** has a smoother riding gait than the short, upright pasterns would imply.

The good shoulder angle is something that the Chileans have indirectly selected for. The Chileans have always been sticklers for performance. Even now, one could criticize Chilean breeders for making most of their selection pressures based on function: If they can pin cattle they are worth keeping! However, through this emphasis on performance, they came to realize the importance of a good shoulder angle. Happenstance, more than foresight, made them understand early on that performance was limited without a good shoulder angle. Over the 12 years Chilean judges crossed over the Andes to judge the most important shows of Argentine **Criollos**, the most concerning conformational flaw they found was straight shoulders. In great part due to the emphasis these knowledgeable evaluators of horseflesh put on this trait, it can be said that the modern **Argentine Criollo** has become a much better stock horse.

The Breed Standard stipulates that the points of the shoulders should be well separated from each other. In essence, this defines a wide chest, which is an important trait in corralero horses that must take the brunt of the contact in this part of their anatomy when pinning steers. The average of the measurements of the width of the chest as determined by the studies of Pinochet (1980) and Porte (1985 and 1991) was 41.65 cm (16.40 inches). There may be a trend towards a narrower horse than in the past as Turu (2000) found stallions averaged 33.8 cm (13.3 in.) while mares to average 33.6 cm (13.2 in.). P. Aguirre’s study (2003) had a value of 37.9 (14.9 in.) for competitive males and 36.9 cm (14.5 in.) for corralera females. In selecting for a wide chest, you may assume you are also selecting for a strong chest, but that correlation does not necessarily have to exist as the width of the chest is not a measure of the amount of muscling between the points of the shoulder.

It would seem that since the chest is such an important feature in the pinning function of the corralero horse, it merits a specific category in the Breed Standard. Certainly, much could be said regarding the muscle definition of the chest, as well as how the placement of the foreleg and the base of the neck permit a strong chest to function. Both the wide strong chest and the wide base of the profile of neck are traits that are important to the Chilean corralero's unique type of competition. The value of these traits in other stock horses is much less important.

Back

The standards of the breed indicate that the back should be "proportional", but in reality this gives the reader little idea of what is common in the **Chilean Horse** breed. It is my opinion that there is a much greater tolerance for a long back in this breed than in most other saddle horse breeds. I think it is a valid generality that, when comparing the **Chilean Horse** to other stock horse breeds, there are many more specimens that are longer than they are tall. Although the Chilean breeders appreciate a long hip, I think it can also be said that as a general rule the length of the back exceeds the length of the hip.

These are body proportions that represent the functional goals of this breed, yet differ substantially from what is considered the ideal in many of the other saddle horse breeds. So, in judging representative specimens of the **Chilean Horse**, it would be wrong to fault the very qualities that have permitted this breed to evolve as an elite stock horse with the distinction as the king of the medialuna competition.

So often, a long back is also one with signs of weakness, but such is not the case in this breed. The **Chilean Horse** is ridden with a saddle that distributes the weight of the rider further back than is customary in other equitation disciplines. The pinning of the steer is done off a thrust from the hind legs that push the horse's chest upward, rolling the steer's opposite ribcage over the top of the pinning cushion. After the thrust is made, this effort throws the rider's weight further back in a saddle, the design of which already shifts the weight in that direction. For these reasons, it becomes extremely important that the back have enough length to support the frame of the saddle and rider, while not impeding the mobility of the loin and hindquarters in their need to be the driving force for the strenuous effort of a good pin.

Having said this, I do feel it merits commenting that among the more common problems of corralero horses is some degree of back pain. All horsemen realize that back pain can be a multifaceted problem that involves the quality and proper fit of the saddle, the weight of the rider, the proper posture of the rider in the saddle and the demands of the equestrian discipline. Obviously, the sport of Chilean Rodeo puts more strain on this part of the anatomy, but in my view much of the problem is related to saddle design and the popularity of the short stirrup leathers that put additional weight distribution on the back portion of the saddle. I would venture to guess that if representatives of other breeds of horses were used to pin cattle while wearing the modern Chilean saddle, the frequency of back problems would be much greater.

Old timers lectured that a good **Chilean Horse** should have equal measurements from the ground to the withers and from the point of the shoulder to the pin bones. I suspect that this advice came from literature about other breeds of horses, as this is an oft-recommended ratio in speaking of good balance for a saddle horse. Studies carried out by Oscar Mujica V. published in the 1943 edition of the *El Campesino* magazine (and brought to light again in annual publication of the Chilean Horse Breeders Association in 1952) actually showed that the average length of the **Chilean Horse** exceeds its height by 10 cm (4 inches). Years later, in his graduation thesis, Dr. José Luis Pinochet P. found that average length of the **Chilean Horses** he measured surpassed their average height by 4-6 cm (around 2 inches). However, the more recent study done by P. Aguirre F. (2003) showed males to average 10.5 cm (4.1 in.) more in length than in height. When looking at performance mares she found the difference to favor length by 13.1 cm (5.1 in.). A long back could definitely be the weak link in a horse's conformation if it did not benefit from a strong loin. Consequently, the majority of **Chilean Horses** are gifted with a strong loin that smoothly ties the back into the hip

Thorax

Due to the long-backed conformation of most **Chilean Horses**, there is a higher incidence of cylindrical thoraxes than is seen in most other saddle horse breeds. The girth circumference is somewhat compensated by the fact that this breed has well-sprung ribs. However, the average measurements taken by Pinochet (1980) and Porte (1985 and 1991) show that the depth of the girth is 67.59 cm (26.61 inches), which, surprisingly, is less than the distance of 72.20 cm (28.42 inches) from the sternum to the ground. This study was no fluke, as P. Aguirre F. came to the same conclusion 23 years later as the male horses she measured had a depth of girth of 67.7 cm (26.6 in.) which made up 48.77% of their height. The females averaged a depth of girth of 68.02 cm (26.7 in.) which was 49.1% of their height- Interestingly there was little gender difference in spite of a significant difference in the circumference of their girths. I was very surprised by this figure, because the Chilean Horse is a short-legged breed that has been purposely selected for a large girth circumference. Part of the explanation lies in the "discreetly profiled" withers. If the withers were prominent, the less than 5 cm (2 in.) of difference between these two measurements would approach the equality that is seen in most other breeds of saddle horses. The other factor that must be taken into consideration is that this breed is longer than it is tall, as this too could help give the illusion of a shorter legged appearance.

Croup

The Breed Standard makes a good description of the long, sloping croup that assures a somewhat low tail set. The studies done by Pinochet (1980) and Porte (1985 and 1991) indicated that the croup was composed of a pelvis that averaged 51.70 cm (20.35 inches) in width, and a hip that averaged 48.10 cm (18.94 inches) in length. It is clear that **Chilean Horse** breeders have selected for a wide and long-sloping croup.

Although it is clear that the Breed Standard asks for a slightly sloping croup, I do want to mention that in the modern Chilean Rodeo there are respected riders with a great deal of experience that also favor a flatter croup and higher tail set. Although this type of conformation is not as common as the sloping croup, there have been some great corralero horses that exemplified this less-inclined croup angle and, as a result, gained some supporters for this characteristic. I have tried to think in what manner a flatter croup could be advantageous to the corraleros and cannot think of a logical reason, unless it's related to a supposition that more open angles may favor greater agility in the lateral movements.

So much of the corralero function depends heavily on working with their hind legs well under them. In pinning a steer, a tremendous impulse must be generated from the hindquarters. This is akin to sprinters jumping out of a starting gate or draft horses digging into their collars in a pulling competition. Both examples benefit from horse types that have sloping croups that permit the hindquarters to work further under the horse's body.

Figure II.23
The range of "slightly sloped" croups in the Chilean Horse breed.

I have noticed that horses with tails that insert higher up in the body than normal are often taken for granted to have flat croups. It is understandable that this assumption be made, since a positive correlation between height of the tail and croup angle is seen in stereotype **Arabians**, many of the jumping breeds and even in some **Thoroughbreds**. Once again, the **Chilean Horse** breed reminds us that such generalities may be more the result of what we are accustomed to seeing in other breeds than physiological necessity. Upon closer inspection of many of these individuals with higher tail sets, it can be noticed that the angle from the point of the pelvis to the pin bones is actually quite normal and definitely sloping.

So, while I don't deny that a small portion of functional Chilean Horses have a rather flat hip, in reality I think it is less common than the supporters of this type

of conformation think, as many simply show a higher tail set while maintaining a sloping croup. There is no doubt that the slightly sloping croup is by far the most common make up in the breed. It is also worth noting that acutely sloping croups such as the ones often seen in draft horse breeds and poor specimens of many North American stock horse breeds are even less common than a flat croup in this Chilean breed.

Personal communication with Eduardo Porte, presently the breed's most respected judge, informed me that what he looks for is a slightly sloping croup that blends in smoothly into the tail, which becomes a continuation of this dorsal line. He also gives importance to the fact that the tail should be well tucked in to the hindquarters, so that only the posterior section of the tail is visible in viewing the profile of the horse. In essence, he doesn't want the tail to insert above or below the end of the croup, and the tail should not raise itself away from the body as may be seen in my high-tailed horses.

What is not stipulated in the Breed Standard is the amount of muscling that is typical over the croup. Generally, horses with a tremendous amount of muscle definition have their croup split down the middle with very prominent gluteal muscles protruding off to each side of the midline. Oftentimes, this is so defined that it is said you can roll a marble down to the base of the tail. Although the **Chilean Horse** is a close-coupled breed with good muscle definition, it is not to be confused with the type of muscle definition that we associate with the **American Quarter Horse**, **American Paint Horse** and modern **Appaloosa** (another breed that unfortunately has deviated from its original breed type).

In this country where few other equine breeds existed, it was advantageous to have specific breed characteristics that could differentiate the "**Chileno**" from the **Thoroughbreds**, **Arabs** and **Percherons** that came in to share a part of the purebred scene after 1850. A croup with split muscling was seen as a characteristic that was very much a part of the **Percheron** breed type. It also was common in some sprinting strains of **Thoroughbreds**. By not selecting for this phenotype in the **Chilean Horse**, the breeders could more easily pick out possible culprits of unethical crossbreeding programs that endangered the purity of their breed in an era when blood typing and DNA testing were not an option.

As we have noted, the **Chilean Horse** has a very limited burst of speed, but it is also well known for being able to put in long and strenuous work hours. Perhaps the necessity to be versatile in this regard is the reason that a smoother muscle that is not wound up as tightly as in many North American stock horses is more representative of this breed. As a result, a posterior-to-anterior observation of the croups and hips should show either a rounded profile or only a slight dip in the midline, while still evidencing plenty of the width that is associated with hindquarter fortitude. It would be interesting if muscle fiber identification confirms this in the future by showing a higher proportion of fast twitch, high-oxidative muscle types in the **Chilean Horse** than in North American stock horse breeds.

Forearms

In line with the comments I have made about muscling over the croup, the muscles of the forearms and gaskins also show a relative amount of strength, but do not compare with the prominent examples we see in the sprinting **Thoroughbred** and the halter horses of the North American stock horse breeds. It is worth mentioning that individuals with this amount of forearm and gaskin muscling can be found occasionally, but they are not representative of the norm, nor are they the objective of the Breed Standard.

Legs

The intensive lateral motion required in the Chilean rodeo competition is also stressful on tendons and ligaments, and, as a result, good structural conformation is perhaps more important in this breed than in most. Ironically, selection pressure for most breeders would put conformational traits in third place, well behind performance and pedigree. When depending so heavily on performance, in some manner, it culls horses that have serious phenotypical flaws that impair their ability to excel in function.

In questioning Eduardo Porte what were the most common faults he sees as a modern judge of the breed, his response immediately indicated a lack of good leg alignment and insufficient bone. This would seem to be a clear indicator that phenotype places last in the three major selection criteria. Breeders who have traveled to see Argentina and Brazil halter classes have commented how much more homogeneous their horses are now (as historically this has not been the case at all). At halter expositions, good leg conformation is a prerequisite as most all horses are well conformed in leg structure.

Certainly, these observations should help Chilean breeders increase selection pressure for sound conformation, but still we must remember that the **Chilean Horse** is, first and foremost, a performance horse. Furthermore, the kind of performance it specializes in takes three to four years of initial training before easy competition is started, and horses will not be in their prime until five to six years of training have taken place. The corralero horses are pressured to perform with speed and power, and much of their movement is in abnormal lateral movements. Nothing is a better screen for soundness than withstanding this training and the subsequent demands of competition.

If the judging experience can only compare the **Chilean Horse** to the **Criollos** that have been carefully molded with a strict emphasis on conformation, perhaps the criticism is too harsh. Moreover, up until now, halter expositions have not been a very prestigious **Chilean Horse** event. The recent surge in interest in halter classes must be accompanied by an understanding of the lack of experience of the majority of the persons participating. Nothing shows this more clearly than the ring manners of many horses that have not received the training time to teach them to walk and stand. Another factor that shows that this facet of the **Chilean Horse** is still in the initial stages is that no official posing stance has been determined for the breed, and thus the judge and the audience must compare horses standing in different manners. I have no doubt that the quality of horse and competitor will increase as halter competition gains the popularity and respect it deserves.

Personally, I find there are fewer conformational defects in the **Chilean Horse** breed than are commonly seen in **Thoroughbreds**, whose selection criteria are also strongly based on performance. For the most part, **Chilean Horses** have nice, short cannon bones, with well-defined tendons and ligaments. A strangled or "tied in" tendon can be seen occasionally, but it is a much less frequent than in most other breeds that have a good deal of **Thoroughbred** in their formation. Splints are not uncommon in heavily campaigned corraleros, but the fact that it is less common than one would suspect in horses that spend so much time running sideways is a tribute to the good structural conformation of "**Chileno**" horses. It has been determined that many of the Iberian origin breeds that developed further in the Americas have shorter splint bones than the common European breeds. Under normal conditions, fractures of the splint bone or inflammation of the interosseal splint ligament is extremely rare. This suggests that a good number of the splints in Chilean Rodeo horses are traumatic in origin, as the lateral movement would make foreleg interference very probable. For this reason, many modern corraleros use protective boots when they compete.

It seems that progress is being made in obtaining horses with more bone. The third metacarpal (foreleg cannon bone) circumference in Professor Porte's 1993 study informed an average of 18.9 cm (7.4 in.). This is clearly lower than the ideal of the Breed Standard that is suggested to be 20 cm. (7.9 in.). On the other hand, ten years later Dr. Aguirre's study showed third metacarpal circumference had increased to 19.7 cm. (7.75 in.). Moreover, Dr. Aguirre's work also gave us valuable information about the third metatarsal (hind leg cannon bone) circumference which had not been reported before. She found this measurement to average 21.6 cm (8.5 in.).

The breed may be making progress in bone circumference, but it should be emphasized that leg alignment is where the breed has the greatest room for improvement. Carpus valgus (knocked kneed) conformations by far the most common defect in foreleg conformation, although offset knees and carpal (knee) rotations are less common than we see in the **Thoroughbred** breed. Tarsus varus and valgus is also something to watch for although as a rule the hind legs of **Chilean Horses** are structurally better conformed than the forelegs.

Hindquarters

As in most stock horse breeds, in general terms the **Chilean Horse** has an excellent hind leg. It is very difficult to find faults in this breed when evaluating a horse from behind. The *tarsus valgus* (knock hocked) that is so common in the **Thoroughbred** is seen less often in this breed. The cow hocks we commonly see in draft horses and some warm bloods are equally rare. The hocks tend to be strong, low to the ground and well separated from each other. This is perhaps one of the most valued traits that huasos look for in a good corralero prospect. Since so much of the work in the half-moon arena is lateral movement, a horse with a wide-based conformation of the hind leg is much less prone to interference.

The most common hind leg fault is the sickle hock. So often, when not excessive, this conformation is found acceptable in stock horses, since they are asked to work with their hind legs well under the body. There is no doubt that there is a level of tolerance and even desirability of this condition in the corralero horse. To what degree this is a faulty or an advantageous conformation for the requirements of function is the subjective part of the analysis. However, one only has to flip through a breed journal to see how the majority of the horses are standing under themselves.

It is a welcome change to work with **Chilean Horses** that, when asked to halt while being led or ridden, usually choose a stance with their four legs squarely under them. In so many breeds that have been selected for sheer speed at whatever distance, horses stop with no sense whatsoever of obtaining a balanced position. So often, when hind legs are seen stretched out behind the body, repositioning only reaffirms that their fore and hind legs have no sense of working together. These horses require a lot of schooling to stand correctly and this is not only a requisite for showing at halter, but also for a proper preparation for a mount or dismount.

Figure II.24
Solid wide stance behind and slightly sickle hocked profile

Joints

I can't imagine a better screen for good leg articulations than all the lateral movement that the Chilean corralero does in his rodeo performance. As a result, the breed as a whole offers good clean and tight joints in the specimens that are prepared to go into competition. Judging joints in the performing horses would be as unfair as commenting on structural soundness of humans by walking into the dressing room of a professional football team. The demands of the Chilean rodeo take their toll, and nothing less can be expected when physiologically all *Equus* were designed as specialists in forward motion. As a result, in some old warriors one will see the windpuffs, bog spavins and splints. Yet, the fact that so many of these horses are still competing in rodeos well into their 20's is certainly a tribute to their soundness. Admittedly, the fact that most horses don't reach the rodeo until they are fully mature specimens between five and eight years of age gives a decisive advantage of a solid and mature foundation. It will be interesting to see how durability is affected now that there is a growing temptation to rush horses into competition at three or four years of age.

Pasterns

The **Chilean Horse**, as a general rule, has a very short pastern that more often than not, is more upstanding than the angle of the hoof. On first impression, a good judge of horseflesh may find the short length and steep angle of the pastern exaggerated to the point of being a fault.

However, there is a good reason why this characteristic is so common. There is not another equine breed that does so much lateral movement in their performance event.

The pinning horse of the corralero paired team must follow the steer across the arena, two tracking and sidestepping at a crisp gallop and full run. The fact that the driving horse turns into a pinning horse on alternating runs means that all participating horses are exposed to the unnatural lateral movements. There is no doubt that the sideways motion is something that puts more stress on the pasterns. Experience has shown breeders that a short pastern is much more resistant to the stresses of this sport.

The upright pastern that contributes a better adaptation to the lateral movements comes with a price. As one must imagine, such a conformation has less of a shock-absorbing capacity. As a result, problems of navicular disease are seen more frequently in corralero horses. Tendon synovitis and inflamed or arthritic articulations are also a common concern in horses that are campaigned hard over a lifetime.

Hooves

There is a notable popularity of short white stockings, especially in the hind legs, but they are often seen on all four. This is worth mentioning because the Breed Standard states that it is preferable to have dark hooves. This would imply that it would be best to not have white on the lower legs. Knowing that in practice the guidelines are not followed is important, as interpreting the breed standards literally would limit looking at an awful lot of good horses.

Traditionally, large, wide frogs on the hooves have also been considered an influence of draft horse genes. As a result, the **Chilean Horses** are preferred to have medium-sized, narrower frogs, within less spherical but well-cupped hooves. The reasoning of the authors of the Breed Standard was that they should be easily distinguishable from the large, round, flat-soled hooves that are thought to show influence of cold-blooded genealogy. A case could also be made for the **Arabian** and **Thoroughbred** breeds having a good number of representatives with large flat-soled hooves with the additional concern of the long toe-low heel syndrome.

It is refreshing to see how absent these flaws common to other breeds are in the **Chilean Horse** breed that evolved for centuries working unshod over rocky terrain. I might warn that many **Chilean Horse** breeders and owners comment on the "weakness" of their breed's hooves. Contrary to the customs of the colonial period, most huasos keep their performance horses permanently stabled and unnecessarily shod. Moreover, traditionally, the job of shoeing horses has generally been designated to the "peticero" (groom), who often leaves much to be desired in professional blacksmith skills. This is especially concerning when the strong requirement of so much lateral movement puts undue strain on much of the limbs, and improper shoeing only aggravates this problem. I daresay the main "weakness" in **Chilean Horse** hooves is the one related to their proper care, and there is a missed opportunity in not requiring their breed representatives to appear at shows unshod like some other proud breeds of South America.

Figure II.25 It's quite common that pastern and hoof angles don't coincide.

I have clarified why shorter and more upright pasterns are advantageous to the functions of the corralero horse. However, rarely can one deviate from the norm and not have some consequences. This sturdier structure is also a less forgiving one that offers less shock absorption to the lower leg. As already stated, one of the most common leg problems in corralero horses is navicular disease, or in veterinary terms, *podotrochleosis*. This is a problem that surely is predisposed by the stresses of the Chilean Rodeo. I don't doubt that some of the blame placed on hoof quality for soundness problems really should be directed to the demands of this difficult sport. I am not aware that under normal pleasure and ranch work the incidence of this problem is any greater than in any other stock horse breed. On the other hand, breeds without the pastern and hoof conformation of

the **Chilean Horse** would surely suffer many more reasons for lameness in trying to withstand the rigors of the medialuna.

"Acampao" Breed Type and Character

Perhaps the most difficult phenotypic objective to quantify is this idea of "acampao" breed type and character. Yet, conversely, the fact that it is given as much importance as the anatomical ideals assures that the breed should not just produce a conformationally sound horse, but also one that, continues to pass on the traits that distinguish this as a unique breed. Although most **Chilean Horse** breeders would have a long list of things that play into this evaluation of breed type, I think everyone would agree that there are certain specific factors that play a very influential role on how "acampao" a horse is.

As the Breed Standard denotes, probably the most important feature is the conformation of the head. Specific emphasis is placed on the profile that is described as slightly convex or straight. In Spanish there is a term, "acarnerado", which describes a head type that all Chilean breeders appreciate seeing in an "acampao" representative of the breed. A "carnero" is a ram, and thus this term would indicate that the head should be "ram-like".

Beyond the profile of the head, this term refers to the thickness of the bridge of the nose. Chilean breeders are not looking to breed Roman-nosed horses. This would be evaluated as being too coarse, lacking in class and once again signals draft horse infusion in the genealogy. A good **Chilean Horse** head should always have a flat forehead. The variations that make the head classify as straight or sub-convex should occur below the eye level. The horse that is "acarnerado" may be very slightly convex or straight in its profile, depending on whether or not there is a downward curvature in the bottom third of the nose. Yet, in either case, a good **Chilean Horse** should possess that thickness of the lateral cartilaginous structures at and below the frontal bones on the bridge of the nose that makes the identity of the breed very obvious.

Although much of the emphasis seems to be placed on the profile of the head, there is also great importance given to the width of the forehead, which should have ample spacing between the eyes. Ideally, the eyes themselves should not protrude from the head like those of an **Arabian**, or the "Impressive" line of **Quarter Horses**, or the famed ox-headed horses of ancient Persia. The **Chilean Horse** should have a large alert eye partially covered by the eyelid, once again more similar to the eye of a ram than the bulging eye of most bovines which is best represented in breeds such as the Jersey, Chianina, and Angus. The extension of eyelid does not facilitate the viewing of the sclera; however, the sclera can be pigmented or white. On the contrary, a horse with a dull, deeply implanted, "pig-eye" would not qualify as having the "look" of an "acampao" horse either.

The other "acampao" characteristic that bears emphasizing would be the length, thickness and consistency of the forelock, mane and tail. There are few breeds in the world that have such a long, thick and wavy forelock, mane and tail. The original **Morgans** were distinguishable for a similar trait, as are some of the **Spanish Barb** horses now being registered in the associations trying to preserve the heritage of the original horses of the "Old West" of North America. It is curious that these breeds that developed in three extremes of the Western Hemisphere have more similarities among them, than they do with the many breeds that developed in the territory between them. Certainly, it makes one wonder what specific horse types, amongst the wide variety that came over from Spain, may have had a stronger influence in each of their genealogical backgrounds.

These qualities of abundant forelock, mane and tail are referred to as "adornos", or decorations. A horse that has good decorations would be one with an exaggerated amount of forelock, mane and tail. Most likely, this would be the first thing a fan of this breed would notice in a horse that qualifies for the "acampao" breed type and, upon closer inspection, they would immediately look for a representative "ram-like" head.

Figure II.26
Toro Bayo Collonco has the "acampao" air about him

While I am on the subject of hair, I should mention that there are also some hair coat colors that are considered more "acampao" than others. There is nothing in the rulebook that prevents a horse of any approved color from winning the "Sello de Raza" (literally meaning "seal of the breed") award. However, in practice, there is a strong prejudice in favor of the dark solid colors. The only light color that traditionally would also be an acceptable "acampao" color is dun. However, it would be almost unthinkable to assign this honor to a light chestnut, palomino, gray or spotted horse regardless of how "acampao" it was in other traits.

Another trait that seriously hampers a horse's chances is height, as most judges would be hard pressed to assign a "Sello de Raza" to a horse that stood over 1.42 m (14 hands). Obviously, following some of the other requirements of the breed, horses with a concave facial profile, straight rather than wavy hair, a lack of or too much feather, clearly split rump and large hooves would also have little opportunity to be prized.

For some time, the "Sello de Raza" did not have clearly defined objectives for the judges to use as guidelines. To some it meant picking out the most perfectly conformed horse, while to others it meant choosing the individual that had the strongest expression of breed type. After much debate, the latter was determined to be the criteria by which a "Sello de Raza" would be chosen. Since this is a title assigned at rodeos where the winner is chosen from the horses that are saddled and ready to perform in the arena, it was a prudent decision. Even under tack, breed type would be clearly evident, while accurately judging conformation under these circumstances would be compromised at best. As a result, the winner of the title of "Sello de Raza" could be a horse with slight conformation faults not seen in other contestants. In summary, it is crucial that the reader understand that the "Sello de Raza" only refers to an individual that shows outstanding breed type.

For halter champions, one must look for the results of the "Exposiciones". In these expositions, or fairs, there are halter events where the horses are shown without tack, and the sole purpose of the competition is to judge the overall quality of the horse. In this competition, the judge closely inspects the physiological angles, proportions and balance. Breed type is also taken into consideration as part of the overall package in judging the best representative of the breed. However, unlike the "Sello de Raza", here it becomes only one of the criteria, not THE criterion. Like the winners of rodeos, the winners of the halter competitions are called "Champions". Thus, it is important to realize if the term is being used to describe a "rodeo" or an "exposition" to determine what the horse was champion of.

An "acampao" character is possibly the hardest thing to define. There is an appreciation of a variety of difficult-to-define qualities that make up this evaluation. In first instance, an "acampao" character should denote a horse that has presence, a horse with a look that calmly states, "I have arrived…take notice!" Such an individual will always be alert to the things around him, without showing the least sign of fear. He will be observant. He may even focus on some faraway vision, real or imagined, that makes him oblivious to his surroundings while he stands with neck erect, ears perked and a total sense of concentration. This "acampao" character will comply with being motionless when asked to stand, but moves instantly with the first jingle of the spurs.

Figure II.27
Las Vertientes Chacoli seems to say "I have arrived…take notice"

The "acampao" character represents what all huasos like to see in their horses -- CONTROLLABLE ENERGY. **Chilean Horses** are not passive, aloof, or sedentary. On the contrary, the **Chilean Horse** is a breed that has an inborn desire to work. When asked to walk, it does so energetically. When asked to gallop endlessly or confront the steep slopes on hills, the rider must be conscientious of imposing rest because the **Chilean Horse** will rarely back off what it is asked to do. When this vigor is put to use responsibly, the **Chilean Horse** contains an interesting combination of a calm and relaxed character that can totally disconnect when rested, and a fiery disposition that is desirous to please his rider when on the go. It is this spark and strong character that has assured that "**Chilenos**" have not backed down in confronting the repetitive physical impact with the cattle in the medialuna or the perils often encountered on the mountain trails.

In addition, the self-assured temperament of the **Chilean Horse** also has a noble quality that one readily appreciates after having dealt with breeds that have high percentages of **Thoroughbred** or **Arab** bloodlines. **Chilean Horses** can be untrusting when they have not been handled. They can even be hardheaded if their experience with man has taught them to expect human aggression. However, it is amazing to me how rare it is to find individuals that aggressively try to hurt people even when they have been the recipients of man's abuse.

An unbroken colt may run over the top of you in an effort to flee from a scenario that intimidates him, but it would be very unusual for that same individual to lash out at a person with ill-intentioned kicks. In handling horses that have been unjustly manhandled the strong character of the **Chilean Horse** can create hardened foe, but my experience has been that when working to gain the trust of even the worst rogues, in a short time they respond to respectful and compassionate attitudes and they are quick to forgive past unpleasant experiences. Horses with a similar past in the hot-blooded breeds have a much greater tendency to hang on to their distrust and vengeful aggression for much longer periods of time.

Longevity -- the Common Trait in all Breeds of Iberian Origin

When my experience was largely with **Thoroughbreds**, I visited Puerto Rico and immediately took interest in learning about the renowned **Paso Fino** breed that is the pride of the "Boricuas" (nickname used to describe the Puerto Ricans). I made a contact with a gentleman who worked in the Stud Book of the Puerto Rican **Thoroughbreds** and was an avid fan of the **Paso Fino**. He was kind enough to show me several stables and breeding farms. In one of these establishments, they showed me a mare with a foal by her side and informed me she was 30 years old. I thought it was joke. It wasn't, and then I assumed that must be some sort of world record. That is until I started researching the **Chilean Horse** breed and realized that longevity was a common factor in many of the American breeds of Iberian origin.

Figure II.28
Picarquin Trago Largo is still fertile and healthy at 29 years of age

Simply in reviewing the famous horses, I have come across many individuals that lived long lives. The king pin of the 19th century, ***Bayo León*** died an accidental death trying to jump over a six foot (1.80m) fence at 33 years of age after having gotten nine mares in foal that season. ***Bellaco*** also lived until he was 33 years. The famous ***Angamos I*** died at 31 years of age, and sired his most important progeny in the last four years of his life. ***Comunista*** was another famous stallion that lived until he was 30. ***Atalaya*** also died at 30 and his son ***Atalaya II*** passed away at 31 years. The famous ***Estribillo*** also lasted until he was 31. ***Rigoreado***, ***Taco*** and ***Esperado*** (the son of ***Faustino,*** so as not to confuse him with another famous ***Esperado***) died at 29 years of age. ***Rotoso*** lived until he was 28. ***Bareadora*** lived to be 28 and had her last foal at 26. ***Mensajera***, the dam of ***Plebiscito,*** had her last foal at 29 years of age.

I have not found a mare that has topped the **Paso Fino** mare previously mentioned, but how long horses lived is not a common bit of information that is kept, aside from occasional anecdotal information. The long-lasting vigor of this breed also offers owners a much longer useful life, as many horses are competitive in high-caliber rodeos until their mid 20s. As a result, purchasing **Chilean Horses** can offer "more bang for the bucks", as good quality individuals that are well cared for will perform and reproduce for more years than traditional North American stock horse breeds. This also means that proven producers can be purchased with a greater degree of confidence that they still have a good number of years of useful life ahead of them.

An Example to the World of a "True" Breed

In an era when breeds are defined by pieces of registration papers rather than by true phenotypic characteristics that coincide with a clear breed type, this little-known breed of insignificant numbers in the tip of South America is here to remind us what the priorities of animal breeds should be. The **Chilean Horse** breeders have, not only astutely and plainly defined the conformational aspects that comprise the Breed Standard, but they have also incorporated other more subtle factors, such as the head profile and the constitution of forelock, mane and tail and character, that they consider a genetically fixed part of the breed type they wish not to stray from.

It is a well-known fact that crossbreeding has destroyed the genetic purity of so many livestock breeds. As it becomes a more economical alternative, eventually DNA testing will provide the much-needed vigilance of all purebred breeders. Progressively, the **Chilean Horse** community already has this control in practice. Still, history also has shown us that through selection, significant changes can be made in breed type and character. Hopefully, the founders of most breeds defined these parameters in order to best comply with the main justifications for creating the breed. Breeders should strive to honor these breed standards, only making changes when there is ample evidence that these better meet the original objectives of the breed. Deviating from those objectives might best justify the formation of new breeds for other specific purposes. Having sub-types within a breed to meet a variety of objectives defies the purpose of what the term "BREED" is all about.

In this complex, fast-paced world that competes for purses, ribbons, public recognition and ego inflation, animal breeders should stop and take notice of how faithfully the **Chilean Horse** breed has honored the essence of a BREED Standard they have never stopped believing in.

Figure II.29
Hugo Cardemil with the two- time National Champion Esquinazo