

# Appendix D

## Colonial Spanish Horse Type Matrix

D.P. Sponenberg, Chuck Reed

A matrix of characters can be used to effectively evaluate horses for their relative consistency with Spanish type conformation. All horses vary, as do all populations. This matrix scores a variety of conformational traits related to Colonial Spanish Horse type. A score near 1 for each trait is most consistent with an Iberian origin, those with a score near 5 are much less typical.

When evaluating individual horses it is possible for a non-Iberian horse to be fairly low-scoring. This is much less likely when entire populations are scored, so that it is recommended that the matrix be used on populations rather than on individual horses. Populations that have over 80% low-scoring horses are likely to be Iberian in origin, and those with over 90% low scoring horses are nearly always proven to have had an Iberian origin. Those with 50% or fewer Iberian type horses are unlikely to prove out to be Iberian in origin.

On every horse, however many of these characteristics that can be observed should be scored. Add up the total score, and then divide that total by the number of items scored. A score of 1 is a very typey horse, a score of 2 an acceptable horse, a score of 3 a marginal horse. Scores of 4 and 5 deviate significantly from Spanish type. In a population of purely Spanish origin the scores should cluster strongly in categories 1 and 2, with very few in 4 and none in 5.

most typical – score 1	not typical - score 5
<b>HEAD PROFILE</b>	
either 1. concave/flat on forehead and then convex from top of nasal area to top of upper lip (subconvex) 2. uniformly slightly convex from poll to muzzle 3. straight	1. dished as in Arabian. 2. markedly convex.
<b>HEAD FROM FRONT VIEW</b>	
Wide between eyes (cranial portion) but tapering and “chiseled” in nasal/facial portion. This is a very important indicator, and width between eyes with sculpted taper to fine muzzle is very typical.	Wide and fleshy throughout head from cranial portion to muzzle.
<b>NOSTRILS</b>	
Small, thin, and crescent-shaped. Flare larger when excited or exerting.	Large, round, and open at rest.
<b>EARS</b>	
Small to medium length, with distinctive notch or inward point at tips	Long, straight, with no inward point at tip. Thick, wide, or boxy.
<b>EYES</b>	
Vary from large to small (pig eyes). Usually fairly high on head	Large and bold, low on head.
<b>MUZZLE PROFILE</b>	
Refined, usually with the top lip longer than the bottom lip	coarse and thick with lower lip loose, large, and projecting beyond upper lip.
<b>MUZZLE FRONT VIEW</b>	
Fine taper down face to nostrils, slight outward flare, and then inward delicate curve to small, fine muzzle that is narrower than region between nostrils.	Coarse and rounded, or heavy and somewhat square as the Quarter Horses, rather than having the tapering curves of the typical muzzle.

most typical – score 1	not typical - score 5
<b>NECK</b>	
Wide from side, sometimes ewe-necked, attached low on chest	Thin, long, and set high on chest.
<b>HEIGHT</b>	
Usually 13.2 to 14.2 hands high. Horses over 15 hands are not typical	Under 13 hands or over 15 hands is not typical
<b>WITHERS</b>	
Pronounced and obvious. “sharp”	Low, thick, and meaty.
<b>BACK</b>	
Short, strong.	Long, weak, and plain.
<b>CROUP PROFILE</b>	
angled from top to tail. Usually a 30 degree slope, some are steeper	flat or high
<b>TAIL SET</b>	
Low, tail follows the croup angle so that tail “falls off” the croup.	High, tail up above the angle of the croup.
<b>SHOULDER</b>	
Should be long, and 45 to 55 degrees	Short, and steeper than 55 degrees
<b>CHEST SIDE VIEW</b>	
Deep, usually accounting for half of height	Shallow, less than half of height
<b>CHEST FRONT VIEW</b>	
Narrow, and “pointed” in an “A” shape.	Broad, with chest flat across.
<b>CHESTNUTS</b>	
Small, frequently absent on rear, and flat rather than thick	Large, and thick
<b>COLOR</b>	
Any color. In populations the black-based colors are relatively common. No bonus points for any color, no suspicion of impurity on any color	No color is penalized
<b>REAR LIMBS FROM REAR VIEW</b>	
Straight along whole length, or inward to have close hocks and then straight to ground (“close hocks”), or slightly turned out from hocks to ground (“cow hocks”) but not extreme. Legs very flexible. At trot the hind track often lands past the front track.	Excessive “cow hocks.” Heavy, bunchy gaskin muscle, tight tendons.
<b>FEATHERING ON LEGS</b>	
Absent to light fetlock feathering, though some have long silky hair above ergot and a “comb” of curled hair up back of cannon. Some horses from mountain areas have more feathering than typical of others, and lose this after moving to other environments.	Coarse, abundant feathering as is seen in some draft horse breeds.
<b>REAR</b>	
Contour from top of croup to gaskin has a “break” in line at the point of the butt.	Contour from top of croup to gaskin is full and round “apple butt” with no break at the point of the butt.
<b>HIP FROM REAR</b>	
Spine higher than hip, resulting in “rafter” hip. Usually no crease from heavy muscling	Thickly muscled with a distinct crease down the rear.
<b>HIP FROM SIDE</b>	
Long and sloping, well angled, and not heavy.	Short, poorly angled.
<b>MUSCLING</b>	

most typical – score 1	not typical - score 5
Long and tapered	Short and thick “bunchy”
FRONT CANNON BONES	
Cross-section is round. Best to palpate this below the splint bones.	Cross section is flat across the rear of the bone.