

Naturally

SHAPED HOOVES

What You Can Learn From Mule Hooves In The Outback

By Jaime Jackson

AN IMPORTANT FOCUS of my wild horse related research, conducted during the 1980s, included the study of hooves.

In the course of examining feral horses, I also had the opportunity to evaluate and measure the hooves



★ Mare mules can be found as members of feral horse harem bands, wherever close proximity of feral jennies (or female asses) provides mating opportunities with monarch stallions. Thus, we can expect to locate such hybrid equid offspring along the designated borders of the noted wild horse sectors.

Figure 1 (left) shows one such mare captured with feral horses during the winter months by Bureau of Land Management officials. She weighed approximately 1,100-lbs., was very healthy, sound and had exemplary hooves.

Big Differences

Figure 2 (above) shows a close-up view of her front right hoof in its volar profile. The hooves of

ABOVE: This closeup view of a wild mare mule's right front hoof is shown in this volar profile.

LOWER LEFT: 1,000- pound mare mule was captured with feral horses during winter. She was healthy with exemplary hooves.

feral mules I examined exhibited many of the same characteristics as the hooves of feral horses, including hoof size, angle and symmetry.

For example, compare the hoof data collected for this mare mule in figure 3 with the statistical norms for all feral horses I sampled in figure 4. As you can see, this mare had extremely naturally shaped hooves from the statistical standpoint of wild horse hooves. As might be expected, the exemplary

of feral mules. For shoers of domestic mules and asses, these findings have great potential value.

Here are several of my key mule observations:

★ Feral mules—and asses—roam the high desert outback of America's Great Basin, just like feral horses.

How Mule Hooves Measure Up (Figure 3)

Hoof Measurement	Front	Hind
Toe Length	3-1/2-in.	3-1/2-in.
Toe Angle	58 degrees	60 degrees
Hoof Length	5-1/4-in.	4-3/4-in.
Hoof Width	4-in.	4-in.

quality of her hooves are apparent:

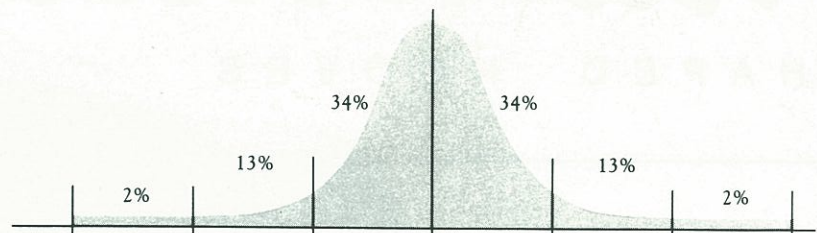
1. Thick, well-rounded walls.
2. Clean, well-defined frogs.
3. Moderately concaved soles (enough to afford the frog passive contact with the ground during the hoof's support phase).
4. A relatively wide expanse across the heels.
5. Virtually unblemished horn from the hairline down.

Unique Conformation

As with domesticated mules, the dominant gene traits for horse or ass appear to govern the degree of ass or horse-like influences surfacing in the hooves of feral mules. This includes the unique conformation of the heel-buttresses, which readily distinguish ass and horse hooves from each other.

For example, the hooves of the feral mule mentioned here, were, in my estimation, more horse-like. However, they clearly exhibited

BELL CURVE FOR NATURAL HOOF SIZE AND ANGLE



	NATURAL BUT UNUSUAL	NATURAL	VERY NATURAL	NATURAL	NATURAL BUT UNUSUAL	
Toe Angle (front)	48° - 49°	50° - 51°	52° - 54°	55° - 56°	57° - 59°	60° - 62°
Toe Angle (hind)	51° - 52°	53° - 55°	56° - 57°	58° - 60°	61° - 62°	63° - 65°
Toe Length (front & hind)	2 3/8" - 2 1/2"	2 5/8" - 2 3/4"	2 7/8" - 3"	3 1/8" - 3 1/4"	3 3/8" - 3 1/2"	3 5/8" - 3 3/4"
Hoof Length (front)	4" - 4 3/8"	4 1/2" - 4 5/8"	4 3/4" - 5 1/8"	5 1/4" - 5 3/8"	5 1/2" - 5 7/8"	6" - 6 1/2"
Hoof Length (hind)	4" - 4 3/8"	4 1/2" - 4 5/8"	4 3/4" - 4 7/8"	5" - 5 3/8"	5 1/2" - 5 5/8"	5 3/4" - 6"
Hoof Width (front)	3 3/4" - 3 7/8"	4" - 4 3/8"	4 1/2" - 4 7/8"	5" - 5 3/8"	5 1/2" - 5 5/8"	5 3/4" - 6 1/4"
Hoof Width (hind)	3 1/2" - 3 7/8"	4" - 4 1/8"	4 1/4" - 4 3/8"	4 3/4" - 4 7/8"	5" - 5 3/8"	5 1/2" - 5 3/4"
T°H - T°F	0°	1° - 2°	3°	4°	5° - 6°	7° - 8°

All measurements left or right hooves, ages 5+ (adults). Based on Litchfield data.

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the common "lobe-like" configuration of the heel-buttress seen in hooves of asses (Figure 3).

Further investigation of this hoof, at the statistical level in particular, is probably in order.

The high quality of hooves seen among feral mules and asses

"High quality hooves seen among wild mules can set the standard for quality hoof care among their domestic brethren..."

should—as with feral horses—set the standard for quality hoof care among their domestic brethren.

Author Jaime Jackson is a professional farrier from Tilly, Ark., and the author of the "The Natural Horse" book.