

The Cute Conundrum

by Laura Hornick Behning

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Fans of dun Morgans have long wondered just where the dun gene came from in the breed. The descendants of the grulla mare, Pendleton Buck Missy, via her daughters Robbi Sue's Misalert (by Robbi Sue's Moralert) and Robbi Sue's Dun Ella (by Applevale Monarch), comprise the only verified source for the dun gene in Morgans. "Missy", as Pendleton Buck Missy was known to her friends, was registered as being by the chestnut stallion King Richard and out of the (smoky) black mare Cute. So where did her dun gene come from?

The cream dilutes vs. dun

Before color testing became available, many color geneticists believed the cream dilutes (palomino, buckskin, smoky black, perlino, cremello and smoky creme) and the dun dilutes (red dun, bay dun, and grulla) were caused by a single gene at the D (dilution) locus. Further confusing the situation was the fact that some highly regarded color researchers divided duns and buckskins by the presence or absence of a dorsal stripe. However, many colors can have a dorsal stripe and even, in some cases or at certain times of the year, other primitive markings such as faint leg bars. In non-duns these markings are thought to be caused by the presence of another modifier, possibly sooty, also sometimes called countershading. It can be considerably confusing for the average person to determine whether or not a given horse is dun or simply a countershaded non-dun.

Years ago, breeders tended to call any odd dilute color not neatly fitting into the definitions of the more commonly seen dilutions a "dun". In my research on silver dapple I found several cases of silvers registered as duns, and there are numerous cases of buckskins and smoky blacks mistakenly registered as duns. Smoky blacks are particularly deceptive because at birth they can be a very light, silvery grey that in many ways resembles a grulla foal; they can also be quite striped. Striping, including a dorsal and leg bars, is part of nature's camouflage for the young foal. When lying down, a pale colored foal with stripes blends well into his



The grulla mare Pendleton Buck Missy (left) with Robbi Sue Misalert as a foal. Photo courtesy of Julie Ploof.

surroundings, allowing him to be better hidden from predators. It is easy to see how in the past, armed with much less color knowledge than we have today, cream dilute foals could be incorrectly registered as duns. This has caused much confusion for those of us who like to research color lines!

So what color was Cute?

Cute produced two other colorfules besides Pendleton Buck Missy (who was registered buckskin but shown in color photographs to be a grulla; we know she also carried a cream gene as she produced cream dilutes). These were the palomino stallion Amber Chief (by Chief Justin Morgan), foaled in 1958, and the 1968 palomino gelding Pendleton Joe (by Orcland Bo Don). Neither Chief Justin Morgan (bay) nor Orcland Bo Don (black) were colorfules, nor did they have colorfules in their pedigrees. This proves that Cute was not just black, but a smoky black, and passed on her cream gene in at least three instances- Missy, Amber Chief, and Pendleton Joe. So where did Missy's DUN gene come from?

Missy's sire is listed as King Richard (Agazizz X Carmalita Knox), a chestnut horse of old Brunk, Jubilee King and Western Working Family lines. None of the horses in his immediate ancestry were dilutes of any flavor. He sired 23 offspring and Missy was the only dilute. His picture, even in black and white, does not appear to

show a dun dilute, so it is fairly certain that he was not a misregistered dun.

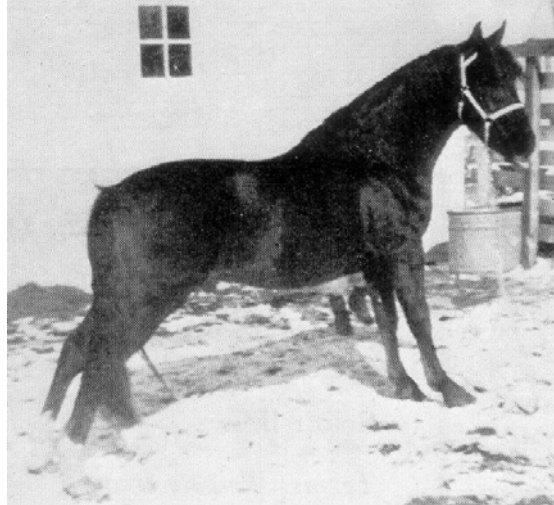
It is possible that Cute was a very dark grulla as well as a smoky black. Her color pictures however seem to belie that possibility, as she looks, essentially, black with a bit of sunbleaching in her mane. If Cute was a dark grulla, we are right back to the same question: where did her dun gene come from?

There is LOTS of color behind Cute- however, it is all the cream dilution, not the dun dilution. Her sire, Ketchum, was also the sire of the famous smoky cream stallion, Chingadero. Ketchum was registered chestnut, but was actually a smoky black. Many smoky blacks indeed appear dark liver chestnut, especially when sun bleached. Ketchum's owner Ab Cross called him "Blackjack Ketchum" and it Ketchum must have been a smoky black to have produced as he did. Cute's dam Smokie Brown (Warhawk, black x Smokie, buckskin) was registered as brown. She could have actually a cream dilute, given her dam's coloring. Cute was her only foal. Is it possible that Smokie Brown could have been a dun dilute? The color line would have to be coming through Smokie (Glider, chestnut x Buck, buckskin). Buck had one palomino and two buckskin foals. Unfortunately, no other clearly dun horses have descended from this family. There are, however, lots of linebacked buckskins and sooty palominos with countershading stripes coming from related Cross Ranch bloodlines, but these all appear to be Morgans whose striping is not due to the presence of a dun gene- even though, in some cases, they were misregistered as "dun".

A Color Mystery

Since bloodtyping and DNA has only fairly recently been mandatory on all Morgans, it is reasonable to expect that some margin of error is present in all of our pedigrees before that time. In most cases such errors were completely innocent. Indeed, that is what the registry Rule III was set up to address. In the past, mares may have been bred by accident and it might not even have been known to their owners, who may have thought another stallion was responsible for the foal they ultimately produced, and registered it as such. This margin of error would be especially possible on large estates or ranches where horses were generally turned out with a stallion for the breeding season on thousands of acres of land and not supervised.

Pendleton Buck Missy was never bloodtyped. She is not listed as being bred by Pendleton Farms, despite having their prefix; instead, her breeder is given as Ramon Gaier and sons of Cleveland, SD. Ramon Gaier is also the breeder of the fairly well-known Western Working Family stallion, Jesse James (Model X Shy Bird). Cute had two foals by Jesse James in 1961 and 1962 (a chestnut and a black)



*Top: King Richard, the sire of Pendleton Buck Missy.
Bottom: Cute, Missy's dam.*

before she was bred to King Richard (chestnut) to produce Pendleton Buck Missy. But was King Richard the sire of Missy? Is it possible that an unknown dun stallion bred her instead? Genetically speaking, this theory makes quite a bit of sense. A dun stallion crossed with a smoky black mare could easily produce a smoky grulla offspring like Missy.

It is also possible is that the real Pendleton Buck Missy was at some point switched or confused with a grulla mare of unknown ancestry; some brown buckskins are similar in shade to grulla, which might explain how such a thing could happen. It is somewhat odd however that Missy was registered as a buckskin when she was very clearly a dun, in a day when generally the opposite was the norm!

Whatever the case, the dun gene is in our breed to stay. The number of dun Morgans and their popularity are increasing with every passing year. People are becoming more educated about the differences between the three dilutions present in the Morgan- dun, cream and silver dapple- and they are being correctly identified as a result. It is indeed an exciting time in Morgan history for those who prefer the "party colors"!