

What is Possible?

A Look at Breeds, Colors and Patterns

by Lesli Kathman

There are two considerations when determining whether a color can be found in a breed. Breeds are limited both by the color genes present (what is possible) and by any restrictions placed by the registry (what is permissible). The Arabian registry, for example, does not restrict the colors for that breed. In theory, an Arabian could be "any color". In practice, the breed does have some restrictions because there are some colors not present in the gene pool. The breed is limited by what is *possible*. In contrast, it is quite possible for a breeder to get a classic splash Appaloosa; the genes are there. However, the horse could not be registered under Appaloosa Horse Club rules. In this case, the breed is limited by what is *permissible*.

The charts presented here focus on what is possible within each breed. Present color restrictions have been noted, but it should be remembered that the changing climate regarding horse color has caused many registries - especially American registries - to question such rules. Some have relaxed or even eliminated restrictions, while other have more clearly defined or even instituted new restrictions. Permissible colors, therefore, can and do change.

Finally, for the sake of consistency and clarity, the charts classify colors based on currently accepted genetic nomenclature rather than the terms used by each registry.

[Note: For those breeds that do allow specific outcrossing, those colors listed include what is possible based on the genes present in permitted outcrosses.]

Categories

Definitive: When all registered horses are a color or that color is considered a defining point of the breed, it is listed as Definitive.

Uniform: The color is uniformly present throughout the population.

Common: These are the colors most closely associated with the breed, and could be considered most typical.

Present: These are colors that are found within the breed, but may not be as frequently seen, or may only be found in specific bloodlines or breeding groups.

Rare: Rare colors are those considered unusual for the breed, but that have been confirmed as present.

Suspected: When evidence suggests that the color may be found within the breed, but no solid proof has been found, it is noted as Suspected.

Not Present: Colors not thought to exist in the breeding population are listed as Not Present. (Given the nature of proving a negative, this designation can change, especially for breeds with open stud books.)

Prohibited: This indicates that the color is specifically barred from either registration or consideration in the show ring. Unless noted, this refers to the breed as it exists in the United States. Foreign registries may have different rules.

Restricted: This generally refers to those patterns of white that are found in the breed, but are restricted in some way by the registry. In some cases, this might mean that there are gender restrictions, or that only minimally marked individuals can be registered while more obviously patterned horses are denied papers.

Historical: Historical colors are those known to have once occurred in the breeding population, but have been lost over time.

Not Determined: When information is not available to prove or disprove the existence of a color in the breed, it is listed as Not Determined.

This notation does not mean the color is not present, only that the author does not have definitive information to make the determination.

Test Confirmed: When test results have been made public to confirm the presence of a color, this is noted. The absence of the notation is not meant to imply that no horse has tested positive, since results are not always publicized. (It should be noted as well that many colors and patterns cannot yet be tested.)

Breed	Chestnut	Black	Bay	Modified
Arabian	Common	Present	Common	Sometimes
Akhal-Teke	Common	Common	Common	Sometimes
American Cream Draft	Uniform	Not Present	Not Present	Always
Appaloosa	Common	Common	Common	Definitive
Andalusian/Lusitano	Rare	Common	Common	Usually
Bashkir Curly	Common	Common	Common	Sometimes
Belgian (American)	Common	Rare	Rare	Sometimes
Belgian (Brabant)	Present	Rare	Common	Sometimes
Caspian	Common	Present	Common	Sometimes
Clydesdale	Rare	Common	Common	Always
Criollo	Common	Common	Common	Usually
Cleveland Bay	Rare - Prohibited	Not Present	Definitive	Never
Connemara	Rare	Common	Common	Usually
Dales	Not Present	Common	Common	Rarely
Dartmoor	Rare	Common	Common	Rarely
Exmoor	Not Present	Not Present	Uniform	Never
Fell	Prohibited	Common	Present	Rarely
Friesian	Rare - Prohibited	Definitive	Historical	Prohibited
Haflinger	Uniform	Historical	Historical	Rarely
Hackney	Common	Common	Common	Sometimes
Highland Pony	Rare	Common	Common	Usually
Icelandic	Common	Common	Common	Sometimes
Lipizzan	Rare	Common	Common	Usually
Miniature Horse	Common	Common	Common	Usually
MFT	Common	Common	Common	Sometimes
Morgan	Common	Common	Common	Sometimes
Mountain Pleasure	Common	Common	Present	Usually
Noriker	Common	Common	Common	Sometimes
Norwegian Fjord	Present	Rare	Common	Always
Paint	Common	Common	Common	Definitive
Paso Fino	Common	Common	Common	Sometimes
Percheron	Rare	Common	Rare	Sometimes
Peruvian Paso	Common	Common	Common	Sometimes
Quarter Horse	Common	Common	Common	Sometimes
Rocky Mountain	Present	Common	Present	Usually
Saddlebred	Common	Common	Common	Sometimes
Shagya	Present	Present	Common	Sometimes
Shetland (American)	Common	Common	Common	Sometimes
Shetland (British)	Present	Common	Present	Sometimes
Suffolk	Definitive	Not Present	Not Present	Never
Shire	Rare	Common	Common	Sometimes
Standardbred	Common	Common	Common	Sometimes
Tarpan	Not Present	Uniform	Not Present	Always
Tennessee Walker	Common	Common	Common	Sometimes
Thoroughbred	Common	Present	Common	Sometimes
Welsh Mountain Pony	Common	Common	Common	Sometimes
Welsh Pony	Common	Common	Common	Sometimes
Welsh Cob	Common	Common	Common	Sometimes

Chart 1 - Base colors found in popular breeds.

Base Colors

The building blocks of horse color are the base colors: chestnut, black, brown and bay. Whatever other colors and patterns are present on any given horse, he will also be one of these four colors. If one of those colors is missing in the breed, then all the colors that are built from that base will be absent. If, for example, there are no chestnuts, there will also be no palominos even if the cream gene is present. (For simplicity bay and brown are grouped together in the charts for this article.)

Likewise, in breeds where all individuals have a specific modifier base color will influence what is possible. All modern Fjords are dun, for example. But because Fjords are also genetically chestnut, black, brown and bay, we see the full range of red duns, grullas and yellow duns. If one or more of the base colors was missing in the breed, then only the modified form of the available colors would be present. Tarpan, for example, are also uniformly dun. They are also uniformly grulla, because the base colors of chestnut, brown and bay are not available. A red dun Tarpan would therefore be an unrealistic model.

For this reason, it is important to know which base colors are present (and common or uncommon) in each breed. Chart 1 gives information on the possible base colors for some of the more popular breeds in the model show ring. When the base colors are found only in conjunction with a specific modifier, they are noted as "always" modified. For those breeds that are only bay, brown, black or chestnut, they are noted as "never" modified.

Modifiers

The remaining horse colors are the result of genes that modify the four base colors. The following charts indicate which modifiers are found in each breed. The modifiers are broken down into:

1) White hairs, 2) Dilutions, 3) Pinto patterns and 4) Appaloosa patterns.

Modifiers That Add White Hairs

The first group of modifiers are those that distribute white hairs through the coat. The most common of these is grey. Many horsemen mistakenly think of grey as a separate color, but in fact it is a modifying

Breed	Grey	True Roan	Ticked
Arabian	Common	Not Present	Present
Akhal-Teke	Present	Not Present	Not Determined
American Cream Draft	Not Present	Not Present	Not Present
Appaloosa	Present	Present	Rare
Andalusian/Lusitano	Common	Rare	Rare
Bashkir Curl	Present	Present	Rare
Belgian (American)	Historical	Present	Not Determined
Belgian (Brabant)	Rare	Common	Not Determined
Caspian	Common	Not Present	Not Determined
Clydesdale	Historical	Not Present	Not Determined
Criollo	Present	Present	Not Determined
Cleveland Bay	Not Present	Not Present	Not Present
Connemara	Common	Rare	Not Determined
Dales	Present	Rare	Not Determined
Dartmoor	Present	Rare	Not Determined
Exmoor	Not Present	Not Present	Not Present
Fell	Rare	Historical	Not Determined
Friesian	Prohibited	Prohibited	Historical
Haflinger	Not Present	Not Present	Not Determined
Hackney	Historical	Rare	Present
Highland Pony	Common	Not Present	Not Determined
Icelandic	Common	Present	Not Determined
Lipizzan	Common	Historical	Not Determined
Miniature Horse	Common	Common	Not Determined

Chart 2 - Modifiers that add white hairs

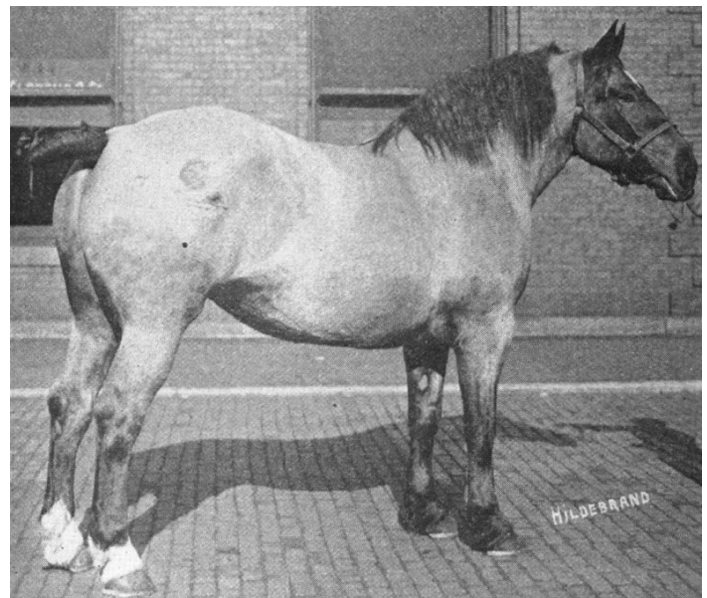
Chart 2 - Modifiers That Add White Hairs (continued)

Breed	Grey	True Roan	Ticked
Missouri Fox Trotter	Common	Present	Not Determined
Morgan	Rare	Rare	Rare
Mountain Pleasure	Present	Present	Not Determined
Noriker	Not Present	Present	Rare
Norwegian Fjord	Not Present	Not Present	Not Present
Paint	Present	Present	Rare
Paso Fino	Present	Present	Rare
Percheron	Common	Rare	Not Determined
Peruvian Paso	Present	Present	Not Determined
Quarter Horse	Present	Present	Present
Rocky Mountain	Rare	Rare	Not Determined
Saddlebred	Present	Rare	Rare
Shagya	Common	Not Present	Not Determined
Shetland (American)	Present	Present	Not Determined
Shetland (British)	Present	Present	Not Determined
Suffolk	Not Present	Not Present	Rare
Shire	Common	Historic	Not Determined
Standardbred	Present	Present	Rare
Tarpan	Not Present	Not Present	Not Present
Tennessee Walker	Present	Present	Not Determined
Thoroughbred	Present	Rare	Rare
Welsh Mountain Pony	Common	Common	Present
Welsh Pony	Common	Common	Present
Welsh Cob	Rare	Rare	Present

gene that progressively lightens the horse's original color. All greys, therefore, are also either chestnut, black, brown or bay. True roans have white hairs intermixed with their base color, but unlike greys the do not get lighter with age. They also have dark points, including the head, which has lead many to refer to them as "dark-headed roans". Finally there is ticking, which most often results in roaning on the flank and a skunk tail (often called rabicano), but also includes any sprinkling of white hairs in the coat not related to grey or roan. Because ticking is often quite subtle and can be hard to see in photographs, many breeds will have this column noted simply as "Not Determined". (Chart 2)

Genes That Dilute Color

There are five known dilution genes found in horses: cream, dun, silver, champagne and pearl. Cremellos and perlinos are the result of two cream genes, and are therefore possible whenever a breed has the



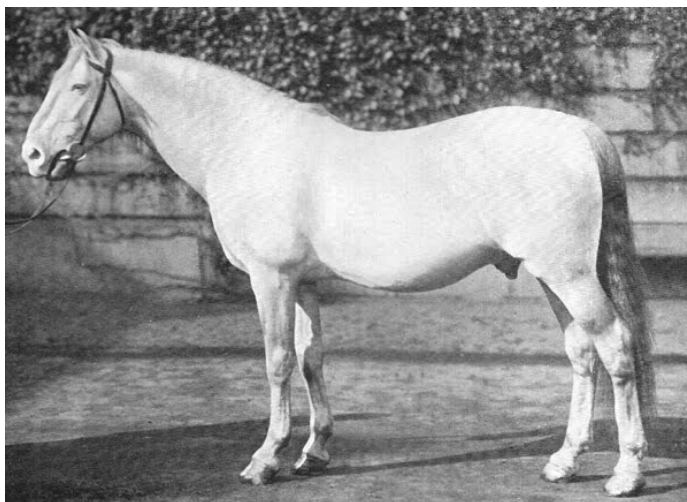
Imprudente, blue roan Percheron mare from the early 20th century.

cream gene. When they are restricted, this is noted. (Chart 3) There are two other less understood dilutions - mushroom and globrunn - that have separate charts due to their rarity. (Chart 5)

Pinto Patterns

These are the genes that create the pinto patterns - tobiano, sabino, splash overo, frame overo and dominant white. Note that horses with patterns designated as Prohibited are usually only denied registration (or penalized in the show ring) when more obviously marked; in many breeds minimally marked individuals will not be identified as having the "prohibited" pattern. It is also possible for an undesirable pattern to be masked by an accepted color or pattern. A good example of this is grey, which can obscure minimally marked horses enough that they go unnoticed until a horse inherits the pattern without the grey. (Chart 4)

(Right) *Pistachio*, a Royal Hanoverian Cream (now extinct)



Breed	Cream	Dun	Silver	Champagne	Pearl
Arabian	Not Present	Not Present	Not Present	Not Present	Not Present
Akhal-Teke	Common	Suspected	Not Present	Not Present	Not Present
Appaloosa	Common	Common	Test Confirmed (Rare)	Rare	Not Present
American Cream Draft	Rare	Not Present	Not Present	Definitive	Not Present
Andalusian/Lusitano	Rare	Rare	Not Determined	Not Present	Test Confirmed
Bashkir Curly	Present	Present	Rare	Rare	Not Present
Belgian (American)	Not Present	Not Present	Rare	Not Present	Not Present
Belgian (Brabant)	Not Present	Not Present	Suspected	Not Present	Not Present
Caspian	Not Present	Rare	Not Present	Not Present	Not Present
Clydesdale	Historical (possibly dun)	Historical (possibly cream)	Not Present	Not Present	Not Present
Criollo	Present	Common	Not Determined	Not Determined	Not Present
Cleveland Bay	Not Present	Historical (Suspected)	Not Present	Not Present	Not Present
Dales	Not Present	Not Present	Not Present	Not Present	Not Present
Dartmoor	Not Present	Not Present	Not Present	Not Present	Not Present
Connemara	Common	Rare	Rare	Not Present	Not Present
Exmoor	Not Present	Not Present	Not Present	Not Present	Not Present
Fell	Not Present	Not Present	Not Present	Not Present	Not Present
Friesian	Historical (Suspected)	Not Present	Historical	Not Present	Not Present
Hafinger	Not Present	Rare (may be Historical)	Not Present	Not Present	Not Present
Hackney	Historical	Historical	Not Present	Not Present	Not Present
Highland Pony	Not Present	Common	Rare	Not Present	Not Present
Icelandic	Present	Common	Common	Not Present	Not Present
Lipizzan	Historical	Not Present	Not Present	Not Present	Not Present
Miniature Horse	Common	Present	Common	Rare	Not Present
Missouri Fox Trotter	Common	Rare	Test Confirmed (Rare)	Present	Not Present
Morgan	Present	Test Confirmed (Rare)	Test Confirmed (Rare)	Not Present	Not Present
Mountain Pleasure	Common	Rare	Common	Rare	Not Present
Noriker	Not Present	Not Present	Present	Not Present	Not Present
Norwegian Fjord	Rare	Uniform	Not Present	Not Present	Not Present
Paint	Common	Common	Test Confirmed (Rare)	Rare	Test Confirmed (Rare)
Paso Fino	Present	Rare	Not Determined	Not Determined	Not Determined
Percheron	Historical	Not Present	Not Present	Not Present	Not Present
Peruvian Paso	Present	Present	Not Determined	Not Determined	Test Confirmed (Rare)
Quarter Horse	Common	Present	Test Confirmed (Rare)	Rare	Test Confirmed (Rare)
Rocky Mountain	Present	Rare	Preferred	Rare	Not Present
Saddlebred	Present	Not Present	Test Confirmed (Rare)	Present	Not Present
Shagya	Not Present	Not Present	Not Present	Not Present	Not Present
Shetland (American)	Present	Rare	Common	Not Present	Not Present
Shetland (British)	Rare	Present	Rare	Not Present	Not Present
Suffolk	Not Present	Not Present	Not Present	Not Present	Not Present
Shire	Historical	Historical	Not Present	Not Present	Not Present
Standardbred	Rare (Australia)	Not Present	Not Present	Not Present	Not Present
Tarpan	Not Present	Uniform	Not Present	Not Present	Not Present
Tennessee Walker	Present	Test Confirmed (Rare)	Test Confirmed (Rare)	Present	Not Present
Thoroughbred	Rare	Not Present	Not Present	Not Present	Not Present
Welsh Mountain Pony	Common	Rare	Test Confirmed (Rare)	Not Present	Not Present
Welsh Pony	Common	Not Determined	Rare	Not Present	Not Present
Welsh Cob	Present	Not Determined	Not Determined	Not Present	Not Present

Chart 3 - Modifiers that dilute the base color

Appaloosa Patterns

Appaloosa patterns all depend on a “master switch” gene that activates the possibility of appaloosa patterning. That gene, by itself, gives the pattern known to most American horsemen as varnish roan. When paired with modifying pattern genes, the result is a pattern like leopard or blanket, which have more white. Varnish roan (called “leopard complex”) has been identified and will soon be testable, but the situation with the patterning genes is not yet clear. For simplicity, the basic patterns of leopard and blanket are included here, but it is likely that more will be identified in the future. (Some forms of sabino are thought to operate as patterning genes for leopard complex, for example.) Currently it is believed that the leopard and blanket patterning genes do not have an effect unless leopard complex is present to activate them, so breeds without the master switch are

largely marked as “Not Determined”. It seems highly unlikely that the patterns are present in many of these breeds, but until a test is developed it is impossible to know for sure. (Chart 5)

Oddities

This group of colors are rare enough that it is more practical to list the breeds where they have been found separately. In many cases, the genetic cause - if indeed there is one - is only poorly understood.

Finally, it must be stated that the information contained in these charts comes from a variety of sources, including breed registries and stud books. Every effort has been made to insure that they are accurate, but until there are comprehensive genetic tests for all the known colors, misidentification of individuals is always possible. There is also

Breed	Tobiano	Sabino 1	Other Sabino	Frame Overo	Classic Splash	Dominant White
Arabian	Not Present	Not Present	Present	Not Present	Suspected	Test Confirmed
Akhal-Teke	Not Present	Not Present	Present	Not Present	Not Present	Not Present
Appaloosa	Not Present/Prohibited	Not Determined	Present - Restricted	Rare - Restricted	Present - Restricted	Not Present
American Cream Draft	Not Present	Not Present	Present	Not Present	Not Present	Not Present
Andalusian/Lusitano	Not Present	Not Present	Rare	Not Present	Not Present	Not Present
Bashkir Curly	Present	Suspected	Present	Rare	Rare	Not Present
Belgian (American)	Not Present	Not Present	Present	Not Present	Not Present	Not Present
Belgian (Brabant)	Not Present	Not Present	Not Determined	Not Present	Not Present	Not Present
Caspian	Not Present	Not Present	Present	Not Present	Not Present	Not Present
Clydesdale	Not Present	Not Present	Uniform	Not Present	Not Present	Historical
Criollo	Rare**	Not Determined	Common	Not Determined	Not Determined	Not Present
Cleveland Bay	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited
Connemara	Not Present	Not Present	Rare	Not Present	Not Present	Not Present
Dales	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited
Dartmoor	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited
Exmoor	Not Present	Not Present	Not Present	Not Present	Not Present	Not Present
Fell	Historical/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited	Not Present/Prohibited
Friesian	Not Present	Not Present	Not Present	Not Present	Not Present	Not Present
Haflinger	Not Present	Not Present	Suspected	Not Present	Not Present	Rare
Hackney	Historical	Not Present	Common	Not Present	Not Present	Not Present
Highland Pony	Not Present	Not Present	Historical	Not Present	Not Present	Not Present
Icelandic	Common	Not Present	Not Present	Not Present	Rare	Test Confirmed
Lipizzan	Historical	Not Present	Present	Not Present	Not Present	Not Present
Miniature Horse	Common	Test Confirmed	Present	Present	Present	Not Present
Missouri Fox Trotter	Present	Present	Present	Rare	Rare	Not Present
Morgan	Not Present	Not Present	Rare	Rare	Rare	Not Present
Mountain Pleasure	Present*	Not Determined	Present*	Not Determined	Not Determined	Not Present
Noriker	Rare	Not Present	Present	Not Present	Not Present	Not Present
Norwegian Fjord	Historical	Not Present	Not Present	Not Present	Not Present	Not Present
Paint	Common	Present	Common	Common	Present	Test Confirmed
Paso Fino	Present	Not Present	Present	Not Present	Not Present	Not Present
Percheron	Not Present	Not Present	Rare	Not Present	Not Present	Not Present
Peruvian Paso	Not Present	Not Present	Present - Restricted	Not Present	Not Present	Not Present
Quarter Horse	Rare	Present	Common	Rare	Rare	Test Confirmed
Rocky Mountain	Not Present	Not Determined	Rare - Restricted	Not Present	Not Present	Not Present
Saddlebred	Present	Not Present	Rare	Rare	Rare	Not Present
Shagya	Not Present	Not Present	Rare	Not Present	Not Present	Not Present
Shetland (American)	Common	Test Confirmed	Present	Rare	Rare	Not Determined
Shetland (British)	Common	Not Present	Not Present	Not Present	Suspected	Not Present
Suffolk	Not Present	Not Present	Not Present	Not Present	Not Present	Not Present
Shire	Historical	Not Present	Common	Not Present	Not Present	Not Present
Standardbred	Rare	Not Present	Rare	Not Present	Suspected	Rare
Tarpan	Not Present	Not Present	Not Present	Not Present	Rare	Not Present
Tennessee Walker	Common	Common	Suspected	Rare	Rare	Not Present
Thoroughbred	Not Present	Not Present	Present	Rare	Suspected	Test Confirmed
Welsh Mountain Pony	Not Present	Not Present	Common	Not Present	Present	Not Present
Welsh Pony	Not Present	Not Present	Common	Not Present	Not Determined	Not Present
Welsh Cob	Not Present	Not Present	Common	Not Present	Rare	Not Present

* Extensively spotted and tobiano Mountain Pleasure horses have a separate registry or (in one organization) a separate division within the registry

** Tobiano Criollos are prohibited in Argentina and Chile, but are recognized in Brazil, Paraguay and Uruguay.

Chart 4 - Modifiers that create pinto patterns

Gwynfe Hero, Welsh Cob stallion from the early 20th century.

always the possibility that new information can come to light. In cases like this proper documentation included with an entry can often mean the difference in placing or not! For that matter, it is never is a bad idea to include reference material when showing a color not typical for the breed.

I would also caution readers that registry color rules can and do change. The recent repeal of the American Quarter Horse Association's "white rule" is a good example. It is always a good idea to do a little research to see if rules have changed. And in that spirit, these charts are regularly updated to reflect new information. I am always interested in unusual "finds" in these breeds or in others not listed. Discussions of these topics can be found at the Equine Tapestry blog at equinetapestry.blogspot.com. If you have information to share, please send it to Lesli Kathman, 4700 Lone Tree Ct., Charlotte, NC 28269 or via email <leslikathman@earthlink.net>.

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Breed	Varnish	Leopard	Blanket
Arabian	Not Present	Not Determined	Not Determined
Akhal-Teke	Not Present	Not Determined	Not Determined
American Cream Draft	Not Present	Not Determined	Not Determined
Appaloosa	Definitive	Common	Common
Andalusian/Lusitano	Rare	Suspected	Suspected
Bashkir Curly	Present	Present	Present
Belgian (American)	Not Present	Not Determined	Not Determined
Belgian (Brabant)	Not Present	Not Determined	Not Determined
Caspian	Not Present	Not Determined	Not Determined
Clydesdale	Not Present	Not Determined	Not Determined
Criollo	Rare	Suspected	Suspected
Cleveland Bay	Not Present	Not Determined	Not Determined
Connemara	Not Present	Not Determined	Not Determined
Dales	Not Present	Not Determined	Not Determined
Dartmoor	Not Present	Not Determined	Not Determined
Exmoor	Not Present	Not Determined	Not Determined
Fell	Not Present	Not Determined	Not Determined
Friesian	Not Present	Not Determined	Not Determined
Hafflinger	Not Present	Not Determined	Not Determined
Hackney	Historical	Suspected	Not Determined
Highland Pony	Not Present	Not Determined	Not Determined
Icelandic	Not Present	Not Determined	Not Determined
Lipizzan	Historical	Historical	Historical
Miniature Horse	Present	Present	Present
Missouri Fox Trotter	Not Present	Not Determined	Not Determined
Morgan	Not Present	Not Determined	Not Determined
Mountain Pleasure	Not Present	Not Determined	Not Determined
Noriker	Present	Present	Suspected
Norwegian Fjord	Not Present	Not Determined	Not Determined
Paint	Rare	Not Determined	Not Determined
Paso Fino	Rare	Not Determined	Not Determined
Percheron	Not Present	Not Determined	Not Determined
Peruvian Paso	Not Present	Not Determined	Not Determined
Quarter Horse	Rare	Suspected	Suspected
Rocky Mountain	Not Present	Not Determined	Not Determined
Saddlebred	Not Present	Not Determined	Not Determined
Shagya	Not Present	Not Determined	Not Determined
Shetland (American)	Rare - Prohibited	Not Determined	Not Determined
Shetland (British)	Prohibited	Not Determined	Not Determined
Suffolk	Not Present	Not Determined	Not Determined
Shire	Not Present	Not Determined	Not Determined

Chart 5 - Modifiers that create appaloosa patterns



Chart 5 - Appaloosa patterns (continued)

Breed	Varnish	Leopard	Blanket
Standardbred	Not Present	Not Determined	Not Determined
Tarpan	Not Present	Not Determined	Not Determined
Tennessee Walker	Rare	Not Determined	Not Determined
Thoroughbred	Not Present	Not Determined	Not Determined
Welsh Mountain Pony	Rare	Not Determined	Not Determined
Welsh Pony	Not Present	Not Determined	Not Determined
Welsh Cob	Historical	Historical	Not Determined

Color	Breeds
Globrunn or Light Black	Icelandics, Arabians, Estonian Natives and suspected in Gotland Ponies
Mushroom	Presently found only in British Shetlands
Manchado Overo	Found in the following breeds, to date all in Argentina: Arabian, Criollo, Thoroughbred, Hackney, Anglo-Norman. It is also seen in the grade horses of Argentina.
Depigmentation (greys)	Common in Kladrubers, Lipizzaners, Camargues, Boulonnais, and some strains of Arabians, Welsh Ponies and Iberians.
Depigmentation (non-grey)	Appears to occur randomly, individuals known in the following breeds: Hackney, New Forest Pony, Quarter Horse, Percheron and Iberian.
Lacing	Found in certain strains of Shetlands and Miniature horses, individual horses in the Morgan, Standardbred and Paso breeds.
Mosaics	A red/black mosaic occurred in the Icelandic, and is often misidentified as a "black and tan pinto".
Brindles (chimera)	Occurs randomly, known instances in the Quarter Horse, suspected in the Arabian and Miniature Horse
Gold eyes	Although usually associated with diluted colors, pale (but not blue) eyes are known to occur in some lines of Highland Ponies. Individuals have also occurred in the Groninger, the Finnhorse and the Peruvian Paso.

Chart 6 - Rare Colors and other Oddities