



## About Gaits and Gaited Horses

This subject is a large one and whole books are devoted to it. We will explain as well as possible the gaits of the horse (and mule and donkey) in a basic fashion. Please indulge in further reading on the subject!

### Walk

The slowest and most energy-saving gait of the horse.

It is an even timed four beat gait. Taking the left hind as an arbitrary starting point, we could say that the gait sequence is: left hind, left front, right hind, right front.

### Trot

The gait which a horse chooses to move faster than a walk but still conserve energy.

It is a two beat gait where the left hind and right fore move in unison, thrusting forward, swinging forward, and then setting down at the same time. As this leg pair swings back, the other leg pair, the right hind and the left fore, swing forward, so that it is the next pair of legs which will contact the ground. The trot is called a diagonal gait as the diagonal leg pair work together. The trot is characterized by it's two beat nature and the flight phase where not leg is on the ground. The thrust which propels the horse forward also has to propel it upward. This upward movement is what makes it so difficult for riders to sit on the horses back.

### Pace

If a horse is genetically "wired" for a lateral instead of a diagonal gait, it will execute this gait instead of or in addition to a trot at medium speeds.

It works very much like a trot excepting that the it's the left hind and left fore that move in unison, and then the right hind and right fore move next. As the whole side of the horse "swings forward" with each leg pair, the pace is often perceived to have a swaying or see-sawing motion in addition to being bouncy. The horse often holds itself somewhat more rigidly through the top line so it is possible to see a stiff horse pace or a pacing/pacey horse become stiff in the neck and back. In some cultures, the pace is cultivated. For example, in Iceland, horses are raced under saddle in the flying pace. Of course, the pace is also seen in many standardbred horses, which come in two flavors, either as pacers or trotters. Some time in the past, these horses were raced under saddle as well but we know the standardbred as a harness racing horse.



## **Canter/Gallop**

This is the fastest gait of the horse and the most energy-consuming way of moving. It is a distinct three beat at moderate speeds (canter) but may spread out to four beats at a fast speed (gallop).

The canter is a diagonal gait. As it is also a three beat gait, it has to come in two flavors, right and left hand canter. If the horse strikes off with the left hind, the left fore and the right hind strike off together next in sequence. Finally the right fore leaves the ground. This is a right hand canter because the right fore appears to lead. Being the last leg in the sequence to move forward, and moving forward the furthest. Correspondingly, a left hand canter starts with the right hind leg, followed by the left hind and right fore in unison and finally sees the left fore move forward.

In the gallop, the diagonal leg pair often does not hit the ground in unison, instead, the hindleg strikes a fraction before the diagonal foreleg, which is why a four beat can be heard. But basically, the pattern of movement is the same as in the canter.

## **Rack, Toelt, Paso Llano, Paso Fino, Single Foot, Revaal, Trippel, Marcha Batida**

There are different names for the same gait in different languages and different horse breeds.

The rack is a four beat gait executed at medium speed. The timing should be even, with the same amount of time between each foot striking the ground, you can call it isochronal. The ability to perform this gait is passed on genetically and can be present in a horse to a greater or lesser degree. Some horses, for example most Pasos, are so thoroughly bred for this gait that the diagonal and lateral gait are not present at all, and the horse will perform a paso gait always, right from the day he was born (see day old foal on left).

Other horses have the ability but are found to trot most of the time. In the latter case, correct training by an experienced person can "remind" the horse of his ability and with a little bit of work these horses will execute a lovely smooth saddle gait for their riders. A horse without the genetic potential or with insufficient ability should never be forced by artificial means to produce this gait.

The footfall pattern is the same as for the walk, being left hind, left front, right hind and right front. There is no suspension phase as there is in the trot and pace as there is always at least one foot on the ground at any time. As there is no suspension phase, the rider does not experience the bounce as in the trot and pace.

Listening to the gait, it sounds like pa-ca-pa-ca-pa-ca..

See the gait sequence here

## **Stepping Pace, Sobreandando**

Different names for the same gait again. The *sobreandando* is a four beat gait, with the same footfall pattern as the rack. The difference is in the timing of the footfalls. Where the rack is isochronal, the *sobreandando* is pacey, meaning that the lateral leg pairs strike the ground noticeably closer together in time than the diagonal leg pairs.

Listening to the gait, you would hear: pa-ca---pa-ca---pa-ca..

The more close in time the lateral leg pairs strike the ground, the more pacey the horse is said to move, and the less comfortable the gait is to ride.

### **Foxtrot, Trocha, Marcha Picada**

Different names for a trotty four beat gait. Again we have the same footfall pattern as for the rack, except this time, the diagonal leg pairs strike the ground closer together in time.

You would hear: pa---ca-pa---ca-pa---ca.....

The more diagonal the gait by increasing the time between the lateral legs landing and decreasing the time between the diagonal legs landing, the more trotty the gait becomes and the less comfortable it is. Some people argue that the trocha is less tiring to the horse than the paso gait, and it still a lot more comfortable for the rider than a trot, so the gait is often used when long distances are to be ridden.

### **Other Four-Beat Gaits**

There are other terms, such as Running Walk, Amble, Slow Gait and many others which refer to various types of four beat gaits other than a flat foot walk.

The listing of gait names is not complete, as every horse breed and language has a term for the saddle gaits. Some horses are distinct in their way of moving, irrespective of the actual gait performed. For example, Saddlebreds are known for their high knee and hock action. Icelandics also have a lot of action but are renowned for their speed in toelt and pace. Paso Finos are expected to show little lift but high collection and as little forward movement as possible whilst maintaining a very high gait frequency. Peruvian Horses have a very loose shoulder which swings out with the whole front leg resulting in *termino*, being the peculiar way the horse brings his front legs forward in an outward arc.

A horse's conformation will determine the way in which it moves. Therefore an Arabian will move different to an Icelandic, and Paso Horse will move different to a Walking Horse. This holds true for all gaits of the horse. Training level, footing, fatigue status and load will further modify the way in which a horse moves.

*Information taken from Narrawin Stud in Victoria, Australia.*