

WORKING WITH GAITED HORSES

by Lee Ziegler 1988, revised 1997

HOW TO TELL ONE GAIT FROM ANOTHER OR WHAT IS THAT HORSE DOING?

Welcome to the wonderful and occasionally frustrating world of gaited horses. Unless you were lucky enough to buy a horse that was completely “set” in his gait, along with the lovely gait you bought him for, he also came with the unwanted bonus of a bunch of different gaits that you probably didn't know existed when you were riding walk-trot horses. If you are ever going to ride your gaited horse well, you will need to learn about those gaits. You will need to look at how horses move, listen for hoof beats and feel some very subtle differences in rhythm and sway in the saddle. You need to learn how to tell one gait from another.

DEFINING GAITS

Gaits are usually defined by their footfall sequence, timing, support sequence, and the shift in the center of gravity of the horse. There are many gaits theoretically and actually possible for horses, but the ones most likely to occur in gaited horses (in no particular order) are: the hard trot; the fox trot; the “fox walk”; the running walk; the ordinary walk; the flat walk; the stepping pace; the hard pace; the rack; the “saddle” or stepped rack; the canter; the lope; and the gallop. Within each of these gaits there are some possible variations. For example: a true trot is defined as a diagonal gait in which right hind and left front hit the ground at the same moment, followed by a moment of suspension when all four hooves are clear of the ground, followed by the simultaneous touch down of the left hind and right front. However, in some horses that are very collected, the hind hoof of the diagonal pair sets down before the front, and in others that are “heavy on the forehand” the front of the diagonal pair hits first. Sometimes, the moment of suspension disappears and there may be a point in which three hooves are in contact with the ground. Since you can't see any of these variations without slow motion video, don't worry about them. All you need to know to ride effectively is which general gait a horse is doing, not precisely how he is doing it. Scientific gait analysis is not necessary for riding and enjoying your horse.

HOW TO LOOK AT A GAIT

Without using video to slow down the motion, you look at a moving horse in real time. There is a lot going on and it can be confusing if you look at the whole horse while you try to decide what he is doing. The trick is to look at the horse in parts, then to put them all together to determine his gait. Look at legs, look at hooves, and then pull back to see what the rest of the body is doing.

LEGS:

The easiest part of a gait to see is leg movement. As a horse goes by in gait, look at the foreleg and shoulder and at the hip and thigh on the side toward you. Watch them for a while. Do they move forward together? Do they seem to be going in opposite directions? Pull back your vision and include the movement of the legs on the far side of the horse. Does any leg on the far side seem to move forward at the same time as one on the side toward you? Which one?

If the legs on the side toward you move forward at the same time, the horse is doing a lateral gait. It may be a pace, stepping pace, “show” running walk or a “stepped” or true rack. If the legs on the side toward you seem to move in opposite directions, the horse is doing a diagonal gait. This will be either a hard trot, fox trot or “fox walk”. If the legs appear to move independently of one another, not moving forward together or paired with legs from the far side, the horse is doing a square gait. This may be either a walk, flat walk, or running walk. All of the lateral, diagonal and square gaits are symmetrical, that is, the legs on one side of the horse mirror the actions of the legs on the other. If some legs appear to work together and others do not, the horse is doing an asymmetrical gait, either a canter or gallop. Since those gaits are fairly easy to recognize, we'll concentrate on identifying the symmetrical ones.

HOOVES AND BEATS:

Once you have an idea which legs are moving together (lateral, diagonal, square) look more closely at the way the hooves hit and leave the ground. Even without slow motion, you can see the general characteristics of the gaits by paying attention to the footfalls.

Diagonal gaits:

The trot: In this most diagonal gait, the diagonal hooves lift off from and hit the ground at the same moment. [Right hind, left front, alternate with left hind, right front.] To see this, focus on a front foot, then include the diagonal hind in your field of vision. You can clearly see them lift off and hit together, in a hard trot. The sound will be a 1-2 beat.

The fox trot/trocha (for Paso Finos) pasitrote (for Peruvians): In this diagonal easy gait, again the diagonal pairs of hooves lift off and move forward together, but this time the front will hit noticeably before the hind of the pair. To see this, focus again on the front foot, then include the diagonal hind in your field of vision. As the legs move forward together they will be just slightly out of time with one another and the front hoof will set down just before the hind slides into place. If you look at the hooves on the side of the horse toward you, they will lift off and set down separately. The sound will be an uneven, 1-2--3-4, with the beats closest together coming from the set down of the diagonal hooves. You may hear it as ka-chunck, ka-chunck sound.

The “fox walk”: This is really just a slower version of the fox trot, done with a slightly longer time interval between the set down of the front hoof and its diagonal hind. It looks and sounds like the fox trot, with the same uneven 1-2--3-4 timing. It is much easier to see a front hoof hit before the diagonal hind in this gait than it is in the faster fox trot. Focus on

the legs on the side toward you, note that they are lifting and setting down independently, then look at one front and its diagonal hind. They move forward together, but the front hits significantly before the hind.

Lateral gaits:

The pace: In this most lateral gait, the lateral (same side) hooves lift off and set down at the same moment. [Right hind, right front, alternate with left hind, left front.] To see this, focus on the hooves on the side of the horse toward you, and you will see them lift off and set down at the same time. The sound will be a 1-2 beat, like the hard trot, but this time the sound will come from the set down of alternating lateral pairs of hooves.

The stepping (broken) pace: In a stepping or broken pace the lateral hooves no longer set down at the same time, although they do appear to lift off the ground simultaneously. In this gait, the hind hoof hits just before the front on the same side. To see this, look at the hind hoof on the side toward you, then broaden your field of vision to include the front hoof on the same side. They will lift off together, but the hind will set down before the front. The sound will be an uneven

1-2--3-4, similar in beat to the fox trot, but this time the beats closest together will come from the set down of the lateral hooves. This gait is called a “sobreandando” in Peruvian horses, and a “skeith-tolt” in Icelandics. It is also known as the “amble” in English.

The “saddle” or stepped rack: This gait is a modified stepping pace, in which the lateral hooves are lifted at almost the same moment and set down separately. To see this, again focus on the lateral hooves, notice that they seem to lift at the same moment, but that there is a significant interval between the set down of the hind and fore. [Because of the speed and action of the gait the set down of the hooves can be very difficult to see.] The high action of the front legs delays the set down of the front hooves, giving an even 1-2-3-4 beat to the gait. Unlike the true rack, in this gait there are always two and sometimes three hooves in contact with the ground. This gait is called a “paso corto” in Paso Fino horses, sometimes a “paso llano” in Peruvian horses and is often called a “single foot” in English.

The rack/tolt: A faster version of the “saddle,” the rack looks virtually the same without slow motion video. The lateral hooves lift at the same time and set down separately. The beat is again an even 1-2-3-4. However, in the rack the horse is supported first by two, then by one hoof at a time. He jumps forward between his transverse pairs of legs (both front, both hind) so that there is a moment when all his weight is supported by first one hind hoof, then by one front hoof. This gait is very fast and hard to see without slow motion. It is called a “hreina tolt” in Icelandic horses, a “trippel” in Boerperds, and a “largo” in Paso Finos.

Square gaits:

The walk: In a walk the hooves lift off and contact the ground at even, separate intervals. Look at the hooves on the side of the horse toward you. They lift separately, do not travel forwards at the same time, and set down at separate intervals. The beat is an even 1-2-3-4.

The flat walk: This is the same as an ordinary walk, speeded up a little bit. The hooves lift and set down at distinct, even intervals. The beat is again a 1-2-3-4.

The running walk/paso llano (in Peruvians): A good running walk is the same as a flat walk, again with more speed. The hooves on a side lift and set down separately in an even 1-2-3-4 beat. Often, what is called a running walk is a long stepping “saddle” rack. It is still an even four-beat gait, but the legs on one side seem to move forward together, and the hooves lift at the same time, setting down separately. Focus on the hooves on one side of the horse to see the difference in the two gaits.

BODY LANGUAGE:

Once you have looked at leg movement and hoof timing, stop concentrating on the legs of the horse and look at his whole body. You can tell a lot about what gait a horse is doing by the way he moves his head, neck and hindquarters.

Diagonal gaits:

The trot: In a trot the horse will not nod his head in any way, and his hind quarters will remain steady as his whole body rises and falls with the motion of the gait. His tail may sway a bit from side to side as his body swings in a good relaxed trot. In a good trot a horse “tracks up” and sets his hind hoof down on the track of the front on the same side.

The fox trot: In the fox trot the horse nods his head and neck up and down in time with the motion of his shoulders and the reach of his hind legs. His hind quarters will bob up and down in rhythm with his gait. He will seem to take a long, reaching step in front and a quicker, higher step in back, “breaking” (bending sharply) at the hock as his hind hoof hesitates before following the diagonal front to the ground. The horse may “cap” or disfigure his front track with his hind in this gait.

The “fox walk”: Again, this is very similar to the fox trot, just done at a slower speed. The horse will almost always “cap” his front track with his hind in this gait. Top speed is probably no more than 6 mph in the fox walk.

Lateral gaits:

The pace: In a true pace a horse will swing his neck and head from side to side, away from the advancing foreleg. He will also swing or “wag” his hindquarters from side to side in this gait. There will be no up and down bob of the head or croup in a pace, but his whole body may appear to rise and fall in a motion similar to the trot. A horse will usually overstep his front track with his hind by a fair amount in the pace.

The stepping pace: A horse in a stepping pace will usually swing his head from side to side with no bobbing motion of the croup. His back will stay relatively stable, with none of the up and down movement of the pace or trot. Again, a horse will usually overstep his

front track by some distance in the stepping pace.

The “saddle” or stepped rack: There is no head nod in this gait, but the hindquarters are very active in an up and down bobbing motion. The shoulders also move up and down, creating the high action of the front legs. The horse takes a fairly short step, overstepping his front track by a short distance. There may or may not be some “paddling” or “termino” in the front legs as they move outward from the shoulder.

The rack: Again, there is no head nod in this gait, and the shoulders and hindquarters are very active. The horse appears to jump from one foot to the other as he moves. There is more overstep in this gait than in the “saddle,” but not as much as in the running walk.

Square gaits:

The walk: In an ordinary walk, a horse (not just a gaited one) will nod his head and neck up and down with the motion of his shoulder and the protraction and contraction of the muscles along his back. The croup will remain steady with no bobbing up and down. There will be some over step of the front track by the hind of the same side, the distance varying with the conformation and speed of the horse.

The flat walk: In this type of walk the head nod will be noticeably more rapid than in the ordinary walk. The undulating motion of the ordinary walk diminishes with increased speed, making the back more stable. The croup will remain steady with no up and down bob, and the over step may be more than in the ordinary walk. Again, speed and conformation will affect the amount of over reach. This is simply a faster, more active version of a regular walk.

The running walk: Head nod continues into this fastest of the walking gaits. The croup remains steady and the hind legs take long, reaching steps, unlike the higher, quicker motion in the fox trot. There is no obvious “breaking” in the hocks in the running walk, and the front legs take a less reachy step than in the fox trot. Over step increases so that the horse is often stepping over his front track by a couple of feet.

The paso llano: In this gait, the head nod disappears, its place taken by the action of the shoulders known as termino. The croup action remains the same, steady with a long reaching step in the rear with no “breaking” in the hocks. There may or may not be significant over step of the front track by the hind, depending on the “advance” or forward motion of the horse.

HOW IT FEELS

Knowing the mechanics, sound and look of each gait doesn't do you much good once you are in the saddle. Unless you ride in a mirrored hall, with a good ground person, or review your work constantly with a video recorder, you also need to know how each gait feels when you are riding it. Only when you now that what you feel isn't the “right” gait will you be able to start doing something to correct the “wrong” one. Here, ranging from rough to

smooth, is the way the gaits feel under saddle.

Trot: I assume you know how this feels, but in case you have forgotten, a trot is a gait that can range from the relatively comfortable jog to the fast extended trot that will jar your teeth unless you have learned how to sit or post it. Motion in the trot is an up and down bounce as the horse jumps from one diagonal pair of legs to the other.

Pace: This gait is as uncomfortable as any trot, this time bouncing the rider from side to side as the horse jolts from one lateral pair of legs to the other. It is not easy to sit, but it can be posted if you are adventurous. [Icelandic horses do a flying pace called a “flug skeith” which is so fast that it is no longer uncomfortable. This gait is not common in other breeds of gaited horses.]

Stepping pace: This gait gives a subtle side to side sway instead of the jolt of the true pace. This rocking motion can sometimes make people seasick, but the gait is fairly smooth to ride.

Fox trot/trocha/pasitrote: This gait moves the rider front to back in the saddle with a definite “push-pull” motion. The hind quarters feel active, moving up and down in a kind of “stutter step”, and in some horses you can feel a pull from the shoulders in a rolling motion. There is never a sensation of a side to side sway in this gait.

“Fox walk”: This is a smoother version of the fox trot, with less “push-pull” motion and a less well defined “stutter step.” Again, there is no side to side motion in this gait, and less “bounce” to the hind quarters than in the true fox trot.

Running walk/paso llano: This gait also moves the rider a bit from front to back in the saddle, combining it with a rolling motion in the shoulders. However, there is no noticeable up and down motion in the hindquarters, just a driving sensation as the hind legs push the horse forward. The sensation is the horse equivalent of riding on a river boat with a paddle wheel turning just out of phase on each side.

“Saddle” or stepped rack: The movement in this gait is a very slight side to side sway, but the primary feeling is of the legs moving rapidly and independently. The rider sits at the smooth center while the shoulders and hindquarters are moving rapidly up and down.

Rack: The feel of this gait and the “saddle” are very similar, although this is a faster longer reaching gait. There is more of a feeling of the horse “climbing a ladder” in front in this gait, and the hind quarters feel very active. Again, the rider is sitting in the smooth center while action goes on all around him.

Walk and flat walk: These two gaits feel almost the same. In the ordinary walk the rider moves from front to back in the saddle, with no part of the horse feeling more active than any other. You should feel each footfall distinctly and evenly as the horse moves in this gait. In the flat walk, the back and forth motion is reduced and you can feel a strong push from each hind leg. The flat walk will often be more comfortable than the ordinary walk as

the undulating motion in the horse's back is reduced.

It takes time, practice, and thought to feel these differences in the gaits, but once you know what a particular gait should feel like you will not mistake it for another even if both are comfortable.

FROSTING

If you know the look, sound and feel of a gait, you can usually tell what a horse is doing without slow motion video to pick out each step. Don't be distracted by the length of step or speed of a gait. Those may be aspects of the quality of a gait, but they are not necessary to define a gait. Remember that some of the “body language” of gaits can be artificially produced. A horse can be made to nod his head in a rack or a hard trot to confuse people who rely on that sign of a running walk or fox trot. Some relaxed horses flop their ears in time with their gait. Others simply can't hold them still because of human intervention. A quick step may be a sign of a good paso corto, or it may result from worn feet on hard ground. The gait is what the legs, feet and body of the horse determine it to be, the rest of these clues to a gait are mainly frosting on the cake.