

For my gait analysis in hand I assessed 3 very different horses moving on firmer ground rather than the arena. The first horse was an aged gelding QHx, the second large pony with light bone and the last looked to be some kind of draft cross. All three horses were well behaved for the exercise and my job was made easy by experienced handlers.

At the walk in a straight line, the pony had the best dorsiflexion in the forelimbs. Although the aged QHx was a bit more upright in both front forelimbs than the pony, the draft cross had a distinct difference where the right front had little to no dorsiflexion and the left front appeared normal. This was also apparent when they were trotting later but there was no head bob accompanying the asymmetry in the draft cross. I wanted to see if anything changed on a 15 meter circle so I watched them first at the walk and noted no difference comparing to the original straight line. When asked to trot on the circle the draft horse still looked the same in the fetlocks but now the QHx really showed less dorsiflexion on the circle to the left and a very slight head bob.

When comparing the protraction and retraction of the limbs (the "A's"), the horses all looked fairly even at the walk on the straight line. The draft horse's stride actually improved as he warmed up and the pony looked even freer as he warmed up. The pony definitely had the gait that was most pleasing to the eye of the three horses. The QHx showed less protraction or cranial phase with the left forelimb at the trot more than the walk. The hindlimbs were symmetrical.

The shoulders of all three horses appears to swing freely and even comparing the right to left side at the walk and the trot. It was noted the QHx barrel did not swing to the left side as much as it did to the right where the other two horses were equal. The horses all carried their head and necks centered and in line with their bodies.

Although nothing was really noted on the pony viewing from behind at the walk, when he trotted there were some slight asymmetries. His left hind veered slight to midline which was actually hard to see when I watched him from the side. Also, when he picked up the trot his tail cocked to the right. The handler did not know if this was normal for the pony or acquired. He does look like he might be part arab so? He did have a nice cranial swing to the pelvis and if I were being picky I would say that the right side of the pelvis does not drop as much as the left side. The draft horse tended to lead with his right hip but this was minimal. The QHx had more dorsal to ventral movement (like Charlie Chaplin) than a cranial swing.

About 25 minutes into the session while we were almost done, I noted that the QHx was shorter in that left forelimb so I asked him to stop and just finished the trotting part of my assessment on the other 2 horses. Nothing else out of the ordinary was notes in the session during the walk and trot portions on these remaining 2 horses.

I was able to ask the handlers to back up each horse and included the QHx. The pony backed up fine although his left hind consistently tracked laterally but it was minimal. The draft horse backed up fine and tended to step fairly large. The QHx had no problems backing either.

All three horses crossed over behind fine although the QHx had a bit more circumduction with the right hindlimb.

I would place the large pony as the best overall mover in hand compared to the other two horses, followed by the draft cross and finally the QHx. I would be curious to see if my findings were similar with the weight and influence of the rider.