

Notes from Gait Analysis Class 2008

These are really good notes from the recent Gait Analysis Class in Palmerston North that Judy Bracey has kindly offered to share with us.

These will give you some insight into what it was all about. The whole two days was ultra inspiring with videos of many superbly 'finished' horses we can all hold in our minds and aspire to..

Dr Deb Gait Analysis, Notes from Day 1, Thankyou Judy

Gait is a name for a particular co-ordination of the limbs. Timing is a crucial factor of gaits, Gaits exist within a timing range, it's the order in which the feet hit the ground.

Timing depends on what the back is doing- the back dictates what the legs are doing. Posture is what the back is doing.

Suspension is when no feet are on the ground. The walk has no period of suspension. With regard to the horses gait's the time between the sounds is the most important.

The beat is the potential for rhythm- for how long you are going to 'play' the beat. A beat can be sounded or silent, give time for the places with no sound, the blank place counts more!

The silences define the rhythm.

Walk

Start, Left hind--left front--right hind--right front, 4 sounds, 4 beats.

Trot

Left hind/Right fore (clip)--suspension--right hind/left fore (clop)--suspension

2 sounds, 4 beats. The trot is a airy gait.

Canter

Left hind--right hind/left fore (together/diagonal)-- Right fore--suspension

3 sounds, 4 beats.

Gallop

Left hind--Right hind--Left fore--Right fore--suspension/flight

5 Beats, 4 sounds.

Pace

Diagonal Left hind/ Left Fore--Suspension--Right hind/Right fore-- Suspension

4 beats, 2 sounds.

'Gait' is built out of a superb and energetic walk. 'Gait' is just an altered timing. 'Gait' was the crowning glory in horse training as it is easier for the horse, there is no big effort or push. Firstly shape the horse up so he can walk, trot and canter then gait.

The horse is as he is.

When assessing the horses movement, look for length of step in the walk, hind limbs, short length of step could mean tightness in the back or hind limbs.

Check how the hind legs move, e.g. do they swing out?

Are the steps equal-- are all four corners reaching equal? Is he leaning.

Check the (upside down) "V" in the legs, what size are the "V's"--compare front to back are they equal or is he moving bigger behind or bigger in front? (enables you tell how much on the forehand the horse is)

The most effective time for physiotherapeutic riding is the time between two curves on a figure of 8/serpentine. The bend comes from the change of the inside hind not the hand. Step under the body shadow/step towards the mid line. Feel that foot come in under the riders hip bone. The ribs have to turn loose, the horse can not be free in the ribcage if the neck and hinds are braced.

Green and braced horses, work both ends, twirl the head and twirl the loins so the middle--ribcage-- will come loose. You might have to go slow to enable this to happen. Look at the horses outside ear when on a circle, with your outside eye.

It is easier for the horse to collect in amble than in trot. Amble is a very fast walk.

Extensions of gait mean longer flight/suspension. Not faster.

Foxtrot/faux trot, the forefoot comes/lands early. Can be sign of tight back.

Delays in the landing of the front couple of feet show the hinds are doing a good amount of work.

When training the horse pre-visualize what is needed/prepare .

Transition is a change of timing.

The horse must push down to make himself go up, not push forward, **push up/bounce**. The problem is not to get them to go forward but to get them to push down--this causes them to go up!!! The wider the steps the horse is forced to take the less he can bring!! You can push a horse off balance asking for too fast or too long a stride--think downwards and up and springing! (Remember, Lynly's demo of stride length ..makes a joke of 'the horse must be more forward')

The horse adopts the intended lead, in canter, when he stands on the correct hind leg. The lead is made by the outside hind leg, it's the anchor, where the weight is, so the horse can push up into canter. Down transitions are also pushing down into the ground/down and forward into the ground.

If the horse throws his head up into canter he is using his front end to get the canter depart, he can't or is unable to use his quarters. A stiff back can cause locked stifles/stumbling in hinds. The walk can become pacey/faux if something is causing the horse to shorten the timing, he could be bracing his back due to discomfort, not being okay within himself.