**Introduction**

Performing an assessment is an exciting opportunity to gain more information about the horse’s mental & physical status. Learning goals:

* Train your senses
* Increase your understanding
* Detect changes early on
* Assess load capacity
* Assess trainability

## **Basic structure** To keep oversight, each assessment should follow a logical structure:

1. General information
2. Observation (static)
3. First Palpation
4. Observation (dynamic)
5. Second palpation

## **Overall markers**

During the entire assessment, you check the presence / absence of the following makers:

* Pain / Stress / Discomfort signals
* Abnormal posture
* Altered gaits
* Soft tissue development
* Stiffness / reduced mobility

Next to structure comes order. It doesn't matter what order you choose if it is consistent throughout all your assessments. Examples include:

* Left to right - front to back - top to bottom
* Right to left - back to front - bottom to top

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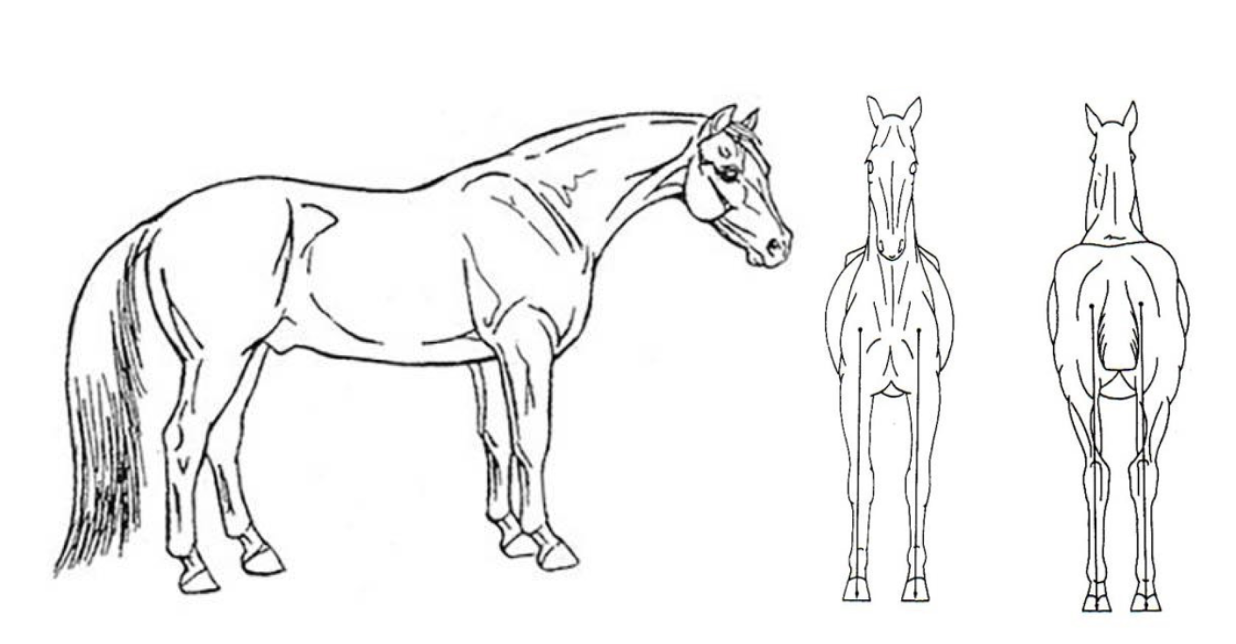
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# **General information**

To get started, collect the horse’s general information with regards to personal data, management, and training regime.

|  |  |
| --- | --- |
| **Date** |  |
| **Author** |  |
| **Country** |  |
| **Horse** |  |
| **Breed** |  |
| **Age** |  |
| **Sexe** |  |
| **Pedigree** |  |

**INSERT HORSE’S PICTURE HERE**



# **Management**

Gather information on the general management of the horse as specified below.

|  |  |
| --- | --- |
| Stabling / turnout ratio  What type of surfaces? |  |
| Daily diet |  |
| Dentist  Last visit; any issues noted? |  |
| Hoof care  Barefoot or shod? Intervals? |  |
| Bodywork sessions What type and intervals? |  |
| Worm management Last faecal count / dewormer? |  |

# **General habits**

A horse has many habits that are essential for its survival. They roll, chew, graze, run and rest. Observing these natural habits will tell you more about its ability to perform these natural habits and with what level of balance. Below you’ll find the tasks specified on what and how to observe.

|  |  |
| --- | --- |
| Rolling pattern Can he/she roll over?  Are the limbs tucked in? |  |
| Chewing pattern Left / right symmetry |  |
| Grazing vs browsing pattern and ratio |  |
| Resting pattern  Does he/she rest often?  Is it always the same limb? |  |

# **Training**

Consider the horse’s current workload. If the horse is currently not in training, then please just fill in the personal agenda of the horse, I.e., how its regular week is structured in terms of handling and activities.

|  |  |
| --- | --- |
| Main Discipline |  |
| Please summary your current training schedule (last 3wk)  Include:  Current focus of the training How many times a week?  +/- duration of a session?  Ratio groundwork vs ridden What gaits used?  Variation intervals  Training Surfaces |  |
| Are there any performance problems / struggles? |  |
| Equipment used |  |

# **Medical history**

When relevant, please fill in the horse’s medical history. Injuries include events after which the horse seemingly looked alright such as a pullback trauma, a fall where the horse immediately got up again without external blemishes or lameness seemingly visible.

|  |  |
| --- | --- |
| Known injuries / accidents |  |
| Known pathologies; malformations |  |
| Medication (if relevant) |  |

# **Bodily observation**

Apart from the general habits, you can also observe confirmation and posture. Confirmation is everything related to the skeletal framework of the horse – and therefore cannot be altered – whereas posture relates to how the horse arranges itself – and thus can be changed. During observation, it is useful to ask the horse to square up as much as possible. However, don’t force it if the horse shows discomfort or struggles to do so – in the latter case, consider this as valuable information in the assessment process.

Observe the horse in a comfortable environment. Take at least 2 meters distance and walk around the horse observe it from all possible angles:

* Front – back view
* Lateral view
* Top view

Below you can find some key areas to assess, first starting with an overall scan and then going more into details.

# **First overall impression** First impressions count. Before going into details, consider some overall markers to determine first impression.

|  |  |
| --- | --- |
| Level of relaxation / comfort Does the horse appear comfortable?  Are there any pain or stress symptoms? |  |
| First impression of overall posture? |  |

# **Segmental observation**

|  |  |
| --- | --- |
| Skin Scan Blemishes; scars; wounds or fat deposits? |  |
| Overall Posture Scan Head and Neck Position  Limbs & Feet stance |  |
| Overall (a)symmetry scan:  Shoulder-Pelvis Ratio Left Right differences  Topline underline differences |  |
| Thoracolumbar spine  Straight back or deviations? |  |
| Muscle toning / linings |  |

**General health assessment**  
A physiological assessment consists of measuring the horses’ vitals.

|  |  |
| --- | --- |
| Resting heart rate  Normal = between 25-40 p/m  Abnormal = > 45 |  |
| Respiration rate  Normal = 8-15 breaths p/m  Abnormal = > 20 |  |
| Temperature  Normal = 37 – 38.5 Celsius |  |
| Capillary refill time  Pinch your finger on the horse’s gums for 2 s. watch how quickly the white mark returns to normal. Normal = Less than 2 seconds  Abnormal = > 3 seconds |  |
| Hydration Pinch some skin on the neck and see how quickly it returns to normal. Normal = 1-2 seconds. Abnormal > 3 seconds |  |
| Mucus membranes  Normal = Pink / Bubblegum colour  Abnormal = white, red or blue (purple) |  |
| Ulcers points & gut sounds  Normal = sounds every 45-90 seconds |  |

# **Palpation**

Palpation is the process of feeling and observing the subsequent reaction. So be careful to NOT use any pressure from your hands, fingers or nails and keep close eye contact with your horse while ensuring to prioritise your own safety. It’s not about massaging or manipulating, just feeling what is there or what is not. Go from left to right side and ALWAYS compare both sides.

Try to square up the horse as much as possible to test for symmetry, but never force it.   
  
Give the horse some rest or movement in between when the horse asks for it. Always monitor reactions and keep checking with the horse: you want to work with the horse and not do something to the horse. NEVER go against a brace. Remember, the more you listen the more a horse tells. So, if you feel a horse bracing against a certain direction or movement in general DO not force it but consider it as useful information.

From palpation, you can continue with a few checks for mobility and range of motion. Always be soft and careful and do not over-ask or over-stretch as then you risk tearing up muscle’s fibres. Below you can find some key areas to assess.

## **General palpation**

|  |  |
| --- | --- |
| Overall skin scan: Any temperature differences, irregularities, swellings, wounds, or fat pockets? |  |

After you’ve done an overall palpation scan, you can assess different body segments more in detail. Consider their feeling separate as well as in relation to the other body parts.

## 

## **Segmental palpation - head**

|  |  |
| --- | --- |
| Teeth & Mandible Incisors aligned?  Can the jaw move evenly?  Muscle symmetry & development |  |
| Hyoid Is it in the middle?  Can you move it easily? |  |
| TMJ  Any reactions?  Overall (a)symmetry |  |
| Ears  Tight or floppy?  Mobile at the base? |  |
| Parotid glands Normal or swollen?  Retromandibular space l/r |  |

## **Segmental palpation – neck**

|  |  |
| --- | --- |
| Poll Muscle development & symmetry Bony landmarks (osseous) |  |
| Skin & Fascia  Turgor test |  |
| Top-line / underline mobility |  |
| Muscle development  Hyper vs atrophy; (a)symmetry |  |
| Joint ROM Passive & Active  ADVANCED only |  |

## **Segmental palpation – shoulders**

|  |  |
| --- | --- |
| Muscle development & symmetry |  |
| Mobility sternum- whither rocks  Left – right and forward – backward |  |

## **Segmental palpation – front limbs**

|  |  |
| --- | --- |
| Upper limb muscle development  & symmetry |  |
| Joint surfaces & mobility  Joint mobilisations  ADVANCED only |  |
| Tendons & Ligaments  Any swellings? Reactions? |  |
| Feet  Medio-lateral balance  Toe length Bar & heel height  High heel low heel?  Cartilage (sidebone?) |  |

## **Thoracolumbar spine & ribcage**

|  |  |
| --- | --- |
| Muscle development & symmetry |  |
| Osseous palpation Dorsal spinous processes  Lateral surfaces of ribs |  |
| General mobility  Wither rock  Ribcage rock |  |

## **Segmental palpation - hindquarters**

|  |  |
| --- | --- |
| Muscle development & symmetry |  |
| Osseous palpation Pelvic points  Tail bones |  |
| Joint mobilisation  LS movement (F/E) Tail movement |  |
| Sacro-sciatic ligament  Anal symmetry |  |

**Segmental palpation – hind limbs**

|  |  |
| --- | --- |
| Upper limb muscle development & (a)symmetry |  |
| Joint surfaces & mobility  Proprioception tests Joint mobilisations  ADVANCED only |  |
| Tendons & Ligaments  Any swellings? Reactions? |  |
| Feet  Medio-lateral balance  Toe length Bar & heel height  High heel low heel?  Cartilage (sidebone?) |  |

# **Movement**

To assess movement, it is best to evaluate the horse both in its natural environment as well as in controlled environment (clinical evaluation). Ideally, the movement is assessed on various surfaces and inclinations:

* Soft surface
* Hard surface
* Small hill

Try to assess movement and write down what you see without diagnosing. So, for example, consider stating you see an asymmetry in stride length with the right limb shorter and refrain from sentences such as ‘’the horse is lame’’.

## **Overall impression**

|  |  |
| --- | --- |
| Does movement come easy? |  |
| Are there signs of stress, pain, or discomfort? |  |
| Overall balance  Sling systems, posture, spine,  and recoil system |  |

## **Walk & trot – straight line**

Ideally assess on both soft & hard surface and write down any potential differences between the two.

|  |  |
| --- | --- |
| Front view:  - Head and neck movement - Tracking up | Walk:    Trot: |
| Hind view:  - Pelvic movement  - Tail carriage  - Ribcage rotation - Tracking up  - Sole presentation  ADVANCED: joint movement  Hip, hock, and stifle | Walk:       Trot: |
| Lateral view: - Breathing  - Stride length (symmetry)  - Gait purity  - Muscle linings  - Shoulder movement  - Toe / heel landing    Advanced: joint movement  Elbow, carpus, fetlock, LS joint, stifle & hock | Walk:      Trot: |
| *Transitions Are the transitions from walk to trot smooth? What changes?* |  |

## **Walk & trot – circles and figures of 8**

|  |  |
| --- | --- |
| Spinal alignment & ribcage rotation |  |
| Tracking up of the limbs |  |
| Balance & proprioception |  |
| ADVANCED: Joint movement |  |

## **Backwards**

|  |  |
| --- | --- |
| Can the horse shift its weight from front to hind end? |  |
| Is there a clear diagonal pairing? |  |
| Can the horse coil the loins, or does it struggle? |  |
| Is the back-up straight or crooked? |  |

## **Incline – small hill up and down**

|  |  |
| --- | --- |
| Balance & weight division:  Uphill: pushing or pulling? Downhill: braking activity hind limb? Thoracic sling balance control? |  |
| Elbow stability Is there a double clunk? |  |
| Head and neck movement: passive or active? |  |

**Bonus – Canter**

|  |  |
| --- | --- |
| Transition quality |  |
| Loin coiling ability |  |
| Gait purity  (suspension & beats) |  |

## **Second palpation**

After the movement you can come back to palpation to check for heat changes as well as changes in swellings and ROM of certain joints of interest to determine whether movement is a good influence of not.

|  |  |
| --- | --- |
| Heat & Swellings:  Improved or not? |  |
| Joint ROM & tissue softness:  Improved or not? |  |

# **Overall end evaluation**

# Summarize the assessment below and consider:

# What did you learn from this assignment?

* What did you find easy / hard?

# The load capacity trainability of the horse

# The horse's strengths and weaker areas

# Priorities for improvement

# Finally, consider whether the horse changed throughout assessment? I.e., is the horse the same, better, or worse after the assessment in terms of biomechanics and mental state.