

Handling horses: safety and welfare aspects

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Introduction

- Breeding and working with cattle and horses employs 18 to 25% of the European population in the agricultural sector.



Introduction

- The proportion of accidents at work, which are directly linked to these animals amounts to approximately 15 to 20%
- The level of seriousness: a simple wound to the death of the working professional.



CAFRAT Leonardo da Vinci project



Combines knowledge in order to define common guidelines on the training of professionals working with cattle and horses



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CAFRAT Leonardo da Vinci project

- 5 countries (France, Germany, Ireland, the Netherlands, Poland)
- Such recommendations and methods are
 - based on identifying animal behaviour and its relation to man
 - analysing the professionals' training methodologies and working practices
- The project will help professionals establish a diagnosis of their own competencies and promote their knowledges



Horse-human interactions

- Activities
 - Stable management



Horse-human interactions

■ Activities

● Riding



Horse-human interactions

- Activities
 - Transport



Horse-human interactions

- Type of interaction
 - Occasionally

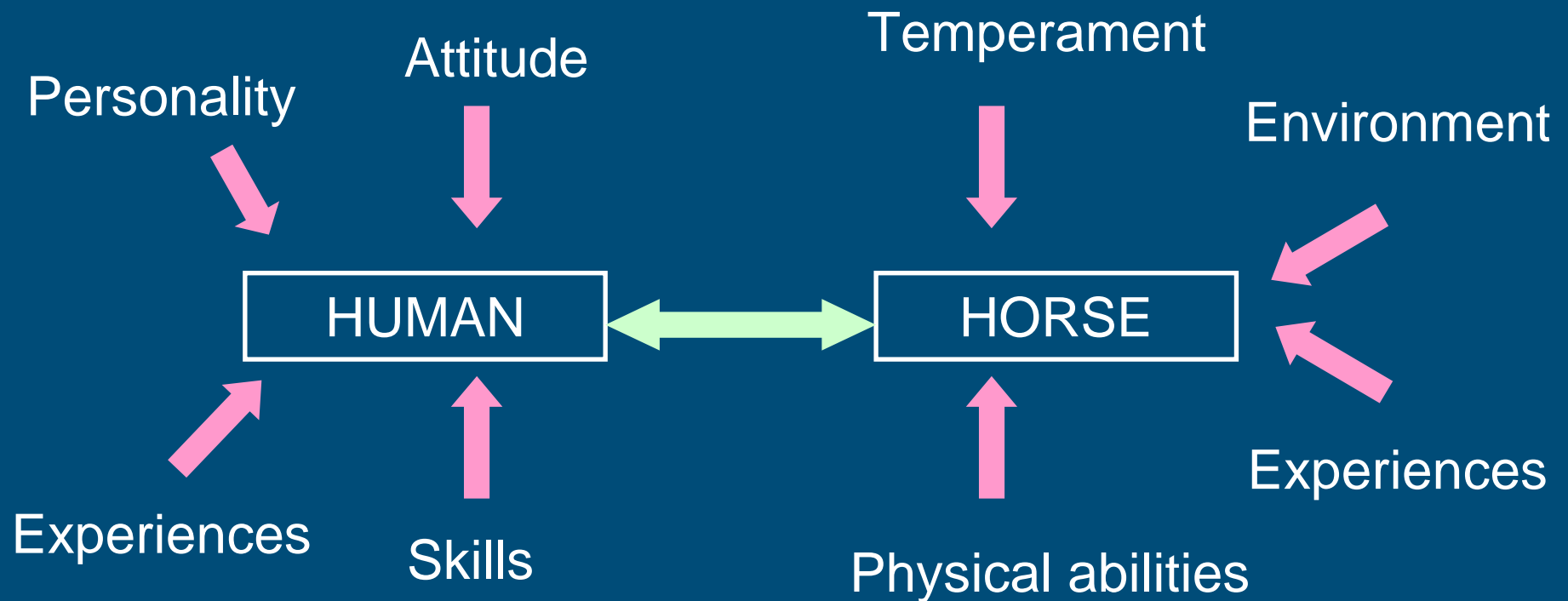


Horse-human interactions

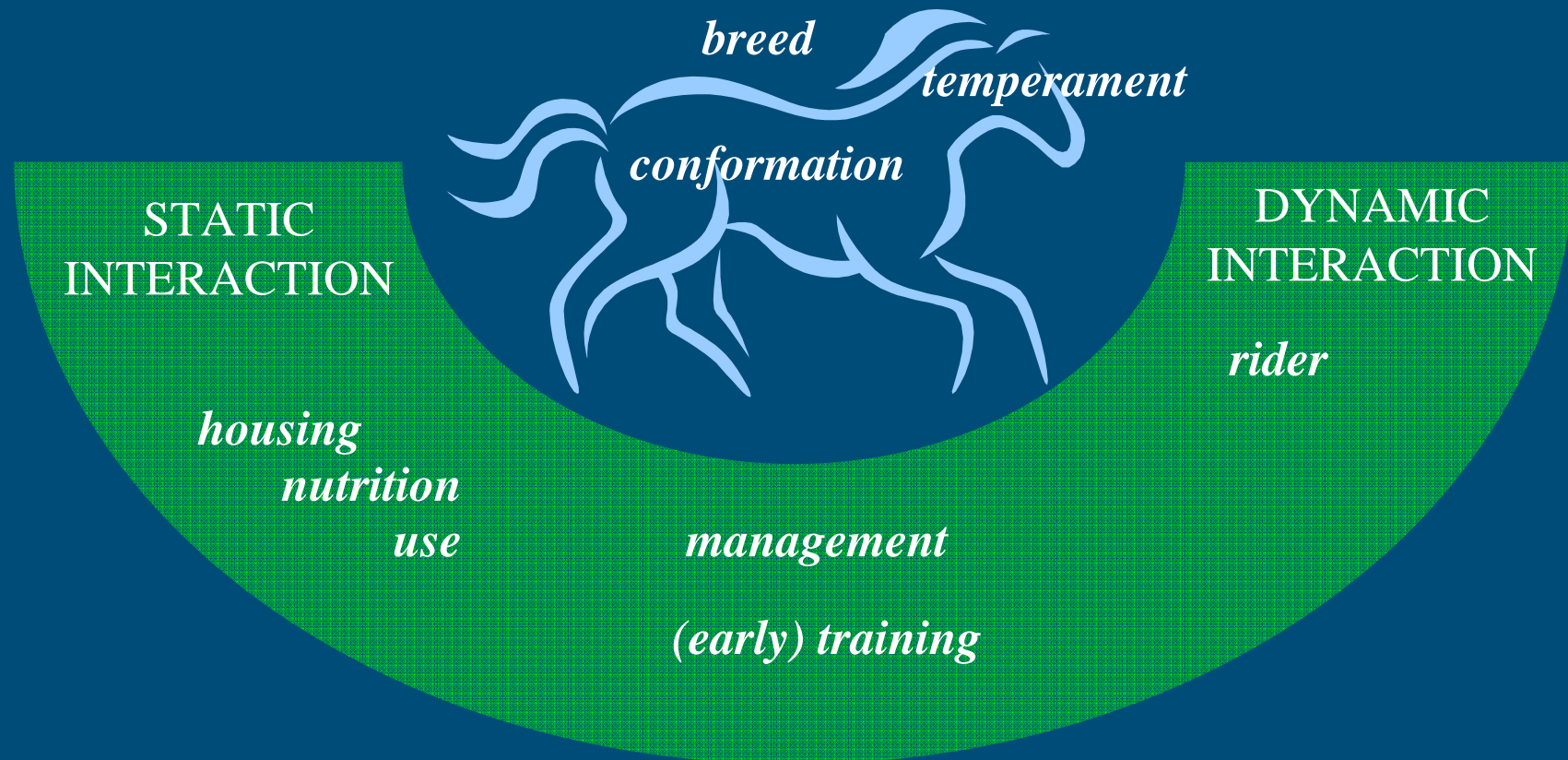
- Type of interaction
 - Long-term bond



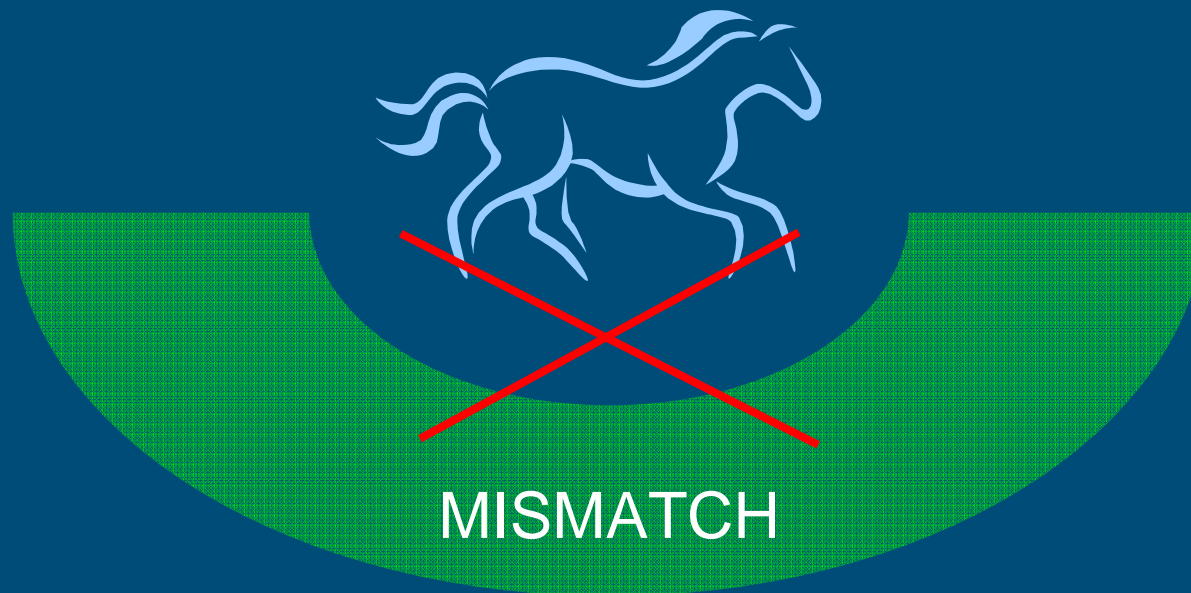
Factors influencing the human-horse interaction



Human-horse interaction and welfare



Human-horse interaction and welfare



Decreased Welfare

Safety concerns



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Human-horse interaction and welfare



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Human-horse interactions and safety

- Type of accidents
 - Riding accidents
 - Handling accidents (at foot)
- Human involvement
 - Professional
 - Non-professional





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WARNING

**UNDER THE MICHIGAN EQUINE
ACTIVITY LIABILITY ACT, AN EQUINE
PROFESSIONAL IS NOT LIABLE FOR AN
INJURY TO OR THE DEATH OF A
PARTICIPANT IN AN EQUINE ACTIVITY
RESULTING FROM AN INHERENT
RISK OF THE EQUINE ACTIVITY.**



The Following Tips Will Help You Learn How To Act Safely Around Horses.

① Praise often, punish seldom. Firm, gentle treatment will gain your horse's respect. Harsh or cruel treatment will make your horse fear you.

② Stop, look, listen. Use caution when working around horses. Horses are frightened by loud noises and may react in an unexpected way.

③ Never stand directly behind or in front of a horse. A frightened horse may kick or run over you.

④ Keep at least one horse length between you and the horse in front of you. Crowding a horse may cause him to kick or bite.

⑤ Check tack before you mount up and have a wrangler check your equipment if you suspect any problems. Improperly fitted and worn equipment may cause injury to horse and rider.

⑥ Please don't feed the animals - they might bite.

⑦ Never wrap or tie yourself to the horse in any way. Being tied may result in you being dragged by the horse.

⑧ At NO time put your foot through the stirrup - you may be dragged by the horse.

⑨ Dismount to adjust clothing or equipment. Horses may spook from unusual movement on it's back. Please don't dismount without wrangler assistance.

⑩ Dress the part. When riding, you should wear long pants, shoes with a heel or boots, and proper headgear as required. Helmets are required for those under the age of twelve.

Safe Riding Tips

① Please be honest with the wrangler picking your horse as to your experience, the times that you have ridden and how long it has been since your last ride. **THIS IS VERY IMPORTANT.**

② If you feel that the horse you are mounted on cannot be safely ridden by you, please notify a wrangler immediately and we will gladly choose another mount.

③ Please let the wrangler that's saddling the horse for you know if you feel the stirrups are not adjusted properly (too long or too short), so you'll be comfortable and have a safe ride.

④ If you feel the saddle is slipping sideways while riding, please let a wrangler or your guide know immediately so the saddle can be tightened.

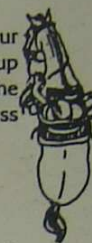
⑤ If for some reason you are having difficulties stopping your horse, please notify your wrangler or guide as soon as possible so someone can assist you.

⑥ Sundance allows open riding. To qualify, you must be able to ride without holding on to the horn of your saddle and surpass our minimum safety and riding standards.

⑦ At no time do we allow any horse to be ridden faster than a slow lope. At no time is there to be the running of the horse. Failure to abide by this rule will result in the termination of riding privileges at Sundance

Left Turn

Since the reins are in the left hand, shift your weight to be left side, extend your left hand up the horse's neck, then pull across his neck in the direction you want to go. The rein pulling across his neck will signal him to turn left.



Right Turn

Shift the reins to the right hand, shift your weight to the right stirrup, extend your right hand up the horse's neck, then pull across his neck in the direction you want to go. Some horses are very sensitive and will turn if the rein is laid on their neck, while others require a stronger signal.



To Go

Make sure reins are loose and hands forward. Lean forward slightly. Kick horse with heels as necessary and use voice command 'giddy-up'.

Stopping

To stop the horse, gather up (choke up) the reins, shift your weight back in the saddle by moving your shoulders back, straighten your legs and make sure your heels are down, your toes up and your weight balance in the saddle. To make horse stop, use the voice command 'whoa', while at the same time pulling straight back on the reins (hard if necessary). When the horse stops, immediately release the pressure on the reins.

Shoulders Back →



↑ Heels Down

PLEASE DO NOT DISMOUNT FROM YOUR HORSE WITHOUT WRANGLER ASSISTANCE!

*Thanks for Riding
with Sundance
Larry Hankins*



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Where does the relationship go wrong?

- 'More people with horses than horse people'



Where does the relationship go wrong?

- Lack of knowledge about how horses use subtle visual information



Insufficient knowledge

- Side effect?
 - Horses show lateralized responses to stimuli > side of approach has an influence
 - Larose et al. (2006) found emotive horses using left eye to look at novel objects



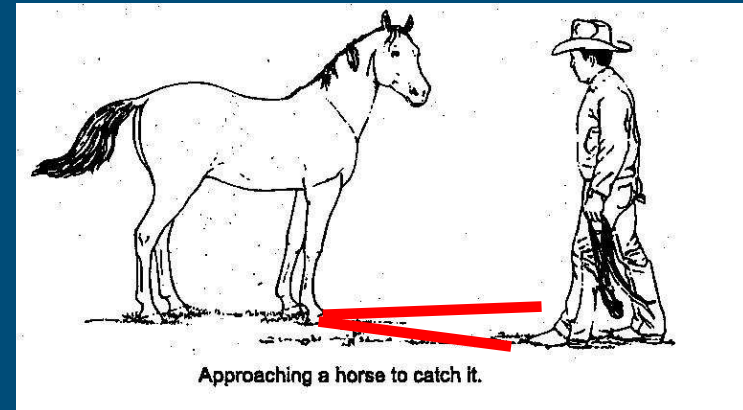
Insufficient knowledge

- Effect of gazing ?
 - Difference between approaching with or without visual contact?
 - One study did not find influence of direction of gaze on the reaction of the horse (Seaman et al. 2002)



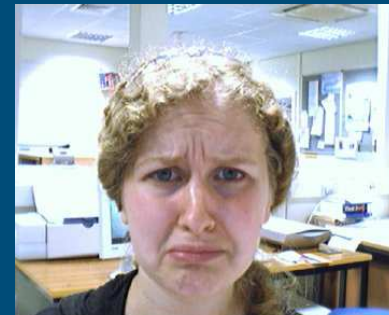
Insufficient knowledge

- Effect of positioning ?
 - Relative angle and distance from one organism to another
 - In cattle it is important (Grandin, 1980)
 - In horses no scientific studies but used in natural horsemanship
 - Highly probably that an inappropriate position (behind) may cause accidents



Insufficient knowledge

- Effect of emotional state of humans ?
 - Negative feelings towards animals when stroking increases heart rate (Hama et al. 1996)
 - Nervousness of rider increases heart rate of competition horse (Von Borstel et al. 2007)



Assessing the human-horse interaction

- Observer ratings
 - Assessing behaviour of the horse by familiar caretakers (Hayes, 1998)
 - Quarter horses: 'obedient' or 'patient'
 - Arabs: 'over reactive'
 - Assessing horse behaviour upon human appearance (Hausberger & Muller, 2002)
 - Thoroughbreds more indifference
 - French saddlebreds and Anglo Arabs more reactive

Assessing the human-horse interaction

■ Observer ratings

- Assessing behaviour in working situation by unfamiliar riders and judges (Visser et al. 2007)
 - Horse temperament effects riding performance
 - Horse emotional reactivity can be assessed by tests and by riders
 - Judges assess co-operation rider-horse differently from riders



Assessing the human-horse interaction

■ Observer ratings

● Assessing horse personality (Mills, 1998)

- Friendliness
- Confident
- Agreeableness
- Spooky
- ...etc.



These commonly used terms were interpreted differently by the assessors and therefore this method is not useful in training people to assess horse personality or behaviour objectively



Assessing the human-horse interaction

- Relation between observer ratings and behaviour observations (Lloyd et al., 2007)
 - Assessing horse personality with a horse personality questionnaire based on behaviourally defined adjectives by familiar handlers
 - Active Moves around a lot, does not like being still for long
 - Aggressive Causes harm or potential harm to other individuals, both horse and human
 - Apprehensive Seems to be anxious about everything, fears or avoids any kind of risk
 - Etc.
 - Reliability between raters was high



Assessing the human-horse interaction

- Relation between observer ratings and behaviour observations (Lloyd et al., 2007)
 - Assessing horse behaviour during field observations
 - Stand at rest Stand with eyes either down or forward, ears soft for 5 s or more
 - Vigilant Stand with eyes focused forward for 5 s or more. Elevated neck intently orientated head and ears. Ears held stiffly upright nostrils dilated
 - Walk Move forward with slow four beat gait. Horse walks energetically, looks in front of self and around
 - Etc.



Assessing the human-horse interaction

- Relation between observer ratings and behaviour observations (Lloyd et al., 2007)
 - There was a good relation between observer ratings and behavioural observations in the field
 - Authors claim that horse personality can be reliably rated
 - However, field observations do not per se show clear individual differences in horse personalities....



Assessing the human-horse interaction

- Behavioural tests to assess individual differences in horse personalities or temperament
 - Novel object tests



Assessing the human-horse interaction

- Behavioural tests to assess individual differences in horse personalities or temperament
 - Handling situation tests



Assessing the human-horse interaction

- Behavioural tests to assess individual differences in general behaviour towards humans
 - Motionless person tests
 - One person entering the test arena, stall box, the field, or stands in front of the box
 - Stands still
 - Information on visual contact in these studies is scarce



Assessing the human-horse interaction

- Behavioural tests to assess individual differences in general behaviour towards humans
 - Approach test
 - Person approaches a horse slowly in direction of the head or shoulder
 - Horses can be alone or with conspecifics, can be tied or free moving
 - Information on visual contact is scarce



Assessing the human-horse interaction

- Behavioural tests to assess individual differences in general behaviour towards humans
 - Stroke test
 - Evaluation of the horse's reaction on human contact and/or on human tolerance
 - Horse is tied or free moving
 - Contact is made on neck or withers



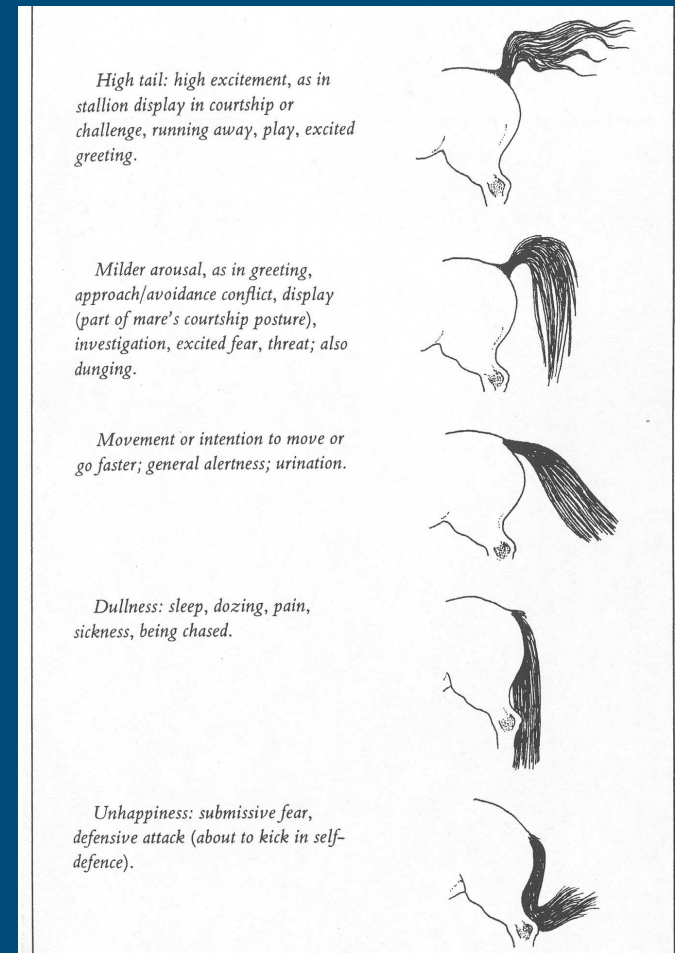
Concluding remarks on safe handling horses

- Very little is known scientifically on the best way to approach horses, and because the individual differences between horses no recipe based method can be given
- There is enough present knowledge on horse behaviour and observation methods to help training professionals and non-professionals to prevent accidents



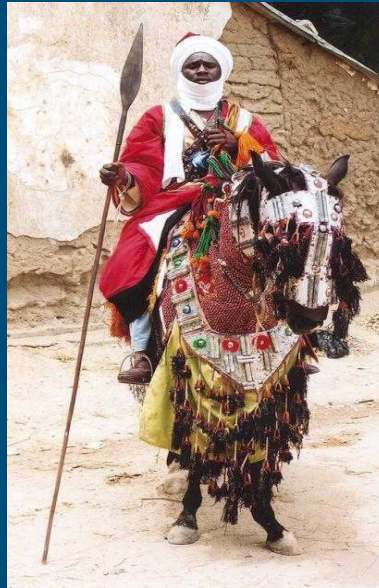
Concluding remarks on safe handling horses

- Train people to observe horses' signals
- Prevent anthropomorphic interpretations of behaviour



Concluding remarks on welfare friendly handling

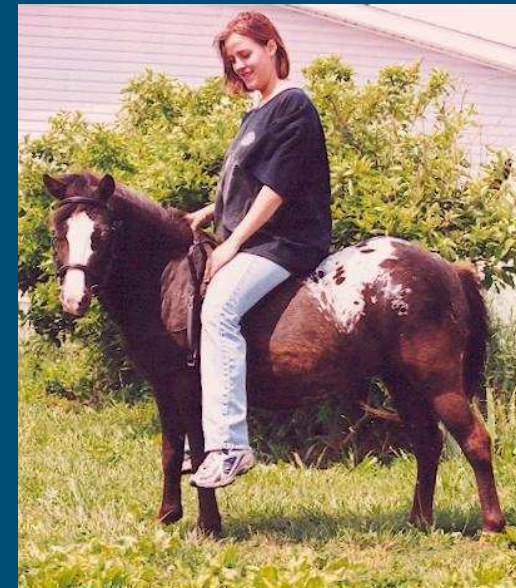
Housing and
feeding



Discipline and
training



Rider



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Thank you for listening !



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