4-H Equine Series
Mastering Equine - Advanced Horsemanship

Mastering Horses

The purpose of the Mastering Horses project is to help you to further develop skills in all areas of equine management. By setting goals to become a responsible horse owner and a good rider, you will become strong in the areas of self-discipline, patience, responsibility, respect and pride in your accomplishments.

As you progress through the Mastering Equine manual, remember that time is not limited. Follow the 4-H motto and "Learn to do by doing". Although you may finish the activities in the manual quite quickly and easily, you may wish to spend more time in this unit to improve your horsemanship skills. Be sure to **Dream It!** record what you wish to complete this club year. Then **Do It!** After your lessons and at your Achievement you can **Dig It!**

Horsemanship is an art of riding in a manner that makes it look easy. To do this, you and your horse must be a happy team and this takes time and patience.

The riding skills you develop in this project will prepare you for advancement. Whether you are interested in specialized riding disciplines or horse training, you will need to learn more about aids and equipment.

No matter what kind of goals you set for yourself in Mastering Horsemanship, the satisfaction you experience will come from the results of your own hard work. Take your time to do your best!

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Remember Equus?

Equus is a smart, safe horse that will appear throughout your manual to give you useful facts and safety tips on working with your horse. Be sure to pay attention when you spot Equus, the goal of this project is to properly educate you in more advanced horsemanship skills, and Equus knows best!

Get Online!

I can't wait to show you what I've found on-line! Check out my great link ideas wherever you see me in the computer screen.

Learning is 3D!

To help you get the most out of your learning, each project meeting has the following parts:

Dream it! Plan for success
Do it! Hands on learning
Dig it! What did you learn?

Manitoba

What Skills Will You Learn?

Each section or Skill Builder (or Builder) in this project has activities that will help your project group learn to do by doing while learning new skills and having fun!

To complete this project, you must:

- Complete the activities in each Builder **OR** a similar activity that focuses on the same skills, as you and your leader may plan other activities.
- Plan and complete the Showcase Challenge.
- Complete the Portfolio Page.
- Participate in your club's Achievement (See the inside back cover for more information about 4-H Achievements).

How to use your Checklists

- Keep your checklists up-to-date. Your instructor or leader will initial the grey area once you have completed a skill.
- Review each level with your leader to determine which skills you have already mastered and highlight the ones you are working on.

Throughout the Skill Builders, you will see words in ***italics***. These words are defined in the glossary section at the back of the project book.

4-H Experience

What skills have you gained through the 4-H program that will help you complete the Advanced Horsemanship manual?

MANITOBA AGRICULTURE, FOOD AND RURAL INITIATIVES GRATEFULLY ACKNOWLEDGES THE SUPPORT OF Agriculture and Agri-Food Canada Agriculture et Agroalimentaire Canada

Skill Builder 1: Ground work

When you approach a horse, it will respond to your position, gestures, and tone of voice. The more we understand the nature of horses (the way they think, how they act and react to different situations, what pleases them, what scares them) the easier it will be to ride and train them.

Skills Checklist

Level	Required Skill	Activities
1-1D	Explain how your horse's four senses other than sight may affect his behaviour.	☐ Body language ☐ Problems in behaviour ☐ Affect the learning ☐ Senses ☐ Restraint
1-2D	What are factors that affect the horses learning?	
1-3D	Identify what a restraint is and list two examples.	
1-4D	Assist younger members in reading their horse's body language.	
1-5D	Identify six different stable misbehaviours and why the horse behaves like this.	

Dream it!

By doing groundwork, you can learn a great deal about your horse's personality and behaviors. Did you know that you send signals to your horse every time you handle him, making him better or worse, depending upon your body language? Each horse is an individual and learns differently, just like you and your friends. Groundwork will help you get to know how your horse learns best. If you do it properly, your horse will come to respect you as a trainer, and make your job easier, too.

To help you plan for this unit, check off the items on the list that your horse is already good at. If you left any off, should you be working on them?

□ Lead properly, without pushing or pulling
□ Let's you handle his face, ears and mouth
□ Stops on verbal and physical cues
□ Loads and unloads from a horse trailer with ease

Do it!

Body Language

Review the section on the horse's body language and the meaning of the different actions. Go outside and look at a pen of horses. Help younger members identify different body languages being shown by the horses in the pen, and identify what each means.

Problems in Behavior

Match the following problems in behavior with their meaning.

a) Windsucking

b) Weaving

c) Excessive Energy

d) Cribbing

e) Charging the door when it is opened

f) Tail Rubbing

g) Kicking

h) Biting

__ 1) Nervous habit that causes the horse to sway from side to side. Major cause is boredom

__ 2) Defined as wood chewing. It is caused by boredom.

__ 3)This can cause colic and other digestive problems. Cribbing may become this.

__ 4) Very common in horses being stabled for long periods of time.

__ 5) Normal response for protecting its food, for a mare protecting her foal and for a horse showing dominance over another.

__ 6) May be caused by disposition, age, sex, and expectations. A problem that occurs in both stabled and pastured horses.

__ 7) Horses that are kept in box stalls and pens will often try to do this.

__ 8) Usually caused by lack of exercise and too much high energy feed.

Affect the Learning

With a partner, list at least five different factors that affect the horse's learning. Give an example of each. Share your answers with the rest of the group. Discuss possible solutions for the different factors.

Senses

With your group, watch the 4-H Horsemanship DVD one (Catching, Regaining Attention, and Standing Still). Identify your horses' four senses, excluding sight.

Go outside and catch your horse. Walk your horse in a figure eight. Explain to the other members how the senses are playing a part in your horses' behaviour.

Restraint

As a group, define what restraint means. Individually, list at least two examples of restraints. Share with others, the different types of restraints that have been used on your horse. When or why have you used restraints on your horse?

Dig it!

Does your horse respect you and obey your wishes or he is in control and you are giving in to his wishes? Discuss the following questions to see who is in control.

a) Your horse refuses to allow you to pick up his feet. When you finally get one picked up he jerks it away and stands on it again. Would you –

- *Work quietly and firmly. When he jerks the foot away a second time, punish him with a firm smack. Then when you do succeed you reward him with a pat.*
- *You ask a friend to help you. It makes you feel more confident to have a friend present.*
- *Just ignore it. The farrier is coming in a few days and he can deal with the problem of not letting you hold his feet.*

b) Your horse is difficult to load into the horse trailer. Sometimes it can take over an hour to coax him to put even his front feet in. This is both frustrating and embarrassing. Would you –

- *Ask an experienced trainer to help you since your methods are obviously not working. The trailer is safe and spacious so he is only being stubborn.*
- *Try to trailer with someone else to the shows. They can try loading him since you will go ahead and meet them at the show.*
- *Decide to just ride at home. Who wants to go to clinics or shows or trail rides anyway?*

c) You have become very keen on showing in the trail class at horse shows. However, your horse has decided he doesn't like the banners used to decorate the walls or fences. He looks at them and refuses to obey you. Would you –

- *Hang some blankets on the fences / walls in your practice arena so he can used to this sort of thing.*
- *Ask a professional to ride him in the class for you. If he can ride him through the class he'll probably be fine for you next week.*
- *Complain to the show committee and ask them to move the banners. If they won't listen, then you scratch you entry.*

d) You are an English rider and it is essential that your horse be on the bit. He has the basic idea but if something catches his attention he goes "off the bit".
Would you –

- *Arrange some lessons for you and your horse with a respected coach/trainer. That way both of you can learn.*
- *Send the horse to a trainer. After all, you know what you're supposed to do.*
- *Just ignore the problem. He jumps quite well and you're not really keen on flat work anyway.*

e) When you are leading your horse, he lags behind and when he does walk beside you he crowds you and steps on your feet. Would you –

- *Work quietly along a wall using a long whip held in your left hand. That way you can flick up with the whip if he fails to move forward when you ask. When he crowds you, you can poke his shoulder with the handle to encourage him to give you "your space".*
- *Get someone else to work him for you. This is slow, boring work.*
- *Just leave it. He's not that heavy when he steps on you.*

Horse Psychology

Horses and Learning

When horses and humans work together, learning takes place for both of them. The more a trainer works with one horse the more familiar he becomes with him and the easier it is for him to predict how the horse will act. It also becomes more obvious what event/activity will match the horse's ability best.

Factors That Affect Your Horse's Learning

1. The Trainer/Teacher

Firm, quiet, kind trainers generally get the best results that last. Horses respond obediently to a good trainer. This is a natural reaction. Therefore trainers/handlers that are able to have their horses see them as a leader are usually successful.

2. The Environment

The horse's environment which includes his surroundings (stable/corrals/pasture/arena), his health care, feeding and handling will definitely affect his ability to learn. Horses that are well kept and quietly handled tend to learn more quickly.

Remember that horses are usually reluctant to attempt anything they suspect may cause them harm. If they were injured, flight (their natural defense) would be impossible. Not walking up a ramp into a trailer or stepping into water makes sense to a horse concerned about survival.

3. Routine

Since horses are creatures of habit they like routine. Of course routine is necessary in feeding to prevent colic and other upsets.

4. Planning

Every trainer needs a well thought training plan. Simple skills must be taught first. More difficult skills are built of the simpler ones. For example horses are introduced to cross-rails before they see a three foot jump or they learn to do a balanced stop at a walk and trot before they attempt a sliding stop.

5. Rewards and Punishment

Rewards are essential if the training is to be successful and enjoyable. Rewards are varied and simple – a simple pat or a quiet word. A short rest after working with speed is a form of reward.

Punishment is given immediately after the act has been done. It must be consistent for the horse to understand that the behaviour or response is unacceptable.

The reward – punishment system affects the horse's learning. However, for it to be effective, the trainer must give the same response to the same situation every time.

6. Time

How long the horse is worked depends upon its age and its physical ability. Young horses are similar to young children: their attention span is very short. They learn more readily in short daily lessons. When the trainer gets the correct response, the horse should be rewarded immediately.

7. Repetition

Skills must be repeated if the horse is to learn them. Horses have a good memory and something well-learned will stay with the horse for a long time. Unfortunately, poor behaviour is also learned.

8. Conformation

Conformation, size and previous injuries affect the ability of the horse to perform certain skills. Not every horse has the athletic ability to rein, jump, or barrel race, even if they have the learning ability.

9. Boredom

Something as simple as a daily turnout can prevent boredom. Some owners provide the horse with a simple toy in the stall. A companion – another horse or even a goat – may help!

Rider Problems

Although most behaviour problems develop early in training the habits of the rider can contribute to new problems. The longer the misbehaviour is allowed to continue, the more difficult it is to correct.

Body Language

Learning to "read your horse" by means of body language is an art that every horse owner should learn. A horse's expression and the way it moves some parts of its body tell other horses and people just how it feels. When studying the body language, take special note of the horse's ears, head, mouth, tail and eyes.

The Ears

The ears are the easiest and most visible sign of the horse's mood.

When the ears are pressed flat back the horse is angry and the handler needs to be careful. Sometimes horses in competitions such as racing or jumping lay their ears back in concentration. Depending on the situation, ears pressed back may mean "I'm not sure about what you're doing".

Ears that are pricked forward usually indicate curiosity or friendliness. Horses that are being ridden may flick their ears forward and backwards indicating that they are listening to the rider.

When horses are relaxing, their ears tend to droop to the sides. Horses that are sick usually have "droopy" ears.

The Head

The horse with his outstretched head and neck is showing his curiosity. If he is particularly alert he will arch his neck and lift his head.

The Mouth

A horse with his mouth open and teeth barred is angry and dangerous. When horses are alert or stubborn they will have their lips drawn tightly. If a horse is very relaxed, the bottom lip may appear to be quite droopy.

Eyes

The horse's eyes express his feelings clearly. Large eyes fully open may express both alarm and curiosity (read other signs to determine which one). Sleepy horses have drooping eyelids. Squinting eyes coupled with ears laying back mean "watch out".

The Tail

When a horse is relaxed and happy, his tail is carried in a relaxed manner. If it is held up and away from the body, he is usually curious and alert. When a horse is showing off he carries his tail straight up. However, when his tail is clamped tightly against his body, he is usually unhappy about something.

The Hooves and Legs

Rarely does a horse kick without warning. Usually he lifts a foot off the ground and pins his ears back before he acts. When horses are calm and relaxed they often stand on three (3) legs, resting the fourth one.

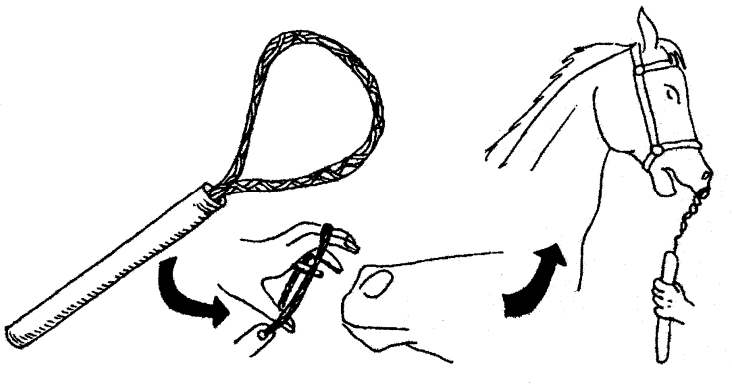
Back

When a horse is tense and ready to buck, his back will be tense and rounded. A horse with a sore back will flinch and lower his back when pressure is applied.

Twitches

Nose Twitch Being Applied

A twitch is a small, soft rope noose fitted at the end with a wooden stick. Place the noose around the horse's upper lip, then twist the stick until the lip is caught snugly in the noose. DO NOT TWIST TOO TIGHTLY. Make sure the twitch handle is long so you can stay away from the horse.



The twitch is used to distract the horse while other work is being done. The twitch is applied to the muzzle or an ear to cause some pain as a distraction. Caution must be used to avoid injury.

Ear Twitch

An ear twitch is applied using your hand. The horse is held securely by the halter shank and then as the head is stroke, you move your hand slowly to the ear. Although most handlers twist the ear for control, it is difficult to hold when the horse tosses his head.

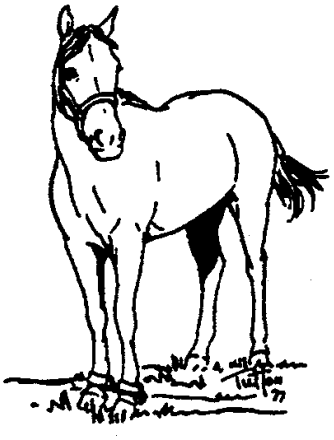
There are several disadvantages to using an ear twitch. If you use it as a control method for any length of time, the ear becomes less sensitive because of the reduced blood supply. To prevent this, you should loosen it periodically. In order to grasp the ear you need to stand close to the shoulder which limits the work to be done. This position is somewhat dangerous since the horse may swing his head about or strike out with his front feet. The ear twitch may cause problems when haltering or bridling the horse.

Nose Twitch

This is used more frequently than the ear twitch. You may use your hand, a handle and rope or a commercially made twitch.

The twitch is applied over the upper lip and pressure applied.

The nose twitch has most of the same problems as the ear twitch. Other problems are that it can slip off or loosen. After removing the nose twitch, rub the nose area to speed up the return of blood circulation to the area.



Hobbles

Hobbles are a form of restraint that may be adapted to different situations. One, two or more legs may be involved.

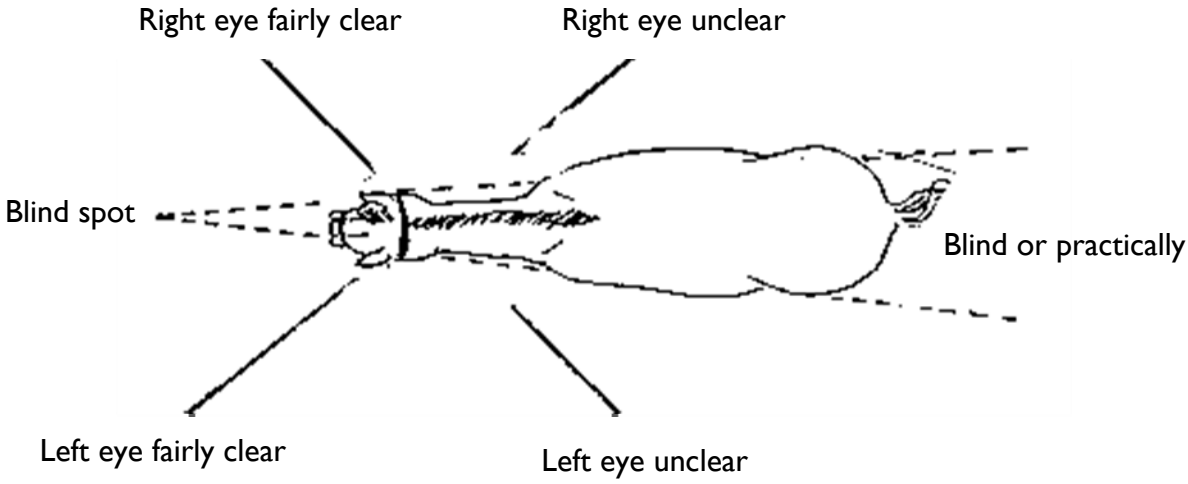
Hobbles may be used to restrict a horse's movement rather than tying when at a trail ride. Commercially made hobbles may be purchased or a heavy strap or sack may be used on the front legs. They should be put on securely on the cannon bone area. The first time they are put on the horse should be in a soft sandy area because many horses throw themselves the first few times they are hobbled. Although it restricts their movement, many horses learn to travel wearing hobbles.

The Senses

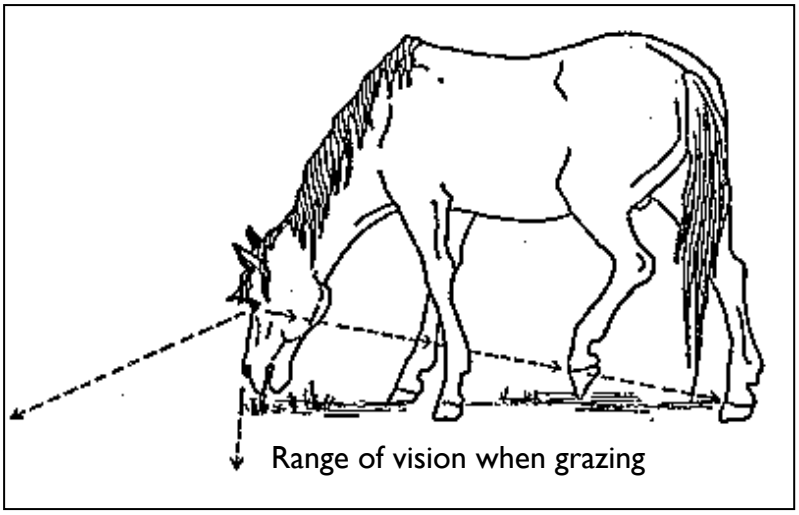
These include eyesight, hearing, smell, touch, and taste.

1. Eyesight

Understanding how the horse sees explains how it reacts to many situations. The eye of the horse has a "ramped retina" which is different from the human eye. This means that it does not form a true arc and so parts of it are closer to the lens than other parts. The horse adjusts his range of vision by raising or lowering his head. He raises his head to focus on a faraway object and lowers his head to focus on a nearby object.



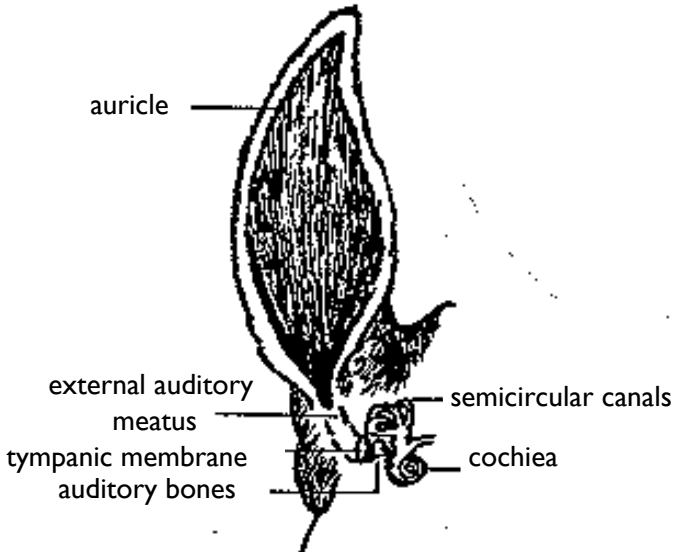
His eyes are located in such a way that he can see in front, to the side and behind without turning his head. However, it also creates "blind spots" for him.


Range of vision when grazing

The height and position the head is held affects the distance a horse can see. By lifting its head, it can see up to .6 km (¼ mile) but with its head down for grazing, it can see only for a few meters (yards) to the side of the body.

It is not known for certain if horses see only in black and white or see some color. Objects that are sitting still convey very little information to them. However, eyesight of a horse is affected by moving objects as they see movement very quickly. This may explain why a sitting rabbit may be seen by the rider but remains unnoticed by the horse until it suddenly moves.

The eye of the horse does not adjust to light as quickly as our eyes. Sudden changes in light may blind a horse. However, most horses have good vision in dim light or darkness.



Parts of the ear

2. Hearing

Horses have very sensitive hearing. Loud popping or shrill noises can frighten a horse. Horses have sharper hearing than we have, but the sound frequency they hear is like ours.

In some ways the horse's ear is similar to yours. The outer part of the ear is called the *auricle*. However, the horse's ear can turn a 180 degrees arc to the front, side, and rear. As well, each ear can move independently.

3. Smell

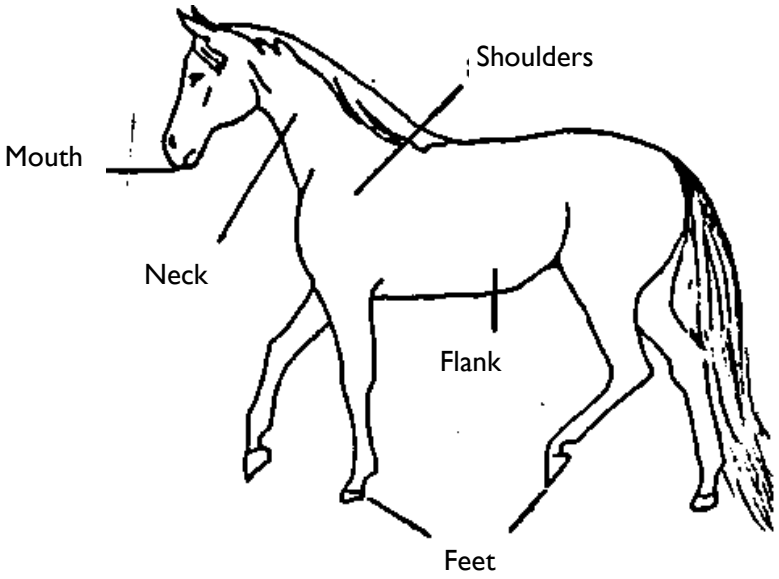
Smell is well-developed in the horse. The horse uses smell as much as sight to identify another horse, a person or an object. That is why you should always let a horse smell an object that is strange to it.

Usually smell doesn't cause a major reaction and the horse will usually move on. If a horse dislikes a smell, he may blow hard through his nostrils or **snort**. A horse will often snort just before it shies from an object.

4. Touch

The sense of touch is very important when training your horse. The most sensitive areas of your horse are the **mouth, feet, flanks, neck,** and **shoulders**. The mouth is only sensitive to **pain** while other parts are sensitive to **pressure**. The amount of pressure will vary with each horse's sensitivity. His sensitivity to pressure depends upon

- the thickness of the skin,
- the sensitivity of the nerve endings in the skin and,
- the experiences of the horse.



5. Taste

Horses are sensitive to flavor and develop a liking for a certain feed because they have had it before. Palatability of hay is related to the texture of the feed. For example, if given a choice, horses will choose bluegrass, brome grass or alfalfa over wheat grasses and slough grass.

Preparation of feed can change the flavor. When you are changing the feed of the horse, do so gradually so the horse develops a taste for it.

Tail Movements

Horses may show irritation or annoyance by lashing the tail about. A flattened tail, clamped tightly to the body indicates fear, unhappiness or panic. A raised tail means excitement while a limp tail may mean sleep or relaxation.

Ear Positions

Flattened ears usually mean anger and fear while drooping ears indicate a lack of attention. Alert ears show that the horse is paying attention – usually in the direction they are pointing. Ears pointing in two different directions means that the horse is paying attention to two things.

Body Tension

A tense body shows that the horse is afraid and fearful. He will probably try to run away from both the situation and the handler. Horses can always recognize tenseness in a handler so it is always necessary to be quiet and relaxed when working around horses.

Head Movements

People who work around horses are well aware of the many head movements, facial expressions and ear positions that indicate the horse's mood.

1. The **head thrust** where the ears are flattened and the nose is tipped forward and upwards with a quick jerk is the most common "threat" movement among horses.
2. The **nudge** is a low, gentle movement used when the horse is seeking attention.
3. The **head shake** is usually a way of getting rid of annoying insects or dirt. It can also signal general annoyance.
4. The **nose shake** when the poll stays in place and just the nose swings back and forth is usually done when the horse feels it has just accomplished a difficult feat.
5. The **jerk back** when the head rises up and back quickly usually happens when something frightens the horse.
6. The **head bob** is really a quick lowering of the head so the horse can look more closely at a puzzling object. He will usually stare intently at it.

Threat Signals

Horses may show two kinds of threat signals:

In **aggression**, the first threat is given by the head; ears are flattened; head thrust forward. When the tail lashes about and the mouth opens, the horse is probably going to lunge forward and bite!

The **defensive threats** are usually given from the rear end. The horse turns his rump, the tail is flattened and the ears are back. He may back toward his object. If he lifts a back foot, he is threatening to kick!

Learning to read signals from your horse can help to make you a better trainer and rider. It can also prevent many accidents.

Problems in Behaviour

Sometimes horses respond to a situation in a way that we do not like. If this is normal behaviour for the horse, there may be a problem. Behaviour problems may be caused by (1) temperament of the horse (2) previous experience (3) stress (4) physical problems. Whether or not the reaction is a misbehaviour, the handler/rider must respond to it.

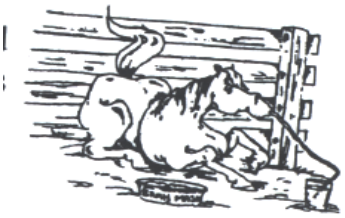
Some misbehaviours can cause injury to the horse or handler or damage to property. If you are having a problem, consider the following questions:

- How did it happen?
- When did it happen?
- Where did it happen?
- Why did it happen?

One of the first things to consider is the nature of the horse. In the wild state, shying, biting and kicking are all natural behaviour. However, none of these are considered as acceptable behaviour around people.

Man has changed the natural lifestyle of the horse. Therefore we can expect problems to arise.

Stable Misbehaviour



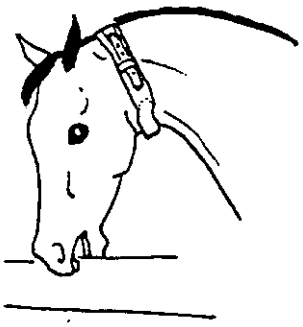
In the wild state, the horse was grazing animal. Man has changed that and expects the horse to live in a confined space, example;. tie stall or box stall. Horses that are not allowed exercise and fed a high energy diet often develop stable behaviour problems.

There are a number of vices that may develop including:

1. **Weaving** – This is a nervous habit that causes the horse to sway from side to side in the stall. This can use so much energy that it may be difficult to keep the horse in good physical condition. To add to the problem, it is contagious. Other horses in the area that can see the horse will also begin to weave.

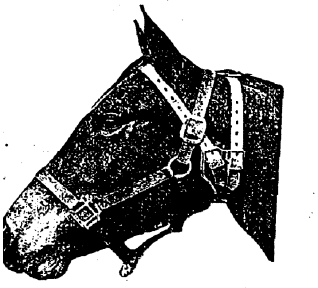
   The major cause of weaving is boredom. The type of stall may also be a cause. A stall with high rails that block the view can start a horse weaving as he tries to see out of the stall alternating his eyes. Once a horse begins to weave little can be done. More turnout time and exercise may help the problem.

2. **Cribbing** - Cribbing may be defined as wood chewing. This is annoying to the owner because it causes damage to stalls and fences. It is usually caused by boredom.

   The amount of time a horse may spend cribbing has been found to relate to the amount of time spent eating. When horses are fed hay cubes or short roughage less time is needed for eating. Exercise and feeding long hay will help to prevent and/or reduce cribbing.

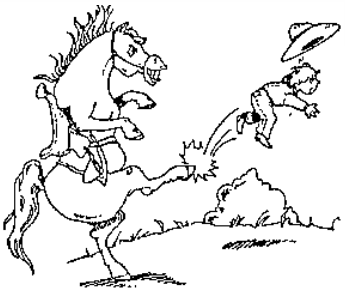
   It may also be reduced by covering the edges of boards (that may be chewed) with plastic or metal strips and by painting surfaces with special paint or oil.

3. **Windsucking** - Cribbing may become windsucking. A horse that is a windsucker will grip an object with its neck and swallow air. This can cause colic and other digestive problems. The easiest way to control windsucking is to use a cribbing collar. This is a leather strap or collar that fits against the base of the throat. It is comfortable for the horse to wear until the horse

4. **Tail Rubbing** - Tail rubbing is very common in horses being stabled for long periods of time. If pinworms are suspected as a cause, deworming the horse will help. If it is caused by skin irritation or dry skin, the application of an antiseptic cream or mineral oil may help. Dry skin can be helped by adding a small amount of oil to the daily diet (1-2 tablespoons). Once the cause has been determined and repaired, the tail rubbing usually stops.

5. **Kicking** - may be caused by a lack of exercise, boredom or disposition. With the horse, kicking is a natural protection instinct. It is a normal response for a horse protecting its food, for a mare protecting her foal and for a horse showing dominance over another.
This does mean that it is acceptable behavior.



Kicking is bad manners. Some horses will kick the stall walls for no apparent reason. It may be as a result of boredom or because they like the sound. Because it can cause injury to both horse and handler, it is a problem. Using rubber padding (matting) on the stalls may help since it deadens the sound. Providing the horse with more exercise may do away with the problem.

6. **Biting** is a problem that occurs in both stabled and pastured horses. It may be caused by disposition, age, sex and expectations. Biting is a natural way of defense for the horse but that does not make it acceptable behavior.

   Young horses, especially foals and yearlings, often nip out of playfulness. Disciplining the horse will usually stop the behaviour.

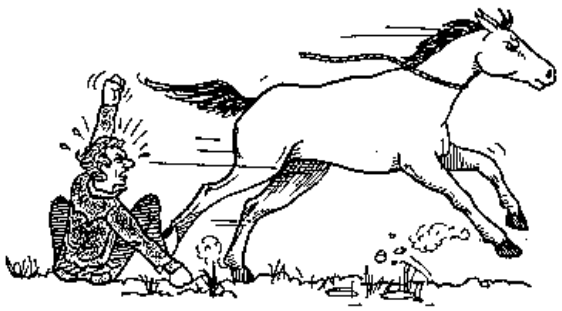
   A mare with a foal or a stallion is more likely to bite than other horses. Although it is a natural show of aggressiveness, it is not acceptable and requires discipline. Remember the jaws of a horse are so strong they can break bones and tear flesh.

"Do not let your horse bite other horses....."

"The results can be painful."

7. Charging the Door When It is Opened

Horses that are kept in box stalls and pens will often try to charge through the door or gate as soon as it is opened. A whip may be carried (and used) carefully to discourage this behaviour.

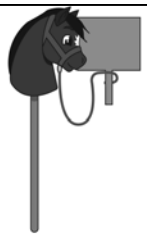


8. Horse has Excessive Energy

Horse owners describe this as the horse being "high". This is usually caused by lack of exercise and too much high energy feed. Allowing the horse plenty of free exercise time helps the problem.

Without the use of psychology and thinking superior to the horse, the owner may become dissatisfied and end up with a spoiled horse who gets his way.

In general, if a horse is being kept in a stable or small pen, provide it with daily exercise. Most behaviour problems are caused by boredom, frustration and over-feeding, rather than the disposition of the horse.



Equus' Hint - the mental health of the horse is just as important as its physical well-being.

Leading Problems

Many horses have never learned to lead properly. They have no respect for their handler. They may tug on the halter shank or push against the handler or walk off in any direction. No matter what the problem is, the horse needs some retraining!

A handler should expect a horse to walk quietly beside him – not pulling ahead nor trailing behind. There should be about 18 inches (36 cm) between the horse and the handler. As with any part of a horse's training, the handler must be consistent in his expectations.

A **long whip** may be used to help teach the horse to move forward more readily. Carry it in your left hand in such a manner that it is angled back toward the hindquarters and trails on the ground. This will prevent you from changing the pressure on the halter shank when you use the whip. Be sure to ask the horse to move forward **before** you flick him with the tail of the whip. This works best if there is a wall or fence to the right of the horse.

The thicker end of the whip may be used to encourage the horse to keep a distance from you (eg. stay in his own space). Carrying it crossways in your left hand allows you to tap his shoulder as a reminder for him to walk on his feet not yours! Again be sure to ask him to move forward first. Correct him quietly when the mistake occurs.

Tacking Up Problems

These are usually caused by rough handling during the early training.

Bridling Problems

A horse may not open its mouth for the bit because it has had its teeth banged with the bit. To open the mouth, insert your thumb into the space at the corner of the mouth and press. When the horse opens its mouth, gently slide the bit in, being careful that it does not bang against the teeth.

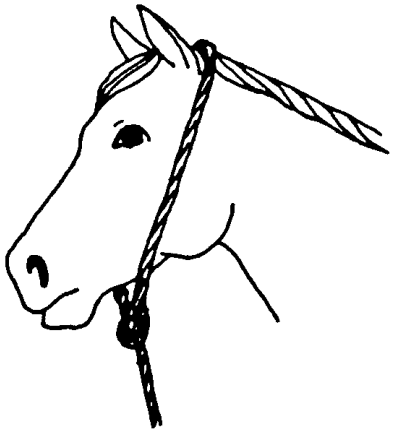
Some horses raise their heads to avoid the bridle. It may be necessary to ask the assistance of a tall rider or perhaps put the bridle on over the halter. With all bridling problems progress is slow. Careful gentle handling may only solve part of the problem. A rider with heavy hands may hurt the horse while riding. This makes the bit an instrument of pain so the horse will try to avoid bridling.

Saddling Problems

Sometimes saddling is difficult even when the horse is securely tied. Usually most problems have been created by rough handling. Start by checking your horse over for any soreness in his back or cinch area. Check your saddle, blankets, and cinch for anything that might cause irritation. Then proceed quietly and firmly. Set the blankets gently on the horse's back followed by the saddle. Keep the cinch/girth from slapping the horse and then lower the saddle slowly. Adjust the cinch gradually.

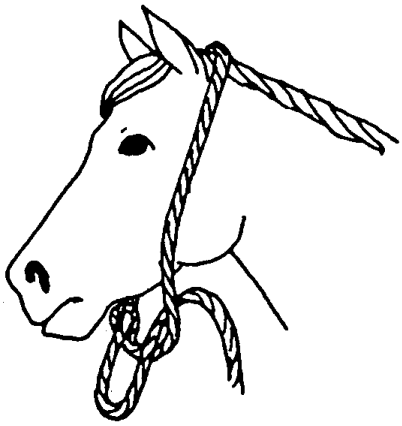
Pulling and Trailing Problems

For horses that pull ahead or trail behind a "come-along" halter may be of help. This halter applies more pressure than an ordinary halter. **Never tie your horse to any object when he is wearing a "come along" halter.**



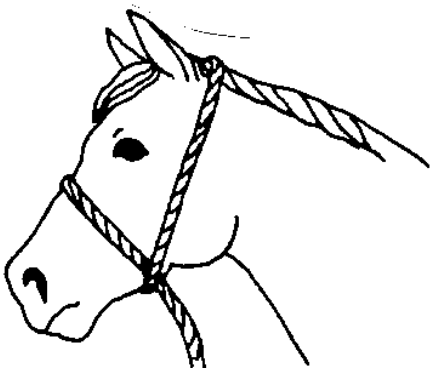
Begin by placing the loop of a lariat over the head resting on the poll. Push the end with the honda toward the chin groove on the right hand side of the face.

From the rope hanging below the honda, form a loop and push it through the first loop.

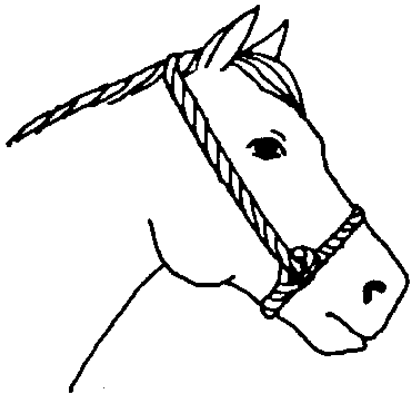


Push enough rope through so that it will go over the nose of the horse. Adjust the honda and position the nose piece so that it is not two high nor to low.

The "come-along" must be used gently but firmly and pressure released when the horse responds. **Never** pull steadily on it!!



"Come-a-long" (left side)



"Come-a-long" (right side)

Pulling Problems

Some horses are a problem when they are tied, whether it be in a stall, in an alley or in cross-ties. These horses may pull back until the halter, the halter shank or the object to which they are tied breaks. Most horses that behave this way have managed to break away at least once in the past. When this happens you have a problem! If the horse is young, the problem may be corrected but older horses are much more difficult. If your horse has this problem seek some advice from a reliable horse trainer.

Even if the problem appears to be corrected, always be careful as this habit may re-appear when you least expect it. Never move quickly around your horse in a way to frighten him and cause him to fly back. Never tie him in a narrow stall where there is little room for you to escape should he panic and pull back. For many of these horses a box stall is a safer solution.

Handling Problems

Most people have horses that have been handled or trained by other people. As a result you do not know what methods were used in training.
This makes it hard to know if a misbehavior is caused by poor handling or by the disposition of the horse. It takes time for habits to form. It takes time and patience to solve the problems but success is determined by your abilities and the horse's attitude.

Catching a Horse

One of the most frustrating things for a horse owner is a horse that is hard to catch! The horse is naturally shy and as it develops confidence in its owner, it becomes more approachable. Others have had bad experiences after being caught. Horses never forget!

Everyone develops his own way of catching the horse. Many horses will simply stand still and allow a person to put on the halter. Some owners lure their horses with oats, giving a reward for being caught.

If a horse is very difficult, it may help to have a smaller pen to chase him into.

Leaving a halter on a horse that is difficult to catch is **not a safe thing to do.** A halter may get caught on a post, a tree or any object or even worse the horse may get a foot caught in it. This type of accident can be avoided. Even a well-fitted halter or a so-called safety halter are not as safe as no halter!

Another common practice is to allow the horse to drag a long rope attached to the halter. Unfortunately the rope and/or halter may get caught on a object causing a terrible accident – one that can be avoided! For safety reasons long ropes should also be avoided.

Some horses may be difficult to halter once they are caught. Previous rough training may have caused the problem. It may also be caused by sensitive ears or an ear problem. A horse that is upset when a halter is pulled over the ears may readily accept a halter that has a strap that is brought over the poll and buckled.

By working quietly and patiently, most "catching" problems can be worked out. However, if the problem becomes extreme, consult a professional horse trainer for help.

Restraints

The horse does not always quietly accept everything we ask him to do. It is sometimes necessary to physically control a horse before some work can be done such as veterinary work, farrier work or training. **Any method of controlling the physical movement of the horse is called a restraint**. It ranges from tying the horse in a stall to physically laying the horse on the ground. By controlling his movement you reduce the chance of injury to yourself and the horse.

The form of restraint that is used will depend upon the situation and the temperament of the horse.

Restraints can take many forms. Many times it is done to simply divert his attention from what is being done.

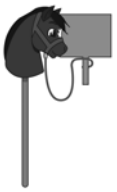
Complete Restraint

Sometimes to treat injuries it is necessary to completely restrain the horse. This must be done by an experienced handler only since it is possible for both horse and handler to be injured.

What's Next?

In the next Skill Builder, you will learn proper care for shoeing your horses hooves and how to braid your horse's tail.

Skill Builder 2: Grooming



You already know how to properly groom your horse in order to look after its health. This skill builder will focus more on taking care of your horses hooves.

Skills Checklist

Level	Skill	Activity
1-6D	Explain and demonstrate coat, mane, and tail care for your area of interest (English or Western). For example pulling manes, clipping, banding and braiding.	☐ Caring procedures ☐ Braiding ☐ Shoeing ☐ Proper fit ☐ Grooming
1-7D	Assist younger members with grooming and hoof care knowledge.	
1-8D	Identify advantages and disadvantages of shoeing.	
1-9D	List three points that the horse shoe fits properly	
1-10D	Identify two seasonal grooming techniques and explain why the grooming needs are affected by the change in seasons	
1-11D	Explain and demonstrate how to braid the tail.	

Dream it!

Why do you think grooming needs change from season to season? What grooming practices have you used on your horse during the different seasons?

Do it!

Caring Procedures

What types of grooming techniques do you do to your horse? Demonstrate to a beginner member the care you do to the coat, mane, and tail for your area of interest, English or Western.

Be sure to explain to the younger members why you are doing each procedure and the importance of each.

Braiding

When braiding a horse's tail, be very careful. Remember the proper techniques when approaching a horse, especially from behind.

Review the steps on page 21 on how to braid a horse's tail. Practice on a doll or a girl's hair before braiding your horse's tail. Remember when braiding hair to be gentle.

Shoeing

In the chart below, make a list of at least three advantages and three disadvantages of shoeing.

Advantages	Disadvantages

With other members, explain why each point is either an advantage or disadvantage.

Proper Fit

With a partner, discuss and identify at least three point of knowing when a horse shoe properly fits. Your leader will arrange for a farrier to come and fit horse shoes to a horse.

Grooming

Help younger members with basic grooming and hoof care techniques with their horses. Such practices could include cleaning the hoof, banding the mane, or washing/bathing.

Dig it!

What are seasonal grooming techniques that you do to your horse? Share with other members the differences and similarities of grooming techniques between the different seasons.

Discuss with members why it is important to wash/clean hoof polish and oil off of your horse.

GROOMING

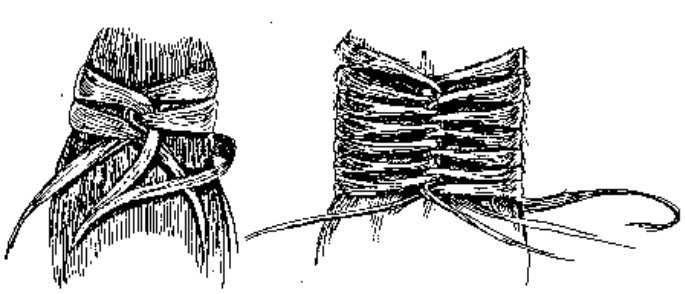
MASTER

Braiding the Tail

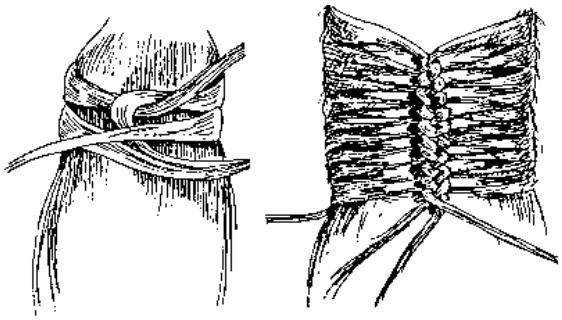
The purpose in braiding the tail is to promote the idea of powerful hindquarters. However the mane must also be braided if the tail is braided. Never show with a braided tail if the mane if not braided.

There are two methods of braiding the tail, one which produces the small braid on top and one which simply produces a flat, neat braid.

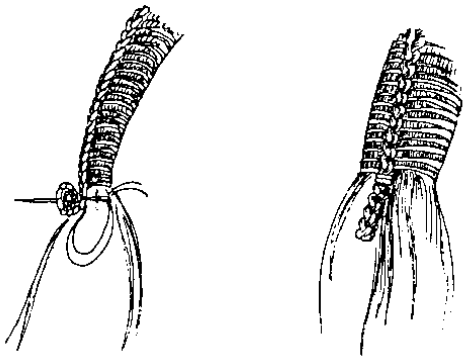
1. Begin by brushing the tail to remove the tangles.
2. Start the braid at the base of the tail. Take a small section of hair from the side of the tail on each side.
3. Pull up to the centre.
4. The "over" method adds the strands by crossing over into the centre each time.
5. The "under" method is braided together by adding strands to the braid from behind each time. This one results in the raised braid.
6. Continue braiding to the end of the tailbone.
7. Continue braiding to the end of the remaining hair and secure it with an elastic.
8. It may now be pulled up behind the braid with mane/tail puller passed through behind the braid or it may be sewn into a pinwheel shape at the end of the dock.



The "over" method which produces an inside braid.



This "under" method which gives an Outside braid.



Two ways of "finishing off" the braid

HOOF CARE

To Shoe or Not to Shoe – That is the Question

The old saying "No foot, no horse" is as true today as when it was written many years ago. A horse's value is directly related to the health of his feet. The type of foot care your horse receives will determine his ability to remain sound and free from lameness.

Horses who are ridden for pleasure on weekends seldom need shoes if they are not being ridden on rough hard rocky ground. Simply allow a day or two after the farrier has trimmed them for the hooves to dry up and toughen. Riding a horse right after a trim is never wise since the feet are soft where they have been trimmed.

Why Shoe?

1. Shoes are necessary for horses being worked or ridden constantly on rough uneven footing. They protect the foot from excessive wear.
2. Shoes increase traction of the feet. Special shoes have been designed that increase traction for horses used in racing, arena / show competitions and on snow or ice surfaces.
3. Shoes can modify the action of the legs and feet in performing the gaits.
4. Proper shoeing can correct or improve the way a horse moves. For example it can help to prevent overreaching.
5. Shoeing may be done for therapeutic reasons. Horses with navicular, laminitis contracted heels and other foot problems may be helped by applying shoes specially designed to relieve pressure in the problem area. They also help to relieve pain caused by such conditions as hoofwall cracks, bruised soles, tendonitis, etc.

Disadvantages of Shoeing

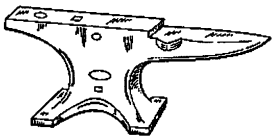
1. Shoeing does interfere with the normal physiological functions of the foot by restricting the normal expansions and contraction of the foot as it hits the surface.
2. Each nail destroys a small number of fibers thus weakening the hoof wall. They form possible sites of infection.
3. Horses **must** be reshoed on a regular basis. To let the hoof grow too far without a reset creates great stress and strain on the tendons and can lead to lameness.

The Farrier

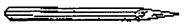
Proper horseshoeing requires considerable knowledge and skill. Each horse **must** have the shoes shaped to fit each foot. A farrier must have complete understanding of leg movement for the various gaits and how to influence each movement. He must understand corrective and therapeutic shoeing and must possess a knowledge of conditions of feet and legs. Shoeing is not a simple job! It requires much training and skill!

Shoeing must only be done by a qualified farrier.

Shoeing Equipment

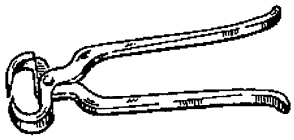


The **anvil** serves as the farrier's workbench and is used to shape the shoe for the horse's foot.

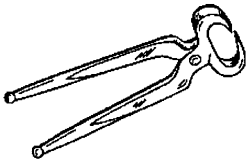


The **pritchell** is used to enlarge the nail holes in a shoe.

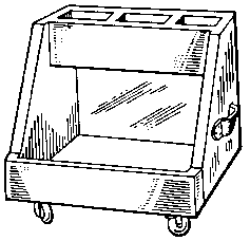
The **hoof knife** is used to remove dead sole.



Cutting nippers are used to remove excess wall.



Farrier pinchers or "pullers" are similar in shape to the nippers but are used to pull shoes or nails from the foot and may be used to clinch the nails.

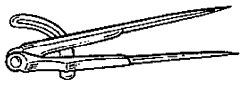


The **shoeing box** is used to store all the equipment.

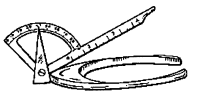
A **clinch block** is used to set the clinches.

The **rasp**, fitted with a wooden handle, is used to level the surface of the foot and to level the clinches.

A **hoof caliper** is used to measure the foot to ensure that each one is the proper length.

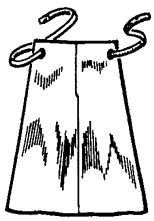


The **hoof leveler** is used to measure the angle of the wall and to ensure that the foot is level.



The farrier's **hammer** is used to tap the nails into the foot.

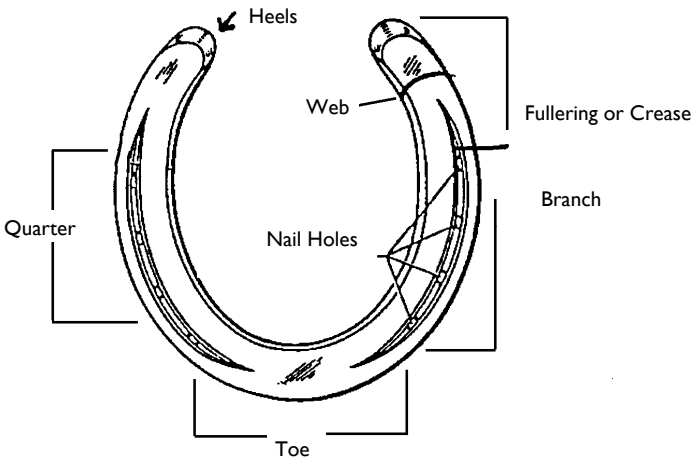
Each farrier uses a **leather apron** or a pair of **shoeing chaps** to protect himself from cuts and bruises.



Parts of a Horseshoe

There are many kinds, sizes, and weights of manufactured horseshoes available or the farrier may choose to make one from a plain bar of iron. The weight and kind of shoe selected for a horse is determined by the kind of work the horse will be performing.

The size of the shoe is determined by the size of the hoof, the position of the nail holes and the length of the heels of the shoe.

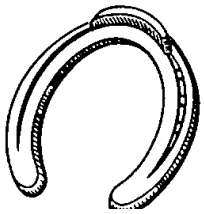


Branch – refers to the length of the side of the shoe. It Must be long enough to support the entire hoof wall. If it is too long, the horse may overreach and step on it with a hind foot, tearing it off. If it is too short, it can produce corns.

Fullering – the hollowed out space of the shoe containing the nail holes.

Web – the flat part of the horseshoe.

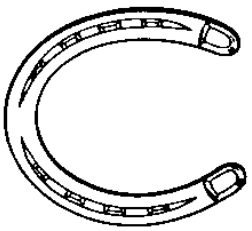
"Keg Shoes" are the most common shoes. They are pre-sized and come in many different types.



Heeled

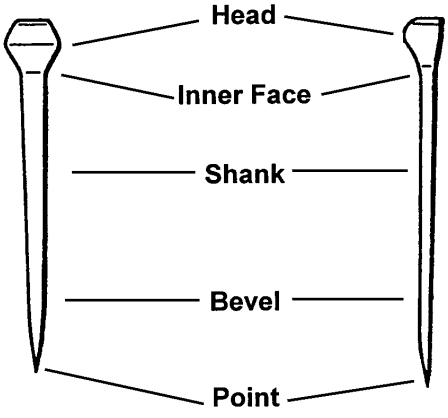
Toe and /or Heel Clip – may be added to a shoe to help hold the shoe in position. Are necessary for horses whose hoof may not hold the shoe well.

May help support an area of hoof wall weakened by severe crack.



Horseshoe Nail

Horseshoe nails are specially made so that one side of the nail is flat and the other side concave and beveled to a point. The sizes of the nails vary. The nail is "beveled" so that the direction it enters the foot can be controlled. By putting the beveled side to the inside of the foot, the point comes out instead of just going straight into the foot.

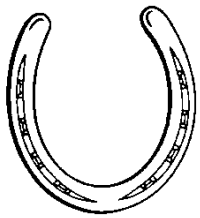


The "White Line" Story

The "white line" is the divider between sensitive and insensitive laminae (tissues). By nailing outside the white line the farrier does not injure the sensitive tissues providing he has the bevel of the nail toward the inside of the hoof.

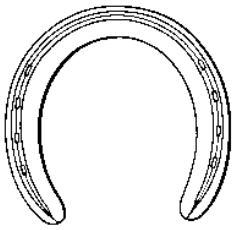
Kinds of Shoes

1. Saddle horse or cowboy shoe



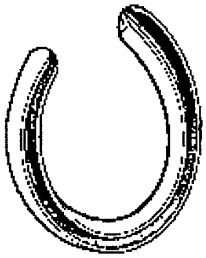
a. are used on most pleasure horses.
b. come in many different weights.
c. may be plain, heeled, toed or heeled and toed
d. the calks increase the traction.

2. Plates



a. usually made of aluminum
b. used on race horses

3. Polo Shoes

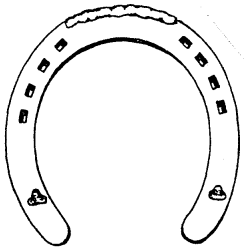


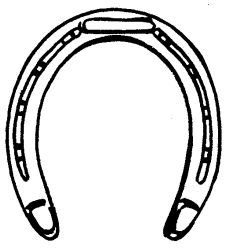
a. Are different from cowboy shoes because the inside rim on the web is raised above the outside rim.
b. Has increased traction allowing for quicker - turns and prevents sliding.
c. Used on polo horses and barrel racing horses.

CAULKS

Caulks are used on shoes to give horses more traction and to prevent slipping. They are mainly used on horses that compete in jumping and cross country events. If a horse is being ridden outside in the winter on ice or packed snow, caulks may be necessary to prevent slipping. Caulks should not be used on hard level ground since they raise the heel and reduce the area of the foot contacting the ground.

Caulks are usually made at the rear of the shoe by turning down a piece of the heal. A toe caulk is added by welding a narrow piece of metal across the toe.

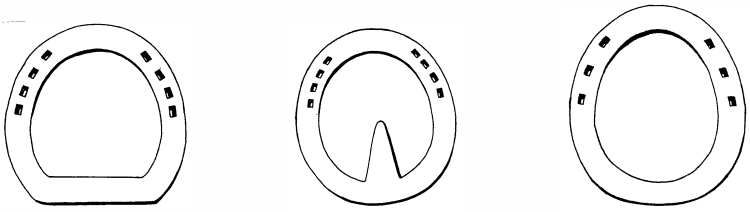




Screw-in caulks are interchangeable. A hole is drilled into the shoe before it is put on so the rider can screw in the caulks when he feels the horse requires more traction. The caulks come in varying weights and sizes.

Corrective Shoeing

Shoes have been designed to help horses with foot problems. These shoes help to relieve pressure and pain and allow the horse to be ridden without lameness. Some examples of corrective shoes are bar shoes, egg bar shoes, and heart bar shoe.



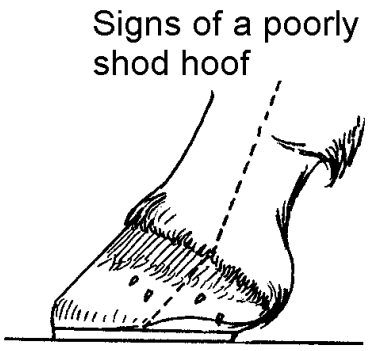
Bar Shoe **Heart Bar Shoe** **Egg Bar Shoe**

Points of a Well Shod Hoof

1. The shoe should fit the hoof and not the foot made to fit the shoe.
2. The angle of the hoof is the same as the angle of the pastern.
3. The clinches are smooth and in an even line.
4. The hoof is not rasped excessively.
5. The shoe should be the right size.
6. The type of shoe is suitable for the work the horse will do.
7. The frog touches the ground (on soft ground).

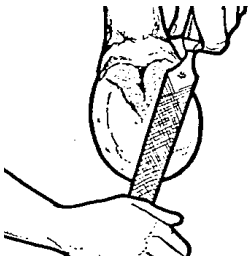
Signs of Poor Shoeing

1. The shoe does not fit and the wall has been rasped to make it fit.
2. Clinches are uneven and rough.
3. The bars and frog have been trimmed excessively.
4. The angle of the hoof and the pastern do not match.

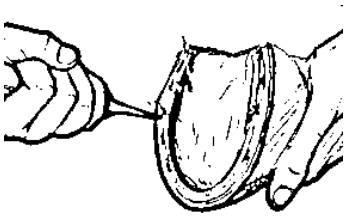


Fitting a Shoe

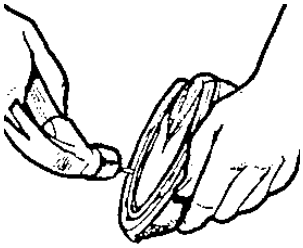
1. The foot is measured for it's angle



2. Checking the shoe size and shape.

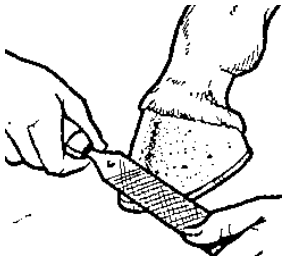


3. The shoe is carefully nailed into place

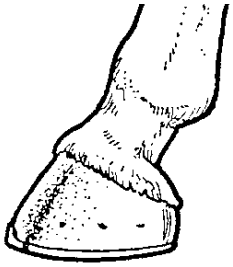


4. Trimming the protruding end of the nails..

5. After the nails have been clinched, the farrier uses the rasp lightly on the walls and the nail heads to make them flush with the hoof wall.



6. A well shod hoof!

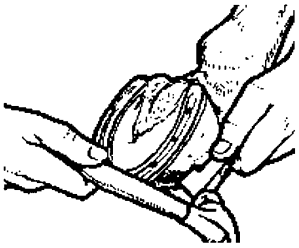


Remember – Horses that are shod must be re-shod or reset at 4 to 6 week intervals. Shoes that are left on too long may cause the hoof to grow out of proportion. Horses wearing "out-grown" shoes are unable to travel correctly and safely.

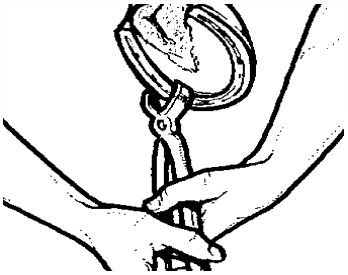
MASTER

Removing a Loose Shoe

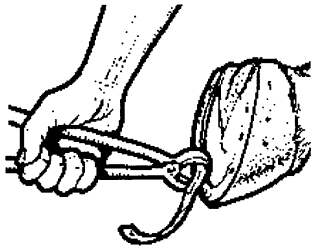
A loose shoe is dangerous for a horse. If he steps on it with an opposite foot, he may tear away part of his hoof. Rather than have this happen a responsible owner will remove the loose shoe.



1. First remove the clinches using clinch cutters or a rasp.



2. Using pinchers to loosen the shoe. Begin on the side that is most loose.



3. Use a downward motion toward the toe to raise the shoe off the wall.

4. Work on alternating sides until you have only the toe nails remaining.
5. To remove these, use a sideways motion.
6. Check to see that no nails have remained in the hoof.

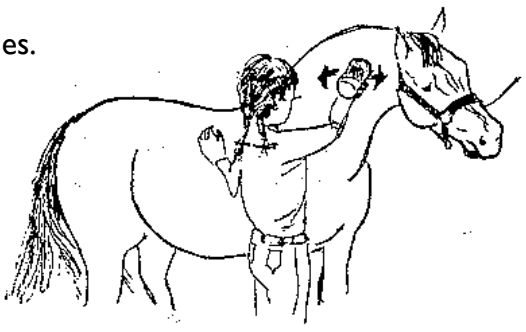
GROOMING

Why do we groom a horse?

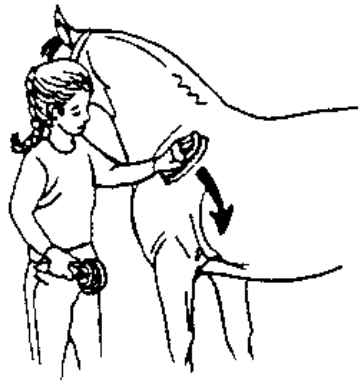
1. Grooming cleans the animal.
2. Grooming conditions the hair and the skin.
3. Grooming improves the look of your horse
4. Grooming prevents disease.

Always groom your horse well before you saddle him, paying special attention to the areas that will be covered with tack. Be sure to clean the cinch/girth area well because dirt and bedding left there can be irritating to the horse.

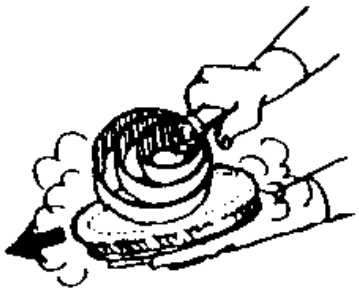
1. Tie your horse securely using a quick release knot or cross-ties.



2. Use the **curry comb** in small circular motion over the neck and body.



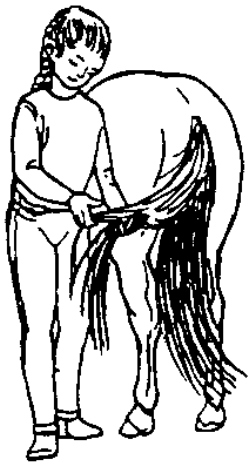
3. Use the **dandy brush**, brush with short firm strokes the way the hair grows.



4. Using the **body brush**, again brush with short firm strokes the way the hair grows.

EQUUS' HINT:
You may clean a body brush every few strokes by scraping it over a metal curry comb.

5. Use a dampened sponge to wipe the eyelids, lips and muzzle. Use another damp sponge to clean the dock area.



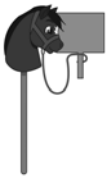
6. Use your fingers to remove as many tangles from the mane and tail as you can. Then use a dandy brush or a plastic comb to finish the job. The mane and tail comb may be used. Work slowly and gently to avoid breaking the hairs.

7. Go over the entire horse with a soft cloth to produce a final shine. Clean the hooves. Work with the pick from front to back.

What's Next?

In the next Skill Builder, you will learn how to properly fill in a score card and how to judge a class giving oral and written reasons.

Skill Builder 3: Identification and Conformation



Judging horses is a learned skill. It is an evaluation of body conformation, type, condition, soundness and size. In order to judge, it is absolutely necessary that you know the parts of the horse and the terms used to describe them.

Skills Checklist

Level	Required Skill	Activities
1-12D	Judge and place one conformation classes of four horses and present written reasons for one and oral reasons for the other.	☐ Skeleton ☐ Judging ☐ Identification ☐ Observations ☐ Walking problems ☐ Time to Judge
1-13D	Assist in teaching younger members about horse identification, colours, markings, breed conformations and evaluation.	
1-14D	Help younger members see correctly shoulders in, haunches in, and lameness.	
1-15D	Identify four different walking problems.	
1-16D	Identify and explain how to properly fill out a judging card.	
1-17D	Explain how the skeleton affects conformation.	

Dream it!

Describe what your ideal horse would look like and why? What do you have to look for in a horse for your area of riding specialization/preference?

Do it!

Skeleton

With a partner, identify how the skeleton affects a horse's conformation. Discuss with the rest of the group, why ideal conformation is preferred over bad conformation.

Judging

Look at the sample judging card in your book. Discuss with other members how to properly fill out a judging card. Identify at least three common errors made on a judging card.

Identification

Look through a couple of horse magazines with younger members. Help the beginner member in recognizing different markings, breed conformations, and colours. Research and then list any of the breeds, markings or colours you were not able to identify.

Observations

With younger members, watch Horsemanship Disc Four *[Introduction to Haunches In]*. Your leader will arrange for you to watch a YouTube video of a horse that is lame. Help members identify key characteristics of each action. Think about examples of lameness, shoulders and haunches in that you have seen in real life and how these characteristics might give clues to possible injuries.

Walking Problems

List at least four different walking patterns. Discuss with other members the different characteristics of each walking pattern.

Time to Judge

Review the points to look for when judging a conformation class.

Study the horses in the diagram on the following carefully and decide upon your placing. Then using the direction on page 48 –50, fill in the judging card giving the reasons why you placed the horses as you did.

Compare your judging card to the official results that your leader will share with you. Did you agree with the placings? How were your reasons?

Your leader will arrange for your project group to attend a local horse show. Individually, judge the conformation class, filling in your judging score card using the techniques you have learned.

MASTER

JUDGING CARD

Name_____

Name of Club_____

TOTAL SCORE

Age: _____

NAME OF CLASS _____

PLACINGS

1st	2nd	3rd	4th	PLACINGS SCORE	REASONS SCORE

WRITE REASONS BELOW

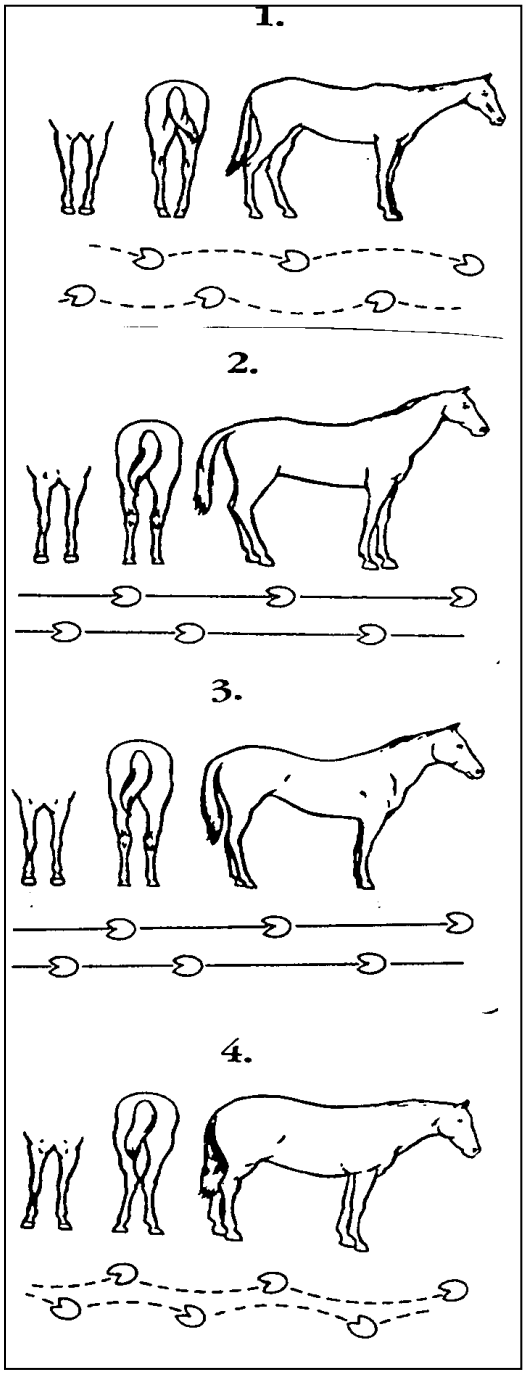
OVER 1. _____
2. _____

OVER 1. _____
2. _____

OVER 1. _____
2. _____

MAIN REASON FOR BOTTOM PLACING

NOTES:



Dig it!

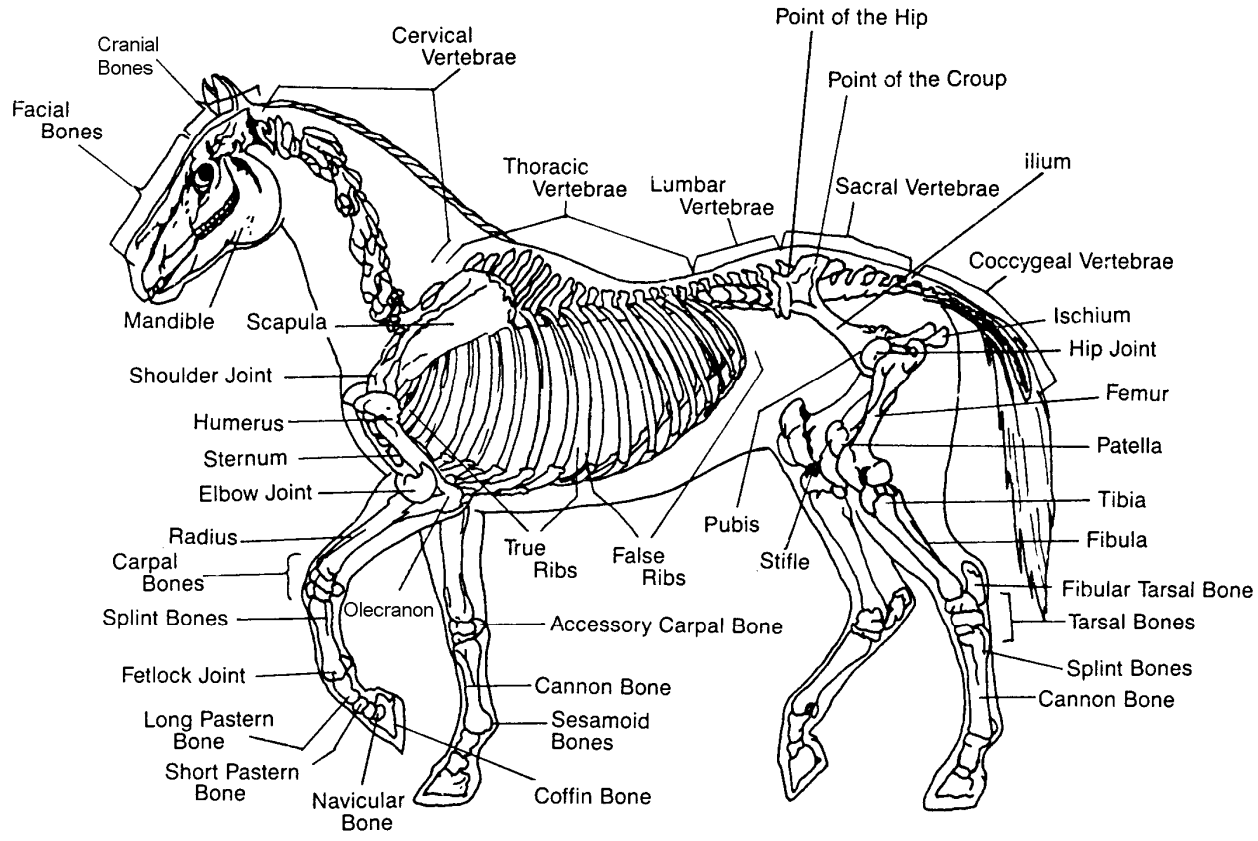
Discuss the following questions as a group:

1. Have you had to judge a class previously to completing the *Time to Judge* activity?
2. What did you find the easiest and hardest thing to do after completing the activity?

ANATOMY & PHYSIOLOGY OF THE HORSE

A horse's body is very complex but an understanding of its structure and function helps a horse owner in providing proper care and management. This section will discuss the **skeletal system** which includes **bones and ligaments**, both which affect the movement and the athletic ability of the horse. The bones of the skeleton give form and the ligaments bind the bones together forming joints.

Skeleton of the Horse



The skeleton of the horse is made up of the trunk (skull, spinal column, ribs and breastbone) and the limbs. It has several purposes:

1. to give shape to the body
2. to support the soft parts
3. to protect the vital organs.

There are 205 bones in the horse's body. They may be long or short, flat or irregular.

The **long bones** act as levers and help in supporting the weight and in movement.

The **short bones** (such as those in the knee, hock, and fetlock) serve as shock bearers.

The **flat bones** (such as the skull) serve to enclose the areas containing the vital organs.

The Forequarters

60-65% of the weight of the horse is carried on the front legs. Looking carefully at the legs you will see that there is no muscle below the knees so many leg muscles have long tendons that pass down the leg over the joints. These tendons are encased in protective sheaths or **"tendon bursa."** Since these are thin coverings any damage is serious. Injuries to tendons and ligament are more likely to occur in the lower leg since they are not protected by muscle or fat.

The front legs have 6 joints:

1. the shoulder
2. elbow
3. knee (carpus)
4. fetlock
5. pastern
6. coffin joint

Each joint capsule is a fluid-filled sac. When the body produces an excess of fluid, as a result of strain or injury, soft puffy swellings occur.

The Pastern

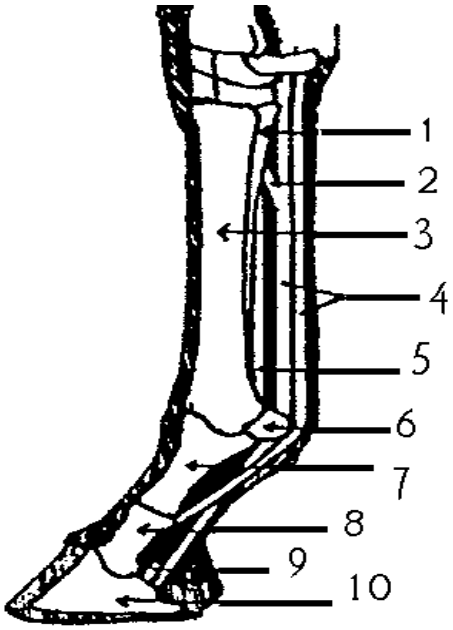
The pastern is made up of:

1. long pastern bone
2. short pastern bone
3. suspensory ligament
4. superficial flexor tendon

The **suspensory ligament** is attached to the navicular bone at the back of the foot. It holds the long pastern and short pastern bones together and reduces the bending of the joint.

The **suspensory ligament** and the **flexor tendon** together support the angle of the pastern. They stretch and contract as the horse's feet move.

The normal working conditions of the ligament and tendon are affected by the angle of the hoof. Improper hoof trimming can change the angle of the hoof causing the tendons and ligaments to stretch or contract further than normal. If the slope is excessive, the **flexor tendon** will stretch. If it is too upright, the two joints will be under stress. This puts great pressure on the cartilage between the bones and increases the risk of fractures and arthritis.



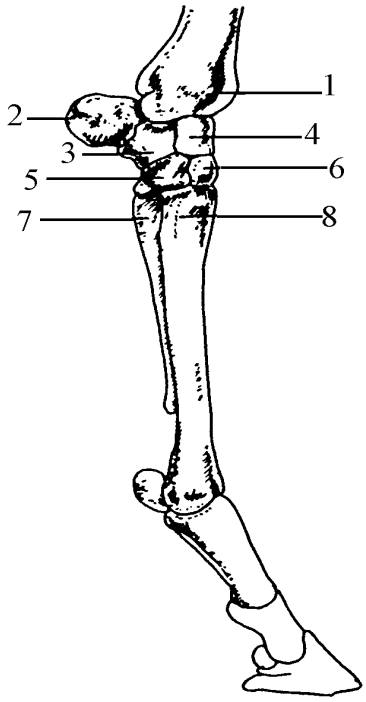
1. Splint bone
2. Check ligament
3. Cannon bone
4. Back Tendons
5. Suspensory ligament
6. Sesamoid bone
7. Long pastern bone
8. Short pastern bone
9. Navicular bone
10. Pedal (Coffin) bone

The Knee

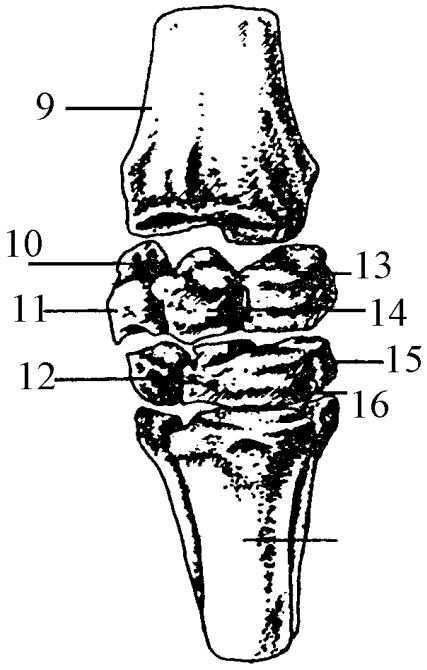
The knee is made up of seven carpal bones located between the cannon bone and the radius (forearm). These bones are joined by the short collateral ligaments which keep them from separating. Longer ligaments on the sides keep the layers of bones from separating. The suspensory ligament from the cannon bone is attached to the third and fourth carpal bones.

To move the knee there are two carpal extensor tendons, two digital extensor tendons and two digital flexor tendons.

Most knee injuries are caused by poor lower leg conformation. If the cannon bone is not centered below the carpal bones, there will be excessive pressure on the carpal bones which



1. Radius
2. Pisiform
3. Cuneiform
4. Lunar
5. Unciform
6. Magnum
7. Splint bone
8. Cannon bone
9. Radius
10. Pisiform
11. Cuneiform
12. Unciform
13. Scaphoid
14. Lunar
15. Trapezoid
16. Magnum
17. Cannon bone



17

JUDGING HORSES

As you work through Judging Horses, you will accomplish these objectives:

1. Become more familiar with the terminology used when judging horses.
2. Improve your ability to describe the ideal horse.
3. Learn how to choose the most ideal horse from a group of horses.
4. Learn more about abstract concepts related to the ideal horse.
5. Recognize deviations from the ideal type.
6. Recognize the common unsoundness and blemishes found in the horse.
7. Recognize the less obvious unsoundness and blemishes.
8. Understand the relationship of form to function.
9. Understand why and how a particular form enhances or reduces the function of the horse.

Judging Conformation

Judging horses is a learned skill. It is an evaluation of body conformation, type, condition, soundness and size. These points are weighed against what you consider the ideal horse.

In order to judge, it is absolutely necessary that you know the parts of the horse and the terms used to describe them.

In a formal judging contest you will be asked to compare each individual animal in a class with other individual animals in the class and place each one in the order of your preference. In addition, you will give reasons why you selected each animal in a particular order of placing.

By following a definite judging method, you can avoid overlooking any parts of the horse. The following method is easy to follow:

1. Stand back. Get an overall view of each horse.
2. Move in closer. Always move quietly around the animals. In your mind, divide the body into 3 main parts – from the side.
3. Look at the head and neck carefully as well as a front view of the forequarters.
4. Move to the near-side and look carefully at the side view of the forequarters, body and hindquarters.
5. Move behind the horse for a rear look at the hindquarters and legs. Be sure to stay at a safe distance to avoid being kicked.
6. Move to the off side. Compare the body from that side.
7. When watching the horse travel away from you and toward you, try to get directly in line with the horse.

Conformation

Conformation includes type, muscling, balance and structural smoothness. It also includes the form and proportion of the various parts of the body.

Type

Type depends on the function a horse is to perform.

Body Types

All horses fit into one of the five following body types. Each of these types has specific characteristics which separate it from the next body type.

Draft Type
- ~ Clydesdale, Shire, Belgian, Percheron, etc.
- ~ heavily muscled, large framed, large boned
- ~ used primarily for plowing, pulling, driving and other hard work

Stock Type
- ~ Quarter Horse, Paint, Appaloosa, etc.
- ~ well-muscled, deep bodied
- ~ center of gravity is close to the ground
- ~ used primarily for short-distance racing, roping, reining, cutting, pleasure and gymkhana events

Saddle (Gaited) Type
- ~ Arabian, Morgan, Saddlebred, etc.
- ~ longer muscled, longer neck and body, more refinement, higher set arching neck, higher tail carriage, often animated movement
- ~ used primarily for pleasure, park and driving

Hunter Type
- ~ Thoroughbred, Warmbloods, etc.
- ~ larger, longer bodies, deeper hearted, longer muscled
- ~ used primarily for long-distance racing, jumping, cross-country, 3-day eventing, dressage, pleasure

Pony Type
- ~ Welsh, Shetland Pony, etc.
- ~ usually 14.2 hands or less, usually resemble Stock Type or Saddle Type breeds, generally shorter neck and body
- ~ used primarily for children's mounts and driving

Muscling

What is muscling?

Muscle is the tissue which contracts and relaxes to cause your horse to move. Muscling refers to how well you can see the length, definition and volume of muscling in your horse.

Length ~ Long, smooth muscles are more desirable than short, bunchy muscles. Long muscles give the horse a longer stride and more endurance. Bunchy muscles tire more quickly and give your horse less endurance.

Definition ~ You can easily see the outline or definition of each muscle beneath the skin of your horse.

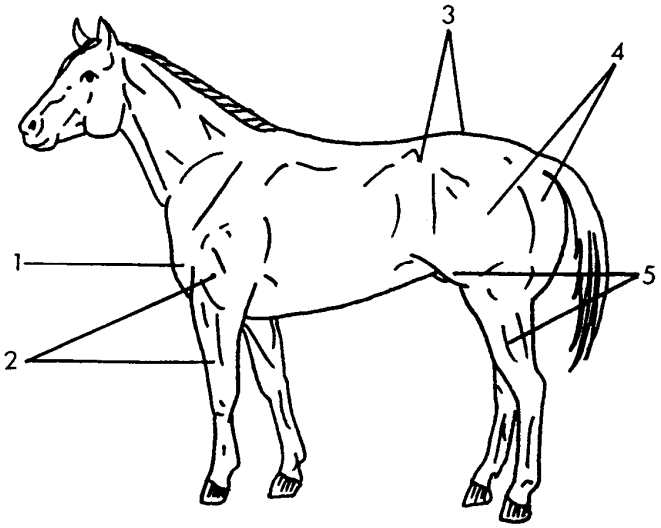
Volume ~ This is the amount of muscle. The greater the volume or amount of muscle, the greater the strength of the horse.

Both the quantity and the quality of the muscle are important.

Where do you look for muscling?

Evaluate the amount of muscling and determine if it is desirable. To find the amount of muscling on your horse, look in these areas:

1. Chest
2. Shoulder, arm and forearm
3. Loin and croup
4. Buttock and thigh
5. Stifle and gaskin



How does muscling differ from one horse to the next?

Well-defined muscling should be characteristic of all horses. Volume, length and definition of muscling should be uniform from the front to the rear and from one side to the other side of the horse. The length and volume of muscling that the horse should possess is determined by the body type and the breed of the horse.

Draft Type – Clydesdale, Shire, Belgian, Percheron, etc.

Draft type horses require a greater volume of muscling compared to horses with other body types because they are bred for strength and power. Thus, volume of muscling is of greater importance than length of muscling.

Stock Type – Quarter Horse, Paint, Appaloosa, etc.

In the stock type horse, length and volume of muscling are of similar importance. Volume of muscle is required for power and quick starts, while length of muscling is required for speed and suppleness. The length and volume of muscling in Stock Type horses is intermediate to the Draft and Hunter/Saddle/Pony types.

Hunter/Saddle/Pony Types – Thoroughbred, Arabian, Morgan, Saddlebred, Welsh, Shetland Pony, etc.

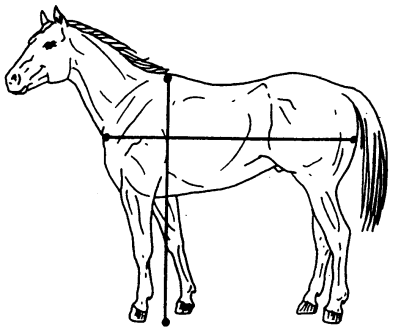
These body types have the least volume but the greatest length of muscling. Length is needed for speed, endurance and suppleness in these types of horses. Length of muscling is more important than volume of muscling.

Balance

Balance ~ All of the parts of the body are in correct proportion to each other, resulting in a pleasing appearance.

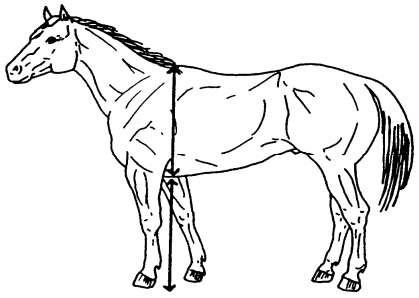
Symmetry ~ When viewing the horse from the front and rear, divide the horse in half down the spinal column and down the middle of each limb.

Methods of Determining Balance



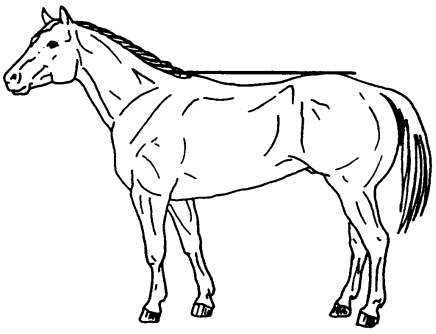
1. Length = Height

The length of the horse from the point of shoulder to the point of buttock should be equal to the height of the horse from the top of the withers to the ground.



2. Length of Foreleg = Depth of Heartgirth

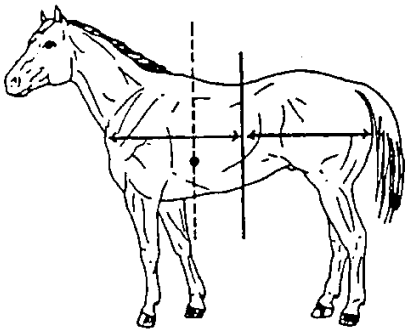
The length of the foreleg from the ground to the elbow should be equal to the depth of the heartgirth from the elbow to the top of the withers.



3. Levelness of Topline

The point of the croup should be at the same height as the top of the withers.

4. Centre of the Horse

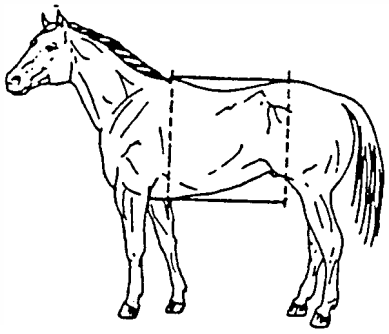


When the horse is divided through the center of the back, the forequarter (not including the head and neck), should be equal in size to the hindquarter.

Note that the center of gravity is different from the center of the horse. Because of the weight of the head and neck, the center of gravity is just behind the elbow when the horse is standing. When the horse is divided through the middle of the back, approximately 60% of the weight is carried on the front legs, because of the additional weight of the head and neck.

5. Top to Bottom Line Ratio

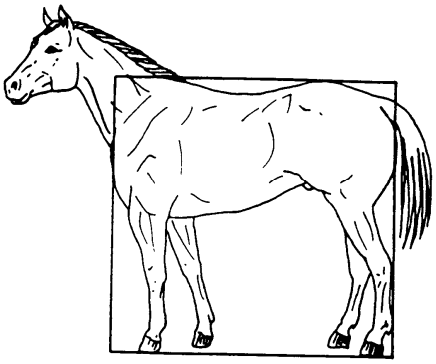
The well-balanced horse has a shorter top line (from the point of the withers to the point of the hip) in comparison to a longer bottom line (from the point of the elbow to the stifle).



6. Square

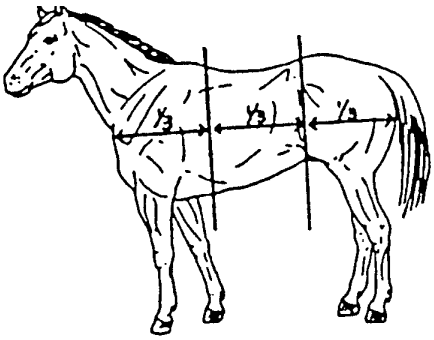
Draw a box around the horse so that:

The width of the box is equal to the length of the horse from the point of the shoulder to the point of the buttock.
The height of the box is equal to the height of the horse from the top withers to the ground.
On a well-balanced horse, this box will form a square – all sides are equal.



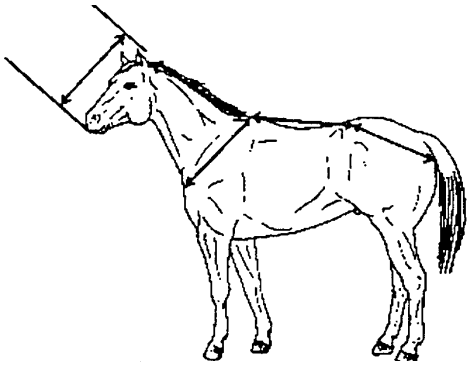
7. Divide the Horse in Thirds

Divide the horse into thirds by dropping lines down from the top of the withers and the point of the hip. The length of each of these three segments should be the same.



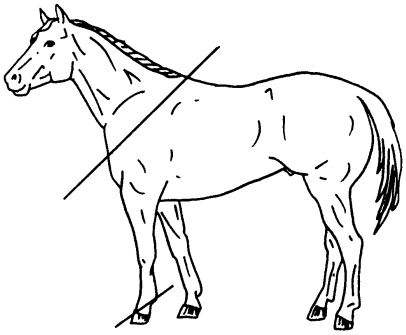
8. Equal Lengths

In the well-balanced horse, the head, neck, shoulder, topline and hip lengths should be approximately equal.



9. Parallel

In the well-balanced horse, the slope of the pastern and the slope from the point of shoulder to the withers should be parallel. They should both have a slope of 45°.



Smoothness and Bloom

The head and the neck should be in proportion, and the neck should blend smoothly into the shoulder. The shoulder and forerib should fit smoothly together, the end coupling should be short and strong so that the top line is strong and the hips tie in smoothly. A horse with a thin neck and a sharp break at wide, prominent shoulders is not smooth. A horse with a weak coupling and jutting hips or extremely "bunchy" muscling is not smooth either.

Smoothness - All parts of the horse's body should blend together smoothly, while having adequate muscle definition. The horse should be in good condition – neither so underweight that the ribs show, nor so overweight that there is little muscle definition.

Bloom - The horse's haircoat should be short and shiny. This is referred to as bloom. A dull, shaggy coat indicates that the horse may not be healthy.

Sex and Breed Character

Masculinity in the stallion and femininity in the mare defines the sex character. The stallion should have a bolder, stronger head, a more massive jaw and thicker, heavier neck and shoulders than a gelding or mare. A stallion has heavier bone and is larger and more rugged than a mare. Geldings do not show excessive masculinity. Mares should be feminine about the head and neck and more refined than stallions.

Each breed has slightly different characteristics about the head, as well as in body conformation. These are the points that denote one breed of horses from another. In breed classes or in selecting a horse of a particular breed, these points should be considered.

Stallions ~ should look masculine
~ when compared to geldings and mares, stallions should show:
~ heavier, more powerful muscling
~ a larger and broader head, a larger muzzle and jaw
~ a thicker more muscular neck, more substance for larger bone

Mares ~ should look feminine
~ compared to stallions and geldings, mares should show more refinement about the head and neck
~ compared to stallions, mares are not as heavily muscled and have less substance of bone

Geldings ~ should look more masculine than the mare, but much less masculine than the stallion
~ the volume of muscling and substance of bone in a gelding will be about the same as in the mare

Note: A lack of masculinity in the stallion or a lack of femininity in the mare may indicate a reduced ability to reproduce.

Quality and Refinement

Refinement is a general lack of coarseness.

The factors closely associated with quality and refinement are:
~ a refinement of body parts – the horse should be smooth and clean-cut, not coarse
~ head looks clean-cut and chiseled
~ tendons and joints should be well-defined, not fleshy
~ bone should be clean and hard
~ tendons in the legs stand back from the cannon bone and give legs a flat appearance
~ short, shiny coat
~ tight, thin skin
~ hard, smooth, durable hooves
~ obvious sex character

Unsoundness & Blemishes

Soundness is extremely important since a horse's performance depends on his ability to move freely.

An **unsoundness** refers to any deviation or abnormality in the structure of the horse that interferes with its usefulness. (e.g. parrot mouth). Please refer to the Discovering Equine—Horsemanship 4 & 5 reference manual for more information on unsoundness.

A **blemish** is an abnormality that affects **only** the appearance **not** the serviceability of the horse. (e.g. wire cut).

Remember no horse is perfect. It is important to know and recognize common unsoundnesses and blemishes. Then you can judge for yourself how important they are in relation to how the horse will be used. Some of the following are considered as a blemish (B), some as an unsoundness (U) and still others as both (B/U).

1. **Blindness (U) :** may occur in one or both eyes and may be caused by either injury or disease.

2. **Poll Evil (U):** an inflamed swelling of the poll, usually caused by a bruise.

3. **Fistulas Withers (B/U):** an inflamed swelling of the withers, usually caused by bruising.

4. **Saddle Sore (B)**: an inflammation caused by poorly fitting tack.

5. **Sweeney (B/U)**: the atraphy or shrinkage of a muscle or muscles in the shoulder. It is caused by a direct injury to the suprascapular nerve in the shoulder. Since the nerve will not heal itself, the muscle atrophies and the performance of the horse is affected.

6. **Shoe Boil (B)**: (also known as a "capped elbow") a soft flabby swelling at the point of the elbow.

7. **Bucked Shins (B/U)**: a painful inflammation of the bone covering on the front side of the cannon bone. It is very common in young horses in heavy training. If the horse is given enough rest, the lameness will disappear.

8. **Bowed Tendon (B/U)**: enlarged, stretched tendons behind the cannon bone. It may be caused by stress or poor conformation. It is usually found in the forelegs.

9. **Wind Puffs (B)**: (wind galls) a puffy swelling that is found on either side just above the fetlock.

10. **Splint (B)**: a calcification or a bony growth usually on the inside of the cannon bone of a front leg. It is usually the result of injury. A developing splint causes pain and lameness but once it has calcified, it rarely causes trouble.

11. **Sidebones (B/U)**: bony enlargement(s) above and to the rear of the hoof caused by injuries or poor conformation.

12. **Osselets (B/U)**: an enlargement on front of the fetlock. The swelling may become hardened as the osselets solidify and become dormant. They usually occur in young horses in heavy training.

13. **Popped Knee (B/U)**: a swelling of the front of the knee caused by an injury or poor conformation. This condition is considered as an unsoundness if the horse is lame, or as a blemish if the horse is not lame.

14. **Bone Spavin (U)**: (Jack Spavin) a bony enlargement on the lower inside surface of the hock joint. It usually occurs as a result of poor conformation.

15. **Bog Sp5avin (B/U)**: a soft swelling on the natural depression on the front of the hock joint. Faulty conformation predisposes a horse to injury leading to a bog spavin.

16. **Capped Hock (B/U) :** firm swelling on the point of the hock due to an injury. It is unsightly but rarely causes lameness.

17. **Curb (B/U)**: a hard swelling on the tendon at the back of the rear cannon about four inches (8 cm) below the hock. It is usually a result of poor conformation but may also be caused by an injury.

18. **Thoroughpin (B)**: a soft swelling in the hollow on the outside of the hock. The swelling can be moved from one side of the hock to the other. It is caused by a strain and rarely causes lameness.

19. **Hernia (U)**: the protrusion of any internal organ through the body wall, usually seen in the abdominal or umbilical area.

20. **Heaves (U)**: a respiratory disorder where the horse has difficulty in forcing air out of the lungs due to a loss in the elasticity of the lungs. The horse may have a chronic cough, and a “heave line” along the flank area. The horse is unsound for strenuous work.

21 **Stifled (U)**: (upward fixation of the patella) – occurs when the stifle is fully extended. The patella locks in place above the stifle joint so the stifle and the hock are unable to bend and the foot drags. It may release on its own or may require some manipulation.

22. **Stringhalt (U)**: an involuntary flexion of the hock during movement. It may affect either or both hind legs. The cause is unknown.

23. **Quittor (B/U)** : a deep infection of the hoof which causes pus to drain through the coronary band. It may be caused by an injury (ex) puncture wounds, bruises, etc. near the coronary band.

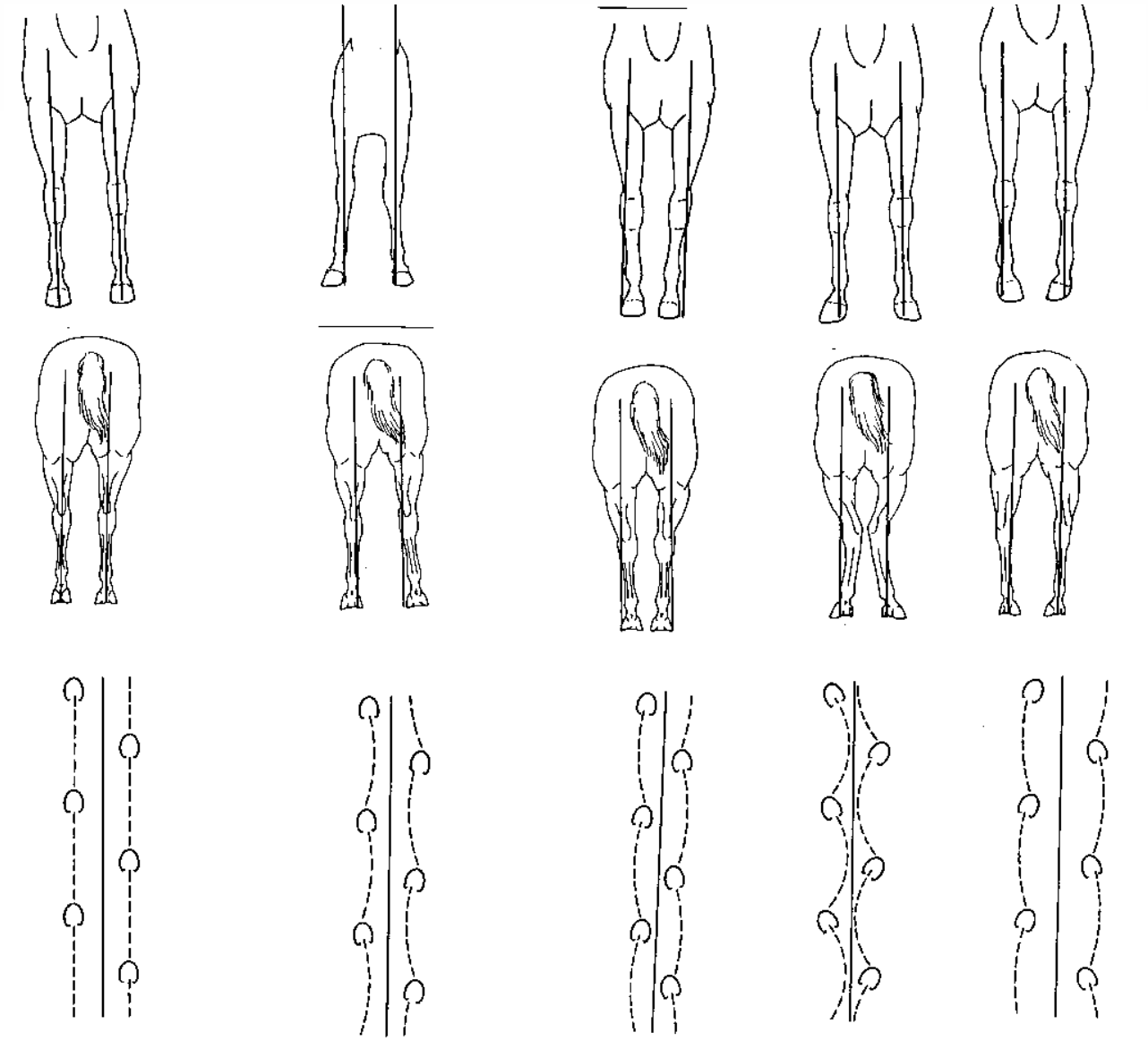
24. **Roaring (U)**: can be recognized by the whistling or wheezing sound emitted as the horse breathes. It is caused by faulty throat cartilage and can be corrected by surgery.

MASTER

Way of Going – How Does This Horse Travel?

How a horse is built will greatly affect the way he moves. Few horses move perfectly straight.

Look carefully at the following diagrams and notice how the conformation affects the way of going.



Ideal Normal Foot moves in a straight line.

Base Wide Base Wide feet move forward in inward arcs.

Base Narrow Base Narrow feet move forward in outward arcs.

Toes Out Feet Move inward in larger inward circles.

Toes In Feet Move forward in wider out-outward arcs.

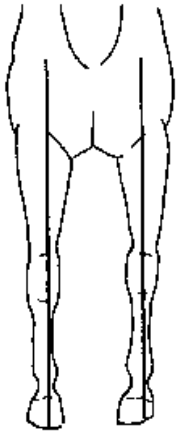
As you study conformation, you will soon realize a horse may have one, two, three or four legs that deviate from straight. In an extreme case he may "toe in" at the front and "toe-out" at the back. Each horse is different from another.

Common Problems

1. Paddling

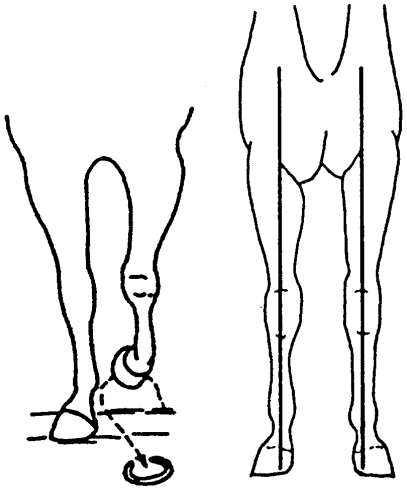
This is also known as "winging out". As the horse moves forward, he "wings" his feet outward. This is common to horses with "toes in" conformation.

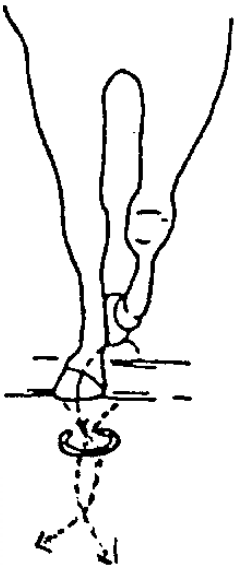
Study the diagram and try to understand why this happens.



2. Winging In

This is also known as "dishing". This is common to horses with "toe-out" conformation.



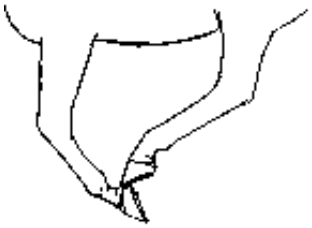


3. Plaiting

To compensate for his conformation, the horse tries to place one foot in-front of the other. This is also known as "rope walking". It is more serious than paddling since it can easily cause a horse to stumble and fall.

4. Interference

This happens when one foreleg strikes the other foreleg or one hind leg strikes the other.

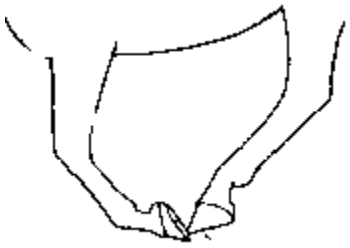


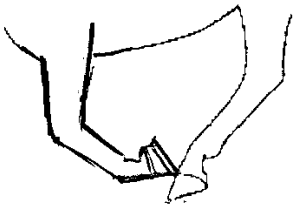
5. Over-Reaching

The hind foot strikes the heel of the forefoot. If the horse is shod it may pull the shoe off. At any rate it may cause serious injury to the heel.

6. Forging

The toe of the hind foot strikes the sole or the shoe of the forefoot on the same side.





7. Scalping

The toe of the forefoot strikes the coronary band of the hind foot.

Judging Draft Horses

Three things seems obvious to be a competent judge of any class of livestock.

Firstly, you must know what the important physical characteristics of any domestic animal are before you can look for them, and then you must be able to recognize them.

Secondly, you must know *why* they are important. In other words, if you cannot relate FORM to FUNCTION the whole exercise is meaningless. A wide heel and a sloping pastern are not "good" because some panel of judges decided that was the case 100 years ago. They are important because they contribute to the usefulness of the animal. And so it is, or should be, with other points of conformation.

The third thing to mention for beginning judges is the importance of having a pattern of examining an animal. For the person who knows what he or she is looking for, appraising an animal is not a random act. He or she goes about it in a systematic, businesslike way.

The draft horse is a large animal. That first impression should be gained at a reasonable distance. The general impression will very often carry the day, unless you find something you don't like on close inspection, or if the horse looks great standing still but moves like a duck.

Any horse, light or heavy, is an animal of movement. Whether the purpose of the breed be to draw a load or carry a rider, the feet and legs constitute the working foundation of any horse and are thus of more relative importance than in any class of livestock. The close inspection of a draft horse should begin at the ground, for if he doesn't have it there – he doesn't have what it takes. In a real life situation this means observing the horse move, at both the walk and trot, both going away and coming at you.

After the horse has been moved comes the close, hands-on inspection, beginning with the underpinning. It is at this point where you will see the judge check the hoofheads on the forefeet with his fingers for any indication of hardness on the corners and give the hocks a close examination.

The close inspection is finished topside in most cases with the judge checking the eyes, mouth and very often chinning them for height at the withers. Close inspection completed the horse is excused and sent back to the line.

How do you judge?

For success in livestock judging, at least three things are necessary:

1. a definite mind picture of the "ideal" animal type;
2. a thorough knowledge of the location and names of animal body parts; and
3. a sense of good judgement to properly evaluate strong and weak points.

No matter what type of item or animal you are judging, the steps you follow will be exactly the same. The steps are the same whether you are judging in a competitive judging competition, the show ring or the pasture.

Here are the steps of judging. As you judge, complete the steps in this order. This will make your job of judging much easier.

1. Picture the ideal item or animal: Picture the ideal item or animal

Before you start judging any class, picture the ideal in your mind. What does that perfect market steer look like? What about the perfect loaf of bread? In your mind, or even on a sheet of paper, list the qualities which you feel are important in that perfect item. Rank them in order of importance.

2. Prepare to compare:

Judging any class means you must compare the items or animals in the class to each other and to the ideal you created and determine the advantages one has over the next. Force yourself to think comparatively. Now you are ready to actually begin judging.

3. View from a Distance:

Stand back and compare the entries. If you are judging livestock, stand about 6 or 7 meters away and analyze the animals. Compare and contrast them in size, structure and overall appearance.

4. View from the front, the rear and the side:

Move to the front, still looking from a distance, and view the class. Move to the back and view some more. Move to the side and again view the class.

5. Move in for a closer examination:

Now you are ready to examine the animal up close. Move in close and give each one a thorough examination. Inspect each one individually, continuing to compare it to all of the others in the class. This may include handling the animal. If you are judging small items, feel them, pick them up and look at them from all angles. If you are judging a food class – now is the time for tasting and smelling.

6. View again from a distance:

By now you should be ready to make your decision on the placing of the class. Once you have finished your close examination, move back and view again from a distance.

7. Build a picture:

Take time here to close your eyes, and build a picture in your mind of that class as it stands in front of you. This will help you when you are preparing your answers.

8. Make your decision:

By now you should have made your final decision on the placing of the class in order from most desirable to least desirable. If you have any doubts, go back a few steps and confirm your decision.

9. Mark your cards:

Mark your placing's on your card. Prepare your reasons. Make sure the placing on your card is the same as the one you are using in your reasons. Hand in your card to the official.

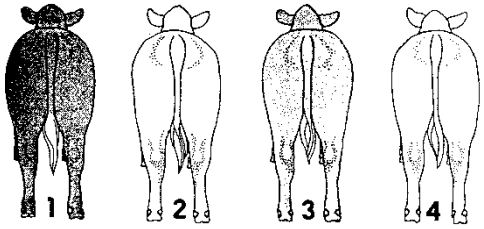
All of this, from the time you start judging to the time you complete the preparation of your reasons, should take no longer than 20 minutes.

The official judge follows these same steps of judging when he places light horses, market steers or dairy heifers. Watch him and you will see what I mean.

Here are a few more hints to help make your judging job a little easier:

- Select your easiest placing's first, usually your top or bottom animal first and work from there.
- Remember, your first impression is usually the best because you are comparing with your ideal animal.
- Always use a comparative process – one animal against another. Emphasize the positive traits of an animal and why one is better than the other.
- Avoid criticizing an animal.
- Make your own decisions – do your own judging.
- Be neat and precise, but thorough, when writing your reasons. You may have justified the placing's in your mind, but the reason for the scorecard is to justify them to the judge.

The Judging Class



There should always be four animals/items in a judging class. If not visibly numbered, number them from left to right, as viewed from behind.

Realize that you actually have five animals/items in mind – the four you are judging and the ideal. Make your easiest placing first. This may be your top entry or it may by your bottom. You may also find you can break the class into groups of two pairs.

As you judge, divide them into three pairs. Compare the first placing with the second placing, second placing with the third placing and third placing with the fourth placing.

How can YOU become a more successful judge?

Anyone can become successful at judging any item or species. There are only two things you need to do:

THINK: *Whenever you are judging, think about what you are doing. Be organized and follow a system.*

PRACTICE: *No one becomes a good judge by judging only a few classes. You must practice, practice and practice to become a better judge.*

Top livestock judges across the country have judged thousands of animals. They become successful judges by thinking about what they were doing and with many hours of practice.

MASTER

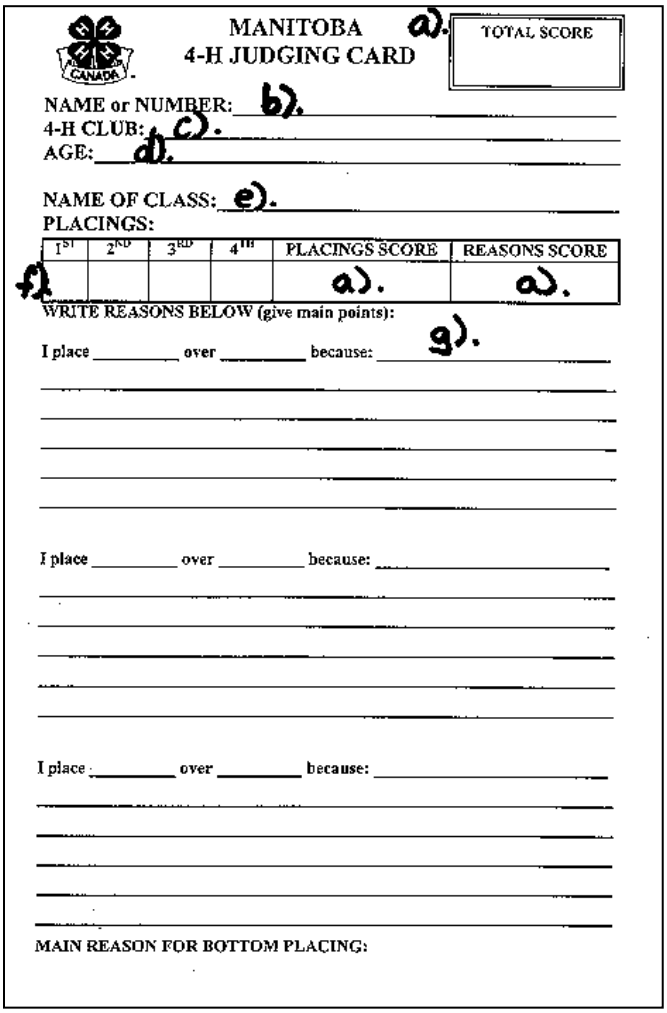
Tips on Filling Out Your Judging Card

Here's how:

a). The boxes marked placing's score, reasons score, and total score at the top are for the official judge. Members are not to write anything in them.

Placing's Score: Marked out of 50 points, this score is placed in the area of the card labeled "Placing's Score". Your score out of 50 is determined by your placing's compared to the judge's. This score is computed by using a "Hormel Guide" (see page 16 in *Let's Judge*).

Reasons Score: The "Reasons Score" is usually done by a judge or marker. Again, it is based on 50 points maximum with your score placed in the area marked "Reasons Score" on the judging card.


MANITOBA 4-H JUDGING CARD

a). TOTAL SCORE

NAME or NUMBER: b).

4-H CLUB: c).

AGE: d).

NAME OF CLASS: e).

PLACINGS:

1ST	2ND	3RD	4TH	PLACINGS SCORE	REASONS SCORE
f)				a).	a).

WRITE REASONS BELOW (give main points):

I place _____ over _____ because: g).

I place _____ over _____ because: _____

I place _____ over _____ because: _____

MAIN REASON FOR BOTTOM PLACING:

b). Members include their first and last name because there may be several Joe's or Jill's taking part in the competition. Form a habit of always including both names. Remember – if you don't fill out your name, you can't get credit for your work. In some competitions you may be asked to use your exhibitor number instead of your name.

c). List your club name.

d). Remember, age is your 4-H age as of January 1st of the current 4-H year. Juniors are 8 to 11 years old, Intermediate are 12 to 14 years old and Seniors are 15 and over years old.

e). The name of the class being judged goes on the class line. Be specific – use knitted potholders rather than crafts, Ayrshire heifers rather than dairy cows, centerpieces rather than flowers and so on. If you are unsure of the class name, ask someone.

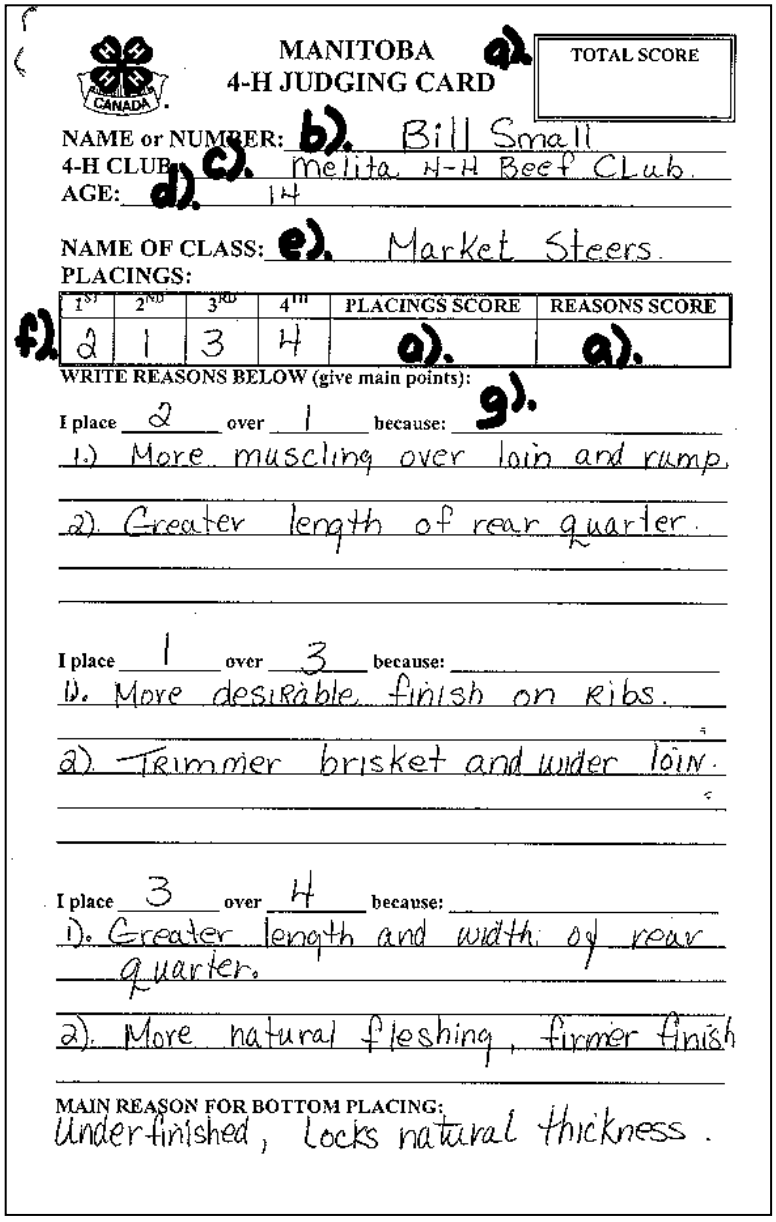
f). The spaces under 1st, 2nd, 3rd, and 4th are for the numbers of the articles / animals in the class. After deciding on their order, put the number of the article / animal you think is 1st in the space under 1st, the number of the second best in the space under 2nd, the number of the third best in space under 3rd, and the number of the last article / animal in the space under 4th.

g). Write two reasons for each pair of placing's.

For example, I place 2 over 1 because it has more muscling over the loin and greater length of rear quarter.

h). Give your main reason for the bottom placing

The judging card below has been filled out correctly.



MANITOBA 4-H JUDGING CARD

TOTAL SCORE

NAME or NUMBER: Bill Small

4-H CLUB: melita 4-H Beef CLub.

AGE: 14

NAME OF CLASS: Market Steers.

PLACINGS:

1ST	2ND	3RD	4TH	PLACINGS SCORE	REASONS SCORE
2	1	3	4		

WRITE REASONS BELOW (give main points):

I place 2 over 1 because:

1.) More muscling over loin and rump.

2). Greater length of rear quarter.

I place 1 over 3 because:

1). More desirable finish on ribs.

2). Trimmer brisket and wider loin.

I place 3 over 4 because:

1). Greater length and width of rear quarter.

2). More natural fleshing, firmer finish

MAIN REASON FOR BOTTOM PLACING:
Underfinished, Lacks natural thickness.

The member has completed all the information about themselves and the class judged.

The placing's are filled in and the reasons are complete. The member has placed 2 over 1 and has given reasons referring to animal 2. Throughout the card he has given two reasons for placing one animal over the other. The bottom placing speaks only of animal 4.

REASONS:

Why do we do reasons?

We do reasons in 4-H because they give us a chance to justify our placing's. By practicing judging and reasons regularly, you will soon develop a good system for judging, and be able to justify your placing's.

Presenting Your Written Reasons

Presenting written reasons is simply putting them down on paper. Follow these rules when presenting your written reasons:

◊ Be neat
◊ Use correct spelling and grammar

Remember: This is not a neatness, spelling or a grammar test – but what the marker cannot read or understand, he cannot mark.

The general rules for written and oral reasons are the same. In both, you must provide a good presentation. It is your method of presentation which differs. Let's look closely at the presentation of reasons.

The judges will determine the value of your reasons by:

1. Content – what did you say?
2. Accuracy – marks are deducted for incorrect statements. Be truthful and accurate.
3. Emphasis – stress major differences more than the lesser ones. Give the major differences first.
4. Completeness – bring out all major differences in your reasons. Omit any difference so small it leaves room for doubt.
5. Terms - use correct terms. Improper terms will weaken your reasons.
6. Presentation - organize your reasons in logical order, from most important to least important. Use short, complete sentences.

Presenting Your Oral Reasons

Presenting oral reasons is a little more difficult because you must present orally to the judge or judges. Follow these rules when presenting your oral reasons:

- Speak loudly and clearly. Don't speak too quickly.
- Be pleasant.
- Convince the judge that your reasons are right.
- Be confident in your reasons.
- Emphasize your most important points.
- Avoid reading your notes.
- Have a picture of the class in your mind.
- Look your judge in the eye.
- Stand straight – don't fidget.
- Relax and have fun!

If you can combine quality content with good presentation in your reasons, that you will be sure to get a good mark.

Preparing Your Oral Reasons

One of the reasons that so many members find oral reasons so difficult is that they don't know how to prepare good notes.

As an experienced judge, you may be required to give oral reasons without any notes. To do this, you must keep a picture of the class in your mind at all times.

For beginning judges, use of notes is acceptable.

Notes should be used as a reference during your presentation, don't read. Your notes should include the class, the placing and a brief comparison of the class. Include reasons for the first placing over the second, the second placing over the third, third over the fourth and finally, reasons for the last placing.

The note taking system outlined below will help you to become more organized. Make sure you use small note cards, not large pieces of paper. Use this note taking system and always keep a picture of the class in your mind, and you will soon be able to do it without notes.

	Class	_____
	Placing	2 – 3 – 1 – 4
Reasons for placing:		Grants
2 at top of class		
2 / 3		3 / 2
3 / 1		1 / 3
1 / 4		4 / 1
4 at bottom of class		

You want your reasons to be impressive, interesting and sincere. You want your manner to be confident. The main point you want to make is why you placed one animal over the other. You can describe until you are out of breath, but if you do not compare you will have wasted your time and energy.

Practice Giving Reasons

Practice will help you:

- Think clearly;
- State your thoughts more expertly;
- Improve your speaking poise;
- Improve your voice; and
- Develop your memory.

Judging Cards

One of the most common faults in a judging competition is that the contestants do not fill out their "Judging Cards" correctly or completely.

When the card is completed only the spaces marked "placing score", "reasons score" and "total score" should be left since they are filled in by the person scoring the card.

Remember to number your animals by standing behind them and starting from the left.

Give two positive reasons for each placing. Then decide on the main reason for your bottom placing.

Be sure to use the proper terms, correct spelling and grammar. Use neat handwriting. While it may not be a neatness, spelling or grammar class, if your card can't be read or understood, it can't be judged!

JUDGING CARD

Name_____

Name of Club_____

TOTAL SCORE

Age: _____

NAME OF CLASS _____

PLACINGS

1st	2nd	3rd	4th	PLACINGS SCORE	REASONS SCORE

WRITE REASONS BELOW

OVER
1.
2.

OVER
1.
2.

OVER
1.
2.

MAIN REASON FOR BOTTOM PLACING

NOTES:

For more complete information on judging consult the "4-H Livestock Judging Manual". It contains examples of descriptive phrases, method for giving oral reasons plus information on judging other classes of livestock.

Becoming a competent judge takes time and effort. If you are going to be involved in the livestock industry, it is certainly worth any extra work it may take. Your livelihood could be affected by your keen ability to select the best animal for your purpose.

Your leader will share with you what a judging completion judge is looking for when scoring written and oral reasons. Remember that the oral reasons you may give may be similar to comments that a judge may make in the ring - particularly at a 4-H show.

What's Next?

In the next Skill Builder, you will learn about the different beddings that are used in stables, as well as proper hauling procedures.

Skill Builder 4: Safety and Stable Management

Because of the variations in weather and the range of temperatures we experience in Canada shelters or stables are necessary for our horses to be comfortable. What type of facility do you have for your horse? Share with the rest of the members.

Skills Checklist

Level	Required Skill	Activities
1-18D	Explain safe driving practises when pulling a loaded trailer.	☐ Trailering Safety ☐ Long Distances ☐ Management ☐ Clean up ☐ Loading and Unloading ☐ Barn Floors
1-19D	List three things to take into consideration on a long haul.	
1-20D	Assist younger members with management of their facility.	
1-21D	Explain and demonstrate to a non horse person, how to properly load and unload a horse.	
1-22D	Identify three types of flooring for a stall. List two disadvantages and two advantages of each type of flooring.	

Dream it!

Your horse facility needs to suit your horse's needs, be suitable for where you live, and be affordable. Nearly all horses will go for at least one trailer ride during their lifetime. No matter what type of riding you do, you need to know the basics of bandaging and safe trailering. Answer the following question.

1. How often do you put your horse into a trailer and haul somewhere? Have you ever had trouble with trailering?

Do it!

Trailering Safety

Your leader will arrange for you to visit a riding facility. As a group, answer the following questions:

1. Before driving off with your loaded trailer, what should you do?
2. What are some changes in driving style that should be made when hauling a loaded trailer?

Your leader or parent will drive an empty trailer around. As a passenger in the truck, notice the differences between hauling an empty trailer versus a loaded trailer.

What are some factors the driver needs to take into consideration when hauling an empty trailer and a loaded trailer?

Long Distances

Have you ever travelled and hauled your horse over a long distance (more than 4 hours)? What were some of the things you had to consider while travelling? List them below.

Management

Managing a facility is important for your horse's safety. Answer the following questions with a partner, and then share your answers with the remaining group.

- Why is it important to keep your stall cleaned in a barn?
- How should you dispose of soiled bedding?
- What are some negative effects of manure?

Clean Up

Your leader will arrange for your group to attend and show at a horse show or fair. Help a beginning member clean out their stall in the barn. Explain to the younger member the importance of a clean stall.

Loading and Unloading

Watch Disc One – 4-H Horsemanship (Trailer Loading/Unloading) for a review on how to properly load and unload a horse.

Once you have finished watching the video, go outside and using a quiet horse, demonstrate loading and unloading a horse. Explain the steps you are demonstrating as you go.

Barn Floors

List below at least three different type of floors barns may have. List at least two disadvantages and two advantages of each type of flooring. Share with the rest of the members once everyone has completed the activity.

Advantages	Disadvantages

Safety Checklist

Here is a barn safety checklist. It can help you decide if your horse is in safe surroundings.

☐ Have all holes or depressions in the floor been filled in?

☐ Is there a first aid kit handy and does it contain all necessary items?

☐ Are the phone numbers of the veterinarian, farrier and fire department posted in the barn or near the phone?

☐ Are the alleys clear of debris? The doorways?

☐ Are hinges, latches, door rollers and tracks in good working order?

☐ Have all leaks in the roof been repaired (if there are any)?

☐ Do the walls or stalls have any sharp objects sticking out?

What is your veterinarian's phone number? _____

What is your farrier's phone number? _____

What is your local fire departments phone number? _____

Dig it!

Discuss the following questions with the rest of the members:

1. Do you have difficulty unloading or loading a horse? What steps do you take to ensure you are being safe?
2. Why is proper management of a facility important for your horse?

HOUSING

Providing your horse with a safe comfortable house is the responsibility of every horse owner.

Barns should be located on sites that are well-drained and easily accessible in all types of weather. They should be dry, clean, well-ventilated and have plenty of light. The stalls whether they are tie stalls or box stalls, should be safe for the horse.

Open sheds should also be located on sites that are well-drained and easily accessible. The open end should face away from the prevailing winds. The roof should be sloped away from the opening. Manure should be removed on a regular schedule so flies are kept to a minimum.

Let's Look at Floors!

Since your horse's health and well-being depends on healthy feet what he stands on in his stall is very important.

FLOORING	ADVANTAGES	DISADVANTAGES
Clay or Earth	• inexpensive • absorbent • usually not slippery when wet	• slow to dry • hard to muck out • can freeze • dusty when dry, can dry hooves • easily pawed and so needs frequent replacement
Sand	• inexpensive • not slippery when wet • good drainage • soft on legs	• can lead to colic if eaten • will not pack to a solid base • dusty when dry • dry sand will crack hooves. • must be raked flat daily
Wood	• easy to clean • springy, therefore easy on legs • keeps warm in cold weather	• slippery when wet, retains odors • rots, so is often replaced • not rodent proof • can be expensive
Concrete	• hard-wearing • rodent proof • easy to clean • can be lain on an incline to assist drainage	• slippery, if not rough finished • Needs enough bedding to prevent urine accumulation and injury to the hocks and other boney parts of the horse's body.
Rubber Mats	• used with concrete or wood to increase traction • used with concrete to ease the stress on legs • some insulating factor • easy on feet	• expensive • slippery when wet • urine can pool on mats

A floor should be elastic, dry, firm, durable, smooth (but not slippery) and absorbent, (but not odour-retaining). It should also drain away well to take away urine and other liquid. This is a very big order of "should's" but remember that what your horse walks on can have a huge effect on the strength and health of its feet and legs. A wet or slippery floor can lead to very serious injuries. Safety, comfort and purpose must be your guidelines when choosing a floor.

More on Bedding

Whether your horse is stabled in a tie stall or a box stall and standing on any type of flooring, he requires adequate bedding. Choices of bedding offered may include straw, wood shavings, sawdust or shredded paper. The average stall requires at least 6 to 8 bales of straw for bedding each week.

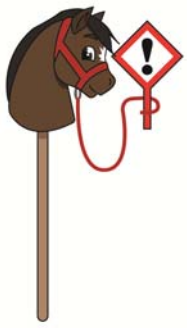
In many areas, straw is the most economical choice for bedding. **Wheat straw** is most commonly used since it is lighter to handle, more absorbent and bright in appearance. **Oat straw** and **barley straw** are also used but horses may be more inclined to eat these than wheat straw.

Bedding may be banked (built-up) along the sides and walls of the stall. This will help to prevent draught and to reduce the risk of the horse becoming **cast**. A horse is said to be **cast** when it rolls on its back and gets caught up against a wall so that it is unable to get its legs underneath its body.

Bedding is essential in providing a healthy comfortable home for your animal. Inside or outside stabling - both require bedding. Straw is a popular bedding choice for the pasture because it is inexpensive, warm, and comfortable. However, straw occasionally contains fungal spores, and the horse will occasionally eat straw bedding.

EQUUS' HINT

The larger the horse and the colder the temperature, the more bedding that is required.



Safety in the Barn

Although cost and efficiency are very important when housing horses, **the most important thing to consider is safety.**

It has been estimated that over half of all horse injuries are caused by unsafe buildings and pastures; by sharp objects, protruding nails, unsafe doors and latches, broken fences, unsafe pastures, slippery floors, improper bedding or unclean stables.

FACILITIES

The Stable

Because of the variations in weather and the range of temperatures we experience in Canada shelters or stables are necessary for our horses to be comfortable. Let's review the basic considerations for a facility:

1. The materials used in its construction must be strong enough to stand up to the abuse that horses may place on it. (eg. kicking, pushing, chewing, pawing, etc.).
2. To help with drainage the stable should be located on slightly higher ground.
3. It must be readily accessible for transporting hay and manure removal.
4. Ventilation is very important for supplying fresh air and to help in keeping the humidity down. Fans may be required.
5. A manger or hay rack, a source of water and salt/mineral holder should be included in each stall.
6. Storage for bedding, hay and other feeds should be included in every stable.
7. Having a clean dry tack room is necessary for keeping equipment clean and in top working condition.

EQUUS' HINTS

There is no excuse for injuries caused by human negligence. Remember that horses are often very nervous: they become frightened and run without thinking or looking.

Manure Management

Since one horse may produce as much as 210 lb of manure each week, a good manure management program is an essential item for every horse owner. Manure is prime breeding ground for flies and parasites.

Odor is another concern for manure disposal. The cleaner a stall is kept, the less the odor that will develop and the milder the odor.

An effective manure management system is necessary for the health of your horse.

Manure Storage

Manure should be piled as far away from the stable and house as possible. For manure piled this way, you may want to look into composting techniques to produce a more useful product once the pile is disposed of. Composting requires regular turning of the pile using a front-end loader. The advantage to composting is that it provides a superior, weed free product for spreading on fields or gardens.

The stored volume will ultimately be spread on fields. However, it should not be spread on pasture grazed by horses.

Riding Surfaces

When riding your horse, pay particular attention to the ground below you. Is it hard or slippery, very deep or grassy? Is it a safe surface for what you are asking him to do?

Problems can occur when the footing is too hard either because it is sun-baked or frozen. Even some grassy areas can be very hard. Riding an unshod horse on a hard surface can cause cracks and chips in the hooves. He may slip and fall if asked to run at speed and turn quickly. Even the shod horse has difficulty on hard ground!

Riding surfaces can be too soft and deep. When heavy rains turn riding areas into mud, the base becomes too soft and the weight of the horse causes the foot to be sucked down, making it more difficult for the horse to lift its foot. This type of footing is very hard on tendons and ligaments.

Riding on wet snow-covered surfaces can be very dangerous. The snow forms a ball on the sole of the foot creating a dangerous situation.

Icy surfaces and wet grass are also very slippery. They are to be avoided if possible.

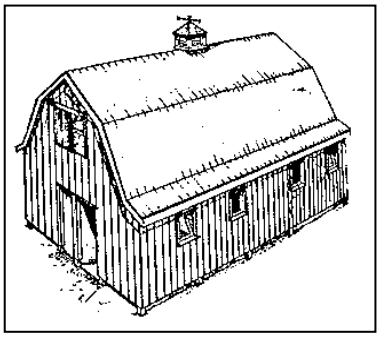
While riding on trails and in pastures, be aware of holes or rocks. Both present a danger!

Most indoor riding arenas have a dirt base mixed with sand and/or fine shavings or rubber to prevent it from becoming too hard. It is important that it not be dusty since that can lead to respiratory problems.

Pasture Hints

Pastures must have shade and wind protection. In the winter, wind is a problem because it cools the horse's body temperature down faster than cold temperatures alone, putting great stress on the horse's body. A horse burns more calories standing out in the cold and windy weather than if it were inside. This means higher feed bills!

Shade from the hot summer sun is a help as horses become stressed during hot humid days. Flies are even more abundant in the sunshine. Trees and hills are good natural shelters with the trees providing shade and the hills acting as windbreaks. Trees should be fenced off so that the horses cannot chew off their branches.



Manure should be removed from the pasture or the land at least harrowed to break up the piles since flies usually lay their eggs in the manure. Refer to page 93 to learn more on pasture management.

FACILITIES

Barn and Stable Construction

Chances are you won't be building a barn this year but who knows what lies ahead in the future. Everyone can picture their ideal stable. Unfortunately these dreams can't always come true. What you want must be measured carefully against what you can afford and what your horses need.

When someone decides to build, the first step is **careful planning**. Answer the following questions for yourself.

- How many stalls do you want?
- How many extra rooms do you need?
- What about a storage room?
- What about water? Electricity?
- How practical are your ideas?

Now think of the construction features. Pole barns are the most common type but stud walls with a concrete foundation are also popular.

- Will the roof be flat or arched?
- How will you insulate your barn? Will it be heated?
- How about windows? Doors?
- What will you put on the inside walls?
- What will be on the outside walls?
- What about the floor?

All this seems overwhelming but planning a stable requires a lot of preparation.

After deciding upon design you must decide on a contractor who will give you an estimate on cost. Always get several estimates as prices vary greatly.

Equus' Hint:

The more natural light the better. The horse will be healthier and your electricity bill will be lower.

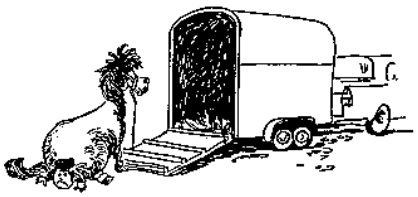
TRAILERING YOUR HORSE

Loading Your Horse

All loading, trailering and unloading should be done with at least two people, if possible.

If a horse is loaded from the time he is a foal, and it is done kindly, there will never be a problem unless he is frightened. Also, if a horse is rewarded each time with grain or a goodie, you will have few problems.

If you must load a horse who is not willing, have another person stand behind the horse and, as you coax him from the front, have them gently push from behind. Two people with their hands locked behind a horse's rump, on the gaskin, can generally push and lift a horse into the trailer. It often helps if you can lift one of the horse's feet onto the ramp or into the trailer as it seems to get him over the first fear of hitting his legs while getting up onto the trailer.



Practice loading your horse and train him so he can be "sent" into the trailer - especially if you are using a two-horse trailer.

When loading into a trailer equipped with a divider and your horse cannot be "sent" into the trailer, you should lead your horse into the left side while **you** stand on the right side of the divider or vice versa.

It is not a safe practice to walk in front of your horse and lead him in. **Never do this if there is no exit or escape door**. Usually escape doors are awkward to get through and horses have been known to try to follow.

Always practice absolute caution and safety when loading and unloading your horse. Be sure that the ground behind and around your trailer provides safe footing for loading and unloading.

Fasten the butt bar or chain **before** you tie the horse. Be careful when you reach for it. When it comes time to unload your horse ease it down carefully so you do not bump your horse's legs.
If you tie your horse in the trailer, be sure to use a quick release knot or panic snap. Be sure to allow enough length of rope that the horse can move its head to balance.

Always stand to one side never directly behind a horse that is being loaded into or unloaded from a trailer.

Hauling Your Horse Safely

1. Check your trailer regularly in these areas:
   a) floor boards
   b) door hinges and locks
   c) hitch welds
   d) spring shackles and wheel bearings
   e) wiring (signal lights, brakes)
   f) safety chains
2. Be sure your trailer has enough height to allow your horse head room.
3. Check for any protruding metal.
4. Try to distribute the weight evenly. If you are hauling only one horse, it is safest to load him on the left side.
5. Before you drive off
   a) Double check all connections - the hitch, the signal and brake lights and the safety chains.
   b) Double check that the doors are closed securely, fastened correctly.
6. The driver should start and stop slowly and steadily. All turns should be made slowly. Drive defensively at a moderate speed. Remember the weight of the trailer and your horse makes stopping quickly an impossibility.
7. Check the horse and the trailer hitch at **every** stop before you continue on.
8. If you are hauling a long distance you should stop and walk your horse after four hours of driving.
9. Use shipping boots or leg wraps to protect your horse's legs and tail wrap to prevent him from rubbing his tail. (Leg wraps also reduce ligament and tendon fatigue.) A poll protector can prevent him from injuring his head.

What's Next?

In the next Skill Builder, you will learn about the digestive system in a horse, as well as the nutrients and minerals that a horse needs.

Skill Builder 5: Health

You feed and care for your horse because you want to maintain a physical condition so that it feels good and will work for you. Teeth are commonly used as a way of determining age of a horse. Over time, the teeth of a horse change according to a known pattern.

Skills Checklist

Level	Required Skill	Activities
1-23D	Create a rough sketch of the digestive system and briefly explain how each organ plays a part in the digestive system.	☐ Digestive System ☐ Colic ☐ Internal Parasites ☐ Injection Time ☐ Good and Bad ☐ Health Check ☐ Telling Time by Teeth ☐ Ration ☐ Record This
1-24D	Explain the causes, symptoms, and treatment of colic.	
1-25D	Explain and demonstrate how to safely give a horse an oral medication.	
1-26D	Describe the life cycle of two internal parasites.	
1-27D	Show where to give your horse an injection and explain safety precautions.	
1-28D	Assist younger members in finding assistance dealing with horse health problems.	
1-29D	Assist younger members to identify good and bad feed.	
1-30D	Explain how to identify the age of a horse and then demonstrate this procedure.	
1-31D	Review how to take pulse and capillary refill. Assist a younger member in both procedures.	
1-32D	Explain why a balanced ration is important to your horse's health.	
1-33D	Identify the cost of ration for horses per month.	
1-34D	Keep up to date feed and health records.	

Dream it!

Do you feed all of your horses the same thing? What type of feed do you give to your horse? Do you feed them the same thing year round?

Have you had to treat your horse for parasites?

Do it!

Digestive System

Draw a rough picture of the digestive system of a horse. Make sure you label the main organs of digestion: salivary glands and teeth, stomach, small intestine, caecum, large intestine, small colon, and rectum. Briefly explain how each organ plays a part in the digestion system.

Colic

With a partner, define colic. Once you have an defined what colic is, match the different types of colic with their causes.

__ Spasmodic Colic	a) Cause when indigestible material collects and blocks the bowel. It is often caused by lack of water or by swallowing sand along with feed or water.
__ Flatulent Colic	b) Caused by worm larvae that invade the blood vessels that supply the intestines. This type can be prevented by regular deworming.
__ Obstruction (Twisted Gut) Colic	c) Caused by a buildup of gas in the intestines, often the result of eating spoiled food, frozen grass or lawn clippings, which ferment and produce gas.
__ Impaction Colic	d) Occurs when the bowel becomes twisted on itself. This can happen during other types of colic, especially if a horse rolls while his intestines are distended with gas. This type is very serious and surgery is necessary to save the horse.
__ Thrombembolism Colic	e) Caused by cramps of the bowel. It is the result of a horse eating spoiled feed, overeating or drinking cold water when he is overheated.

With a partner, fill in the chart below on symptoms of colic.

Early Stages	Later Stages

Discuss what type of treatment you can do/give to your horse if it has colic.

Internal Parasites

Discuss as a group what an internal parasite is and where they can be found. Identify four common internal parasites and describe the life cycle of two of them.

Injection Time

Go outside to your horse and identify the area where you would give an injection.

As a group, identify at least three safety precautions while injecting.

Good and Bad

With a partner, identify and make a list of at least three good types of feed and three bad types of feed.

Good	Bad

Once your list is completed, help younger members identify why the different types of feed are good or bad.

Health Check

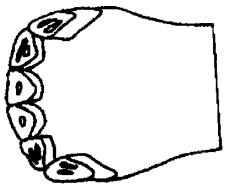
Review how to take the pulse of a horse and check the capillary refill time.

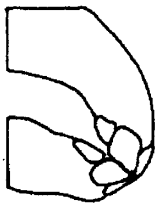
Go outside and pair up with a younger member, and assist them in taking the horse's pulse and checking the capillary refill time.

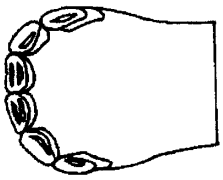
Telling Time by Teeth

MASTER

Looking back for reference, how old would the following horse be? Why?







With the help of a leader or parent, go outside and determine the age of a horse by looking at it's teeth. How old was the horse?

Ration

Discuss as a group why a balanced ration is important to your horse's health. Compare the weight of different types of grains using the same container. List the types of grain you measured and what each weighed. Why do we measure feed by weight and not by volume?

Record This

Include all feeds fed (roughage, grain, supplements)

Feed	Amount Fed Kg / day	Digestible Energy (DE) (Mcal)	Protein Kg	Calcium (Ca) g	Phosphorus (P) g	Vitamin A IU
Total						
Required						

HEALTH RECORDS

List any routine practices for prevention of sickness and injury such as de-worming and vaccinations you have used on your horse. Also include treatments for sickness or injury.

DATE	PROBLEM	TREATMENT	COST

1-MONTH FEED RECORDS				
	Quantity		Price Per Unit	Total Cost (1month)
Feed	Per Day	For 1 Month		
Grains (list)				
Roughages (hay)				
Pasture				
Supplements				
Protein				
Minerals				
Salt				
Other…				
			A. 1-Month Feed Costs	$
			B. Bedding Costs	$
			c. Hauling Costs	$
			D. Health and Veterinarian Costs (see Health Record)	$
			E. Farrier Costs	$
Month_____ to Month_____			Total Cost for 1 Month	$

Dig it!

Discuss as a group the following questions

- Were there any feeds that you were surprised that they were good or bad?
- Were there any types of internal parasites that you didn't know about?
- Did you find identifying the age of a horse by looking at it's teeth challenging? Why or why not?

Share with the group what type of ration your horse needs.

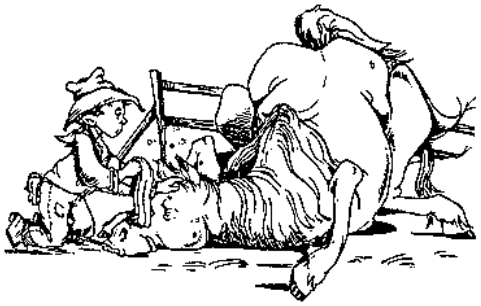
YOUR HORSE'S HEALTH

An important part of maintaining a healthy horse is to learn what is considered normal. After you have learned "normal" it will be easy for you to recognize the abnormal.

General Signs of Good Health	General Signs of Illness
1. Stands alert and erect.	Appearance is "droopy". His head may be low and his expression dull.
2. Eyes are bright and clear.	Eyes are dull.
3. Coat should be smooth and glossy.	The hair is dull and the skin is sticky.
4. Appetite is robust and constant.	Appetite is poor.
5. Digestion is normal.	Digestion is poor.
6. Pulse is in the normal range.	Pulse is more rapid than usual.
7. Normal temperature of 37.2° to 38.3°C	Temperature rises above normal.
8. Mucous membranes or the lining of the mouth should be shiny and pink.	Poor blood circulation (such as during shock) may cause mucous membranes to be almost white.
9. Horse breathes in a normal manner.	Respiration may be faster than normal. The nostrils may be flared.

The Vital Signs

When a problem is suspected, the heart rate, respiration rate and temperature of the horse are measured. Capillary refill time and the skin pinch test are also helpful vital sign tests.



Respiration

To measure respiration, place your hand on the flank of the horse to feel the movement as the horse inhales and exhales. **Count 1 for each inhale and exhale – not 2**. You could also do this by watching his flank.

Remember the respiration rate will be higher after exercise, in warm weather and when the ventilation is poor.

Normal respiration is 8-16 breaths per minute.

Pulse

To measure the pulse (heart rate) you need a watch that measures in seconds. Time for 15 seconds and then multiply by 4.

The pulse rate is affected by air temperature, exercise, excitement and age.
Young horses have a higher pulse rate than older horses.

The heart rate (pulse) may be taken in several places where a main artery is found. They are:

1. At the margin of the jaw where it comes from the underside.
2. At the inside of the elbow joint.
3. Under the tail.

The normal heart rate is 40-44 beats per minute but it can range from 32-44 beats per minute

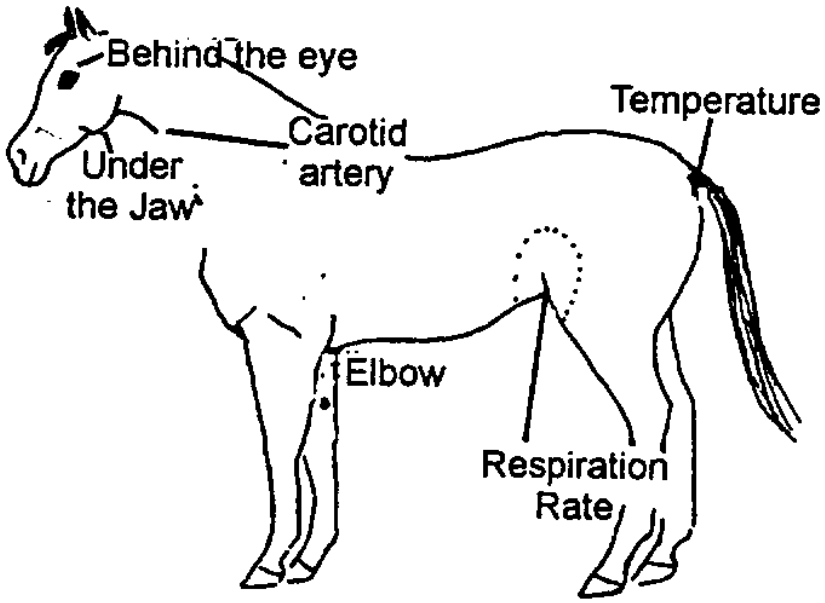
Normal Vital Signs

Temperature:
38°C
(100.5 F)

Range:
37.5°-38.3°C
(99-100.3F)

Pulse:
40-44/minute

Respiration:
8-16/minute



Temperature

The temperature is taken using a lubricated (veterinary) rectal thermometer.

The average temperature is 38°C (100.5°F) but 37.5°C to 38.3°C (99°-100.8°F) is considered as normal.

Body temperature is affected by air, age, temperature, digestion and exercise.

- A fever of 39°C (102°F) is **mild**.
- 39.5°C-40°C (103°-104°F) is **moderate**.
- 40°C-41.5°C (104°F-106.5°F) is **high**
- Above 41.5°C (106.5°F) is **life threatening**

Capillary Refill Time

The capillary refill time is a way of checking if the circulatory system is functioning correctly. Therefore it is helpful in detecting colic.

This is measured by lifting the horse's upper lip and pressing down with your thumb on the gum directly above its front teeth. When you remove your thumb, a white spot should disappear and the depressed spot should look normal. If this test takes longer than 2 seconds, the circulatory system is slow.

Skin Pinch Test

This tests for dehydration. Since horses require a lot of water, dehydration can be fatal. To check for it, simply pinch the skin on your horse's neck. The wrinkles that result should return to their normal appearance of lying flat against the horse's neck within 2-3 seconds. If it remains wrinkled for longer the horse may be dehydrated.

Winter Care for Horses

Cold weather can take the joy out of riding so the horse is often forgotten during the winter. Many horses are turned out on old pasture or cropland to forage for the winter. Watch your horses to make sure they are not losing weight. If they begin to, increase their feed.
There are a number of things we can do to make our horses more comfortable. A horse that is well fed does better for several reasons. The body has the nutrients it needs to maintain itself and produce body heat. If the weather becomes very cold increase the amount of feed to provide extra energy to keep the horse warm. A useful rule of thumb to use when calculating the feed a horse needs when it is cold is **for every degree below minus 15 degrees Celsius, increase feed by 2 ½ percent (or ½ pound per degree for the average horse)**.

For winter maintenance, it is best to feed increased hay, as it gives off more heat during digestion than grain does. Increase the hay until it is no longer practical, then add grain if necessary. This will be in the 2 ½ to 3 percent of body weight and will depend on the quality of the hay.

Horses must have clean free choice water to drink. The water should be warmed slightly (two to three degrees Celsius). A horse eating snow will feel the cold more than a horse that has water supplied daily. The interior heat from its body will have to be used to melt and warm the snow - using more energy (feed). A horse on dry feed during the winter must have access to water, not just snow.

A horse that is being ridden during the winter may also need extra feed. Take extra care when riding the horse in winter. The footing is not always solid. This makes slow gaits the safest. Even a horse in good condition will sweat. Horses with a heavy haircoat may overheat if exercised extensively. Do not turn the horse out until it is dry. If the horse is turned out damp it may catch a chill.

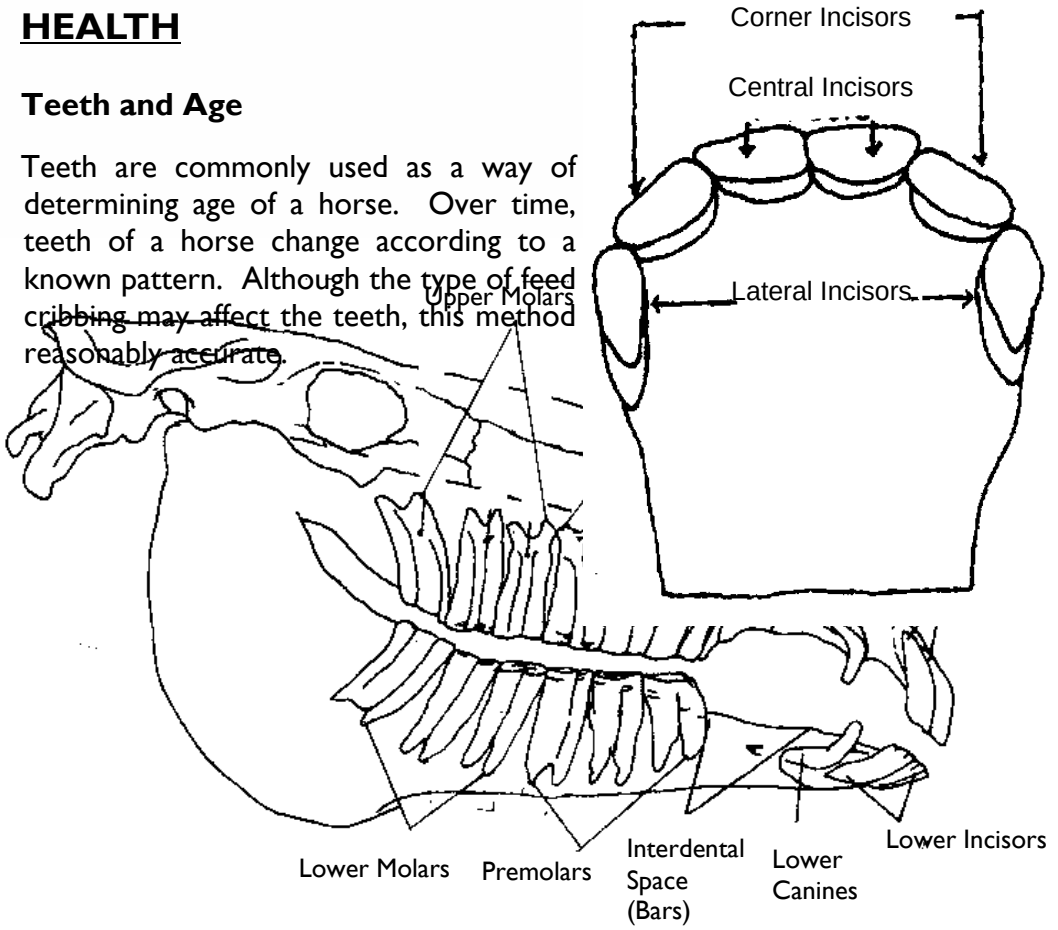
Horses do not need to be kept inside during the winter, but they do need shelter from the wind. Wind is a problem because it cools the horse down faster than cold temperatures alone. For horses being kept on pasture, trees, bush and hills are good protection. Open front shelters are also excellent since not everyone has barn space for horses. Some people do keep their horses in the barn for the winter. These need to be turned out for exercise.

Horses that are turned out during the day after being kept in a heated barn should be blanketed. The only problem with blanketing is that if the horse sweats under the blanket it may possibly become chilled because it takes so long to dry, so check your horse regularly and remove the blanket on warm sunny days. Always be sure to keep the blankets clean and mended.

HEALTH

Teeth and Age

Teeth are commonly used as a way of determining age of a horse. Over time, teeth of a horse change according to a known pattern. Although the type of feed and cribbing may affect the teeth, this method is reasonably accurate.



Incisors

- are the front teeth
- used to tear off grass
- 6 in the upper jaw and 6 in the lower jaw

Premolar & Molars

- are the back teeth
- used for grinding food
- the molars are at the back of the jaw and the premolars are in front of them
- there are 12 in the upper jaw (6 on each side) and 12 in the lower jaw (6 one each side)

Canine teeth or Tushes

- small pointed teeth found in the upper and lower jaws just behind the incisors
- usually only found in male horses

Wolf Teeth

- small extra premolars found in-front of the first premolar
- causes discomfort to the horse when a bit is placed in his mouth
- may be easily removed by a veterinarian

Interdental Space

- the gum space between the incisors and the premolars
- space where the bit sits

Bars

- the upper surface of the lower jawbone in the interdental space
- a very sensitive area where the bit rests

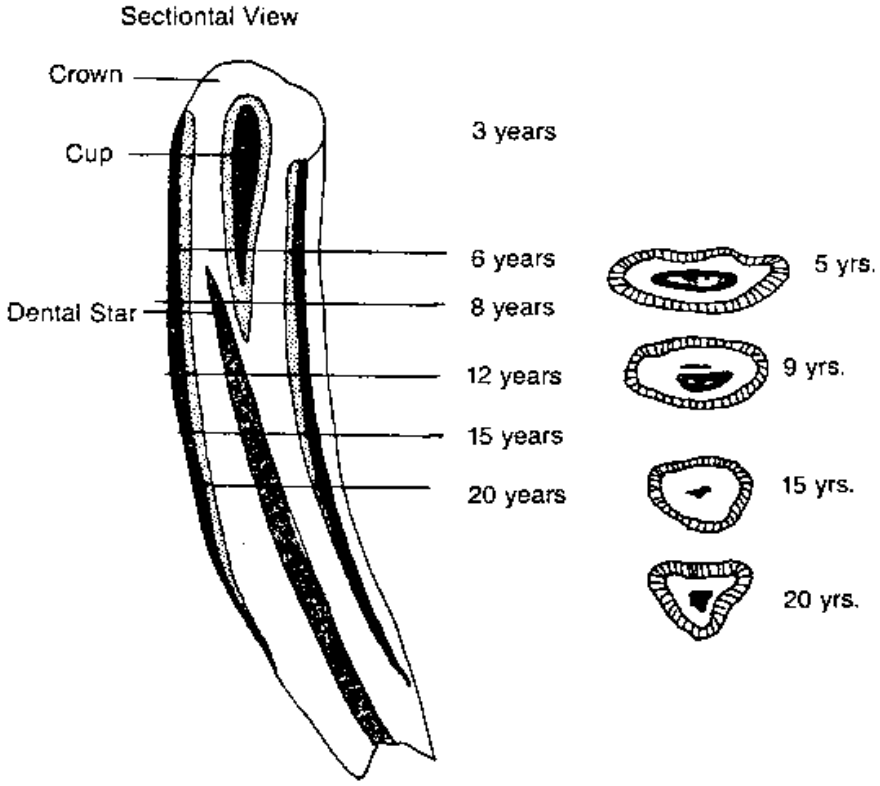
Teeth Facts for Horses

A horse has the same number and type of teeth on top and bottom.

Foal
- 12 molars
- 12 incisors
- 24 teeth

Mature Mare
- 24 molars
- 12 incisors
- 36 teeth

Stallion or Gelding
- 24 molars
- 12 incisors
- 4 canines
- 40 teeth



A horse's teeth are constantly growing and constantly being ground down as he chews his food.

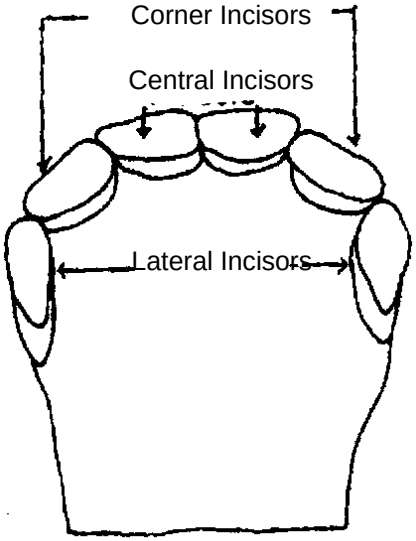
As the teeth grow and are worn down, the appearance of the tooth changes in a set pattern. That is why we can tell a horse's age by his teeth.

Tooth development is related to age. As a horse uses its front teeth, they wear. The diagram shows how after 5, 9, 15 and 20 years the crown, cup and dental star wear down.

Telling Time By Teeth

The teeth appear and wear through very distinct periods.

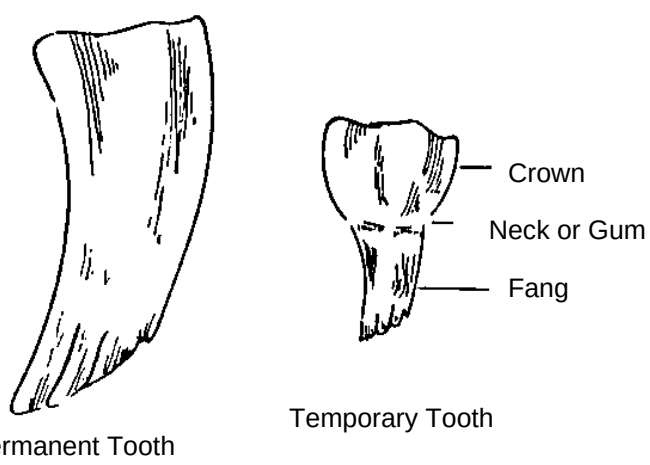
During this time the shape also changes. In horses up to 7, they are oval. From 9-13 years the teeth are a triangular shape and after 13 the surfaces have a rounded appearance.



Horse Baby Teeth

When a foal is born, it has no incisors. The first two (central) appear after 10 days. The next incisor (lateral) on each side will appear up to six weeks later. The corner incisors grow in when the horse is six to ten months of age.

Looking at a young horse, it is easy to identify baby teeth and permanent teeth. Baby teeth are white and have a narrow base. Permanent teeth are yellow in color and are an even width from top to bottom.



Permanent Tooth

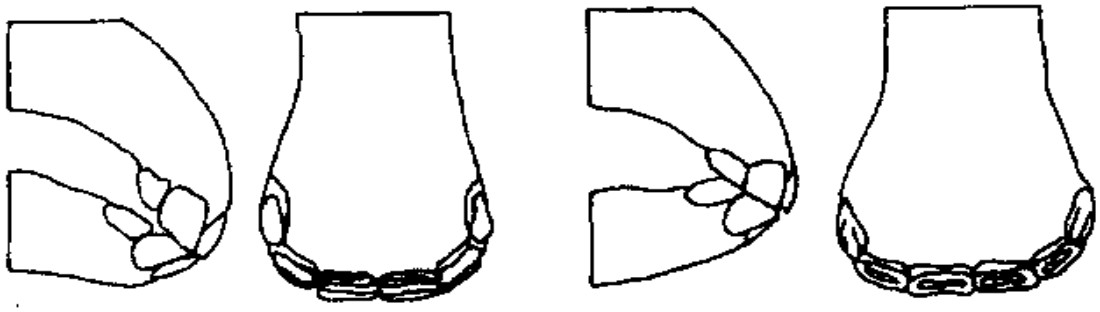
Temporary Tooth

The First Period

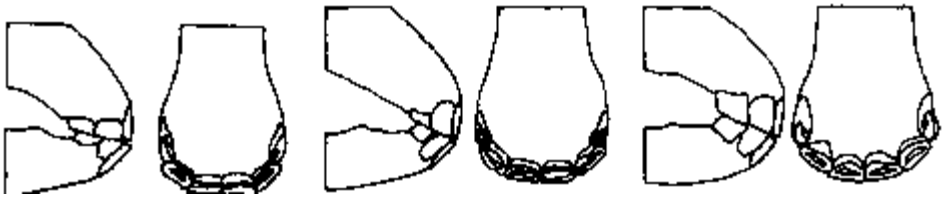
This period involves the growth and use of baby teeth. By 18 months, all of the baby teeth have appeared. By 24 months they are all in use.

1 Year

2 Year



Second Period



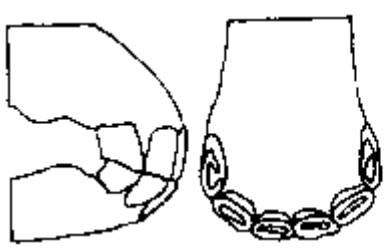
3 Years

4 Years

5 years

- The temporary "baby teeth" are replaced at almost regular intervals by the permanent teeth.
- At 2 ½ years the temporary central incisors loosen and the first permanent incisor erupt.
- From 3 ½ to 4 years the permanent lateral incisors erupt.
- From 4 ½ to 5 years, the permanent corner incisors erupt. (These are the last permanent incisors to come).

Third Period



6 Years

8 Years

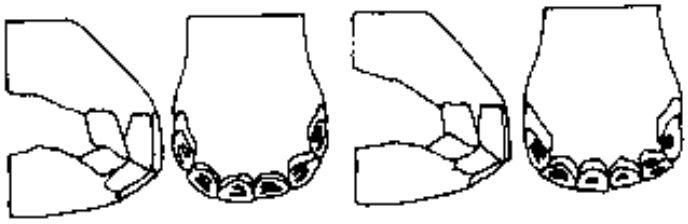
This is the period noted by the wearing of the lower incisors and the disappearance of the cup.

- Six years of age is estimated by the size, shape and disappearance of the cup of the tooth. The cup will be gone by the time the horse is 10-12 years.
- At six, the cup disappears from the lower central incisors and the "dental star" appears.
- The cup does not disappear from all the incisors at the same time.
- By eight years, the cups have disappeared from the central and lateral incisors.

Fourth Period

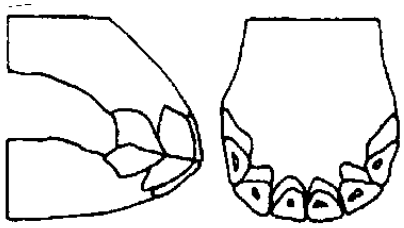
This period is noted by further wearing of the teeth, including the upper incisors and the angle of the teeth.

- After 9 years it is difficult to tell a horse's age accurately.
- The most noticeable change is in the tooth angle which slants outward.
- By 12 years, the dental cup disappear in the central incisors and the horse has what is known as a smooth mouth.
- By 15, the dental star is smaller but is clearer and more centered.
- After 20, the teeth may become shorter. The space between the incisors may increase. The angle of the tooth from the gum to the crown slants out further.

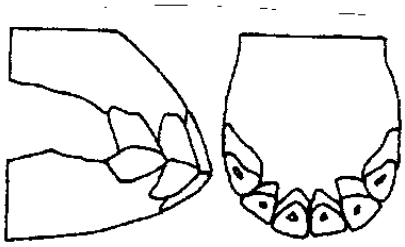


10 Years

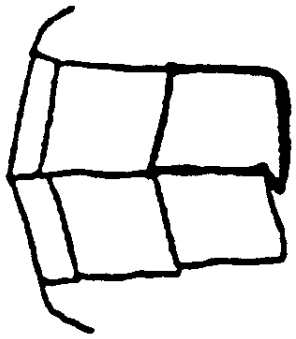
12 Years



15 Years



19-20 Years



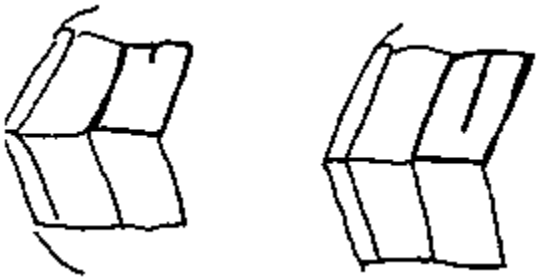
7 year hook

Changes to Note

At 7 years of age, a hook appears on the edge of the upper corner incisor. This hook disappears by 10 years of age.

Galvayne's Groove

This groove appears on the outer surface of the upper corner incisor teeth. It appears at about 10 years of age at the top of these teeth and develops down the tooth more as the horse ages. At 14, it will be more than one third of the way down the upper corner incisors. By 20 years of age, it has reached the bottom of the corner incisor teeth.



11 years 17 years
Galvayne's Groove Development

More "Toothy Terms" to Remember

Dental Star - a star shaped or circle-like structure near the centre of the wearing surface of the permanent incisors.

Full Mouth - when a horse has a complete set of permanent incisors.

Parrot Mouth - the upper incisors overhang the lower incisors and do not meet properly and therefore cause uneven wear.

Smooth Mouth - refers to the smooth biting surface of the upper and lower incisors after the cups have disappeared at 12 years of age or older.

Wear - refers to the amount of use or wear observed on the biting surface of the incisors.

Angle Bite - the outer angle at which the upper and lower incisors meet.

Table - another name for the grinding surface of molars and premolars.

Bishoping - a practice done by dishonest horse dealers where a horse's teeth are made to look like those of a younger horse.

Dental Care

A horse's teeth tend to stay in good condition for most of his life. The only problem that usually develop is uneven wearing of the surfaces producing sharp edges. This is easily solved by having his teeth **"floated"** with a special rasp. **Quidding**, when a horse dribbles food from his lips, is a sure sign that the horse needs to have teeth checked.

Other signs that indicate your horse may need some dental work done are:

- Mounds of partially chewed food are found in the manger.
- A large number of unbroken oats are found in the manure.
- It will cock its head, spill food from its mouth and obviously have difficulty eating.

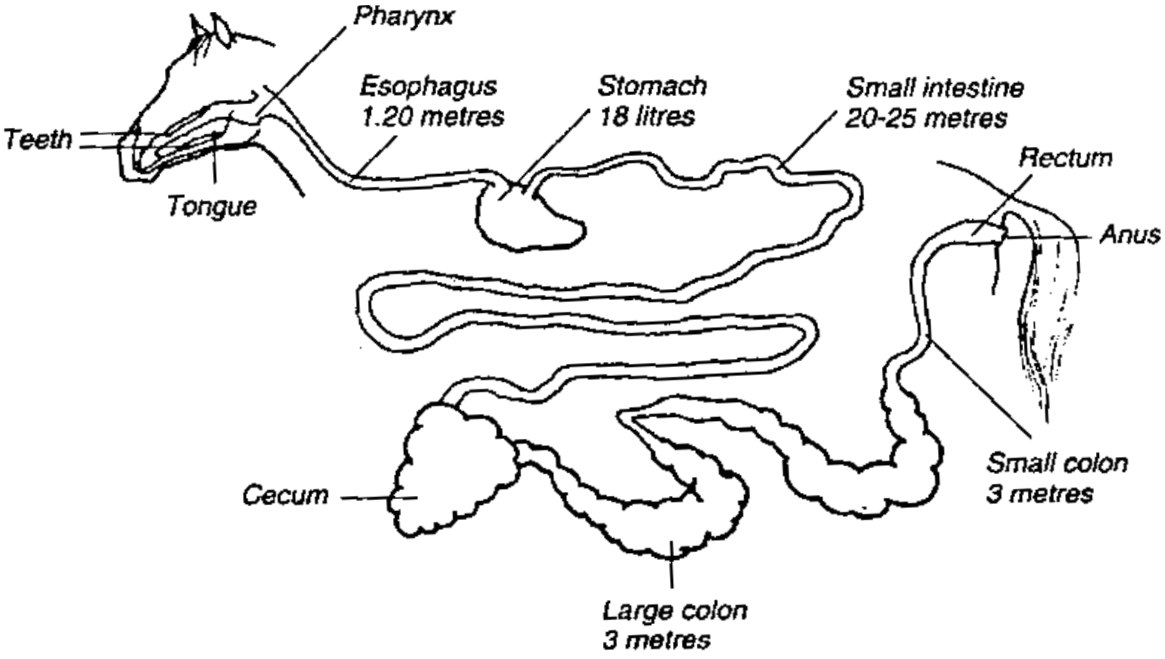
Horse Digestion

The digestive system of the horse is a simple single stomach system (also found in the dog and the pig). However it has unique type of large intestine that is able to digest roughage such as hay or grass. It has a much smaller capacity for digestion than a cow. That explains one of the rules of good feeding – "feed small amounts often."

The main organs of digestion include the:

1. salivary glands and teeth
2. stomach
3. small intestine
4. caecum
5. large colon
6. small colon
7. rectum

The liver and pancreas also contribute to the digestive system. The total length of the system is about 27 metres (90 feet) and the capacity is about 227.25 l (50 gallons). The complete digestive process, from time of eating until expulsion of feces takes three to four days.



The Salivary Glands and Teeth

Digestion begins in the mouth where the food is ground up and mixed with saliva by the molars. Saliva is discharged into the mouth from ducts located inside the cheeks, on the floor of the mouth and under the tongue. Salvia makes swallowing easier and helps to convert the starches into sugar. The moisture content of the food determines the amount of saliva. The food is ground by the sideways (lateral) movement of the jaw.

After the food is chewed and mixed with saliva it is moved to the back of the mouth where the muscles of the pharynx force the food into the esophagus and into the stomach. Food moves down through the esophagus by successive waves of muscular constriction. The muscles allow movement in one way only and prevent vomiting.

Stomach

In the stomach, glands located in the lining secrete gastric juices which are added to the salvia-soaked food. The gastric juices are slightly antiseptic and consist mainly of water, hydrochloric acid and enzymes (**pepsin**). The action of the pepsin breaks down vegetable fats and changes proteins into a form that can be absorbed by the body. The food warms up to body temperature and with the fluid conditions prevailing inside the stomach the food begins to break down. The enzymes work best when the stomach is less than full.

Small Intestine

The small intestine is suspended from the underside of the backbone by a membrane called the **mesentery**. Like the stomach, the intestine secretes digestive juices through intestinal glands. Enzymes from the liver (bile) and pancreas are also secreted. The rate at which the food is broken down is speeded up. The food breaks down into small molecules that are absorbed through hair – like "villi" that cover the wall of the intestine.

Caecum

The caecum is the first part of the large intestine. It is a unique structure that allows the horse to utilize roughage because of the micro-organisms that help to break down woody material. It is also known as the "water gut" because it has a capacity of about 36 litres (8 gallons). In addition to digesting roughage and absorbing nutrients it serves as a reservoir for storing water in the system.

Large Colon

In the large colon the bacterial action continues to break down the fibrous portion of the food, releasing carbohydrates. This action may take several days. That is why the large colon is so large, 3-4 metres (10-12 feet) long, about 25 centimetres (10 inches) in diameter and can hold about 91 litres (20 gallons). Both the caecum and the colon have microorganisms which are responsible for the synthesis of several B vitamins that are essential to the horse.

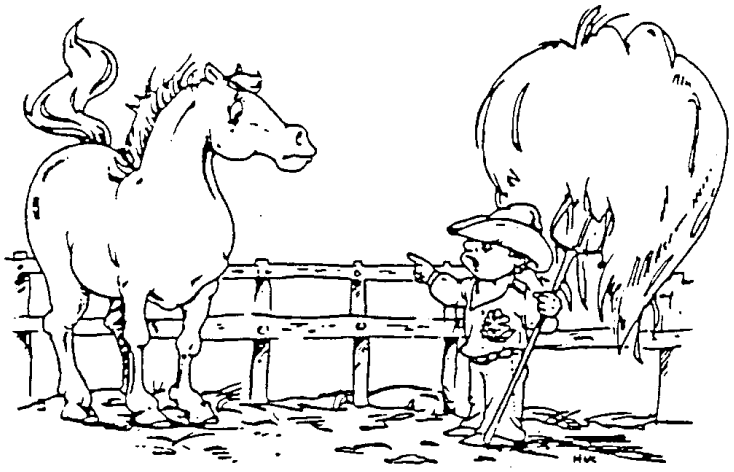
Small Colon

In the small colon, much of the fluid content is re-absorbed into the horse's body.

Rectum

When the residue of the food moves into the rectum, it is pressed into the shape that characterizes horse droppings. The droppings of a healthy horse consist of 25% solid material and 75% water.

The feces from your horse can be an indication of their health. Any sudden change in consistency, color, odor or amount it may be the first indication of a problem.



Feeding Management Guidelines

1. Feed additions such as growth stimulants and antibiotics, have not been proven beneficial to the horse. Therefore feeds containing these products should be avoided.
2. Floating (rasping) of the horse's molars and pre-molars as necessary will improve digestion.
3. Maintain a constant worming program. A non-wormed horse needs at least 10% more fluids fed daily to maintain condition costing about $35.00 to $70.00 more per year. As well worms are a leading cause of colic.

Rules for Good Feeding

Your horse's health depends upon his food, and his care. That is the responsibility of every horse owner. Always keep the rules for good feeding and your horse will thank you.

1. Feed little and often.
2. Feed plenty of bulk food or roughage (hay).
3. Feed according to the work being done.
4. Make no sudden changes in the diet.
5. Feed at the same time each day.
6. Feed only good quality hay and grain.
7. Do not work the horse immediately after feeding.
8. Provide free choice water at all times.
9. Feed a succulent every day if possible.
10. Provide a trace mineralized salt block or loose mineral salt.

Parasites

Parasites are small pests that make their home on another animal. The animal on which the parasite lives is called the host. Infestations of parasites are very detrimental to the horse's health so it is up to the horse owner to recognize the signs.

A parasite is an animal that lives off of another animal (host). The parasite uses the host to provide it with a home and food. It may eat the same food as the host or use fluid from the animal's body (often blood). It is not in the best interest of the parasite to be present in large numbers; this can make the host unhealthy and it may die. If the horse is dying from parasite damage, large numbers of parasites will migrate out of, or off the body of the horse before it dies.

The horse is the host to a variety of parasites. Susceptibility to parasites varies. Young horses from birth to two years old are the most likely to show symptoms. Young horses tend to eat manure and dirt. Older animals usually do not have as much of a problem as young animals unless they are kept in a badly infested area. In older horses more parasites will go through the body, but will not stay.

In order to control parasites we need to be able to recognize parasite infestation. While not all parasites can be seen, they produce changes to the body of the horse. It is important to rid your horse of parasites to prevent irreparable damage to internal organs (lungs, liver, arteries and intestines).

Internal Parasites

Table 1

Parasite	Where Found	Size	Number of Eggs	Method of Infection	Location and Lifecycle	Signs
large roundworm (ascarid)	small intestine	5-22 inches	1,000,000 /day	swallowed with feed and water	Eggs - stomach and intestine Larvae - go through gut wall into the bloodstream, through liver, heart and lungs, migrate up the trachea and pharynx and are swallowed	Colic, diarrhea, rough hair coat, pot bellied, retarded growth
bots	hairs of lips, throat, migrate through stomach-lining, rectum	3/4 inch	150-300 eggs	horse rubbing eggs with lips	One year cycle. Larvae enters and grows in mouth. Pass to the stomach and intestines. Pass out with feces. Bots can attach to the rectum for several days.	Yellow eggs are attached to hairs of the horse, generally legs. Colic, digestive upset, excitement, thin, low energy level. Poor coat and loss of condition.
strongyles (large) bloodworms	small intestine, caecum, colon, blood	2 inches	large numbers	swallowed with food and water, on pasture and in pens	Pass through three stages on the ground after hatching. Go through walls of the small intestine, caecum, colon into the arteries and through the circulatory system.	Loss of appetite, diarrhea, rough coat, sunken eyes, colic, anemia. Can cause thrombosis or aneurysms (blockages that may cause death through gangrene or heart failure).
pinworms	rectum, large intestine	very small eggs may be anchored in anus. One species produces live young.		swallowed with food and water	Mature in the colon. Pass out with feces and anchor in the anus.	Tail rubbing, irritation of the anus. Broken hairs and bare patches around tail and buttocks.

Internal Parasites

These parasites are small worms which live inside your horse's body. Most can be found in:

- The digestive tract
- The lungs
- The body cavity
- The muscles

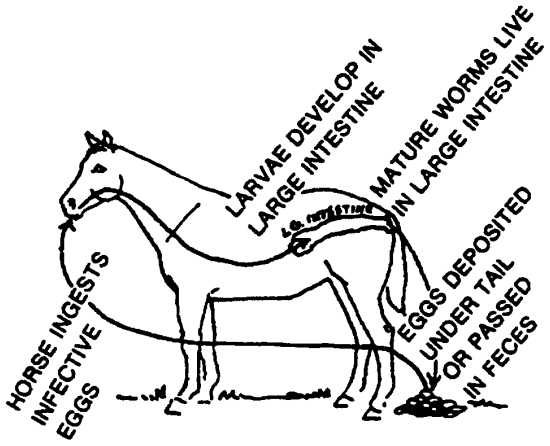
Because they may be at different stages in their life cycle the same parasite may be found in several places in the body. Horses with infestations of internal parasites (worms) may show several of these signs:

- A rough dull coat
- May shed out later in the spring than the other horses
- A thin horse with a pot-belly appearance
- Thin even though he is well-fed and is no longer growing
- Frequent colic or diarrhea
- Stunted growth
- Poor bone or muscle development in young horses
- Pale membranes of the eyes and mouth

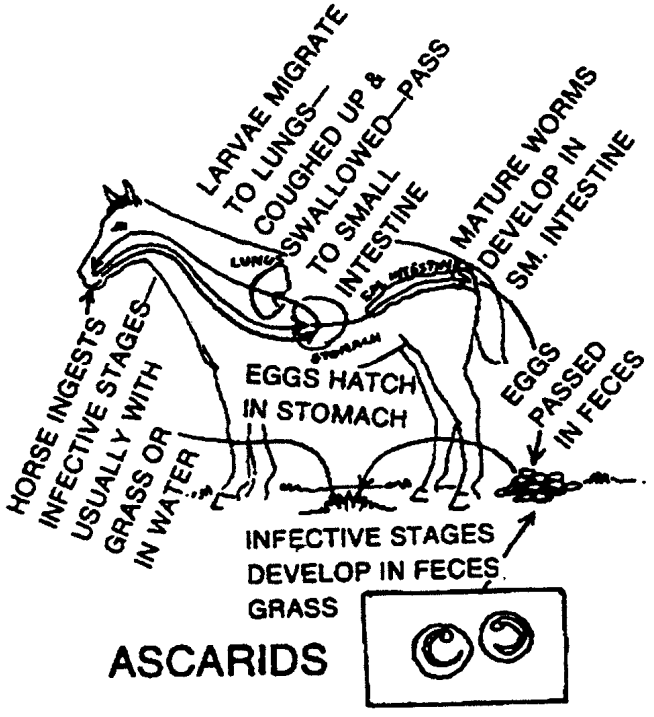
Common Internal Parasites

Pinworms

Pinworms lay their eggs at the base of the horse's tail, and horses infected with them often rub on walls and fences because these eggs cause intense itching. Pinworms may be found in the large intestine. Signs of pinworms include tail rubbing.



PINWORMS



ASCARIDS

Ascarids (Roundworms)

These yellowish-white, pencil-thick worms are the largest of the parasites varying from 5-52 inches in length. Roundworm eggs hatch in the stomach, then move through the liver and lungs. The worms are then coughed up, re-swallowed and the process starts again. With age, horses build up a resistance to these worms. Foals are most affected by

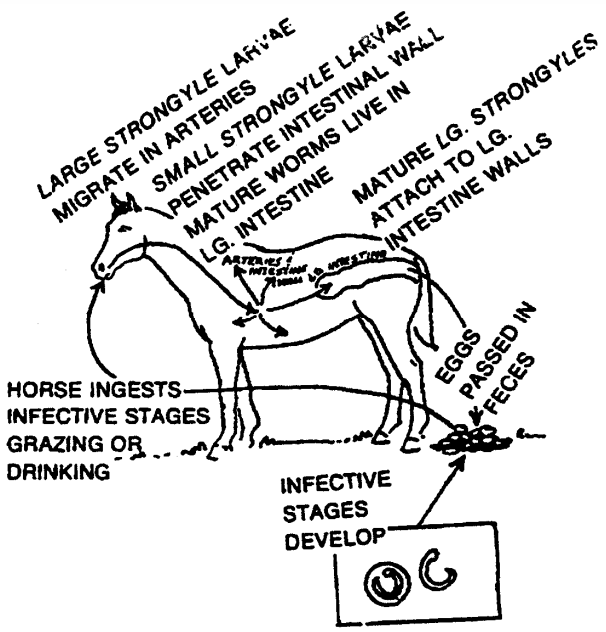
Stongyles (Bloodworms)

They are the most common and most dangerous parasite to horses. There are about 54 varieties.

Bloodworms suck blood through the walls of the gut and large intestine. This is what gives them their bright red color. Some of them live in the blood vessels and if their numbers are great enough, they can cause blood clots or they can keep needed blood from getting to the digestive system. Colic and death are possible as a result of heavy bloodworm infestations.

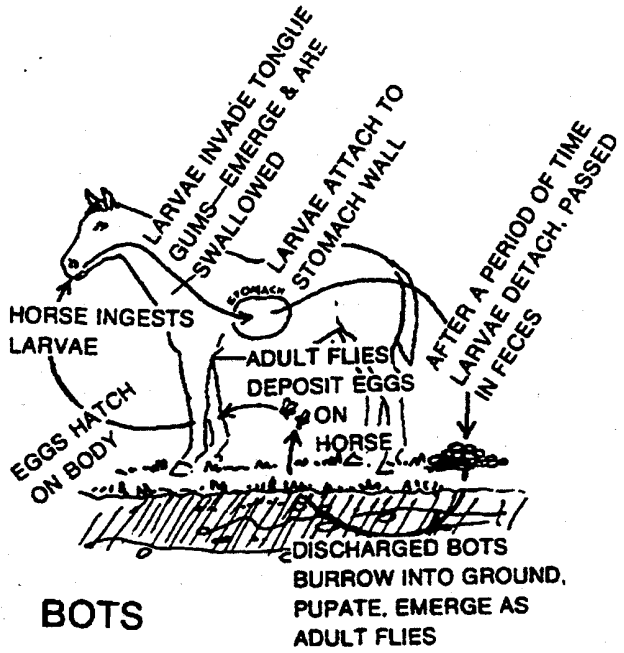
Bloodworms may be found in the small intestine, caecum, colon and blood.

Signs of bloodworm infestations include; loss of appetite, rough coat, sunken eyes, colic.



Bots

Bots are not worms, but flies which lay their eggs on the horse's forelegs and chest. The eggs hatch into small larvae or maggots and are licked off by the horse. The larvae then move from the mouth down into the gut where they do most damage since they can cause colic, ulcers, poor digestions and poor growth. Bots may be found in the nose, throat, stomach and intestines.



BOTS

Deworming Programs

All horses should be on a regular deworming program where they receive dewormer at least twice a year to keep the internal parasites under control. There are many different brands available. They come in paste, gel, liquid and powder. Consult your veterinarian to set up your program.

Since the horse must live in a limited space the problem recurs. Manure is the main source of parasite infection so it is easy to see how the problem grows. Our cold climate is an advantage when it comes to parasite control since most parasites and their eggs are killed by freezing temperatures. Pasture rotation, reducing the number of horses in small areas and not over-grazing helps to control parasites. Removal of manure from corrals and pens will help to prevent the problem also. Harrowing of pastures spreads the manure allowing the heat and sun to destroy the eggs.

Fecal Counts

By providing your veterinarian with a fecal sample from your horse, you can learn how many and what type of worms he is carrying. Your veterinarian can then advise you which dewormer to use.

External Parasites

Mosquito

These pests bother both people and horses. As well they spread disease. The application of some insecticide sprays may give some protection.

Flies can really irritate horses.

Flies

Flies are always a problem during the summer months. There are many species of flies that are a nuisance to horses.

House flies and face flies can be very irritating for the horses. They are suspected of spreading infectious eye diseases. Horse flies, stable flies, deer flies, black flies and horn flies are bloodsucking and cause pain when they bite. Blow flies, known as blue bottle flies lay eggs in open wounds.

These hatch into larvae or maggots. Keeping the stable and the pasture clean and free of manure is the best way to control flies since flies lay their eggs in manure. If flies are a real problem, an insecticide may be sprayed on stable walls and ceilings. However great care must be taken that none gets on the feed or the horse. The horse may also be sprayed with an appropriate fly spray. Fly masks are available that cover the face and ears offering some protections.

Horsefly

Face Fly

Stable Fly

Horn Fly

Lice

Horse lice causes intense itching so the horse rubs against solid objects. As a result large areas on their necks, shoulders and hips loose hair and may become red and inflamed. It is usually worst in winter and early spring. The eggs that are attached to the hair may be seen.

The condition may be treated by applying louse powder in several applications to allow for a two-week hatching period. This condition is very contagious.

Mites

These tiny creatures produce a skin disease knows as mange which is similar to scabies in humans.

Scarcoptic mange is caused by tiny mites burrowing into the skin surface causing great irritation and itching to the horse. As the horse rubs, the hair falls out and scabs form. It may occur anywhere on the body. This condition must be reported to the Department of Agriculture if it occurs.

Psoroptic mange parasites feed on the skin's surface causing great itching and subsequent rubbing. It is usually found at the roots of the mane.

Since mange is infectious and is easily spread, an infected horse must be isolated and treated. The stall and any equipment used with him should be disinfected to prevent spreading. Consult a veterinarian for advice on the best treatment.

Ringworms

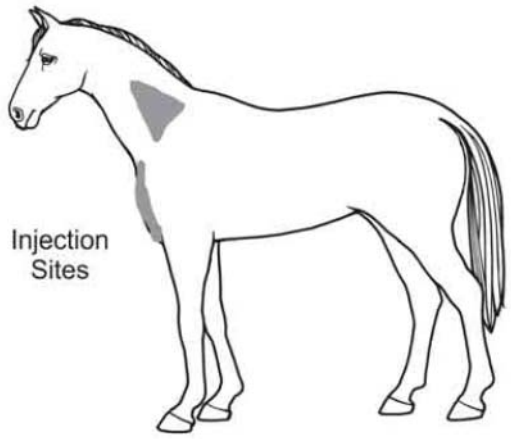
This condition is caused by a fungus. The sores appear as round scaly areas with a rough grey surface. Consult your vet for appropriate medication. Be very careful in handling animals with ringworm as it is contagious not only to other horses but to humans as well.

Prevention

This lies in keeping your stable area clean and in separating the infected animals from the others. As soon as you suspect a problem is developing, isolate the animal and seek advice.

Giving Vaccinations

Most vaccinations are given in the muscle (intramuscularly) and are given most commonly in the chest or neck. When giving injections in the neck, be careful not to hit the jugular vein or spine. The ideal location on the neck is in the triangle (as shown in the diagram). Make sure injection site is in a location that will drain if it becomes infected. **After the needle is inserted draw back slightly on the syringe to ensure that you are not in a blood vessel. If blood is seen within the neck of the needle, remove needle and try a new location.** When using any drug, always follow the directions on the label. Also keep a written record of any vaccines or drugs that are given to your horse.



Colic

A horse with colic has a severe stomach ache. Colic, a gastro-intestinal disorder, has various causes, some of which are sudden changes of diet, worms or overeating. Colic is the most common digestive problem found in horses. Some horses (often young horses) tend to get colic more often than others. As a horse owner it is important for you to recognize the symptoms of colic in the horse. The symptoms develop slowly, so the earlier it is noticed, the better the chance of treatment. The horse will show signs of discomfort by:

Early Warning signs

- The horse will be uninterested in food (he won't eat at all or picks at his feed)
- A change in your horse's attitude (he seems depressed- doesn't greet you or doesn't have any interest in the things around him and doesn't seem to have his usual energy.)
- A change in the appearance, consistency, and amount of your horse's manure. It may be loose and watery, hard and dry, or altogether absent depending on what's going on in his body.

Signs that colic has arrived:

- The horse may be alternately listless and restless, first standing apart from other horses, then pacing or lying down and rolling repeatedly.
- Pawing.
- Looking at his flank
- Touching the sore spot with the nose.
- The horse may bite or kick at its flanks.
- Kicking at the belly with a hind leg.
- Sweating
- Stretching
- Rolling
- Lying on the back (cast) - this may relieve the pressure on the digestive tract.
- Sitting on hindquarters, supported by front legs.
- The horse's resting heartbeat is consistently higher than 50 beats per minute
- The respiratory rate is higher than 30 breaths per minute.
- The horse has either no gut sounds or hyperactive gut sounds.

The reaction of the horse depends on the amount of pain it has. The stretching, rolling, lying cast or sitting on hindquarters indicate that the horse is in considerable pain.

A common cause of colic is worms. Worms can cause colic by blocking a main blood vessel to the digestive tract. This will affect the health and movement of the digestive tract. Worms can also cause an infection in the digestive tract. Colic can occur when a large number of worms migrate through the digestive tract at the same time because of natural causes or from the application of a dewormer. Consult your veterinarian to determine the severity of the problem and treat the horse.

Colic can also be caused by:

- An impaction caused by feed (poor quality, low digestibility, low fibre).
- An impaction caused by sand or foreign materials
- The gut twisting (may be caused by worms or the gut being displaced).
- A length of the gut folding inside itself (intussusception).
- Infection of the digestive tract (may be secondary to another illness).
- A rupture of the digestive tract, usually from pressure with an
- impaction.
- Eating too quickly.
- Gas
- Stress

Colic can be fatal. If you suspect colic, check vital signs and listen for gut sounds. Leading the horse around and keeping it from rolling will help to prevent further problems, such as twisting an intestine or injuring itself. If you have a horse with colic, walk it for 20-30 minutes. This will usually help the mild cases. If the horse is not improving, make it comfortable in a box stall and call your veterinarian. Use a blanket to keep warm and prevent shock. Because of the number of causes, diagnosis is difficult even for a veterinarian. Treatment must be done to relieve the visible symptoms and stress on the horse.

The veterinarian will check the pulse rate and temperature and listen for normal bowel sounds. A tube may be inserted through the nostril and down to the stomach to check for fluid or gases. Mineral oil or fecal softeners may be given through the tube to help move a suspected blockage. Often the horse will be given antibiotics, muscle relaxants, pain relievers and, or sedatives to make it more comfortable. Other treatments may be done by your veterinarian as well.

The twist or torsion type of colic is most difficult to treat because it has the same early symptoms as the less serious colic. The lack of any gut sounds is often an indication of a twist or complete lockage. It is rarely diagnosed before the horse goes into shock and dies. Surgery is the only way this colic can be treated although the success rate is not high.

The Worst Case Scenario Colic

Deaths are the most common with the twist, torsion and the severe impaction. The horse may die of shock. This is the final stage in a chain of events that take place in the body of the horse. The stress causes the horse to dehydrate (lose water). This causes chemical changes in the cells of the body and keeps it from getting the correct messages. When this happens, the horse will not get enough blood to the brain, heart, kidney and liver. The cells in these organs start to die. Next, the body increases its acid production and the acid level in the blood increases. The pulse rate will increase from 40 beats per minute to 80 or 90 beats per minute. Blood will not be sent to all of the areas that need blood. If you are watching the horse, you will see a loss of pink colour in the membranes around the eyes and the gums. Nothing can be done for the horse at this stage.

Death by blood poisoning may also occur.

Fortunately most colic cases respond well to treatment. After a horse has had colic, it should get special treatment for a few days. Feed the horse a bran mash and good hay and limit the amount of grain. The bran and hay are bulky and are easier to pass through the digestive tract. Make sure that the horse has clean, fresh drinking water. If the horse is watered from a pail, supply fresh water several times a day.

Try to estimate how much grain the horse has consumed. If it's only a normal meal amount, put the horse back in its stall or out in its pasture and observe it for several hours. If the grain consumed has been excessive:

1 - remove feed
2 - call the vet
3 - cool horses feet
4 - periodically move horse to stimulate circulation

Treatment is most effective within 48 hours. Laminitis and colic can be likely

NUTRITION

The Five Basic Nutrients

Like all other animals, the horse has five basic nutrient or food requirements. These five groups are:

1. Energy (carbohydrates and fats) for growth, work, and heat.
2. Protein - for muscle and tissue development and repair.
3. Minerals - for bone development and bodily functions.
4. Vitamins - for bodily functions.
5. Water - essential for all functions.

Energy

Energy is fuel needed by the horse for general body maintenance, for keeping warm, for muscular development and building protein. In a ration, energy comes from two sources: carbohydrates (such as starch, sugar, and cellulose) and fats. Different feeds (grain and hay) contain varying amounts. The amount of energy a horse needs in its ration depends on its age and level of activity (working, broodmare, growing, etc.)

Horses are not generally fully mature until they are four years old, yet they are often expected to perform at a very high level at an early age. This is true of race horses and young show horses. Top quality rations should be fed to allow for fast growth, proper bone growth, and muscle development.

A deficiency of energy results in reduced growth, loss of weight, lack of vigour, poor digestion, poor reproductive performance, and weakness. Its extreme form is starvation. Unfortunately, starvation is common during winter and especially in horses less than one year of age.

An excessive energy intake causes the horse to become obese which makes it more prone to laminitis and less interested in activity thus aggravating the overweight problem. Inactive mature horses will become overweight on good quality pasture. Overweight horses are very common among those owned by people who only ride three to five hours a week. Pregnant mares that are too fat may have difficulty developing and delivering a healthy foal.

Measuring Energy

There are 2 methods of measuring the energy value of a feed. One expresses the value in **total digestible nutrients (TDN)** as a percentage. This system has been around for a long time and is a favourite choice of many.

The other system measures energy as digestible energy (D.E.). **Digestible Energy (DE)** is a measure of the amount of useful energy in a feed. For example, oats contain an average of 2.86 Mcal DE/kg. That is 2 kg of oats contain 5.72 Mcal DE. If 10 Mcal of DE are required, 10 divided by 2.86 equals 3.5 kg of oats are needed. The unit of measure is the calorie or megacalorie (Mcal). In calculations one Mcal = 1,000,000 calories.

Protein

Proteins are needed by the horse for building and repairing body muscles. As well as getting enough protein, the horse must get the right kinds. Proteins are highly complex. During digestion, proteins are broken down into amino acids. These are absorbed from the intestine into the blood stream and carried to all parts of the body. They are then recombined to form body tissue and eventually become muscle, internal organs, bone, blood, skin, hair, and hooves. Protein requirements vary with age. For example weaned foals need 14 – 16% protein, yearlings 11% to 12 % and mature horses 9 – 10%.

Minerals

Minerals are required in relatively small amounts but they are a very essential part of your horse's diet. Essential minerals include calcium, phosphorus, sodium, chlorine, iron, iodine, cobalt, selenium, fluorine, potassium, magnesium, sulphur, manganese, copper, zinc, and molybdenum. Most of the minerals are present in adequate amounts in feeds but deficiencies of calcium, phosphorus, salt (sodium and chlorine) and iodine are common and supplementation is usually required. Problems may occur in particular areas where soil and plants are too high (toxic) or too low in one or more of the other minerals.

In many areas of Canada, the soil is low in iodine so plants and feed lack this mineral. This may be compensated by feeding free choice iodized salt.

Salt (Sodium Chloride) in the diet makes feed more palatable and is essential to many body functions such as the formation of digestive juices and the maintenance of osmotic balance in the body. Salt deficiencies may result in reduced appetite, rough hair coat and generally reduced performance. Supplemental salt is required in all horse diets as natural feedstuffs are deficient. Horses should be allowed 50 to 60 g of salt daily and more where excessive perspiration occurs. Until this salt is replaced, the horse may show signs of fatigue or overheating. Salt can be included in a concentrate ration at a level of 0.5 to 1.0 percent. In addition, salt should always be available free choice in a mineral box wherever horses are kept.

Selenium is required by horses. A deficiency produces a muscular dystrophy known as white muscle disease which occurs in areas where the soil has a low selenium content. It has been reported in animals consuming forages grown on Gray Wooded soils which tend to be considerably lower in selenium than those grown on Dark Brown or Brown soils. In deficient areas selenium supplementation is given to pregnant mares and to foals at birth.

Calcium and **phosphorous** are two minerals that are very important to good horse nutrition. Together with vitamin D they are vital to strong bone development. They are required in adequate quantities and in proper proportion, for normal development and maintenance of bone in horses. The ratio of calcium to phosphorus should be maintained above 1.2:1, but below 3:1, however, higher ratios are tolerated by most horses. If there is more available phosphorus than calcium, an imbalance occurs and calcium absorption is reduced. Deficiencies of calcium and phosphorus lead to reduced bone growth, stunting, abnormal development of foals and bones that are more easily injured. Excess calcium and phosphorus can also result in abnormal bone development and imbalances with other elements. In young animals, a deficiency in calcium may result in **rickets**, a disease where the bones are malformed, stiff, and break easily.

A deficiency in phosphorous can cause horses to start chewing wooden fences, bones, and clothing. This is known as **pica** (depraved appetite).

Calcium levels are usually low in grain. However, grass hays are borderline and legume hays have high calcium levels. Phosphorous levels may be high in grains and in bran and oil meals. However, they are low in grass and legume hays. A commercial preparation should be fed to ensure the horse is getting enough calcium and phosphorous.

Vitamins

Vitamins, although they are required in very small amounts, are essential. Without them, certain problems may arise. Many of these vitamins are provided in their everyday foods, such as the hay that your horse is eating.

Vitamin A is considered as absolutely essential. Lack of this vitamin may result in impaired growth and reproduction, poor or uneven hoof development and hardening and cracking of the skin which makes a horse most susceptible to infection. Vitamin A can be found in carrots, fresh grass and herbage.

Vitamin D works together with calcium and phosphorous for good bone development. No vitamin D supplement is necessary when horses are out on pasture. Vitamin D can be found in fresh herbage and sunlight.

Vitamin B is sometimes added to the diet if the horse is under stress or the roughage is not ideal. Vitamin B can be found in alfalfa hay.

Vitamin E is sometimes added to the diet in areas where there is a selenium deficiency in the soil. To some extent, vitamin E can replace the function of selenium. Vitamin E can be found in alfalfa hay, cereal germ, and fresh herbage.

An imbalance of vitamins can create as many problems as a deficiency. Always stay within recommended guidelines.

Water

Water is essential to the horse, as it is to all living creatures. It should always be fresh and clean. Water is necessary to transport nutrients, to remove wastes and to maintain body temperature. Water makes up a large part of the blood and other body fluids (2/3 of live weight).

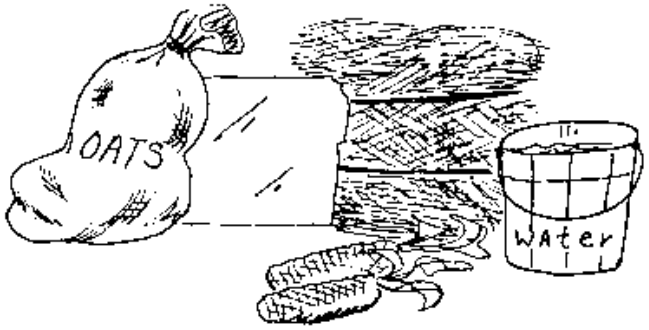
Nutritional Problems

By carefully observing your horse you can be aware of nutritional problems or deficiencies quickly. Common signs include:

1. Lack of appetite – does not want to eat.
2. Loss of weight – hollow flank, prominent ribs.
3. Low spirits – dull, listless.
4. Poor hair coat – dull, rough.
5. Unusual eating habits – chewing unnatural objects, such as wood.

If you are unsure about the reason, consult your veterinarian.

General Feeding Guidelines



1. Horses should be fed small amounts often.
2. Grain rations should be fed at least twice daily.
3. Feed should be given at least 2 hours before a heavy workout.
4. Feed at the same time each day.
5. Water should be given sparingly after hard work and preferably after the horse has cooled.
6. Water should be given before feeding.

Feed Facts Review

1. Pasture - should contain both grass species (timothy) and legume species (alfalfa).
2. Hay - dried forage. Legume hay (alfalfa) has a higher feed value than grass hay.
3. Straw - has low feed value and is used mainly for bedding. Some straws such as timothy straw may be used for feed but must be supplemented.

Concentrates

1. Oats - most common grain for horses. Easy to feed and digest. May be cracked or rolled for feeding.
2. Barley - a high energy grain. Should be cracked or rolled.
3. Corn - a high energy grain. Should be limited to 25% of diet.
4. Wheat - high energy grain but due to its gluten content it should only be fed in very limited amounts. Not usually considered suitable for horses.
5. Wheat Bran - When soaked in hot water, it is used as palatable laxative feed (bran mash).
6. Flax - Fed in small amounts (10% of ration) it will give the hair coat a nice shine.
7. Molasses or Beet Pulp - should be limited to 5% of the ration. Used to increase palatability fattening but low in protein.
8. Minerals - Mixtures of minerals (calcium, phosphorous and sometimes trace minerals) are used to supplement minerals lacking in roughage and other feeds.
9. Salt - usually fed in block or loose form. Red salt is iodized salt. Blue salt is cobalt – iodized.
10. Complete Feeds - usually are a combination of both roughage and concentrates in a cubed or pellet form.

FEED

Grains

Grains are concentrates, which means that they have more nutrients packed into smaller amounts than bulk foods. Grains usually have about 50% to 60% more digestible energy per pound than hay.

A healthy diet for a horse consists of at least 50% roughage. Grains and other concentrates should be fed when a horse needs either more energy or nutrients other than those he / she gets from the roughage he / she eats. Grains may be in kernel form or processed to make them easier to chew and digest. Some grains such as oats and barley may be **crimped** (slightly crushed) or **rolled** (slightly flattened). Barley and corn are sometimes **flaked** (crushed into flakes).

Oats

Oats are less concentrated than other grains due to the fact that they have more fibre in their hulls. This makes them the safest grain to feed.

The best oats have plump, heavy kernels and weight approximately 34 lbs. per bushel. This means they have plenty of starch and not too much fibre.

Corn

Corn must be fed carefully because it is more concentrated. It has the most energy (calories) per pound of all the grains. It is easier to overfeed than oats because one quart of corn provides as much digestible energy as two quarts of oats. The digesting fibre (found in roughage) is what produces a higher body temperature.

Corn may be fed on the cob, as whole or shelled corn, or may be cracked, rolled or flaked. It is important to feed only good quality corn that is not moldy. Toxins found in moldy corn can cause brain damage and death.

Barley

Similar to oats. It has more energy than oats but not as much as corn. Barley has more fibre than corn but not as much as oats. It is easier to overfeed barley than oats.

Barley should be rolled or flaked to get rid of the outer husk so that it is easier to digest.

Sweet Feed

Mixed grains with molasses added. Molasses makes the feed less dusty and more tasty. Be careful when storing and feeding sweet feed in hot humid conditions, as it can spoil. Sweet feed also attracts flies, so keep feed tubs clean.

Handy Horse Hints

1. If your horse is a fussy feeder, medicines can easily be given by placing them inside a hollowed-out apple or carrot. Alternately, mix powders (tablets and pellets can be crushed) with molasses and smear it on the tongue with a wooden spoon, so that it cannot be spat out again.
2. Cubed and coarse feeds contain added supplements. Giving an additional one can imbalance the ration and is a waste of money.
3. It is a false economy to feed cheap, inferior feedstuffs. Because their nutritional value is likely to be low, large quantities have to be given, so you are not really saving money. If they are dusty or contain fungal spores they may also be harmful to your horse's health.
4. Weigh feeds rather than feeding by volume. Short feeds can be deceptive and may vary in weight from one sack to another. Similarly sections of hay can vary tremendously in weight, and it is easy when feeding by eye either to underfeed or to waste money by overfeeding.
5. To prevent a horse from eating his feed too quickly put a large lump of rock salt in his feed bowl. This will also ensure that he receives as much or as little salt in his diet as he wants.

Equus' Hint

To make a cheap feed scoop, cut diagonally across an empty large plastic drink bottle.

Do-it-yourself feed scoops.

Pelleted Feeds

Feed may be ground up and pressed into pellets. There are four types of pellets:
1.Single ingredient such as alfalfa meal
2.Mixed-grain pellets
3.Feed supplements
4.Complete feed pellets that contain both grain and hay

Feeding only pelleted feeds may cause the horse to chew on wood. Supplying some hay keeps them busy, provides necessary bulk and helps prevent wood chewing.

Bran

This is ground-up hulls of wheat. This feed is sometimes mixed with other feeds or fed as a bran mash. Bran should not be fed in large quantities, as it contains large amounts of phosphorous and can upset the calcium-phosphorous balance, resulting in bone problems

Beet Pulp

Beet pulp is a by-product of processed sugar beets. It may be used as a form of roughage, especially with horses with heaves or allergies. Beet pulp is more digestible than hay but bulkier than grain. Dry beet pulp swells as it absorbs water or saliva. **It must always be fed wet**.

Feeds a Horse should NOT receive

Not all feeds found on farms are safe for horses. Some of them can prove fatal. Here are some things to avoid:

1. Urea (non-protein nitrogen supplement)
2. Rumensin (an additive found in prepared livestock feeds. It causes death in horses.)
3. Added Selenium (ask your local livestock specialist)
4. Frozen Silage (can lead to colic)
5. Commercial cattle and chicken feed or any feeds formulated for other types of livestock.
6. Mouldy hay (particularly clover)
7. Salt water
8. Mouldy grain
9. Treated grain intended for seed
10. Hay containing blister beetles or known poisonous weeds
11. Large amounts of bread
12. Poisonous plants (Japanese yew; white snakeroot; leaves from black walnut, red maple, apricot, oak and apple trees; some fescue grasses, bracken fern, horsetail, deadly nightshade, poison hemlock, larkspur, milkweed, jimson weed, rhubarb leaves, ragwort and oleander).
13. Don't permit your horse to lick old fertilizer bags (ammonia poisoning), old paint, pesticide containers (arsenic poisoning) and discarded batteries (lead poisoning).
14. Feed additives, such as growth stimulants and antibiotics, have not been proven beneficial to the horse. These products should be avoided.

Guidelines for Rations

A **ration** is a combination of feeds to meet the needs of your horse.

The feed requirements depend upon:

1. Stage of growth (young horse, broodmare, mature horse).
2. Level of activity (working or resting).
3. Weather conditions (summer or winter).

RATION FORMULATION:

These factors are important to remember when you are formulating rations:

Know or find out the nutrient requirements of the animal you are feeding. NRC nutrient requirements of horses are given in the table below. Make a list of them for your horse.

NUTRIENT REQUIREMENTS OF HORSES

Age	Body Weight (kg) (lb)	Daily Feed (kg) (lb)	Digestible Energy (Mcal)	Protein (kg)	Calcium (g)	Phosphorus (g)	Vitamin A (IU)
Young Horses Mature Weight							
200 kg	(406)	3.10 (6.8)	8.10	0.30	10	7	5,500
400 kg	365 (803)	(11.8)	13.89	0.52	20	13	11,000
500 kg	(990)	6.60 (14.5)	16.45	0.63	25	17	13,000
600 kg	540 (1188)	7.40 (16.3)	19.26	0.74	31	20	13,000
Mature Horses: at light work - 2 hr/day	(440)	4.2 (9.3)	10.44	0.38	8	6	5,000
	(880)	7.4 (16.4)	18.36	0.67	16	12	10,000
	(1100)	8.8nn(19.5)	21.89	0.80	20	15	12,500
	600 (1320)	10.3bb(22.6)	25.39	0.93	24	18	15,000
Mature Horses: at medium work - 2 hr/ day	(440)	(11.7)	13.16	0.48	9.2	7.0	5,000
	(880)	9.(6 21.2)	23.80	0.87	17.2	13.0	10,000
	(1100)	11.6 (25.5)	28.69	1.05	21.2	16.0	12,500
	600 (1320)	13.6 (29.9)	33.55	1.23	25.2	19.0	15,000
Maintenance	200 (440)	3.75 (8.2)	8.24	0.32	9	6	5,000
	400 (880)	6.30 (13.9)	13.86	0.54	18	11	10,000
	500 (1100)	7.45 (16.4)	16.39	0.63	23	14	12,500
	600 (1320)	8.5 (18.8)	18.79	0.73	27	17	15,000

Final Ration

Feed all ration ingredients on a weight basis. Actual amounts fed vary by the size of the horse, the age of the horse, the climate and the working conditions. Veterinarians are usually a good source for recommendations on appropriate types and amounts of feed for a specific horse. Animal nutritionists are also trained in how to develop equine rations and make recommendations.

It is important that you know how to feed your horse to adequately meet its needs. Ration is the term used for the amount of feed a horse receives. Each horse is different and requires a different ration.

Determining the feed value of forage allows you to balance rations more accurately based on nutritional value. For more information on feed testing in Manitoba visit the following website: ttp:www.gov.mb.ca/agriculture/livestock/ nutrition/bza12s14.html

To ensure proper amounts of a balanced ration, feed according to animal weight. Include all feeds fed (roughage, grain, supplements)

Feed	Amount Fed Kg / day	Digestible Energy (DE) (Mcal)	Protein Kg	Calcium (Ca) g	Phosphorus (P) g	Vitamin A IU
Alfalfa/grass hay	8.5	14.45	1.063	89.25	1.7	-
Oats	2.5	7.45	.275	2.0	7.5	-
Loose Horse mineral	70 g	-	-	10.5	8.4	13,594
Total	10.64	21.89		101.75	32.9	13,594
Required	-	21.89		20	15	21,000

Comments: My ration has a high calcium level and a higher amount of total feed by weight than suggested. I could decrease the hay and increase the oats to change the calcium level and total feed weight, but don't want to feed that much grain.

By adding 70g of loose horse mineral, I brought the ratio down to 3.09 : 1. The supplement also contains other trace minerals.

Pasture Management

Horses are hard on pastures. They eat the grass close to the ground before moving on and their hooves tear up the turf in high-traffic areas around gates, fence lines, feeding and watering areas. Horses will not graze where they have dropped manure and these areas tend to become larger with long grass.

How to Improve Pastures

1. Pastures may need to be seeded, fertilized, cleared of weeds and treated with slaked lime (calcium hydroxide).
2. Pastures also need a rest so that grass can grow back. You could divide your pasture into two areas and rotate your horses into one area, while the grass grows back in the other.

What's Next?

In the next Skill Builder, you will learn about the different equipment used for different areas of riding, as well as many aspects of trail riding.

Skill Builder 6: Riding

Equitation means having the ability to control your seat and properly ride a horse, making riding an art form. Most of your activities for this unit will take place outside with your horse.

Skills Checklist

Level	Required Skill	Activities
I-35D	Assist younger members with their tack.	☐ Saddle Up ☐ Judge This ☐ Blankets ☐ Help Out ☐ Warm-up ☐ "Special Equipment" ☐ Saddle Differences ☐ Riding Lessons
I-36D	Describe one obstacle in a trail class and demonstrate how to do it.	
I-37D	Ride a trail pattern.	
I-38D	Judge a trail class.	
I-39D	Name and describe three types of Western or English saddles and explain how they differ to suit their purpose.	
I-40D	Name any pieces of tack that you use for your special area of riding interest. What is its purpose and how should it fit.	
I-41D	Identify two types of riding blankets. List two similarities and two differences between the blankets.	
I-42D	Demonstrate at least three warm up exercises.	
I-43D	Assist younger members in identifying common faults while	
I-44M	Mounted Skills	

Dream it!

What horsemanship goals do you want to accomplish this year? How will you go about it?

Do it!

Saddle Up

Head outside and catch your horse. Saddle up your horse. Help younger members put the bridles on and tightening of the saddle. Assist members if they need help adjusting their stirrups or anything else.

Your leader will have set up a trail pattern. Walk on foot through the pattern as a group, describing at least one of the obstacles set up. Once all of the obstacles have been described, mount your horse and complete the pattern one at a time.

Judge This

Review the judging section in Skill Builder 3. Look at the sample judging card in your book. Identify common mistakes made when filling out a judging card.

Your leader will arrange for you to attend a local horse show. Practice the proper judging skills and judge three riders participating in a trail class. Once everyone has judged the class, discuss the placing's and reasons.

Blankets

Share with the other members what type of blanket you use for riding. Choose 2 blankets that are used for riding and list two similarities and two differences they have with each other.

Help out

Review the section on common faults while riding. Help members in identifying the faults and how to avoid these faults while riding.

Warm-up

Identify 5 different warm up exercises to do before riding. Demonstrate at least three of the exercises. Explain the purpose of the exercise you demonstrate.

'Special Equipment'

Bring an assortment of specialty equipment to your meeting and discuss the uses of each item. Explain to the other members why you use that piece(s) of equipment and how the equipment should properly fit your horse.

Saddle Differences

Visit a local tack shop with your group. Identify three different types of Western or English saddles.

Answer the following questions:
•What are the differences between the three saddles you identified?
•How do the purposes of each saddle differ?
•How would you consider the differences when you purchased a new saddle?

Riding Lessons

Practice the Mounted Skills from your skills checklist. Keep a journal to help you keep track of your improvements. Ask people to watch you for specific things that you want to work on, such as posture. Get your checklists initialized once you have mastered a skill. The 4-H Horsemanship DVD series may provide pointers. Be sure to practice any riding goals that you had set for yourself in the Dream It! section.

Dig it!

Answer the following questions and discuss them with the rest of the members.

- Did you accomplish your horsemanship goals ?
- What are some skills that you need to work on?
- What will you use from this Skill Builder to help you reach your goal?

TACK

Sheets, Blankets and Rugs

Sheets, blankets and turnout rugs are all terms you may meet at any saddle shop or catalogue. Each is designed to give your horse extra protection or warmth.

Sheets (sometimes call **summer sheets**) are light weight and may be made from cotton, polyester or a blend of both. They come in different sizes, styles and colors. They protect the horse from dust, flies and sun.

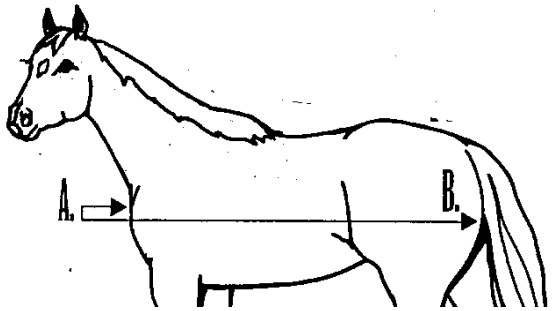
Anti-Sweat Rugs are made from open cotton mesh. They are popular as coolers for over-heated horses.

Blankets come in many weights, kinds and colors. They may be a cotton sheet lined with a woolen insert or made from polyester and filled with warm fiberfill and foam. There are many degrees of warmth to choose from. Matching hoods are usually available.

Rugs – turnout rugs especially New Zealand rugs are popular with those who use blankets on their horses outdoors. The outer shell is made from waterproof canvas with inner lining of wool. They provide protection against wind and rain.

Qualities of a Good Blanket, Rug or Sheet

1. The stitching is firm and even.
2. It fits the horse well.
3. Leg straps keep the blanket in place.
4. Leg straps, chest straps and surcingles are firmly attached.
5. The material is closely woven, tear-resistant and maintains its appearance after several washings.



What Size Do I Buy?

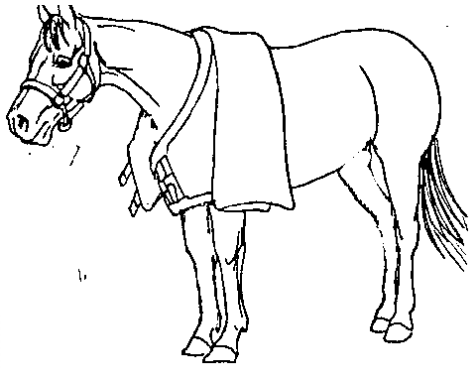
Using a measuring tape, start from the center of the horse's chest and:

(A) measure around the widest part of the shoulder, along the barrel and around the hindquarter to the side of the tail

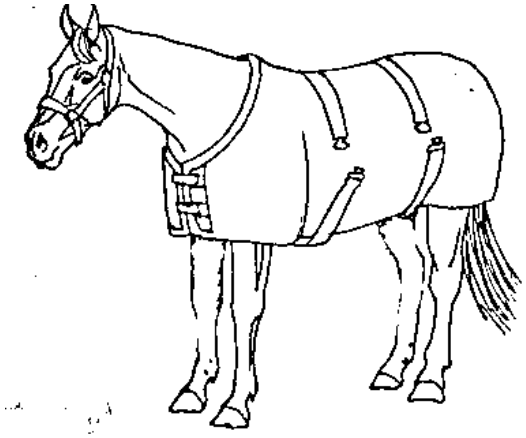
(B) If the measurement is an odd number, take the next highest measurement. This even number in inches is your horse's blanket size.

Safety Sense for Blanketing

1. Always halter a horse **before** putting on, straightening or taking off a blanket. When he is loose in a stall or pen, there is no way for you to control him and you could be injured. Fold the blanket or sheet across the withers and place in gently. Talk quietly to the horse.



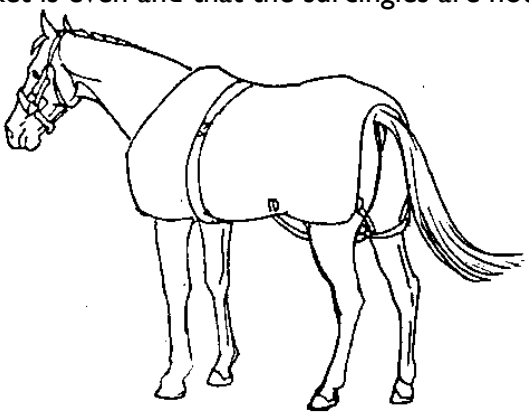
2. Fasten the chest straps so the blanket will remain in place.



3. Unfold the blanket over the back and fasten the surcingles. Make sure there is enough room at the shoulders. This keeps the hair smoother under the blanket.

4. Run the leg straps through each other to prevent rubbing inside the legs.

5. Check that the blanket is even and that the surcingles are not twisted.



6. When straightening a blanket **always** undo the leg straps and surcingle first. Then lift them into position – don't just tug them into position.

Taking the Blanket Off

1. Halter the horse.
2. Unfasten the leg straps and then the surcingles.
3. Unfasten the chest strap.
4. Fold the front part of the blanket over the top of the back part and slide it off backwards.

Equus' Hint

Never undo the chest strap first. Always work from the leg straps to the surcingle to the chest strap. Think safety!

Hoods

1. A full hood is often used with a summer sheet or a blanket.
2. It is designed for warmth and protection and also helps to keep the horse clean.
3. Put it on over the halter if the horse is to be tied.
4. Make sure that the eye and ear holes are in the correct position and do not rub.

Saddle Blankets and Pads

The main reasons for using a saddle blanket or pad are:

- To protect the horses' back
- To absorb moisture
- To protect the saddle
- To compensate for poorly fitting saddles

Today's tack shops and saddle catalogues offer a great variety of saddle blankets and pads. Styles, shapes, colors, fabrics and prices vary. How can you be sure you are purchasing what you really need? Most of this equipment can be classified into the following groups:

1. **Genuine Navajo** (pronounced Na-va-ho) **blankets**
   - These are made by Southwestern American Indians and meet all the requirements of a good blanket.
   - They are made from wool and readily absorb.
   - The will last for years if they are cared for. (dry cleaning is recommended)
   - They are expensive.

2. **Blended Fiber Blankets**
   - They are similar to the Navajo blankets in appearance but they contain a high percentage of cotton or synthetic fibers.
   - They are not as durable as all-wool blankets.
   - They do not absorb moisture as well as all wool and may wear quickly depending on the blend.
   - They may be washed.
   - They are reasonably priced.

3. **Sheepskin Pad**
   - In the English riding world, this is the equivalent of the Navajo blanket.
   - Top quality sheepskin pads are contour-shaped, reinforced at strain points and have long, dense fleece.
   - If brushed or combed after each use, the fleece requires only infrequent washings with cold water.
   - These are expensive.

4. **Imitation Sheepskin Pads**
   - They are not as absorbent as genuine sheepskin and are not as long lasting.
   - They may stretch somewhat with use and are machine washable and dryable.
   - They are available in many styles and colors for both English and Western saddles.
   - They are reasonably priced.

5. Hair Pads

- These are tightly matted and quilted and are excellent shock absorbers.
- They "breathe" well and absorb moisture well.
- They are difficult to keep clean and dry slowly.
- They must be equipped with wear leathers to prevent them from wearing out at points of strain.
- They may also become lumpy as the quilting breaks down.
- They are fairly expensive.

6. Felt Pads

- These are available for both English and Western saddles.
- In general, they are quite adequate but must have leather or canvas guards at the weak wear areas.
- Poor quality pads do not keep their shape.
- They must be dry cleaned if they are to last as they cannot be machine washed.
- Reasonably priced.

7. Foam Pads

- These are available in a variety of styles and colors for both English and Western riding.
- They are easily cleaned and are good shock absorbers.
- They are usually covered in a variety of fabrics, reinforced and quilted.
- They do not breathe as well as natural fibers and absorb little moisture.
- They are quite expensive.
- They may have extra padding or be cut back.
- These "specialty" pads work well on hard to fit horses and saddles.

8. Therapeutic Pads

- These pads are designed for horses with backs that become sore easily and therefore need a form of special protection.
- Many are hospital tested.
- They are available in both English and Western styles.
- They are relatively expensive.

Caring For Saddle Blankets and Pads

1. No matter what kind of blanket or pad you choose for your equipment, it will be useful longer if you take care of it.
2. Keep it clean. Dirty matted material cannot absorb moisture or protect your horse.
3. After each use hang it to dry.
4. Refold the blanket frequently to distribute the wear.

Preparing for the Show

Western Classes

Attire

Western riding apparel is trendy and styles change from year to year. Basic western attire consists of a long-sleeved shirt, a necktie or bolo, western hat or protective head gear, belt, western riding boots, and pants (clean, boot cut jeans are allowed). Clothes should be clean and fit properly. The rider's hair should also be tidy and tied back if it is long.

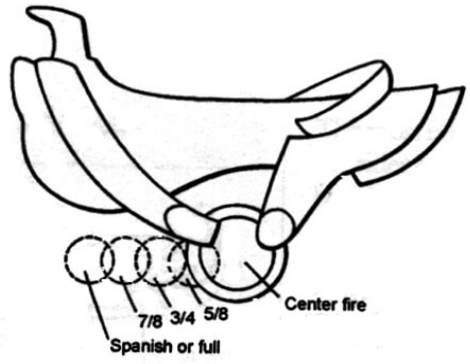
Note that different breeds have different styles. Suit coats, vests and chaps are popular in different areas and for some classes. Check the rules of each competition for required and restricted attire.

Equipment

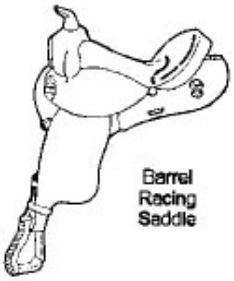
- A western stock saddle should be used for all western classes. No extra points will be given for silver or extra trim.
- On bridles, the chinstrap or chain cannot be narrower than ½ inch and must lie flat against the jaw of the horse. Chains are not allowed on snaffle bits.
- In 4-H shows, bosals and snaffle bits will be permitted on young horses less than five years of age, with a nylon or leather chin strap.
- On horses 5 years or older, bits allowed would be a curb bit that has a solid or broken mouthpiece, has shanks and acts with leverage. The use of a hackamore (including mechanical hackamore) or other type of bridles is the option of the competitor, or at the discretion of the club.
- When split reins are used, the ends of the reins must fall on the same side as the reining hand. Only one finger between is allowed. Roping reins may only be used in speed events. When a romel is used: a) it may not be used forward of the cinch b) no finger is permitted between the reins c) the romel can be carried in the free hand with a 16 inch spacing between the free hand and reining hand.
- A rope or riata may be used but must be coiled and attached to the saddle. Hobbles should be attached to the saddle.
- Splint boots may be used for the western riding (pattern) event. Bell boots, splint boots and skid boots may only be used for speed events, reining and working cowhorse. Spurs are optional but must be of western type.

Western Saddles

Western saddles are usually, but not necessarily, double rigged (two cinches).
The positioning of the front cinch is relative to the swells or pommel. This positioning indicates full, 7 / 8, or 3 / 4 rigged saddles. Full rigged saddles tend to place the horn over the centre of balance of the horse (which can be useful for roping) while 3 / 4 rigging tends to place the rider over the centre of balance of the horse. Choose the saddle that will most suit the type of riding that you do.

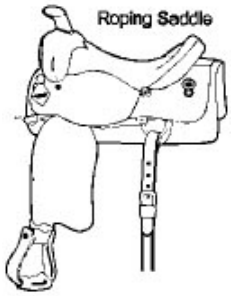


Different Types of Western Saddles



Has a deeper seat that helps the rider stay put during hard turns and fast runs. The horn is taller, making it easier to hold onto during turns. If the seat is done properly, it will also help the rider to be stable and in control. Generally, barrel racers like a half rough out saddle so they can get more grip.

Has less rise in the seat with the lowest place or pocket a bit further ahead. This makes it easier for the rider to stay centered. The swells and horn are also very high so the rider can hang onto the horn at a proper angle to push or pull on it to remain stable.



Has a deep seat and the fenders hung in a position to ensure that the rider can be up and balanced when ready to rope. The horns and trees are very strong to take the pull. As well the rigging must be one that pulls off the top of the tree bars and has great strength. Generally suede out padded seats are preferred to give more grip. The swells of the saddle are kept reasonably low as to keep the leverage of the rope on the horn to a minimum.

Has a low horn so it won't interfere with the riders hands on the reins. The seat must be shaped to allow the rider to roll their pelvis back for making big stops. It should also be built so as to allow as much feel to the horse as possible.

Light weight. Balance point to the back of the saddle. Allows the horse and rider to enjoy the trail.

Other Commonly Used Equipment

Tie Down

In the western discipline, the standing martingale is known as a tie down. It consists of a strap which attaches to both a noseband and the cinch and passes through a ring or loop on the breast collar. (For safety - always use the breast collar loop!) Tie downs are often used in high speed events where the horse's head must be in the correct position at all times. It is important to realize that tie downs are not to be used in place of lack of training. They can be dangerous if used improperly.

Breast Collar

The breast collar is used to keep the saddle from generally slipping back; to balance the saddle in tight turns and keeps it in place during fast acceleration. The western breast collar is v-shaped, as this does not restrict breathing, with a centre part that attaches to the girth. Each end of the breast collar attaches to the D-rings on the saddle.

Running Martingale

This piece of equipment consists of a strap that passes between the horse's front legs and attaches to the girth by a small loop. At the other end it forks into two smaller straps with a ring on the ends. The reins pass through the rings. A neck strap prevents the horse from stepping over the martingale. A small triangular reinforcement where the martingale strap forks is called a bib.

Running martingales change the rein pressure from "straight back" to "down and back." This encourages the horse to lower its head and flex at the poll. It allows the rider to correct the horse's headset while still giving the horse plenty of freedom.

It must always be used with a true snaffle bit!

A running martingale must be adjusted correctly in order to work properly. One of the easiest rules of thumb is to hold the strap up to the shoulder of the horse. The rings should reach evenly with

English Classes

Attire

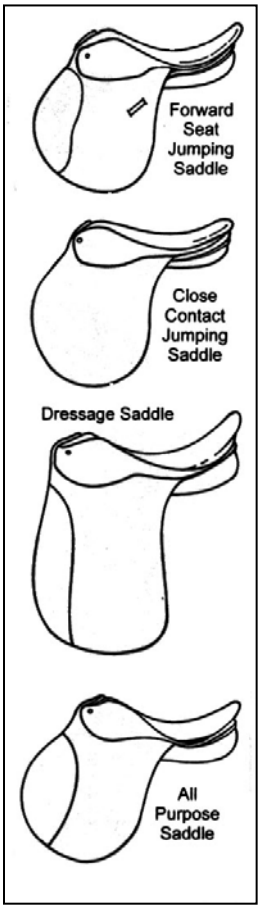
English riding apparel is traditional and there are definite style preferences. The rider should wear a riding helmet (with a harness or chinstrap), hunt coat, riding pants (breeches or jodhpurs), high English style riding boots and a choker or tie (gloves - optional). The coat should be tailored, made of wool or polyester and should be a dark color including dark grey, navy, brown or pinstripe. The pants
should be lighter shades such as beige, light gray, canary or rust. Long or short-sleeved shirts are accepted, in white, pastels or pinstripe. Take note that some colors may be considered "improper." Check the rules for each competition for required and restricted attire. According to the American Quarter Horse Association rule book, for example, maroon or red hunt coats are considered "improper."

Long Hair: Ultimately, the clothes should be clean and fit properly. The rider's hair should also be tidy and tied back if it is long.

Equipment

- An English type (hunting or forward seat) saddle should be used for all English classes. Saddles should be black and/or brown.
- In all English classes, an English snaffle (no shank), pelham (with two reins), kimberwick and/or full bridle with cavesson nose band and brow band must be used.
- Options include: Spurs (not rowel type), crop or bat (not to exceed 30") and English breast plate.
- Draw reins, rowelled spurs, standing martingale and legs wraps are prohibited in English riding.

For more advanced events, such as jumping, remember to again check the show rules.



Different Types of basic English Saddles

The **forward-seat** sets the rider forward, well over the centre of balance of the horse. These saddles are meant for jumping and hunting and may have heavy knee rolls which give the rider maximum security. The forward-seat is probably the best English saddle for the novice rider in that it is the most versatile. Close-contact forward-seat saddles eliminate the bulky knee roll.

The **cut-back** saddle is used on gaited horses as well as Morgans and Arabians which move with much animation or lift of the legs. This movement combined with an arched neck and head tends to move the centre of balance of these horses somewhat further back from where it is normally found. (Also Saddle Seat).

The **dressage saddle** has a deeper seat with leathers positioned more to the rear of the saddle. This allows the rider more exactness of leg position for riding a highly schooled dressage horse. Young, inexperienced riders will have little need for this type of saddle.

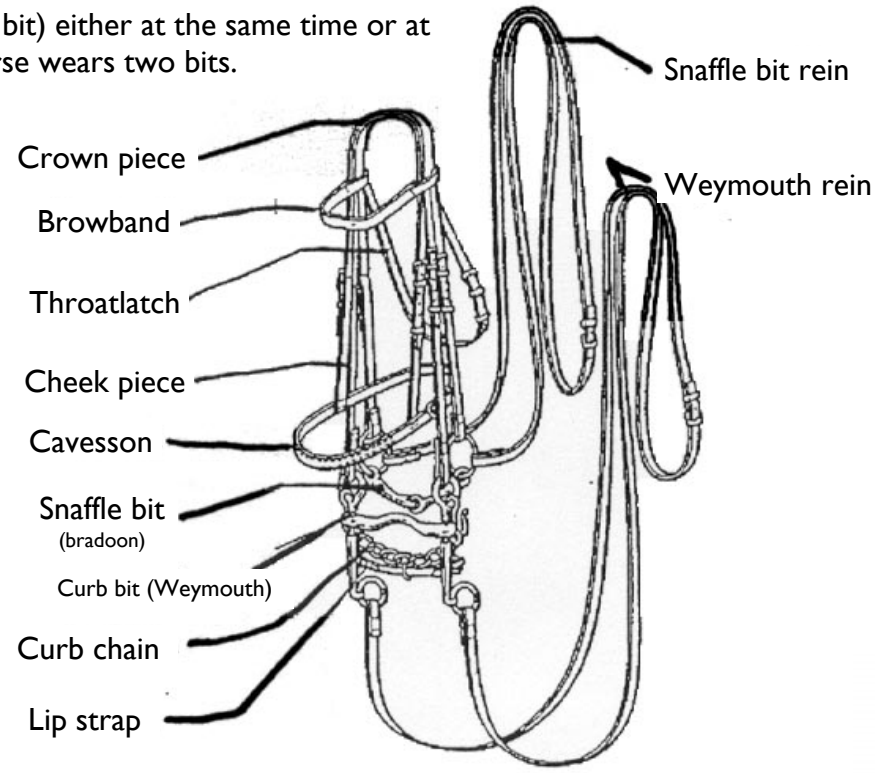
The **all-purpose saddle** allows the rider to use the same saddle for both dressage and jumping.

Other Commonly Used Equipment

The Double Bridle

The double bridle or Weymouth bridle allows the rider to use a curb bit and a bradoon (snaffle bit) either at the same time or at different times because the horse wears two bits.

This bridle is mainly used by English riders in advanced dressage or on gaited horses.



The snaffle bit is used to raise the horse's head. The curb bit is used to ask the horse to flex at the poll and relax its lower jaw. The two bits sit in the mouth, with the snaffle bit sitting above the curb. They are fitted so that the snaffle fits against the corners of the mouth and the curb bit rests on the bars.

The reins of the double bridle are two different widths, with the reins attached to the snaffle bit being wider than the reins attached to the curb bit. The reins are crossed between the bit and the rider's hands, with the curb rein under the snaffle rein. In the rider's hands, the curb rein is held between the third and fourth fingers and the snaffle rein is between the first and second fingers.

HORSEMANSHIP

Becoming a good rider requires building on a good foundation: a secure seat, balanced riding and knowing how to use the aids correctly. This knowledge allows you to ride with a fluid movement, soft supple hands and coordinated aids. Riding a sitting trot and riding without stirrups can be very beneficial.

Sitting Trot

This is necessary in both English and western styles of riding. It helps the rider to develop a deep supple seat and ride smoothly at the trot. After your horse is warmed up and moving forward at a steady pace, sit evenly in the saddle with your weight over your seat bones. Your back must be straight, tall and relaxed. (You can help your back to relax by lifting one arm straight up, reach up and then lowering it.) Your legs should be relaxed but the heels must not come up. The toes of your boots should be able to be seen below your knees when you look down. Breathe deeply and ride in balance.

Riding Without Stirrups

Riding without stirrups is an effective way for developing a secure seat, strong legs and balance. If you are trying it for a first time it's a good idea to ride in an enclosed area. This exercise is beneficial to both English and western riders. If you are riding an English saddle, cross the stirrup leathers flat over the withers. If you are riding a western saddle simply remove your feet from the stirrups. Without stirrups your position is exactly the same as if you were riding with stirrups. There is a general tendency for the knees and thighs to ride up, forcing the seat bones and buttocks to the back of the saddle. If you feel this happening, slow down and adjust your seat and feet. Do not lean forward but keep sitting deep and tall.

Posting Without Stirrups

English riders often practice posting without stirrups to help develop more balance, stronger legs and a more independent seat. If your balance and position in the saddle are secure, the exercise is not difficult. Keeping in the same position as when riding with stirrups, let the natural motion of the trot lift your seat up and forward. As you post, simply roll slightly forward on the inner part of your thighs and then back on your seat bones. Don't lift yourself too high. Try to keep your heels down and your legs steady. Don't balance on your hands! This is a very demanding exercise and can only be practiced in short sessions.

Some Riding Exercises

Arm Circling

Begin by placing the reins in one hand. Bring the free arm up level with the shoulder. Lower it again and take it straight back. Then bring your arm forward again making a complete circle all the way around. Try it first when the horse is standing still and then while he is moving. At all times, keep your body straight. Be sure to circle both arms. This exercise helps to develop balance and form.

Shoulder Exercises

This should only be done in an enclosed area. Begin with the horse standing still. Later it may be practiced with the horse on the lunge line. Touch your fingers to the top of your shoulder. Then unfold your hands and arms slowly. Stretch them out to the sides with the palms of your hands facing upwards. Then turn your hands over and let your arms come slowly down to your sides. Repeat several times. This exercise helps to relax your shoulders and elbows.

Touch Your Toes

Have the horse standing still. Take the reins in your left hand. Then with as little movement as possible, lean down and touch your right toe with your right hand. Don't allow your leg to move back or forwards. Repeat using the other hand. This exercise helps to loosen a stiff back and also improves balance.

After you become proficient at this try a variation by touching the left toe with the right hand and visa versa. Always keep Looking straight ahead and try to keep your lower body as still as possible.

Head Rotations

Begin by rolling your head forward as far as possible, then back, to the left and then to the right. Finally roll your head all the way around. It will relax your neck muscles and teach you how to move your head without moving your body, arms or legs.

Torso Twisting

Place your hands on your hips. Then twist your upper body around from the waist keeping the hips and legs still. Turn first to the left and then to the right. Repeat several times. This teaches the body to move freely.

Stretches

Sit up straight and tall with your arms hanging loosely at your sides. Bend sideways in line with your hips and slide your hand as far down the side of your leg as possible. Only lean sideways not forward. Try this to the left and then to the right. Repeat several times. This can be used to loosen your back.

Thigh Raising

If necessary, grasp the horn or pommel of the saddle with one hand. Take your feet from the stirrups. Raise your left knee up to the withers and then lower it, still keeping your back straight and tall. Repeat with your right leg. When you feel secure enough try raising both knees at the same time. This exercise helps to strengthen the muscles of the thighs and the abdomen.

Foot Rotations

Take your feet out of the stirrups. Sit tall in the saddle. Draw circle with your toes while keeping the rest of the leg still. This exercise will increase your suppleness in your knees and ankles.

RIDING SKILLS

The Half-Halt

A half-halt is a short signal that asks a horse to balance himself and prepare to do something.

To execute a half-halt the rider needs a deep seat. The rider "sits deeply", shifting more weight on the hindquarters and engaging the horse's hindquarters as the hands close on the reins. The coordinated and combined use of hands, seat and legs provides the cue to the horse. The half-halt provides lightness to the forehand.

Side Pass

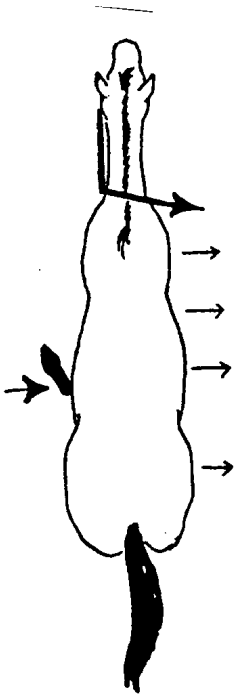
The side pass is the sideways movement of the horse, stepping to the right or to the left, with both the forehand and the hindquarters moving evenly together. The horse should have a slight forward movement so the legs cross in the front.

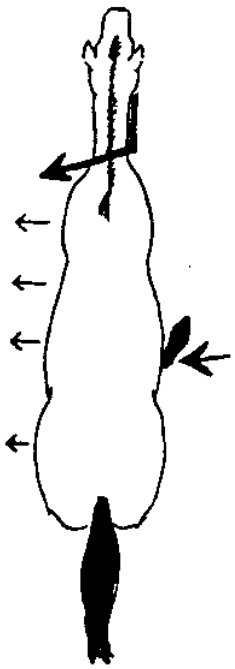
You use your hands, your weight and your legs to cue your horse.

To side pass to the right, use your left rein to turn the horse's head just slightly to the left and hold light contact with the right rein to make the horse
move to the right. At the same time shift your body weight slightly to the left, away from the direction of the side pass. Use your left leg or heel to move the hindquarters to the right.

Reverse the cues to side pass to the left.

To the Right





To the Left

Two Track or Half Pass

The two track is the movement in which your horse moves forward in a diagonal direction with its front feet and back feet making two sets of parallel tracks. A horse that is trained to two track will quickly learn to perform simple and flying lead changes. Begin at a walk and progress to the trot.

Cueing for a two-track is the same as for a side pass, except that the rein tension will be lighter and your leg pressure will be greater so the horse continues to move forward.

Correct two tracking requires that the horse remain straight in the body as it moves along the diagonal. Leading with either the forehand or the haunches is a serious fault.

Simple Lead Changes

Simple lead changes allow you to slow down to a trot / jog before cueing your horse to change from one lead to another.

Practice simple lead changes by riding a figure 8 and dropping to a trot to change your leads each time you pass the centre. Make sure you keep the horse at the trot until you know it has mentally discontinued the lead it was on. Lope / canter two or more times around each end of the figure 8. Then as you complete the last circle, slow to a trot in a straight line across center. Then begin a circle in the opposite direction and pick up the lope / canter. Lope / canter this circle a couple of times. Then as you complete the last circle, slow to a trot in a straight line across center. Again begin a circle in the opposite direction on the correct lead.

Flying Lead Changes

Before you attempt to ask your horse to do a flying lead change, be sure your horse can do the following:

- yields well to leg cues for leg-yielding, two tracking and side passing.
- Moves willingly forward and sideways when doing the two track and side pass.
- Moves from a halt to a lope / canter on the lead requested with 95% accuracy.
- Comes away from bit pressure easily, slows down easily and does not raise its head in resistance.

If your horse does these things he is ready to work on flying lead changes. If not, work on the problem areas.

Start practicing flying lead changes by trotting your horse in a large circle with a free rein until the horse is moving quietly and relaxed. Ask your horse for the following haunch-yielding exercise to prepare it for flying lead changes.

1. Away from the fences in a large arena, trot a straight line and yield the horse to the right or left into a few steps of a two track. Then continue in a straight line and repeat the exercise. Be sure to work equally to the right and left.
2. Trot a figure 8 using a diagonal instead of a circular track. Stay on this figure until your horse is calm.
3. Displace the haunches on a two track at the intersection of the diagonal lines. This displacement will only be a step or two. Then straighten and continue until the horse responds willingly and is relaxed. Work both ways.
4. Once your horse learns to yield its haunches on a two track at the intersection, it should make a flying lead change at this point when given the cues for a two track while moving at the lope / canter.
5. Be sure not to throw your weight in the anticipated direction. Simply shift your weight and cue your horse with the opposite leg of the desired lead.

RIDING

1. The Aids

Horses are trained to respond to the basic aids which are your

- voice
- hands
- legs
- weight.

When you first begin training your horse, the aids must be applied in a very definite manner in the same way each time. However, as the training progresses, the horse will begin to respond to lighter cues.

2. The Voice

- Your voice can be a very important aid since horses can easily learn words such as "whoa", "easy" and "back". (Many horses that have been shown for years also know the words "walk", "trot" / "jog" or "canter" / "lope".)
- Be consistent and use the same word or sound each time and repeat often. Watch the tone of your voice as this indicates your feelings to your horse. Work calmly and quietly. Screaming and yelling loudly will only make matters worse.
- Every horse should learn the command "whoa". This can often prevent trouble before it happens.
- If you are planning to show your horse, speak your voice cues quietly since many judges frown upon them.

3. The Hands

- Hold your arms, elbows, wrists, hands and fingers in a quiet relaxed manner. You should maintain a very light contact with your horse's mouth.
- "Good hands" are described as steady, light, soft and firm in their actions, never hard or jerking. To develop good hands you must learn to ride in balance with your horse.
- Whether you ride English or Western, it is important to learn to ride with two hands. It is very important to use two hands when schooling your horse. The *inside hand* asks for direction with a flexing "give and take" motion while the *outside hand* controls the speed and the bending of the horse.
- As your western horse learns to respond to your cues, you may use a single hand on the reins. However, in training sessions you may still wish to use two hands.

4. The Legs

- Your legs are used to control you horse's movement forward and to control his hindquarters.
- As you squeeze your legs, your horse must learn that is a signal to him to shift his weight back over his hindquarters, taking the weight from his forequarters. Since this cue will be used for every command, it is very important.
- Pressure from your calves and your heels will control your horse's hindquarters. As you press against his body, he will learn to swing his hindquarters away from the pressure. As he learns more about leg pressure, he will require less cuing from the reins.
- Because your legs are such an important aid, you must be sure they are in the proper position and your stirrups are at the correct length. The feet of the rider
- should be almost parallel to the body of the horse. The lower leg needs to be kept still when you ride so that the leg aids will be most effective when applied.

5. Weight

- Body weight may be used as a cue or aid for your horse simply by shifting your weight. Response is gained by a simple shifting of your weight since your horse will try to stay in balance under you. Leaning your body slightly forward encourages the horse to move faster while a slight shift back encourages him to stop or slow down.
- Practice using your cues until the horse will move into any gait smoothly. Try to stay in balance with your horse at all times. Try not to pull back on the reins when stopping your horse or asking him to slow down. If all your cues are working, a very slight flexing of the reins should achieve results.

6. Backing

- You should be sitting erect in the saddles with your weight just slightly forward. As you squeeze lightly with your legs apply light rein pressure to prevent the horse from going forward. With the horse collected, use the voice cue "back" and flex the reins gently and continue to squeeze with your legs. This is asking for the forward motion but in reverse.
- Backing is not natural to the horse so be very patient and ask for one step at a time. Hold the reins low so as to encourage the horse to flex at the poll and tuck in its nose.
- If the horse refuses to move and becomes very stiff in the jaw and neck, loosen the rein pressure and ask him to go forward a few steps. Stop and relax for a few moments and then try again.
- As the horse becomes skilled at backing, you can control the direction of backing by varying the amount of pressure given by one leg or the other.

7. Stopping

- A good stop is one that is balanced with the hindquarters well under to balance his weight and the front quarters head and neck are very light. It is **not** necessarily a sliding stop.
- Timing is very important when asking for a stop. It is a good idea to give your horse a voice cue such as 'whoa" first. Then squeeze with your legs and use a firm flexing (give and take) of the reins. Sit tall and deep in your saddle, gripping with your thighs. Push down on your heels. Do not throw your weight back and pull on the reins!!
- Training your horse to stop from a lope is a slow process. Begin at a walk - using the same cues consistently. Proceed to a trot and finally to the lope / canter.
- Always let your horse stand in a quiet relaxed manner. This is his reward.
- Never rush your training. Look for light responses and never over-practice your stops.

8. The Half-Halt

- This is a good exercise for improving collection.
- It is a momentary pause for the horse when his balance is more to his hindquarters. He hesitates but does not lose his forward momentum and then continues on.
- To ask for a half-halt, the rider sits deep in the saddle and squeezes his legs. At the same time he flexed the reins slightly. As soon as he feels the horse check himself he releases the reins slightly and allows the horse to move forward.
- The half-halt may be used with both reins or with only one.
- If a horse is traveling in a straight line with his head bent to one side, a half-halt done on the side opposite to the bend may help to correct the problem.
- For horses that lean on the bit this exercise can help to lighten them.

9. Circles and Turns

- When you are moving your horse in a circle, his body should bend from head to tail to match the curve of the circles. If it is a small circle, the bend will be greater.
- The rider should sit straight in the saddle with his hips and shoulder parallel with those of the horse. His/her head should be looking in the direction he is going.
- Your inside hand will control the direction while your outside hand controls the speed.
- Your inside leg rests along the girth/cinch while your outside leg maintains contact behind the girth.

10. Transitions

- These are changes of speed or gait (ie. Walk to trot)
- They should be smooth. The horse should go evenly from one gait to another without hesitation or fuss.
- Smooth transitions require a great deal of schooling and practice.
- An "upward transition" means an increase in speed (ie. From a trot to a canter).
- A "downward transition" is a decrease in speed or gait (ie. From a trot to a walk).

Rider Problems

Balance

Whether you ride English or Western style, balance is very important since your balance can affect your horse's way of going. Balanced riders ride in a flexible reliable style that does not inhibit the horse's ability to perform.

Think of your body as one part stacked upon another: head over shoulders over upper body over seat bones over legs and feet. When you sit in balance in the saddle you are sitting evenly on your seat bones, not leaning one way or another with the weight equally distributed on both feet. An imaginary vertical line could pass through the ear, shoulder, hip and ankle.

Head

You should be looking up and watching where you are going. Your head weighs 10-13 pounds so if it is hung down or off to a side your horse will notice it. This is why the horse will usually go in the direction you are looking. For example, you can ride a circle with minimal rein or leg pressure simply by looking at the centre of the circle.

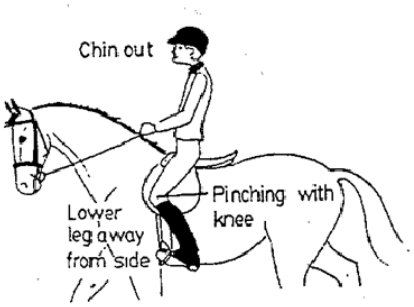
Often a rider will look down to check leads or diagonals. This can make it more difficult for the horse since it places extra weight on the forequarters.

"Look where you are going."

"You may miss seeing obstacles."

Common Faults

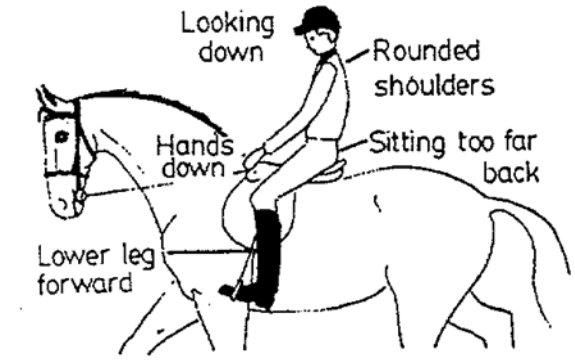
Shoulders



Sitting in the saddle your shoulders should be level. If they are not even, you may have shifted your weight to the lower side. This will make your horse lean in that direction also. Loping / cantering in circles may cause you to drop one shoulder so pay careful attention to keeping them even.

Back

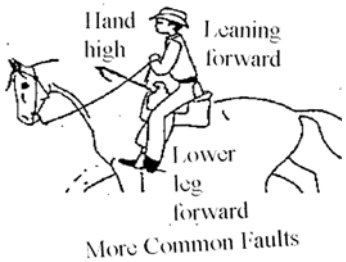
Your back should be straight but not rigid.



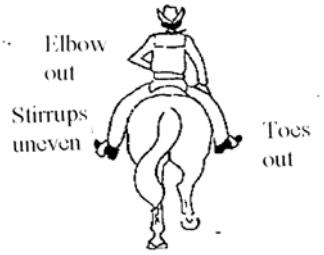
Arms and Hands

Watch that your hands are not held too high nor too low. Keep your elbows in!

Seat



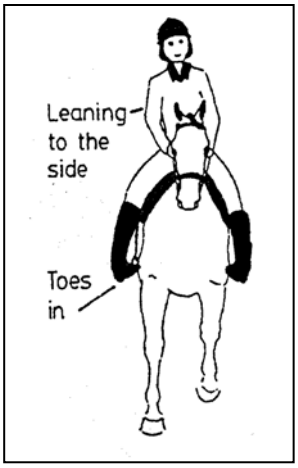
More Common Faults



The inside of the thighs should remain in contact with the saddle without gripping. Your seat bones should be in contact with the saddle so that your body sits at a 90° angle to the saddle. Be careful not to just sit back on your buttocks with your leg forward.

Legs

The Western rider uses a longer leg position than an English hunt seat rider. The differences in riding style are caused by the shape of the saddle and the forward movement of the horse. For all saddles, the stirrups need to be short enough so the legs and ankles can act as shock absorbers.



For Western riding, the stirrups should hang to a length so that the bottom of the stirrup touches your ankles when your leg hangs beside it. This will give you enough bend in your knee to be comfortable. If you are involved in gymkhana events you may want to shorten them a little.

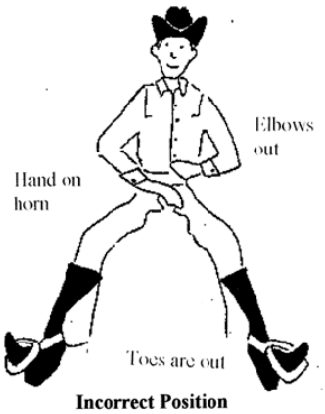
Lower Leg

Since the lower leg is used to cue the horse, it needs to be kept still or the leg aids will not be effective.

Foot

The foot position affects how you use the legs. The ball of the foot should be resting on the stirrup with your weight carried down through your heel so that your heel is lower than your toe. Putting your foot too far into the stirrup makes it difficult to flex your ankle.

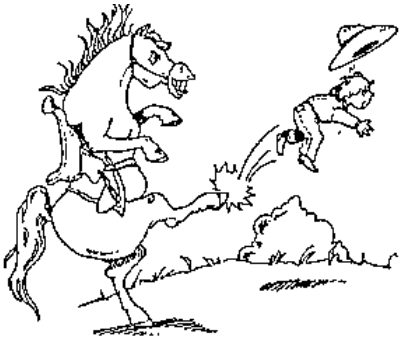
The rider's feet should be almost parallel to the horse's sides. Toes pointing outward can cause problems, especially if the rider is wearing spurs! Remember that the direction of the foot affects the whole leg.



Incorrect Position

EQUUS' HINTS

1. Mount your horse quickly and smoothly, without hitting the horse's rump or the saddle with your right leg.
2. Keep good posture and balance in the saddle to go with the motion of your horse--it's so much more comfortable for your horse's back!
3. Ride with a light touch on the reins. Make sure they are even.
4. Do more walking and trotting / jogging than cantering / loping.
5. Give clear consistent cues to your horse to move, stop, back up, etc. Use your natural aids (voice, hands, legs and weight) more than the artificial aids (whip / crop and spurs).
6. Warm your horse up by walking and trotting / jogging before you canter / lope. After the workout is completed, cool him out by walking him. This is necessary to prevent cramps and sore muscles. Your horse is cooled down enough when his breathing has returned to normal without nostril dilation and his neck and chest are dry.


Know what to do when your horse bucks.

The Gate

Working the horse at the gate uses several of the skills the horse has already learned. He must be able to side-pass, turn on the hindquarter, turn on the forehand and move slowly forward and in reverse. Work slowly and quietly in teaching your horse and do not expect perfection immediately. How you open the gate will depend on which side the gate latch opens and the direction the gate will open.

Suppleness

Flat work will develop your horse's athletic ability and suppleness. It gives you the opportunity to teach him to lengthen and shorten his stride, stretch out, bend and become more responsive to your aids. Plenty of turns on the forehand, turns on the haunches, shoulder in and leg yielding will create suppleness in your horse.

Types of Riding Events

Dressage

Dressage, as a class is recognized at the national and international level. The outstanding dressage horse must be free-moving, athletic and possess a healthy mental attitude. Training for dressage is a long, slow process with each step built upon another. Instruction is necessary. Dressage demonstrates skilled precision between horse and rider. To be successful in a dressage competition the horse must willingly comply to the rider's aids in a precise pattern. Such schooling makes any horse more enjoyable to ride.

Reining

A reining competition in the western discipline is comparable to dressage in the English discipline. Reining horses must be athletic and possess a good mental attitude if they are to excel at the sport. Reining demonstrates speed and athletic ability in a precise pattern. Instruction and training is needed, as this too is a slow process of building step upon step.

Jumping

Jumping is an exciting and popular sport. There are many types of competition ranging from cross-country hunt courses to brightly colored show jumping courses. Even the simplest courses require a considerable amount of skill from both horse and rider. Riding to fences requires accurate timing and a precise stride length. For the safety of both horse and rider, proper instruction is necessary.

Barrel Racing/Pole Bending

These classes are rapidly growing in popularity. Both events require great skill. The horse must be very athletic and quick both in the turns and on the straightaway. Careful schooling is necessary to keep him calm and manageable while running at top speeds. Proper instruction is necessary to prevent problems.

Trail Classes

Whether or not you plan to compete in a trail class, many of the skills demonstrated in the class are very useful in making your horse better trained. Any of these requirements (side-pass, pivot, step-overs, etc) may be performed in either the Western or English discipline.

The Gate

Working the horse at the gate uses several of the skills the horse has already learned. He must be able to side-pass, turn on the hindquarter, turn on the forehand and move slowly forward and in reverse. Work slowly and quietly in teaching your horse and do not expect perfection immediately. How you open the gate will depend on which side the gate latch opens and the direction the gate will open.

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Trail Horse Training

Trail riding is a popular hobby for many horse owners. If offers a variety in riding that is not possible working in an enclosed area. It is also good for show horses who have become bored with their routine.

Trail horse training is good for pleasure horses as well. The training helps the horse become more sensitive to cues, helps the horse collect, increases concentration and teaches patience. The trail obstacles force the horse to pay attention to where its feet and body are at all times. This will make riding easier for you and your horse.

All the skills that are used in a horse show trail class are used by the pleasure horse in natural settings. The main skills that horse must learn are:

1. Moving away from leg pressure.
2. The meaning of "whoa".
3. Backing up by leg and rein pressure.

Step Overs

This skill is necessary whether you ride as a pleasure rider, compete in English classes or western trail classes.

The horse should be taught to slow down, look at the obstacle and learn to adjust the length of its stride. For a horse to be a safe trail horse it must look where it is about to step. Because of the way its eyes are set, a horse must lower its head and neck. Begin by using one rail for the step over, adding more as the horse becomes confident.

Change your "step overs" as your horse gets used to them. Vary the height and spacings. On the trail, obstacles are often different sizes, colors and heights. Set up a series of step overs to make your horse less clumsy. The horse needs to set its hind feet where the front feet have just been. This is important when footing is difficult.

For the pleasure horse, step overs can be used to help set the head, collect the horse and develop a rhythm. It is best to use heavy poles that are not easily moved.

Step-Overs

1. a single log
2. a series of poles 6-8 feet apart
3. poles arranged like wheel spokes.

Backthroughs

The backthrough is helpful training aid that makes a horse more versatile and more agile. Whether or not you plan to show your horse in a trail class, this skill is a useful one.

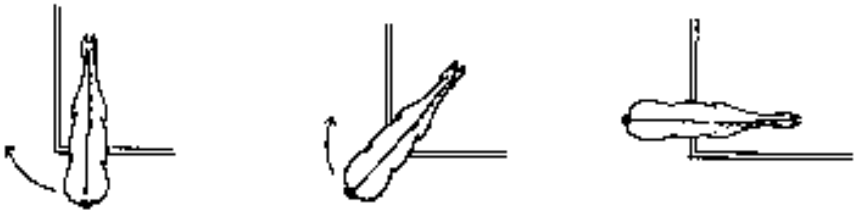
Before working on a backthrough with obstacles, the horse must back readily and be able to move one foot at a time.

When you teach a horse to back, use heavy poles that will stay in place if the horse bumps into them.

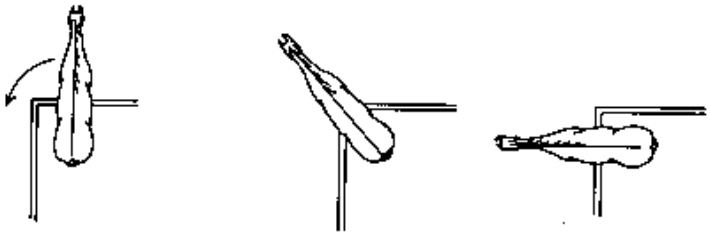
1. Ride the horse forward through the poles and then work slowly at backing in a straight line between the poles. Do not rush the horse.
2. Backing an "L" shaped pattern is common. The horse should be able to turn to the right or left on the forehand while backing.
3. Start with a fairly wide "L". Ride the horse into the "L". Stop the horse so its hind legs are still between the poles.
4. Then ask the horse to back, one step at a time. Start the turn when the hind feet get past the inside corner of the "L". Work slowly one foot at a time.

Side Passing

The skill, which has already been discussed, is widely used in trail class competition. Regardless of whether or not you plan to compete, these exercises can increase the maneuverability of your horse.



In the exercise, the horse is asked to side pass along the rail and then do a turn on the forehand to be positioned for side passing along the other rail. This may be done in a L, a T or square shape.

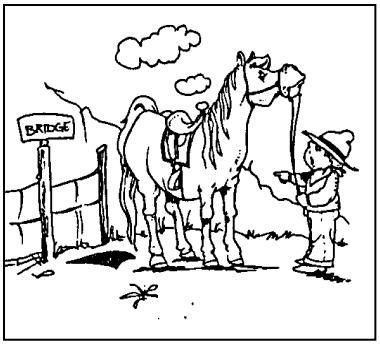


In this exercise the horse is asked to side pass along the rail and then a turn on the hindquarters to be positioned for side passing along the other rail. This may be done on an L, T or square shape.

Bridge

A bridge is a standard obstacle in a trail class but depending upon where you live, you may never meet this obstacle when out trail riding.

Begin by walking over a sheet of plywood. Encourage the horse to lower his head and look at the obstacle. Work slowly and calmly. Soon he will be confident in walking over a raised bridge.



"If you would just go over it, it wouldn't be called an obstacle!

Trail Riding - "Think Safety First!"

Trail riding is an activity that many people enjoy. It is relatively inexpensive and can be both relaxing and a lot of fun. The type of horse is unimportant as long as he is healthy and sound and has comfortable gaits. All equipment should fit well and be comfortable to both horse and rider.

1.The trail may present some new hazards to your horse so keep him under control at all times.
2.Do not ride off until everyone is mounted.
3. Allow at least one horse length between you and the horse in front of you to prevent being kicked.
4. Have someone designated as lead rider and someone to bring up the rear.
5. If someone stops to fix equipment, etc. have everyone stop. This will help to prevent a runaway because horses left behind may try to catch up to those riding ahead.
6. When crossing highways or main roads have everyone cross over at the same time when the traffic is clear. This prevents a long string of horses crossing the road. Dismount and lead the horse across pavement.
7. When crossing streams or rivers, be careful to cross where it is shallow and safe. Have someone remain behind to help any horses that may not want to cross.
8. Speed on the trail is unsafe. Ride at safe gaits.
9. Always tie your horse in a safe place. Use your halter (which you have remembered to bring). Do not tie him by the reins!
10. Keep at a walk when going up or down hills.
11. Courtesy to other riders is the best safety on the trail.
12. Think of your horse first. Watch his condition; avoid injuries and care for him properly.

Trail Horse Class

This class is judged on performance of the horse over at least six obstacles, with emphasis on manners, response to the rider and attitude Commonly used obstacles include the gate, bridge, back throughs, step overs, sidepass over a log and 360 turn around in a box (square). The horse should work with a minimum of resistance and show an interest in what it is doing. The horse is also required to show the three gaits (walk, jog, lope) somewhere between the obstacles.

1. **General**

   The Trail Horse Class is the performance of a safe, sensible, well-mannered horse over a course of obstacles.

2. **Conduct** (taken from the Manitoba 4-H Horse Show Guide)

   a). This class will be judged on the performance of the horse over the obstacles, with emphasis on manners, response to the rider, and attitude.
   b). Credit will be given to those horses negotiating the obstacles with style and some degree of speed, providing correctness is not sacrificed. Horses should receive credit for showing attentiveness to the obstacles and the capability of picking their own way through the course when obstacles warrant it, and willingly responding to the rider's cues on more difficult obstacles.

c). Horses shall be penalized for any unnecessary delay while approaching obstacles. Horses with artificial appearance over obstacles should be penalized.
d). Horses must not be required to work on the rail. The course must be designed, however, to require each horse to show the three gaits (walk, trot, lope) somewhere between obstacles as part of its work and quality of movement and cadence should be considered as part of the manoeuvre score. Gait between obstacles shall be at the discretion of the judge.
e). The course to be used must be posted at least one hour before scheduled time of the class.
f). At least six obstacles must be used, three of which must be from the mandatory list of obstacles and at least three different others selected from the list of optional obstacles.

3. **Obstacles**

A. Mandatory obstacles:

Opening, passing through and closing gate. (Losing control of gate is to be penalized.) Use a gate which will not endanger horse or rider. If the gate has a metal, plastic or wooden support bar under the opening, contestants must work the gate moving forward through it.

Ride over at least four logs or poles. These can be in a straight line, curved, zigzag or raised. The space between the logs is to be measured and the path the horse is to take should be the measuring point. Trotovers and lopeovers cannot be elevated. Spacing for walkovers, trotovers, and lopeovers should be as follows or increments thereof.

a. The spacing for walkovers shall be 20" to 24" (40 cm to 60 cm).
b. The spacing for trotovers shall be 3' to 3'6" (90 cm – 105 cm).
c. The spacing for lopeovers shall be 6' to 7' (1.8-2.1 meters) or increments thereof.

Backing obstacle. Backing obstacles to be spaced a minimum of 28" (70 cm). If elevated, 30" (75 cm) spacing is required. Entrants cannot be asked to back over a stationary object such as a wooden pole or metal bar.

a. Back through and around at least three markers.
b. Back through L, V, U, straight or similar shaped course.

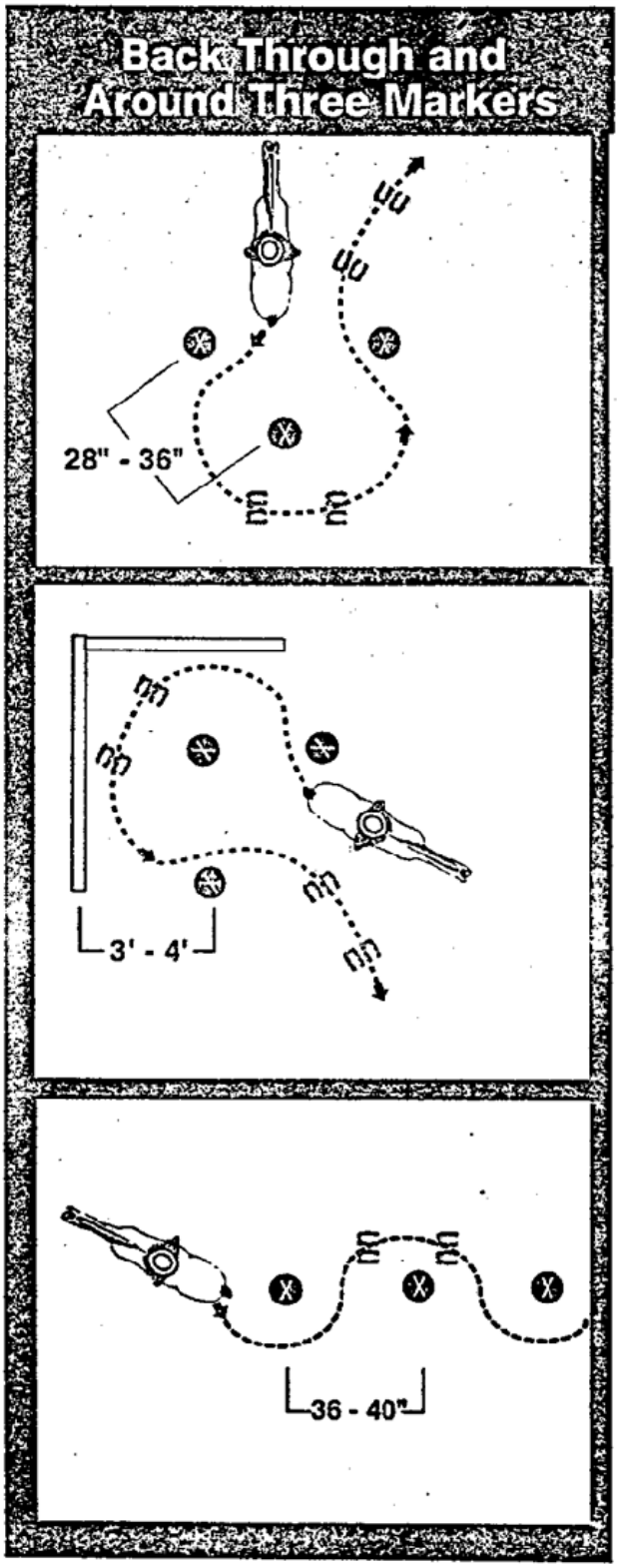
B. *Optional obstacles, but not limited to:*

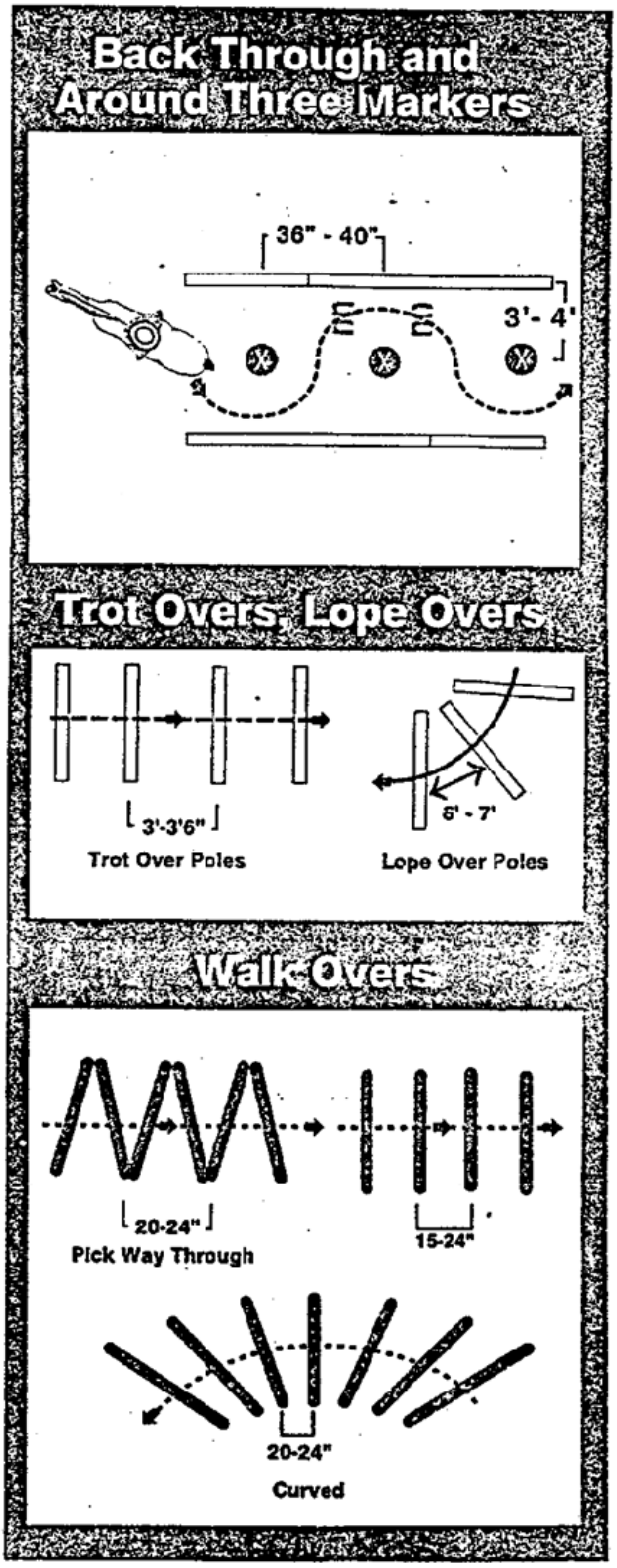
1. Serpentine obstacles at walk or jog. Spacing to be minimum of 6' (1.8 meters) for jog.
2. Carry object from one part of arena to another. (Only objects which reasonably might be carried on a trail ride may be used).
3. Ride over wooden bridge. (Suggested minimum width shall be 36" (90 cm) wide and at least six feet long). Bridge should be sturdy, safe **and negotiated at a walk only.**
4. Put on and remove slicker.
5. Remove and replace materials from mailbox.
6. Side pass (may be elevated to 12" (30 cm) maximum).
7. An obstacle consisting of four logs or rails, each 5' to 7' (1.5 to 2 meters) long, laid in a square. Each contestant will enter the square by riding over log or rail as designated. When all four feet are inside the square, rider should execute a turn, as indicated and depart.
8. Any other safe and negotiable obstacle which could reasonably be expected to be encountered on a trail ride and meets the approval of the judge may be used.
9. A combination of two or more of any obstacle is acceptable.

Unacceptable obstacles:

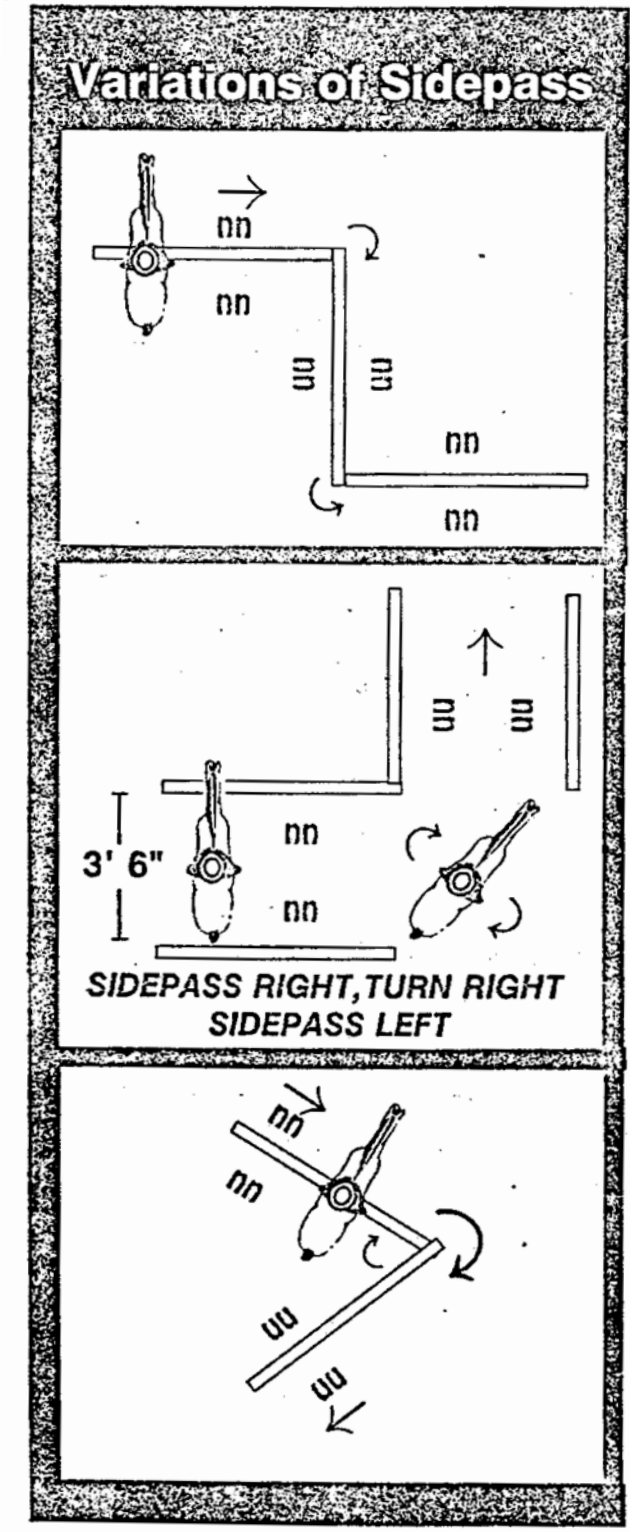
1. Rocking or moving bridges
2. Water box with floating or moving parts
3. Flames, dry ice, fire extinguisher, etc.
4. Logs or poles elevated in manner that permits such roll
5. Ground ties
6. Tires
7. Animals
8. Hides
9. PVC pipe
10. Dismounting
11. Jumps

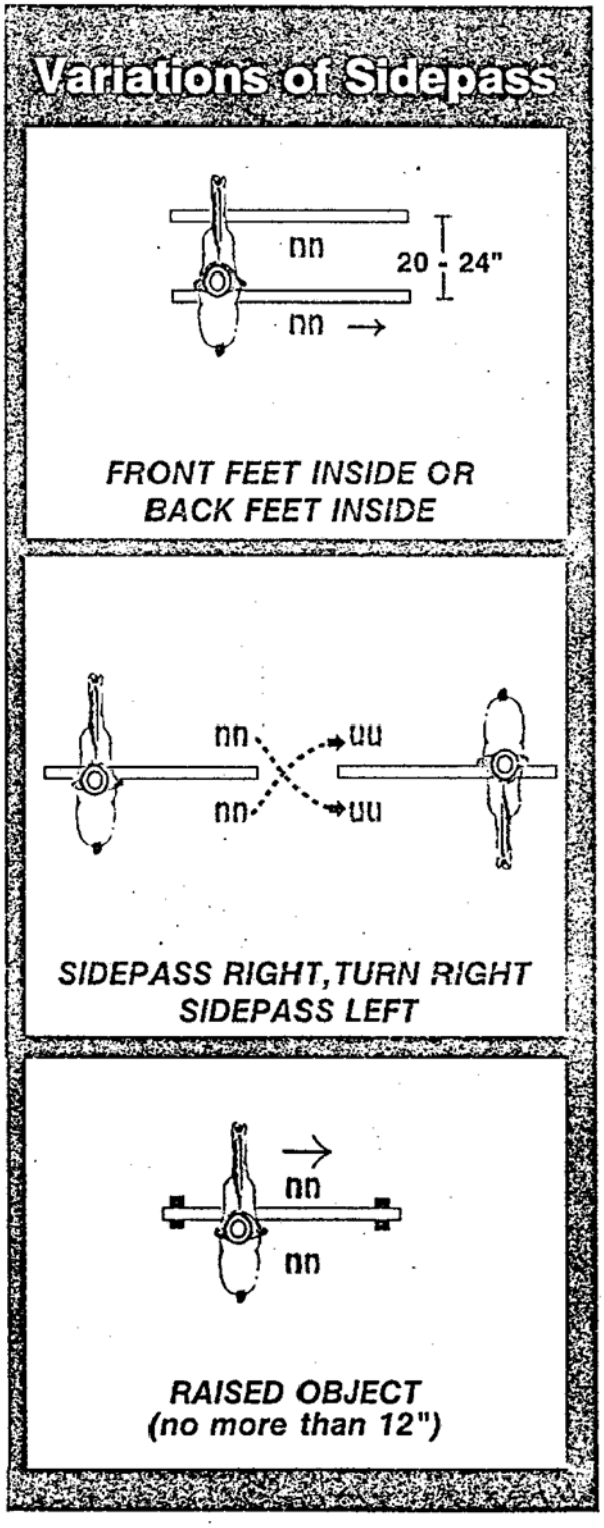
Trail Diagrams





Trail Diagrams





4. Scoring

a). Suggested scoring will be on the basis of 0-infinity, with 70 denoting an average performance. Each obstacle will receive an obstacle score that should be added or subtracted from 70 and is subject to a penalty that should be subtracted. Each obstacle will be scored on the following basis, ranging from plus 1 ½ to minus 1 ½: -1 ½ extremely poor, -1 very poor, - ½ poor, 0 correct, + ½ good , +1 very good, +1 ½ excellent. Obstacle scores are to be determined and assessed independently of penalty points. Penalties should be assessed per occurrence as follows:

b). The following deductions will result:

i). 0-SCORE
- ⇒ use of more than one finger between reins
- ⇒ use of two hands (exception in Snaffle Bit or Hackamore classes designated for two hands) or changing hands on reins; except for junior horses shown with hackamore or snaffle bit, only one hand may be used on the reins, except that it is permissible to change hands to work an obstacle.
- ⇒ Use of romal other than as outlined in on page 7 in "Tack"
- ⇒ Performing the obstacles other than in specified order
- ⇒ No attempt to perform an obstacle
- ⇒ Equipment failure that delays completion of pattern
- ⇒ Touching the horse on the neck to lower the head, or use of free hand to instill fear or praise
- ⇒ Fall to the ground by horse or rider

ii). ½ POINT
- ⇒ Each tick of log, pole, cone or obstacle

iii). 1 POINT
- ⇒ Each hit of or stepping on a log, pole, cone or obstacle
- ⇒ Break of gait at walk or jog for two strides or less
- ⇒ Both front or hind in a single-strided slot or space
- ⇒ Skipping over or failing to step into required space
- ⇒ Split pole in lope-over

iv). 3 POINT
- ⇒ Break of gait at walk or jog for more than 2 strides
- ⇒ Out of lead or break of gait at lope (except when correcting an incorrect lead)
- ⇒ Knocking down an elevated pole, cone, barrel, plant obstacle, or severely disturbing an obstacle

v). 5 POINT
- ⇒ Dropping slicker or object required to be carried on course
- ⇒ First refusal, balk or attempting to evade an obstacle by shying or backing more than 2 strides away

vi). 5 POINTS

- ⇒ PLUS ENTRY CANNOT PLACE OVER ANOTHER ENTRY THAT COMPLETES THE COURSE CORRECTLY
- ⇒ Stepping outside the confines of; falling or jumping off an obstacle (back thru, bridge, side pass, box)
- ⇒ Loss of control or letting go of gate
- ⇒ Blatant disobedience (kicking out, bucking, rearing, striking)
- ⇒ Riding outside designated boundary marker of the course
- ⇒ Failure to ever demonstrate correct lead or gait, if designated
- ⇒ Failure to enter, exit or work obstacle from correct side or direction
- ⇒ Failure to complete obstacle
- ⇒ Failure to perform correct line of travel within or between obstacles
- ⇒ Second refusal, balk or attempting to evade an obstacle by shying or backing more than 2 strides away

5. If disrupted, the course shall be reset after each horse has worked. In the case that a combination of obstacles are used, the course cannot be reset until the contestant finishes the entire course regardless of where any disruption occurs.

6. Management, when setting courses, should keep in mind that the idea is not to trap a horse, or eliminate it by making an obstacle too difficult. All courses and obstacles are to be constructed with safety in mind so as to eliminate any accidents. If difficult courses are set, junior trail should be less difficult. When the distances and spaces are measured between all obstacles, the inside base to inside base measurement of each obstacle considering the normal path of the horse, should be the measuring point. Enough space must be provided for a horse to jog [at least 30 feet (9 meters)] and lope [at least 50 feet (15 meters)] for the judges to evaluate these gaits.

7. The judge must walk the course and has the right and duty to alter the course in any manner. The judge may remove or change any obstacle he deems unsafe or non-negotiable. If at any time a trail obstacle is deemed to be unsafe by the judge, it shall be repaired or removed from the course. If it cannot be repaired and horses have completed the course, the score for that obstacle shall be deducted from all previous works for that class.

Thoughtful Thanks!

Celebrate your success with others! Think about who helped you along the way. Sending a thank you card to those who helped you (e.g. 4-H leaders, 4-H Ambassadors, staff, parents, friends, sponsors etc.) can be a great way to show appreciation and to let others know of your success.

NOTE: Whether you purchase or create your card(s), make sure you personalize it with a message.

What's Next?

The dismounted and mounted skills checklists are next. Followed by the Showcase Challenge. It is time to show what you have learned throughout your project

GLOSSARY

Angle Bite - the outer angle at which the upper and lower incisors meet.

Anti-Sweat Rugs - are made from open cotton mesh. They are popular as coolers for over-heated horses.

Balance - All of the parts of the body are in correct proportion to each other, resulting in a pleasing appearance.

Beet Pulp - A dried by-product of processed sugar beets.

Bishoping - a practice done by dishonest horse dealers where a horse's teeth are made to look like those of a younger horse.

Blankets - come in many weights, kinds and colors. They may be a cotton sheet lined with a woolen insert or made from polyester and filled with warm fiberfil and foam. There are many degrees of warmth to choose from. Matching hoods are usually available.

Bloom - The horse's haircoat should be short and shiny. This is referred to as bloom. A dull, shaggy coat indicates that the horse may not be healthy.

Crimped - slightly crushed

Dental Star - a star shaped or circle-like structure near the centre of the wearing surface of the permanent incisors.

Flaked - crushed into flakes. Barley and corn are sometimes flaked.

Flat bones - (such as the skull) serve to enclose the areas containing the vital organs.

Forging - The toe of the hind foot strikes the sole or the shoe of the forefoot on the same side.

Full Mouth - when a horse has a complete set of permanent incisors.

Interference - This happens when one foreleg strikes the other foreleg or one hind leg strikes the other.

Intussusceptions – is the enfolding of one segment of the intestine within another.

Irregular bones - are those bones in the spinal column which protect the central nervous system.

Lateral flex - The ability of the horse to bend from nose to tail.

Ligaments - hold bones together

Long bones - act as levers and help in supporting the weight and in movement.

Muscle - is the tissue which contracts and relaxes to cause your horse to move.

Muscling - how well you can see the length, definition, and volume of muscle in your horse.

Over-Reaching - The hind foot strikes the heel of the forefoot.

Paddling - known as "winging out." As the horse moves forward, he "wings" his feet outward.

Parrot Mouth - the upper incisors overhang the lower incisors and do not meet properly and therefore cause uneven wear.

Pica - depraved appetite.

Plaiting - known as "rope walking." The horse tries to place one foot in front of the other.

Psoroptic mange - parasites feed on the skin's surface causing great itching and subsequent rubbing. It is usually found at the roots of the mane.

Quidding - when a horse dribbles food from his lips

Ration - a ration is a combination of feeds to meet the needs of your horse.

Refinement – general lack of coarseness.

Restraint -

Rickets - a disease where the bones are malformed, stiff, and break easily.

Rolled - slightly flattened.

Rugs - turnout rugs especially New Zealand rugs are popular with those who use blankets on their horses outdoors. The outer shell is made from waterproof canvas with inner lining of wool. They provide protection against wind and rain.

Scalping - The toe of the forefoot strikes the coronary band of the hind foot.

Scarcoptic mange - is caused by tiny mites burrowing into the skin surface causing great irritation and itching to the horse. As the horse rubs, the hair falls out and scabs form. It may occur anywhere on the body. This condition must be reported to the Department of Agriculture if it occurs.

Sheets - (sometimes call **summer sheets**) are light weight and may be made from cotton, polyester or a blend of both. They come in different sizes, styles and colors. They protect the horse from dust, flies and sun.

Short bones - (such as those in the knee, hock, and fetlock) serve as shock bearers.

Side pass - the sideways movement of the horse with both forehand and hindquarters moving.

Smooth Mouth - refers to the smooth biting surface of the upper and lower incisors after the cups have disappeared at 12 years of age or older.

Smoothness - All parts of the horse's body should blend together smoothly, while having adequate muscle definition. The horse should be in good condition – neither so underweight that the ribs show, nor so overweight that there is little muscle definition.

Symmetry - When viewing the horse from the front and rear, divide the horse in half down the spinal column and down the middle of each limb.

Table - another name for the grinding surface of molars and premolars.

Tendons - muscles are attached to the bones by tendons.

Toes In - Feet move forward in wider outward arcs

Toes Out - Feet move inward in larger inward circles.

Wear - refers to the amount of use or wear observed on the biting surface of the incisors.

Winging In - also known as "dishing." This is common to horses with "toe-out" conformation.

Dream It! ***Plan for Success*** *Work with your project leader to ✓ the skills that you would like to include in this year's plans. It will take at least* ***2 years*** *to competently learn these skills. Check off the* ***Supporting Activities*** *that you finish. The grey area is for the skill evaluator's initials when they check to see if you are able to do the skill with your horse. You may choose to learn them all, unit by unit, or to master a few in each unit, each year.*

MANITOBA 4-H MASTERING EQUINE DISMOUNTED SKILLS			
Skill	**Project Choices**	✓	***Initial***
	GROUNDWORK AND PSYCHOLOGY		
1-1D	Explain how your horse's four senses other than sight may affect his behaviour.		
1-2D	What are factors that affect the horses learning?		
1-3D	Identify what a restraint is and list two examples.		
1-4D	Assist younger members in reading their horse's body language.		
1-5D	Identify six different stable misbehaviours and why the horse behaves like this.		
	GROOMING AND HOOF CARE		
1-6D	Explain and demonstrate coat, mane, and tail care for your area of interest (English or Western). For example pulling manes, clipping, banding and braiding.		
1-7D	Assist younger members with grooming and hoof care knowledge.		
1-8D	Identify advantages and disadvantages of shoeing.		
1-9D	List three points that the horse shoe fits properly		
1-10D	Identify two seasonal grooming techniques and explain why the grooming needs are affected by the change in seasons		
1-11D	Explain and demonstrate how to braid the tail.		
	Identification and Conformation		
1-12D	Judge and place one conformation classes of four horses and present written reasons for one and oral reasons for the other.		
1-13D	Assist in teaching younger members about horse identification, colours, markings, breed conformations and evaluation.		
1-14D	Help younger members see correctly shoulders in, haunches in, and lameness.		
1-15D	Identify four different walking problems.		
1-16D	Identify and explain how to properly fill out a judging card.		
1-17D	Explain how the skeleton affects conformation.		

MANITOBA 4-H MASTERING EQUINE DISMOUNTED SKILLS

Skill	Project Choices	✓	*Initial*
	SAFETY AND STABLE MANAGEMENT		
1-18D	Explain safe driving practises when pulling a loaded trailer.		
1-19D	List three things to take into consideration on a long haul.		
1-20D	Assist younger members with management of their facility.		
1-21D	Explain and demonstrate to a non horse person, how to properly load and unload a horse.		
1-22D	Identify three types of flooring for a stall. List two disadvantages and two advantages of each type of flooring.		
	HEALTH		
1-23D	Create a rough sketch of the digestive system and briefly explain how each organ plays a part in the digestive system.		
1-24D	Explain the causes, symptoms, and treatment of colic.		
1-25D	Explain and demonstrate how to safely give a horse an oral medication.		
1-26D	Describe the life cycle of two internal parasites.		
1-27D	Show where to give your horse an injection and explain safety precautions.		
1-28D	Assist younger members in finding assistance dealing with horse health problems.		
1-29D	Assist younger members to identify good and bad feed.		
1-30D	Explain how to identify the age of a horse and then demonstrate this procedure.		
1-31D	Review how to take pulse and capillary refill. Assist a younger member in both procedures.		
1-32D	Explain why a balanced ration is important to your horse's health.		
1-33D	Identify the cost of ration for horses per month.		
1-34D	Keep up to date feed and health records.		

MANITOBA 4-H MASTERING EQUINE DISMOUNTED SKILLS

Skill	Project Choices	✓	*Initial*
RIDING AND EQUIPMENT			
1-35D	Assist younger members with their tack.		
1-36D	Describe one obstacle in a trail class and demonstrate how to do it.		
1-37D	Ride a trail pattern.		
1-38D	Judge a trail class.		
1-39D	Name and describe three types of Western or English saddles and explain how they differ to suit their purpose.		
1-40D	Name any pieces of tack that you use for your special area of riding interest. What is its purpose and how should it fit.		
1-41D	Identify two types of riding blankets. List two similarities and two differences between the blankets.		
1-42D	Demonstrate at least three warm up exercises.		
1-43D	Assist younger members in identifying common faults while riding.		
1-44M	Mounted Skills		

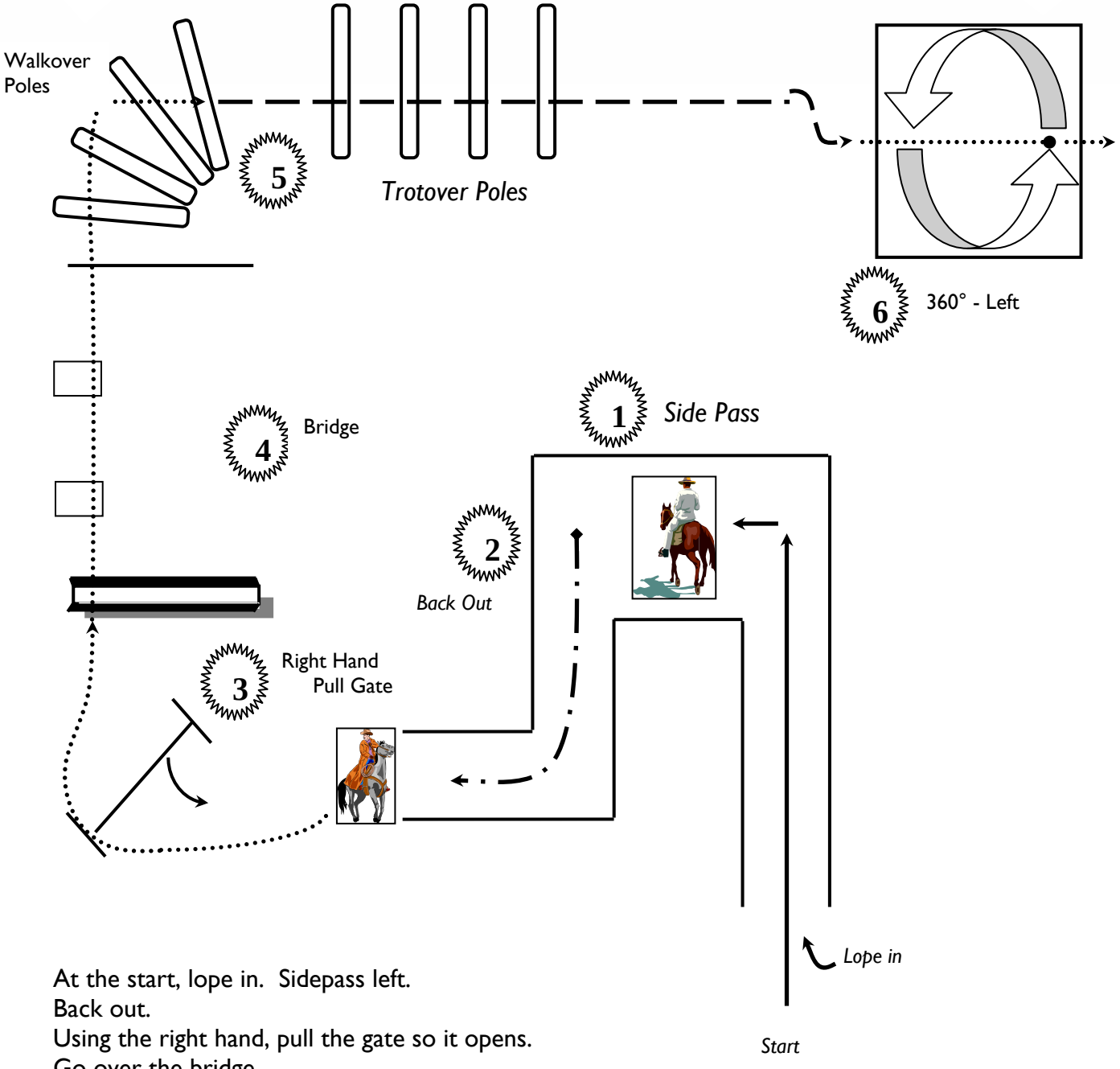
MANITOBA 4-H MASTERING EQUINE MOUNTED SKILLS

Note: Your leader has access to a series of videos entitled 4-H Horsemanship that demonstrate and discuss the skills required for riding level 4.

Skill	Do It Skills	✓	*Initial*
1-1M	Warm-up— Demonstrate your own warm-up including at least everything in the rider 5 warm-up plus shoulder in.		
1-2M	Demonstrate a haunches-in of at least 6 strides at a sit trot/jog. Go both ways.		
1-3M	Demonstrate haunches-in halt to lope transition in both directions.		
1-4M	Demonstrate haunches-in at the lope/canter in both directions.		
1-5M	Execute a turn on the haunches of at least 6 fluid crossovers with the horse correctly shaped or walk pirouette (English) in both directions.		
1-6M	Explain and demonstrate 3 lead up exercises to produce a two track/half pass. Show a two-track/half pass of at least 3 strides in both directions 1) at a walk and, 2) at a jog or sitting trot. The lead up exercises may be used in the demonstration.		
1-7M	From a lope/canter, ride a controlled gallop (Western) or hand gallop (English) of at least 10 strides in both directions, then go back to a lope/ canter with a smooth downward transition.		
1-8M	Demonstrate: a) two or three lateral exercises in succession that will allow you to produce a smooth lope/canter transition and collection. Demonstrate that transition. B) Western riders demonstrate 2 lateral exercises using neck reining.		
1-9M	Explain and demonstrate the aids to produce a flying lead change. Demonstrate a flying lead change in both directions.		
1-10M	Demonstrate a new riding discipline at a local event.		
1-11M	Assist younger members with any of the horse handling skills related to rein effects.		
1-12M	Assist younger members with any of the horse handling skills related to laterals and collection.		
1-13M	Be a good safety role model for younger members.		
1-14M	Assist other members in developing riding patterns.		
1-15M	Ride the attached pattern. Include a tack check, mount, and dismount. May be ridden 1 or 2 handed.		
1-16M	Your specific riding goals—please list.		

Manitoba 4-H Mastering Equine Riding Pattern

Rider may have a reader for all patterns. It is not necessary to use the whole arena. Modify the size of the riding area to maximize safety! The Dressage letters along the outside are guidelines. Paint or tape the letters to a pail or cone if desired. This pattern is broken down into 4 parts for easier reading, but is intended to be read as 1 pattern for evaluation. All long patterns can be ridden with 1 or 2 hands.



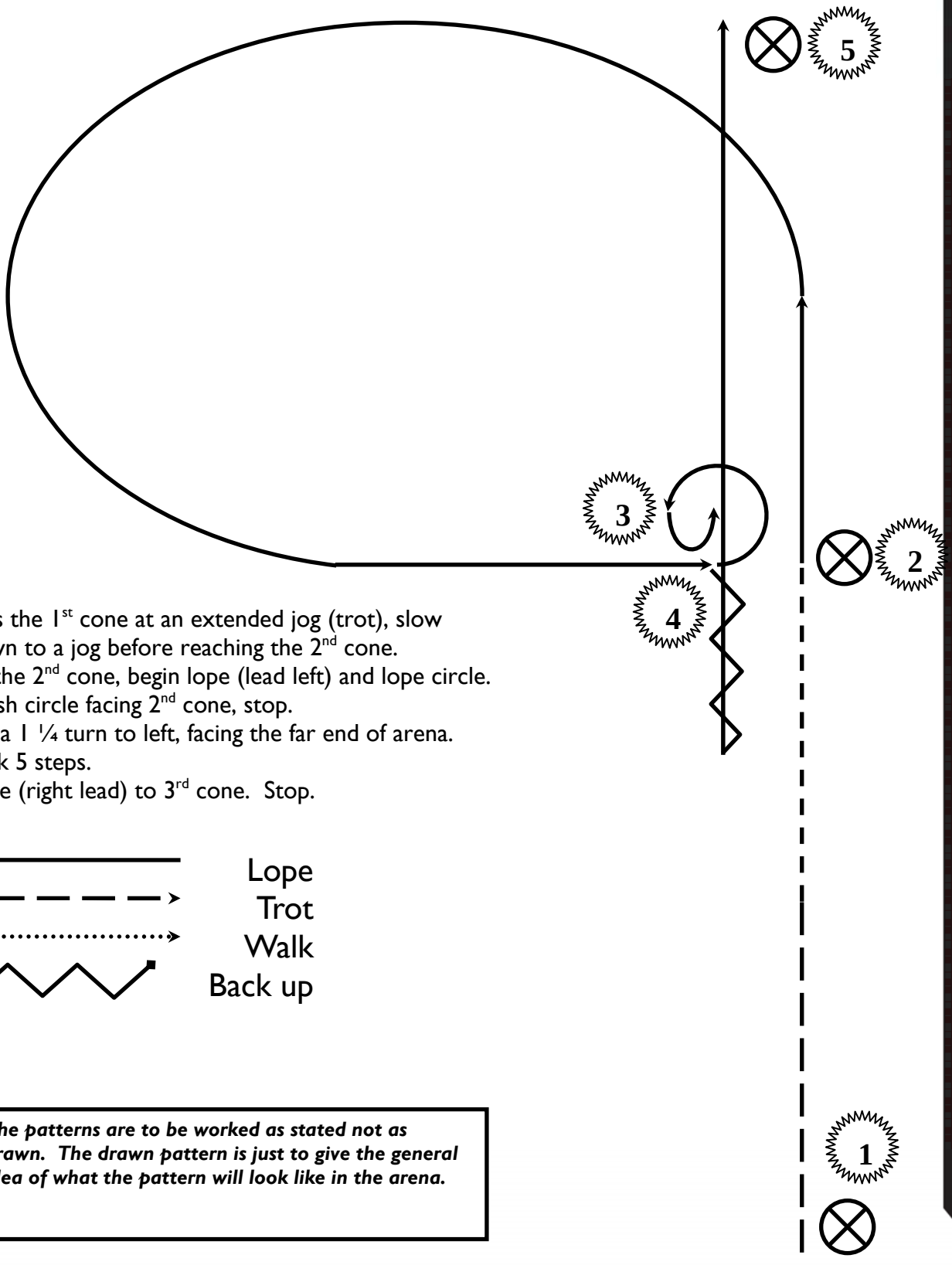
At the start, lope in. Sidepass left.
Back out.
Using the right hand, pull the gate so it opens.
Go over the bridge.
Walkover poles, and then trotover poles.
Turn in box to the left.

The patterns are to be worked as stated not as drawn. The drawn pattern is just to give the general idea of what the pattern will look like in the arena.

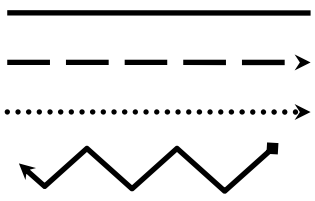
Manitoba 4-H Mastering Equine Riding Pattern

Western Horsemanship #1

Rider may have a reader for all patterns. Short patterns should be ridden with ONE hand (Western) or two hands (English).



1. Pass the 1st cone at an extended jog (trot), slow down to a jog before reaching the 2nd cone.
2. At the 2nd cone, begin lope (lead left) and lope circle. Finish circle facing 2nd cone, stop.
3. Do a 1 ¼ turn to left, facing the far end of arena.
4. Back 5 steps.
5. Lope (right lead) to 3rd cone. Stop.



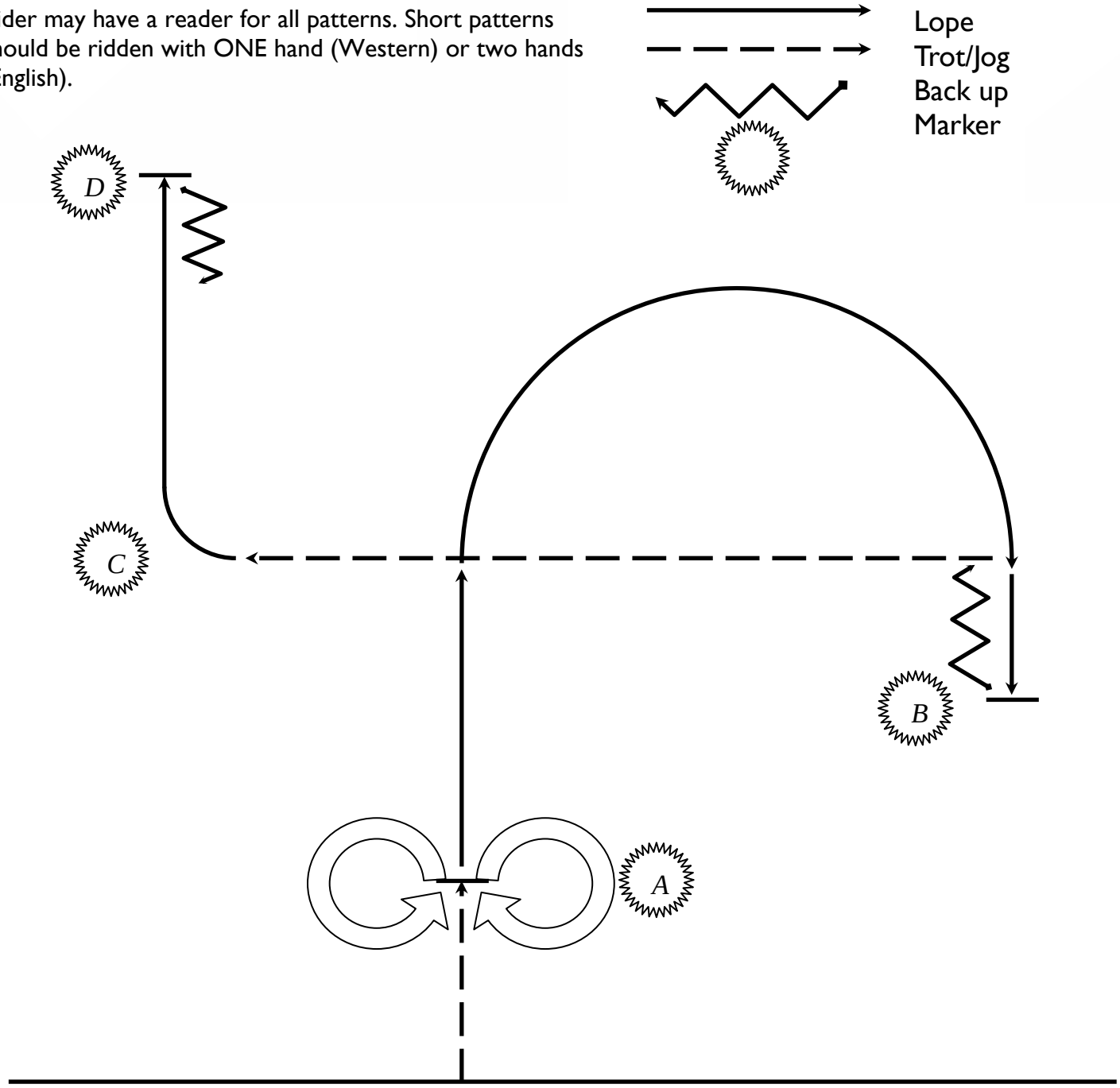
Lope
Trot
Walk
Back up

The patterns are to be worked as stated not as drawn. The drawn pattern is just to give the general idea of what the pattern will look like in the arena.

Manitoba 4-H Mastering Equine Riding Pattern

Western Horsemanship #2

Rider may have a reader for all patterns. Short patterns should be ridden with ONE hand (Western) or two hands (English).

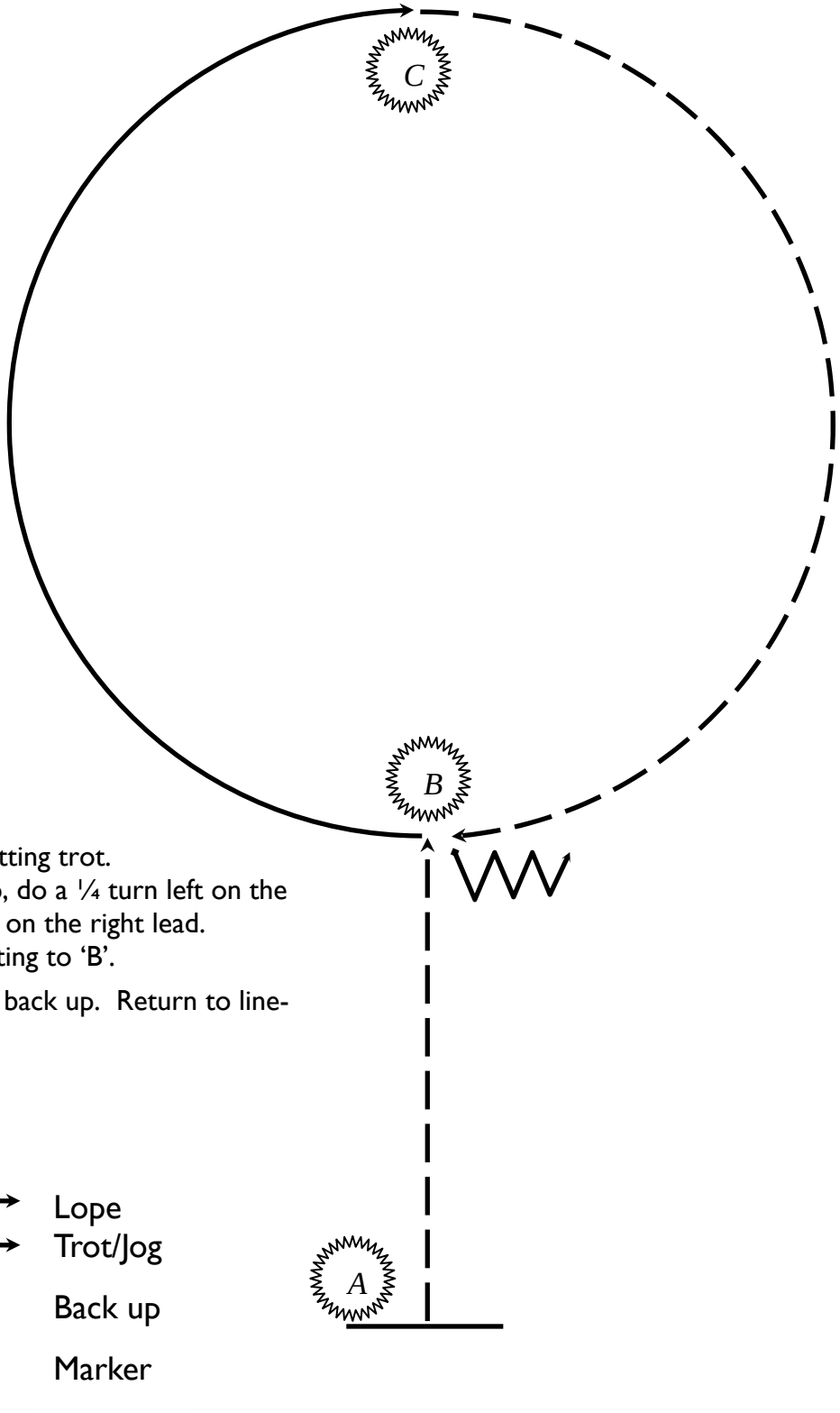


1. Jog to A and stop.
2. 360° Turn to right. 360° Turn to left.
3. Lope on right lead in half circle to B, then stop.
4. Back 4 steps, 90° turn to right and jog to C.
5. At C, lope on left lead to D, stop and back 3 steps.
6. Your pattern is complete. Jog to the exit gate at the far end of the arena.

Manitoba 4-H Mastering Equine Riding Pattern

English Equitation #1

Rider may have a reader for all patterns. Short patterns should be ridden with ONE hand (Western) or two hands (English).



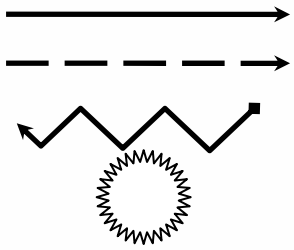
Equitation

1. At 'A' start a sitting trot.
2. Before 'B', stop, do a ¼ turn left on the haunches, start on the right lead.
3. At 'C' trot posting to 'B'.
4. At 'B' stop and back up. Return to line-up.

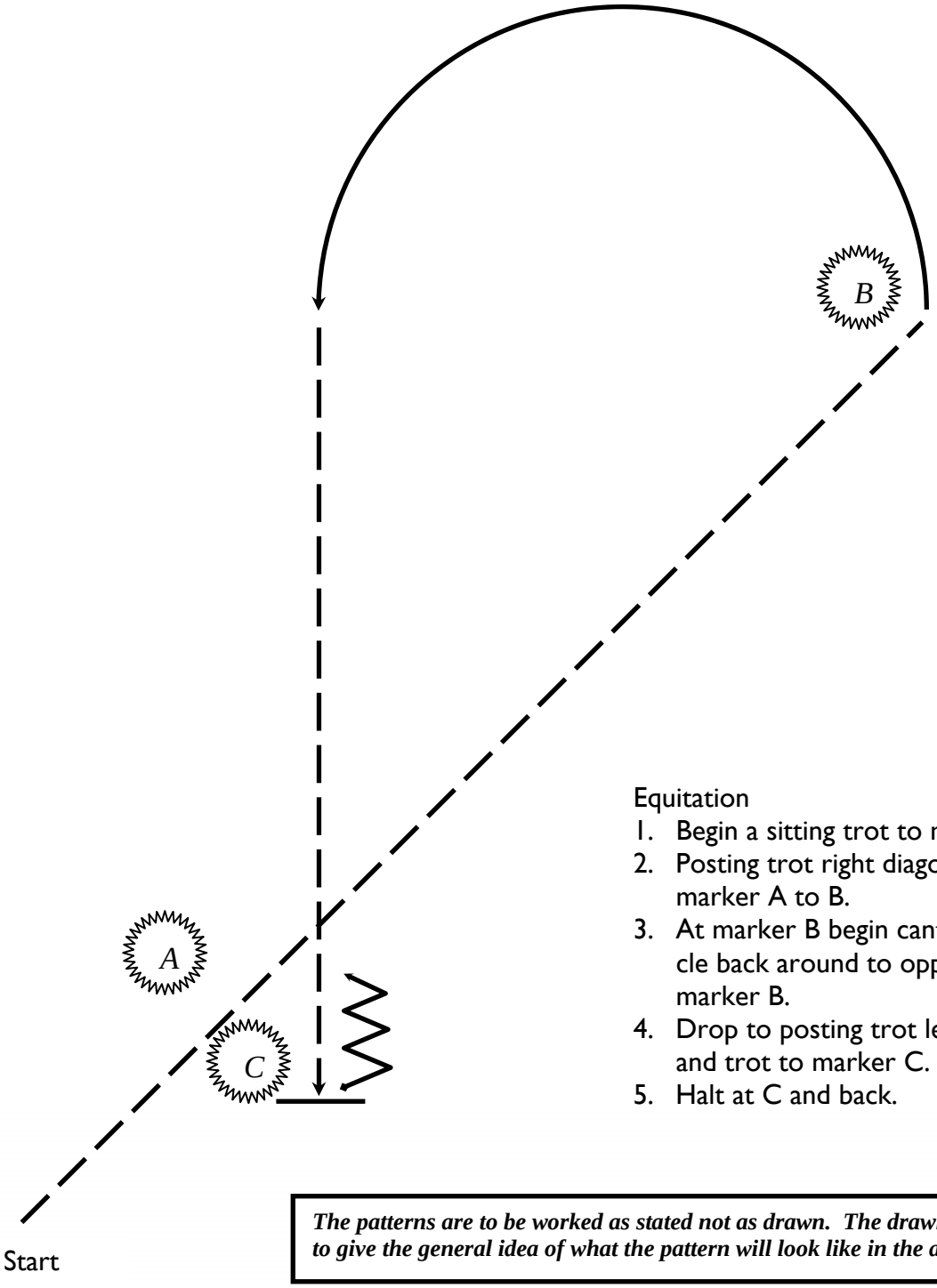
Manitoba 4-H Mastering Equine Riding Pattern

English Equitation #2

Rider may have a reader for all patterns. Short patterns should be ridden with ONE hand (Western) or two hands (English).



Lope
Trot/Jog
Back up
Marker



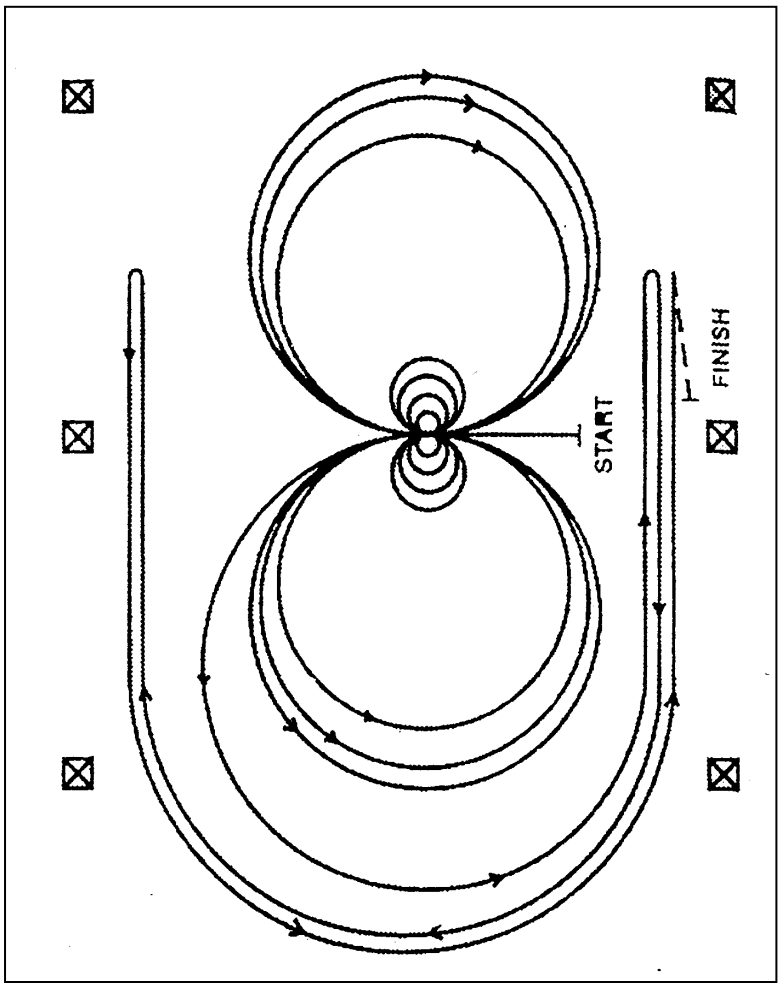
Equitation

1. Begin a sitting trot to marker A.
2. Posting trot right diagonal from marker A to B.
3. At marker B begin canter and circle back around to opposite marker B.
4. Drop to posting trot left diagonal and trot to marker C.
5. Halt at C and back.

The patterns are to be worked as stated not as drawn. The drawn pattern is just to give the general idea of what the pattern will look like in the arena.

SENIOR PATTERN
AQHA REINING PATTERN #1

Rider may have a reader for all patterns. Short patterns should be ridden with ONE hand (Western) or two hands (English).



Beginning at the centre of the arena facing the left wall or fence.

1. Complete **two** spins to the right.

2. Complete **two** spins to the left. Hesitate.

3. Beginning on the left lead, complete three circles to the left: the first two circles large and fast; the third circle small and slow. Change leads at the centre of the arena.

4. Complete three circles to the right: the first two circles large and fast; the third circle small and slow. Change leads at the centre of the arena.

5. Begin a large fast circle to the left but do not close this circle. Run up the right side of the arena past the centre marker and do a right rollback at least twenty feet (6 meters) from the wall or fence – no hesitation.

6. Continue back around previous circle but do not close this circle. Run up the left side of the arena past the centre marker and do a left rollback at least twenty feet (6 meters) from the wall or fence – no hesitation.

7. Continue back around previous circle but do not close this circle. Run up the right side of the arena past the centre marker and do a sliding stop at least twenty feet (6 meters) from the wall or fence. Backup at least ten feet (3 meters) Hesitate to demonstrate the completion of the pattern.

8. Rider may drop bridle to the designated judge.

Showcase Challenge

Bringing it all together!

Now that you have finished this project, it is time to think about how you will share your experiences and knowledge with others. You may put your new skills to work by helping at a community event or at your club Achievement or teaching others about your topic. The goal of the Showcase Challenge is to help highlight your new skills and help **you** understand how you can use them. It can be an opportunity to receive feedback from others on your project. So go back through your manual and find some highlights of your learning (what you are proud of) and think about how you will "showcase" it.

Dream It!

Here are some Showcase Challenge Suggestions:

- Demonstrate something you made or learned about
- Make a pamphlet
- Give a speech
- Use your new skills to help with the Club Achievement plans
- Make a poster or display
- Make a computer presentation (e.g. PowerPoint)
- Write a report
- Or come up with your own idea. It is up to you and your leader!

My Showcase Challenge Plan

My showcase idea: _____

_____

What materials and resources do I need? _____

_____

Who do I need to help me? _____

_____

When do I need to have things done by? _____

_____

Do It!

Insert or attach your finished product or a photo of you sharing your skills in your Showcase Challenge.

MASTER

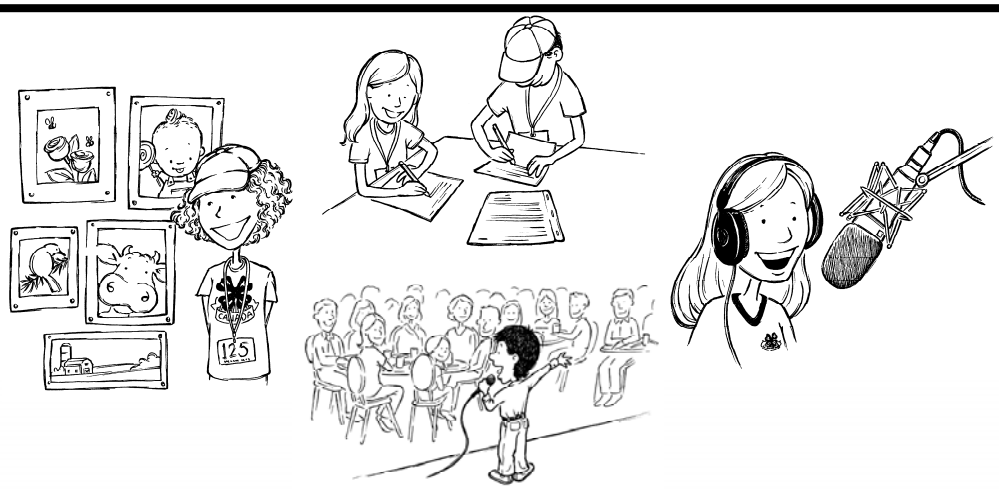
Dig It!

Now that you have showcased your project skills;

- How did your Showcase Challenge go?

- What would you do differently next time?

- How will you use your new skills in the future? *(in different situations?)*



My 4-H Portfolio Page

Name: _____ Date: _____ Year in 4-H: ____

Club: _____ Hours Spent on 4-H: ____(Project and Other 4-H Activities)

Mastering Equine—Advanced Horsemanship Skills Chart

To be completed by the leader and the member based on observations and conversations through out the project.

Skill Builder	Members will be able to… Each Builder had a Skills Checklist which identified the skill you will learn.	We know this because… Identify activities completed and record observations and information from discussions about activities.
1	Groundwork and Psychology • Explain how your horse's four senses other than sight may affect his behaviour. • What are factors that affect the horses learning? • Identify what a restraint is and list two examples. • Assist younger members in reading their horse's body language. • Identify six different stable misbehaviours and why the horse behaves like this.	
2	Grooming and Hoof Care • Explain and demonstrate coat, mane, and tail care for your area of interest (English or Western). For example, pulling manes, clipping, banding, and braiding. • Assist younger members with grooming and hoof care knowledge. • Identify advantages and disadvantages of shoeing. • List three points that the horse shoe fits properly. • Identify two seasonal grooming techniques and explain why the grooming needs are affected by the change in seasons. • Explain and demonstrate how to braid the tail.	
3	Identification and Conformation • Judge and place one conformation classes of four horses and present written reasons for one and oral reasons for the other. • Assist in teaching younger members about horse identification, colours, markings, breed conformations and evaluation. • Help younger members see correctly shoulders in, haunches in, and lameness. • Identify four different walking problems. • Identify and explain how to properly fill out a judging card. • Explain how the skeleton affects conformation.	
4	Safety and Stable Management • Explain safe driving practises when pulling a loaded trailer. • List three things to take into consideration on a long haul. • Assist younger members with management of their facility. • Explain and demonstrate to a non horse person, how to properly load and unload a horse. • Identify three types of flooring for a stall. List two disadvantages and two advantages of each type of flooring.	

Skill Builder	Members will be able to… Each Builder had a Skills Checklist which identified the skill you will learn.	We know this because… Identify activities completed and record observations and information from discussions about activities.
5	Health • Create a rough sketch of the digestive system and briefly explain how each organ plays a part in the digestive system. • Explain the causes, symptoms, and treatment of colic. • Describe the life cycle of two internal parasites. • Show where to give your horse an injection and explain safety precautions. • Assist younger members in finding assistance dealing with horse health problems. • Assist younger members to identify good and bad feed. • Explain how to identify the age of a horse and then demonstrate this procedure. • Review how to take pulse and capillary refill. Assist a younger member in both procedures. • Explain why a balanced ration is important to your horse's health. • Identify the cost of ration for horses per month. • Keep up to date feed and health records.	
6	Riding and Equipment • Assist younger members with their tack. • Describe one obstacle in a trail class and demonstrate how to do it. • Ride a trail pattern. • Judge a trail class. • Name and describe three types of Western or English saddles and explain how they differ to suit their purpose. • Name any pieces of tack that you use for your special area of riding interest. What is its purpose and how should it fit. • Identify two types of riding blankets. List two similarities and two differences between the blankets. • Demonstrate at least three warm up exercises. • Assist younger members in identifying common faults while riding. • Mounted Skills.	
Showcase Challenge	• Explain success in using the skills listed above	
Additional Comments/Activities:		

Leader Point of Praise!

I am most impressed by…

I acknowledge that the member has completed the 4-H project requirements.

Leader's Signature: _____

Above and Beyond!

In addition to project skills, 4-H also increases skills in meeting management, communications, leadership and community involvement through participation in club, area, or provincial 4-H events or activities. List below any activities you participated in this year in 4-H.

(Some examples include Executive Positions Held, Workshops, Communication, Community Service, Rally, Bonspiels, Conferences, Judging, Camps, Trips, Awards, Representation to Area or Provincial Councils, etc.)

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

**Feel Free to add additional pages that include awards, certificates, new clippings, photos or other items that describe your 4-H involvement.

Member Point of Pride!

What I learned…

What I need to improve on…

What I want others to notice…

Member's Signature: _____

Point of Praise! Another's perspective on your achievements in 4-H.

(community professionals, MAFRI staff, 4-H club head leaders, 4-H Ambassadors, friends of 4-H)

I am most impressed by…

I believe that you have learned…

In the future I encourage you to…

Signature: _____

4-H Achievement

4-H Achievement is… a 4-H club celebration when members have completed their projects. Achievements are planned by the club to give recognition to members and leaders for their accomplishments in their 4-H projects and club activities.

A 4-H Achievement can take many different formats: from choosing a theme, to member project displays, to members using their new skills for the event (entertainment, food, decorating, photographer, etc.), to members presenting their project to the whole group, the options are endless and open to the creativity of the members and leaders in each club!

Clubs may also plan their Achievement to promote 4-H to the community or to recognize sponsors and others who have helped the club.

Members and leaders - be sure to check your project books for the project completion requirements, so you will be ready for your club's Achievement celebration!

If you have any questions, comments or suggestions for this or other 4-H projects contact:

Manitoba 4-H Projects
Manitoba Agriculture, Food and Rural Initiatives
1129 Queens Avenue
Brandon, MB R7A 1L9

Email: 4h@gov.mb.ca

Phone: 204-726-6613
Fax: 204-726-6260

This manual is for educational use only and is not intended as professional advice.

For more information about 4-H and the many 4-H opportunities available please visit

http://www.gov.mb.ca/agriculture/4-h/

What is 4-H?

4-H is an international youth organization involving more than 7 million members in 80 countries around the world.

In Canada, 4-H began in 1913 in Roland, Manitoba as a community-based organization dedicated to growth and development of rural youth. Today's 4-H program reaches both farm and non-farm youth across Canada. The motto of "Learn to Do by Doing" is embodied in the program, as 4-H focuses on skill development as well

4-H Motto

"Learn To Do by Doing"

4-H Pledge

I pledge,
My HEAD to clearer thinking,
My HEART to greater loyalty,
My HANDS to greater service,
My HEALTH to better living,
For my club, my community, and my country.

4-H Quality Equation Principles

Quality People

- Promote responsibility, respect, trust, honesty, fairness, sportsmanship, citizenship, teamwork and caring.

Quality Experiences

- Provide members with personal development and skill development experiences.

Quality Projects

- Promote and value quality effort.
- Promote high quality, safe food production within industry standards.

Manitoba 4-H project material is developed by

Manitoba Agriculture, Food and Rural Initiatives (MAFRI)

MANITOBA AGRICULTURE, FOOD AND RURAL INITIATIVES GRATEFULLY ACKNOWLEDGES THE SUPPORT OF Agriculture and Agri-Food Canada Agriculture et Agroalimentaire Canada