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WELCOME: VOLUNTEER LEADERS

Welcome to teaching our most important resource – our young people. We are excited that you have chosen to become involved in the 4-H Horse Program. We hope you have a great time working with you 4-H members as they make new friends, take part in 4-H activities, work with their horses and learn more about being a responsible horse owner.

This is a supplemental resource to the Horse Reference Manual (2003). It outlines the equine project plus provided some teaching hints and techniques that you can use.

How the Alberta Horse Program Works

Mandatory 4-H Horsemanship Project

Safety First! To help ensure safety and basic horsemanship skills of 4-H members in the province, a mandatory project has been established. The first three levels of the Horsemanship Project have assessment tools, which provide an opportunity for members to develop basic riding and handling skills. These help to ensure they acquire basic safety techniques and learn about the responsibility involved in caring for their horse. Members can ride either Western or English, but must complete the project assessments for the first three levels with your own project animal.

Young horses may be used, however the ability to complete some of the assessments will depend on the training of the horse.

Once members have completed the first three levels of the Horsemanship Project, they may continue in this project, or you may move on to other projects. If they choose to move on to another project, it is advisable to carry on with Horsemanship 4 -7 to enhance the skills required for your other projects.

Completion of a 4-H Horse Project Year

To complete a yearly 4-H horse project, members must:

- Complete a record book for each project.
- Take part in at least 70 per cent of designated club activities.
- Take part in Achievement Day.
- Enroll in one of the projects available and work on the assessments required for that project. Members are not required to finish a project in one year, nor are they required to finish a level in a year. The members yearly project qualifies as long as they have been working on the skills and knowledge for the project in which they enrolled in.

Horse Project Objectives

The 4-H Horse Project gives members an opportunity to:

- Acquire an understanding of horse management through the experience of owning, caring for, and maintaining records on a horse project.
- Develop the skills, patience and understanding of the handling practices essential in working with horses.
- Develop an appreciation of the horse industry and its importance in the local community, the province and the country.

4-H Horse Reference Manual

Members and leaders use the main 4-H Horse Project Reference Manual as the members work through the Horsemanship Project and the other 4-H horse projects. This manual has basic horsemanship information that is important for any horse owner to know.

This manual was compiled with the best information available at time of publication. New research is ongoing in the horse world, so some of the information presented may change in the future.

4-H Horse Project Books

There are many projects available to 4-H horse members and the most popular projects have supplementary Project Books that provide leaders and members with additional information specific to each project. These books also include activities for members to complete and the assessment tools that you as leaders will work through with your member for each project. Additional information is also available on the 4-H website at: www.4h.ab.ca.

If members have an interest in a equine project that is not listed or does not have any available

4-H resources, they are encouraged with your direction as a leader to take the Horse Creative Option project. Many of our new horse projects have started as ideas – developed into creative options – turned into a pilot project and become a recognized horse project with resource material developed and supplied.

When new project resources are developed, material will be put on the web site until there is enough interest and information to develop a on-line and written project book.

The 4-H Horse Record Book

Members use the 4-H Horse Project Record Book. It is a member's responsibility to provide the majority of the feed, management and care of their horse. Feeding records on the member's horse must be maintained for a minimum of 180 days prior to Achievement Day.

Most 4-H members are in only one horse project; therefore these members do not have any duplication while keeping records for the required 180 days prior to achievement day. For members in more than one horse project or taking care of more than one project horse the following table outlines your minimum 4-H record keeping expectations are:

Your Record Book

Records must be kept on a project animal for **180 days prior to the Achievement Day event**. A member can only have one project animal per project, with the exception being Rodeo. If a member enrolls a horse in more than one project, they must include project goals specific to that project (Question 4, page 7) and write one story with separate paragraphs for each project (page 40). A record book must be kept on each project animal and only project animals for which a record book has been kept may compete in a 4-H sanctioned event. The only exception would be if the project animal has to be replaced by another animal because of health reasons, and if that replacement has been approved prior to the event.

The Project Assessment Tools (Levels)

To provide consistency throughout the province, the 4-H horse project options have been developed with level assessment tools (skill requirements). These assessment tools explain to the members what they are expected to learn and what will be used to assess your knowledge and skills in each project. They can be used by a leader, parent, senior member or riding instructor, to assess each member's knowledge and skills in each project.

These assessment will not be monitored other than through the 4-H club. For the benefit of members, they are encouraged to be honest and realistic with the member's ability to complete each of the assessments. A benefit of this program is that when members move to different clubs or compete at district, regional or provincial activities club or event organizers should have a good idea where the member's skill level is.

When completing levels 1-3, members can be work on more than one part of levels 1-3. Members do not have to for example complete all of level 1 before working on the skill levels in level 2 or 3. We do not want to stagnate our member's drive or enthusiasm.

Members must complete both the mounted and dismounted portions of the assessment tools. Our horse project stresses riding skills, animal husbandry and stable management. For our members to become good horseman – the completion of mounted and dismounted assessments are critical

Recognized Horse Project Options

English Horse Projects

1. Members who wish to gain more experience with the English style of riding are encouraged to participate in this project.
2. Projects that involve English riding include:

Horsemanship 4-7 - is a continuation of the mandatory Horsemanship Project where members continue to learn horsemanship skills, riding with English equipment.

Jumping - members will learn about and develop basic skills for beginner jumping. Members and horses learn to work together as a team learning correct techniques.

Dressage - members will learn about and develop techniques used in dressage competitions. Members learn about dressage competitions and develop riding skills that help teach their horses basic dressage movements.

Western Horse Projects

1. Members who wish to gain more experience with the Western style of riding are encouraged to participate in this project.
2. Projects that involve Western riding include:

Horsemanship 4-7 (a continuation of the mandatory Horsemanship Project) - members will continue to learn more advanced horsemanship skills, riding with Western equipment.

Ranch Horse - members will develop skills in working with cattle, roping, first aid, trail riding and other skills used with ranching.

Rodeo - members will learn about competing in rodeo events including: Barrel Racing, Goat Tying, Steer Undecorating, Team Roping, Cow or Steer Riding, Pole Bending, Keyhole, Breakaway Roping, and Goat Tail Untying. Members also learn how to set up and conduct a rodeo.

Packing - members will learn how to safely use pack horses and equipment used in packing and learn how to take part in pack trips.

Reining - members will work with their horse to develop the skills used in reining competitions. Members should have advanced riding skills and horses should be athletic.

Cattle Events (Cutting, Working Cow Horse, and Team Penning) - members will learn about handling cattle and using a horse in competition for the three cattle events. Members and their horses should have some advanced riding skills and lots of experience before enrolling in this project.

Young Horse Projects

Members interested in learning more about the horse industry and about raising and training young horses are encouraged to participate in this project. The young

horse project is set up with two participation streams: members having the option to complete the project on their own as a self-directed basis or linked up with an industry based young horse development project.

Young Horse - Self-Directed

This project helps you to teach and train the horse that has no real “schooling”. The young horse project is developed for a weanling, yearling or two year old animal, however this project is not restricted to a certain age of the horse, rather the amount of training and handling needed.

Members start their projects at what development level the animal is at: weanling, young, green or mature. The project covers topics like foal nutrition, safety, facilities and training.

Members carry this project as long as they want or until the levels are attained. They can sell their animal at any time.

Young Horse - Industry Affiliated

Members apply through the provincial office (usually by October 1 for Standardbred and Draft Horse, June 1 for WRERA), are notified that they have been accepted and are linked up with industry groups. Members receive knowledge and corporate support to develop skills and experience the variety of Alberta’s Horse industry.

Standardbred - members apply to join this program, receive a weanling from a standardbred breeder and work through the young horse development levels, care for the animal and then market it for the owner at the annual yearling sale (members receive a percentage of the sale).

Draft Horse - members apply to join this program, purchase a weanling draft horse and work it through three years of young horse development training. In the first year the emphasis is on halter, second year includes ground driving and third year includes cart driving.

Wild Rose Equine Ranchers Association (WRERA) - members apply to join this program, purchase a foal from an association rancher and work it through the young horse development levels for a minimum of two years.

Judging Horse Project

This project is designed for members who do not have a horse and who wish to learn about judging horse events (members are not required to have a project animal).

Members will advance through the assessment tools that encourage learning about and experiencing the judging of conformation and performance classes.

Members keep a record book on the activities they participate in, recording their experience and training with judging.

Creative Options Project (COP) - Equine

This unit is designed for intermediate (12 to 14 years old) and senior (15 to 20 years old) members as of January 1st of the current club year.

The members must have completed at least Horsemanship Level I-III and wish to design their own area of study. Non-riding projects do not have to complete the mounted abilities of Horsemanship I-III to participate in this project. In this unit, members select, plan, share and evaluate their own projects. This project is ideal for members who do not own their own horse.

Further information on this project is available by ordering the Creative Options Project Book or by contacting the 4-H specialist in your region.

GENERAL LEADERSHIP TECHNIQUES

Set Kids up to Succeed

As we teach these units, our goal is to always Set Kids up to Succeed.

While some units focus on our youngest members (9 – 12) with the least amount of knowledge, new 4-H members will benefit no matter what age they are. Older children, who are new to 4-H and also new to the horse world, can assist with these sessions. They will assimilate the content in the process, helping to build a solid foundation.

These sessions are also a great opportunity for enthusiastic senior members to mentor young 4-Hers. Other units focus on members that have finished Horsemanship 1-3. They are informative and challenging.

You have the flexibility of choosing which units you would like to use and when.

Learning Styles

Some people learn best through visual methods or auditory methods,. While others learn best by “doing”. Most people learn best through a combination of two or all three styles. If you are reading from notes to a group of visual and kinesthetic learners you will not likely retain their attention for long. Children are a “tough crowd” if you have lost their attention. These sessions have been designed to reach children through all three of these channels. We have provided a brief description of these three learning styles below.

Visual learners

Visual learners prefer to see pictures, diagrams, illustrations and words written down. They will observe all the physical elements in a classroom. Their learning material will be carefully organized and perhaps decorated. When something is being described, they prefer to have a picture to view.

Auditory Learners

Auditory learners remember what was said very well. They remember best through verbal repetition and saying things aloud. They enjoy group discussions and group presentations including the use of music. They are easily distracted by noise, but also easily distracted by long periods of silence.

Kinesthetic Learners

Kinesthetic learners (or tactile learners) remember what they DO very well. They need to get physically involved. They enjoy making and creating. They like to handle the learning materials. They tend to fiddle with small objects while listening or working. They have trouble staying still or in one place for a long time.

General Notes:

1. Don't let any child put herself or another child in danger, either by an act of commission or by an act of omission.
2. Always talk in a normal voice; never squeak or talk down to children
3. Always have a snack on hand and be sure that it gets eaten halfway through a session. Food is very important. Plummeting blood sugar can make things go wrong when they shouldn't!
4. Small prizes or treats are a fun addition to some of the games.
5. Encourage kids to choose a partner they don't know very well and to choose a different partner each time.
6. Remember to ALWAYS SET KIDS UP TO SUCCEED.
7. Have fun, enthusiasm is contagious!

HORSEMANSHIP: **TEACHING ACTIVITIES**

A Challenge – Share your Horsemanship Project Training Techniques with your fellow 4-H Leaders.

Our Challenge is for you as leaders to use this information and to share with fellow tips and techniques that you develop. Please send on disc any new or successful activity description, that you develop or modify, to us by June 1 of the project year so we can share it with your fellow 4-H Leaders the following year. Our address is Provincial 4-H Equine Advisory Committee, Room 200, 7000 – 113 Street N.W. Edmonton Alberta, T6H 5T6 or e-mail document to [cloverleaf@gov.ab.ca.](mailto:cloverleaf@gov.ab.ca), indicating that is a resource for the equine project. The top three submissions as judged by a committee of your peers will annually receive a fifty-dollar gift certificate complements of Lammler's Western Wear.

Horse Handling

Grooming and Care

Movement

Feeding

Horse ID

Facilities

Psychology

Tack

Health

Safety

HORSE HANDLING: WHERE SHOULD I STAND?

Introduction

This activity will help younger members visualize and practice where they need to stand while their horse is being inspected by a Judge, Vet or Farrier. If they haven't had any Showmanship experience then you will need to give some general guidelines before they play the game. Explain how the area around the horse is divided into quarters. Discuss the Safety aspect and the importance of always being on the same side of their horse as the person inspecting the hindquarters of their horse. By being in this position they can control the hindquarters by pulling the nose toward them which would cause the horse to swing the hind end away from the person inspecting. When the person inspecting their horse is in front of either shoulder, the handler should be in front of and facing their horse on the opposite side. The Safety consideration here would be the handler can pull the head away from the person inspecting if necessary.

10

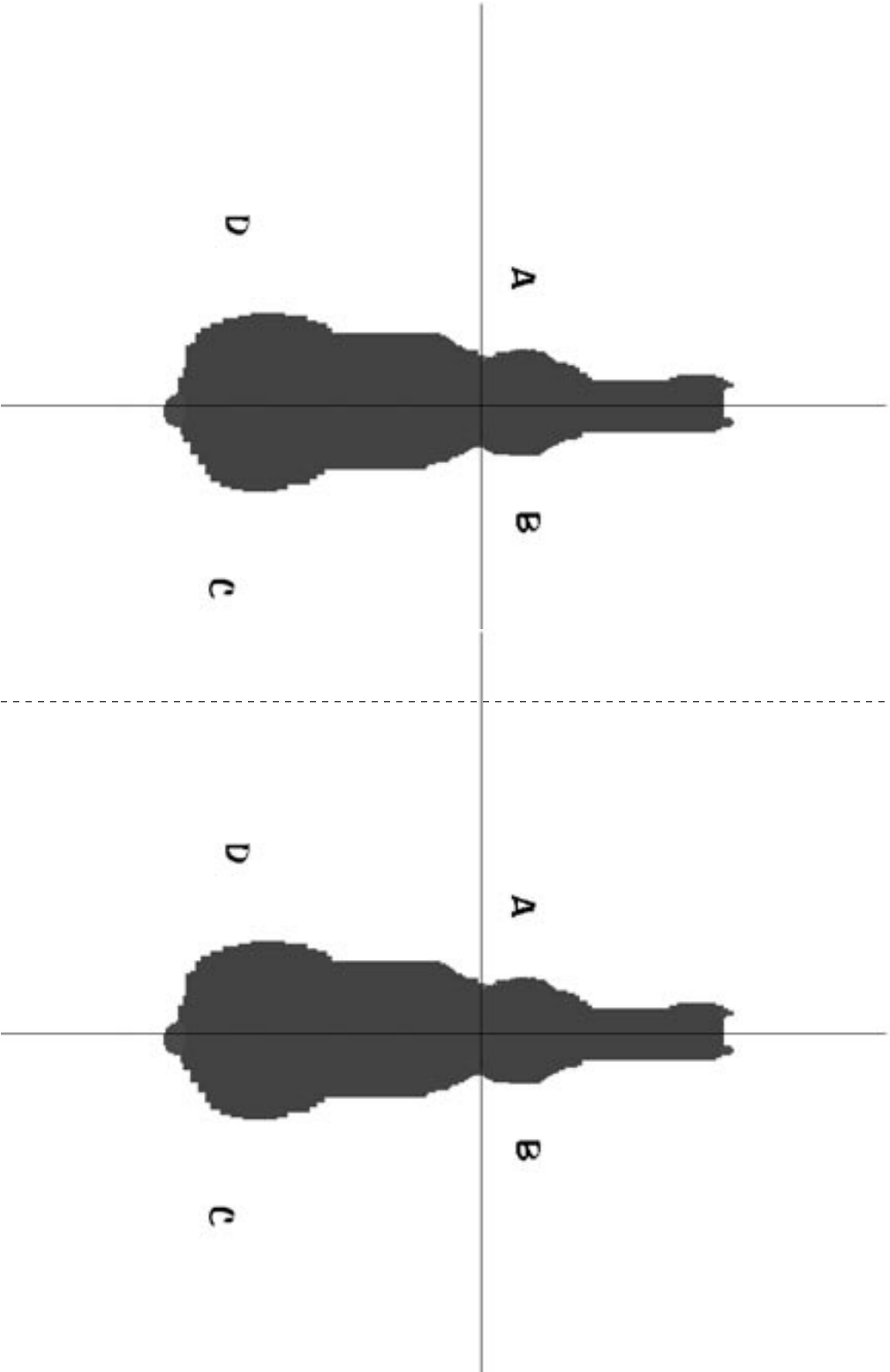
This is a game they can play with an older member. Their partner should be comfortable with Quarters so they can offer guidance during the game. The younger member is the Handler and the older member can be the Judge, Vet or Farrier. The Handler can only move to Box A or B. The Judge, Vet or Farrier can move anywhere. The Handler starts in Box A (on the front, left side of their horse). The Judge, Vet or Farrier places their game piece in any Box and the Handler must respond by moving or staying where they are.

Preparation

Copy enough game cards so each pair will have one. They will also need two game pieces (1 red and 1 black Checker or 2 Quarters – one would be heads and the other tails!).

Meet with the older members prior to the start and explain the game. Also explain their role as the coach, teacher and mentor. They may want to play a few games themselves to get comfortable with the process.

Once they have been partnered up, explain the rules. (See intro).



HORSE HANDLING: LEADING YOUR HORSE SAFELY

In this exercise the members will work in pairs. The “horse” is blindfolded and holds his/her hands together just above waist level, elbows bent at waist level. The “horse” will hold the snap end of the lead rope between their hands pressed flat against each other. (If the handler pulls too hard the snap should just slip right out from between their hands.) The other end will be held by the handler, who is in charge of leading the horse asking it to move off, making it stop and stand, and working through a course of 3 pylons by using the lead rope for signals.

The handler should be on the left side of their horse with the lead rope neatly folded up in their left hand. Make sure there aren’t any sagging loops that hang as low as their knees. Their right hand should be about 6-8” from their horse’s imaginary halter (their partner’s hands). Explain to the members when they lead their real horse they would always stay between it’s head and shoulder, keeping the horse’s eye in front of them. With their partner they should be right beside them (assuming their hands out in front of them is the head/halter).

Encourage members to “ask” as softly as they can to communicate to their “horse”.

Change positions. Ask the horses to tell their partners how they did. Did they ask gently? Were they patient and did they give you time to respond before asking again?

HORSE HANDLING: GOOD HANDS GAME

Bridles are required for this game. Members should bring their own. Members play this game in pairs. One person is the “horse” and the other is the “rider”. The horse is blindfolded, has their bridle around their neck and holds the bit in their hands. The rider stays about 3’ behind the horse and uses the reins, not the voice, to ask the horse to stop and turn. The rider can cluck to the horse to initially ask for forward motion. The horse is encouraged to say what they are feeling – whether a rein action is too subtle (not likely) or unnecessarily strong or sudden (all the time!). Cushions or pylons can be set up to mark a course for the rider to follow.

Tell the members there are several ways we use our bodies to communicate with our horses while we ride. Ask what are some of the parts they use. (voice, hands, legs, seat, upper body)

Explain the game as follows:

Good hands are soft hands. Soft hands “ask” instead of hard hands that “demand”.

- partner up and decide who will start off being the horse and who will be the rider
- Riders – try to have quiet hands / use as little pressure as you can to communicate to your horse / try not to use your voice except to ask them to move forward
- Horses – you will feel what your horses feel (but in your hands). Keep your hands up in front of your chin so the reins go over your shoulders. Does your rider have soft hands or hard hands?

Blindfold the horses and they will wear their own bridles. After one time through the course ask the horses to tell their riders how they did. Could they have been lighter? (Definitely!) Try again and be even lighter. Then switch positions and bridles.

GROOMING & HOOF CARE: **GROOMING**

Introduction

In this session members will review the grooming tools found on page 133 and how to use them. Members should have brought their own grooming supplies or they can share with another member.

Have the members turn to page 132 in their manuals. Use the next few pages as your guide and progress through each tool. Each member can find the matching tool in their own supplies. This is a good opportunity for new members to discover some tools they don't have but should have. Encourage members to name the tool and describe how to use it. You can "add" to their descriptions if necessary.

MOVEMENT: LEADS

In this game the members will actually lope around the room like a horse. They will lope on the correct lead then on the wrong lead to see how each feels. Allow for a generous space between “horses” and tell them it is their responsibility to keep a safe distance between each other by slowing down or carefully passing on the ‘inside” only. This exercise demonstrates how much easier it is to lope on the correct lead.

Explain to the members when a horse lopes he moves one foreleg and one hind leg, both on the same side of the body, ahead of the other two legs. This is called leading. When your horse is traveling on a circle or around the arena, it is easier for him if he leads with his inside set of legs. It is a smoother ride for them too. Tell them they will try loping on their inside lead and the wrong lead to see how it feels.

- ask a willing member to demonstrate how to “lope” like a horse.
- have the group lope to the right on their right lead
- then ask them to change leads but continue going to the right (talk about how uncomfortable that is)
- if the group is still relatively under control, change direction and do it all again!

MOVEMENT: DEVIATIONS OF TRAVEL

The ideal way a horse travels is straight on, each leg moves on a straight line. Turn to page 188 in the reference manual or demonstrate for the group. Try one at a time and only at a walk. Only do the most common ones: Paddling, Winging and Plaiting. Explain what interfering is but don't let them try it.

The next time your club is at the arena have your group watch each other's horse trot toward them and see if they can spot a paddler, winger or plaiter. (Paddlers are the most common!)

MOVEMENT: FOOTFALLS

Introduction

This is a fun activity the members can do with a partner or alone. They will mimic the footfall sequence of each gait. If done with a partner one person will be the back legs and the other will be the front. The person behind can hang on to their partner's waist or a lead shank wrapped around their waist (so they can stand further back). If done alone, the member will demonstrate using their own hands and feet.

As a brief intro to the group you should review the following:

What is a Gait? The order in which the horse's feet touch the ground.

Walk – 4 beat gait. Each foot is picked up and set down separate from the others.

Trot / Jog – 2 beat gait. Diagonal pairs.

Diagonals – opposite front and hind feet move at the same time.

Right diagonal – right front and left hind are moving together

Left diagonal – left front and right hind are moving together

Canter / Lope – 3 beat gait. One hind, diagonal pair then one front.

Gallop – 4 beat gait. Each foot is picked up and set down separately.

Pace – 2 beat gait. Pairs on same side move together. Standardbreds pace.

Stride – distance between two steps of the same foot.

Lengthen the stride – reach further with each leg.

Back up – 2 beats. Diagonal pairs.

Preparation

Hang the six posters provided up on a wall at various points around the room. Divide your group up so you have a few at each poster. An intermediate or senior member should be assigned to each gait to help supervise and teach as the groups are rotated around the room. Meet with these older members prior to the start and explain the activity and your expectations.

Following the initial rotation of the groups and depending on the confidence of your members you could "raise the bar" by removing all of the posters and asking the members to demonstrate a gait for the entire group. Their choice of gait or yours.

WALK

4 BEATS



TROT / JOG

2 BEATS



CANTER / LOPE

RIGHT LEAD

3 BEATS



CANTER / LOPE

LEFT LEAD

3 BEATS



GALLOP

4 BEATS



BACK UP

2 BEATS



HORSE IDENTIFICATION

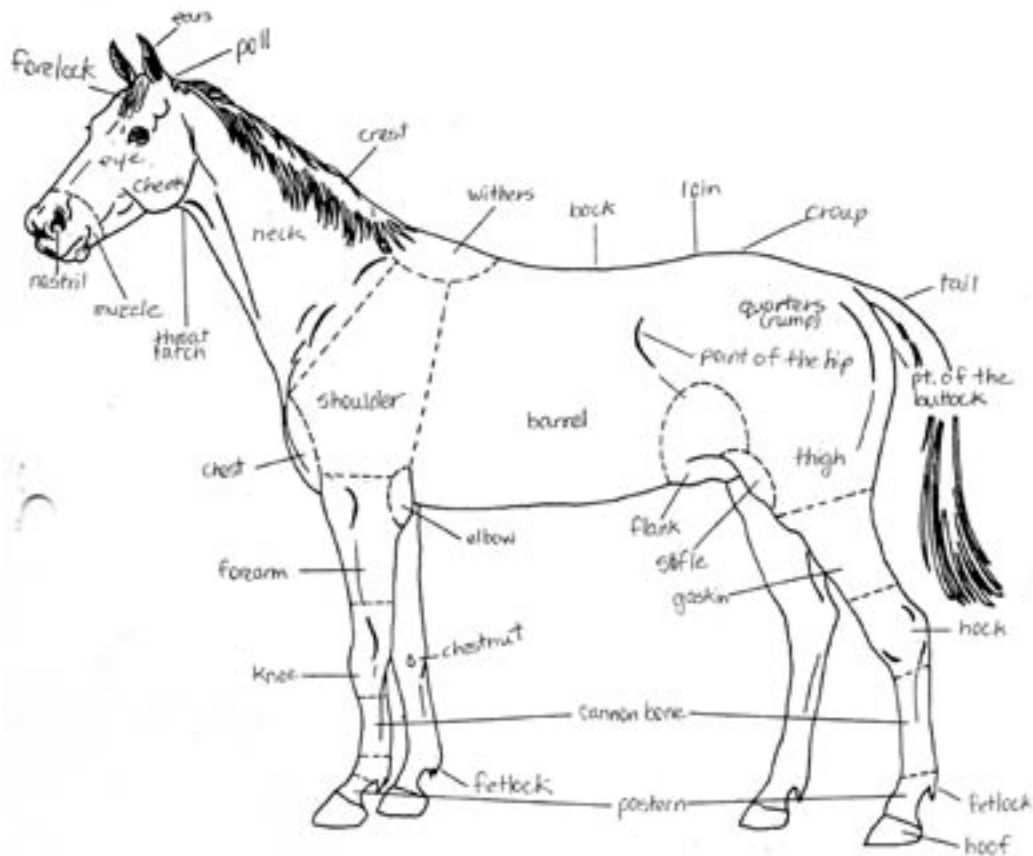
Body Bingo

Prior to the session, copy enough bingo sheets for your group and highlight 15 lines on each Bingo sheet. Vary them from sheet to sheet and include some "easy" and some "challenging" on each. Cut out the words and place them in a small container to be drawn and called out during the game.

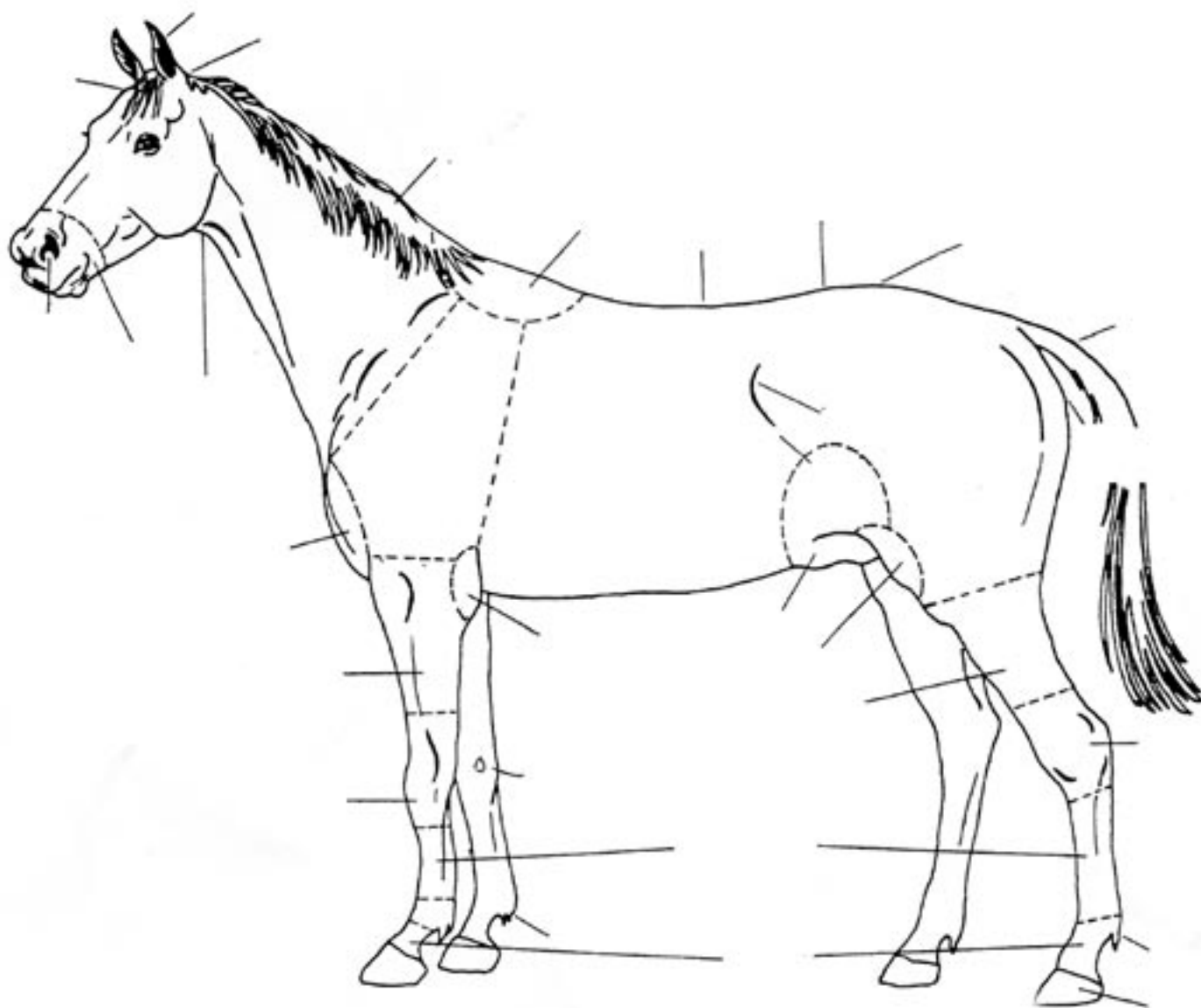
Hand out bingo sheets to each member. Using the diagram on page 15, the members complete the highlighted parts only on their individual sheets. If they complete all of the parts it really slows the game down and young children get frustrated trying to find the words.

When everyone is finished filling in their lines, start the game.

As a word / body part is called out, the members cross out the matching word on their sheet. When they have crossed out all 15 parts they call out "Body Bingo!" Hand out a small prize or treat to each child as they finish and continue until each child has finished (all parts have been called).



PARTS OF A HORSE



- Partner up
- Using their horse tape measure have the members measure each other in hands. Invite them to come and record their name and their height on the board. When all of the measurements are on the board, explain the height cut-off point for a pony Vs. a horse. (14.2) Give a treat to all of the ponies in the room! (the “ponies” love this!) Then give one to the tallest “horse”. Then give one to all of the other “horses” or the rest of the “herd”.

Stations

Members will learn some basic terminology in these sessions that are used to describe horses. They can work in groups and rotate around to each station. There are two ways you can do this. You can use old magazines and have the kids find, cut, paste and label or you can prepare the cut-outs and labels ahead of time, toss them onto a table and the kids have to match the pictures with the correct label. The second method is much cleaner, quicker and can be used over and over. Older members could have a project meeting and do the actual preparation of these units.

Colours Station

Use the colours indicated in the Level 1 Project book:

Black/Bay/Grey/Sorrel/Chestnut/Buckskin/Palomino/Brown

Markings Station

Face markings: star/stripes/blaze/snip/bald face

Leg markings: stocking/half stocking/pastern/half pastern/coronet

Breeds Station

Quarterhorse/Arabian/Paint/Morgan/Appaloosa/Percheron/

Thoroughbred

Age/Sex

Foal/Colt/Filly/Mare/Yeld Mare/Stallion/Gelding/

Yearling/Weanling/Aged/Dam/Sire

This session has been prepared for you – see attached.

Refer to page 60 in the Horse Manual for the answers.

FOAL	GELDING	COLT	MARE
WEANLING	STALLION	FILLY	YELD MARE
YEARLING	SIRE	AGED	DAM

The offspring of horses, either male or female, up to one year old	Male offspring, up to 4 years old or until gelded.	Female offspring, up to 4 years old, or until the first breeding.
Mature female horse over 4 years old or younger if bred.	Mature female horse that has never given birth, barren.	Male horse, that has not been castrated (gelded).
Male horse of any age that has been castrated.	One year old up to 2 years old.	A foal that no longer has access to its mother's milk. Up to one year old.
Any horse, any sex, over 9 or 10 years old.	A foal's female parent.	A foal's male parent.

TACK

TACKY GAMES

Introduction

In this session the members will “show and tell” the misc. tack items they brought. They will learn the difference between a snaffle bit and a leverage bit and the styles of riding that would use each. Then they will review the parts of the Western and English saddles and bridles and play a team game to increase their knowledge.

Show and Tell

Have members who brought misc. pieces of tack show them to the group and tell us about them. (We have seen some real antiques and family treasures!)

Bits

This is a very basic introduction to the difference between the two main categories of bits, non-leverage and leverage. At this level the members just need to know that there are two categories, how they work and what style of riding uses each type. Have a couple of snaffles (non-leverage) and leverage bits that you can pass around as you talk about them.

Non-leverage or Snaffle bit

A snaffle is a mild bit. It puts pressure on the lips first then the bars and tongue. Snaffles can be seen in English and Western. In English riding we use a direct rein (explain) and ride with light contact and no slack in the reins.

Leverage bit

Pressure is applied to the bars, tongue, lips, chin and poll. Bits with a very high port can also put pressure on the roof of the horse’s mouth. This type of bit is considered more severe than a snaffle because it puts pressure on the horse in more areas. A leverage bit has a shank. This increases the amount of pressure applied by your hands. In Western riding we “neck rein” or ride with one hand. Western riding can also demand a more responsive horse with lots of fast turns and stops. With a leverage bit the horse learns to move quickly with very little pressure.

TACK: TACK RACE

Review the parts of the Western and English saddles and bridles. Have members refer to their manuals page 144 for bridle parts and pages 152 & 153 for saddle parts. You can point to the part and have each member take turns to say what that part is.

- Divide the group into 2 teams. An English team and a Western team.
- Post the labeled sticky notes on a vertical surface (wall or flip chart)
- This is a relay race. The first member runs up to the board and chooses a sticky note and places it where it belongs then runs back to their team and tags the next person in line.
- There are 5 bridle parts and 15 saddle parts on each set of tack.
- Once a winner is declared switch places and repeat.
- It is a good idea to enlist 2 parents or senior members to help out by being a “judge” at each station to ensure the label is placed in the correct place.

TACK: TACK RACE

Write the following 40 tack parts on small sticky notes:

Western

HEADSTALL

crownpiece
throatlatch
cheekpiece
chin strap
browband

SADDLE

cantle
seat
pommel
gullet
horn
fender
skirt
rear billet
latigo
seat jockey
rear jockey
swell
concho & strings
latigo keeper
stirrup hobble

English

BRIDLE

crownpiece
throatlatch
cheekpiece
noseband
browband

SADDLE

cantle
seat
pommel
gullet
skirt
dee ring
buckle guard
rear panel
front panel
sweat flap
saddle flap
stirrup iron
stirrup leather
stirrup bar
billets

TACK: BIT LAB

Bit Severity Lab

Introduction:

In this activity the members will review the difference between a leverage and a non-leverage bit. They will learn the parts of the bit and the factors that determine bit severity. Then they will work with a partner and rate the severity of several bits using the bit severity worksheets attached. As part of your introduction of this activity review pages 145 – 150 in the manual in conjunction with the notes found below on Non-Leverage and Leverage bits.

Preparation:

The members should read pages 145 – 150 in the Manual.

Corrections:

- Page 145 – bottom photo labeled as “Eggbutt Snaffle” should be “Full Cheek Snaffle”
- Page 147 – top photo labeled as “Egg Butt Mullen Mouth Snaffle” should be “Medium Ported Curb”

In preparation for this Lab you will need to collect several different types of bits, both leverage and non-leverage. Vary the shape, size and type of mouthpieces as much as possible. In the pilot for this activity we had over 12 different snaffles and over 24 leverage bits. We raided our own tack rooms, found some old, long (and I mean long!) shanked bits that “grandpa used to use”, and borrowed several Gag bits from a Barrel racer. Once you collect all of the bits it’s time to label them. We used small paper tags with a small string attached (available at office supply stores) that we looped through the bridle ring. If you are not sure what type of bit it is you could always take it into a tack store and see if they can help you or try doing some research on the Web. We found some great resources using “Google” as our search engine.

The participants will also need a fabric tape measure (in inches). To make things easier we took a soft tape measure and cut it into several 5” strips. Each group was given a 5” strip to use during the Lab.

Lay the bits out on a table separating the leverage from the non-leverage. Group all of the same bits together. For example, if you have several D-ring Snaffles with different types of mouthpieces, lay them next to each other so it is easier to see the subtle differences.

You will also need to make several copies of the worksheets. Allow enough so each group could evaluate most of the bits.

Non- Leverage Bits

- Also called Snaffles
- Reins attach above the mouthpiece
- Direct rein pressure applies lb. for lb. pressure
- applies pressure to the tongue, bars and lips (full cheek also applies pressure to the cheeks)
- A broken mouthpiece is NOT a “snaffle-mouth” it is a “jointed” mouthpiece. Snaffle refers to the rings on each side and the fact that there is no leverage.
- Types: O-ring or Loose ring / Egg Butt / D-ring / full cheek / half cheek / Fulmer
(A Fulmer is similar to, but milder than a Full cheek – see photo below.)



Leverage Bits

- reins attach below the mouthpiece
- applies pressure to tongue, bars, lips, chin, poll and sometimes the palate

6 factors to determine severity:

- **Mouthpiece** – rubber, copper, sweet iron, steel, chain, twisted wire, etc.
- **port** – low/medium/high wide/narrow The higher and narrower the more severe / can contact the highly sensitive palate / a low wide port will give plenty of room for the tongue – great for horses with a thick tongue
- **Weight** – A heavy bit makes any cue stronger.
- **Hands** – A severe bit can be used in a mild way in educated hands. Even the mildest bit can become severe in uneducated hands.
- **Purchase** – distance between mouthpiece and the bridle ring (pt where headstall attaches) the longer the purchase, the more leverage it can apply. However, a longer purchase can also lessen the leverage ratio depending on the length of the shanks.
- **Shanks** – Severity increases with length and straightness. Shanks that curve back toward horse reduce pressure. S-shaped shanks provide for quicker release when you drop the reins but also quicker contact when you pick up. Pressure is triggered as soon as slack is removed. mouthpiece rotates down / chin strap up / lower jaw is squeezed in vice-like action

Feel the Vice!

Hold the bridle up by the crownpiece with one hand. With your other hand, spread your fingers so your thumb is behind the mouthpiece and your fingers holding the curb strap away. Have someone pull on the reins. Your fingers and thumb will be pulled towards each other by “inches”. Unfortunately for the horse, his lower jaw doesn’t give like your fingers do. At the same time the purchase rotates forward, it pulls down on the crownpiece applying poll pressure

Leverage ratio: length of purchase X length of shank

Example: 2” purchase with 6” shanks has a ratio of 1:3. This means for every pound of pull there is 3 lbs of pressure applied to the horse’s mouth (plus chin and poll pressure)

Bit Severity Activity

You have collected a variety of bits, labeled them and laid them out in a somewhat organized fashion and are now ready for the members to evaluate them using the

Bit Severity Worksheet. The members should work with a partner. Each pair will need a soft tape measure and a pencil. They will start with the Non-Leverage bits.

1. Hand out one Non-Leverage Worksheet to each group. As an introduction to the activity and to reduce the number of questions you will get later, complete the worksheet together using one of the non-leverage bits from your display.
2. Review the parts of the bit. The cannons (long tubular sections of the mouthpiece), bridle rings, butt (where the mouthpiece meets the sleeve), players, keys and crickets are small moving pieces in the centre of the mouthpiece. Identify a copper, sweet iron, steel and rubber mouthpiece.
3. The first two questions are straight forward. The more severe a characteristic is the higher the score will be. You may need to point out a triangular or edged mouthpiece so it is not mistaken for a smooth mouthpiece.

Question 3 is multiplied by question 4 and the total is carried over to the right hand side. To answer question 4, measure 1” in from the bridle ring, then use your tape measure to wrap around the mouthpiece to measure it’s thickness.

Questions 5, 6 and 7 are all subtracted from the running total as they deal with characteristics that make the bit milder, thereby reducing the total score.

4. Place the Non-Leverage Worksheets in a central spot and let the groups begin!

Initially, you will find you are answering a lot of questions but once they get the hang of it they will be able to help each other. Once they are all finished, review some of the bits together as a group. See where groups

differed on scores and dig deeper to find out why. This is when the learning really begins!

Repeat the steps for the Leverage bits. First hand out worksheets to each pair, then choose a bit and review the parts. In addition to the above parts, a leverage bit will also have a shank, purchase (the part of the lever above the mouthpiece), rein loop or ring, it may have a port (high, medium, and low).

Question 7 is added to question 8 then the total is multiplied by question 9.

TACK: BIT LAB

NON-LEVERAGE BITS

Type of Snaffle _____ BIT # _____

1) How many pieces are there in the horse's mouth?

TOTAL SCORE

- A. 1 to 3 pieces 1 pt
 B. more than 3 pieces 5 pts

2) What kind of texture or shape does the mouthpiece have?

- A. Sharp (eg. Triangular or edged) 10 pts
 B. Prickly 10 pts
 C. Rough (eg. Twisted wire or chain) 10 pts
 D. Twisted metal 5 pts
 E. Wrapped with smooth wire 3 pts
 F. Smooth 1 pt

3) What is the ring shape?

- A. Round (rings are circles) 1 pt
 B. All other shapes 2 pts

4) How thick are the canons?

X

- A. 1/2" or more 1 pt
 B. 3/8" but less than 1/2" 3 pts
 C. less than 3/8" 10 pts

_____ = _____

5) How are the rings attached to the canons?

- A. Through holes in the canons 1 pt
(this would be all snaffles except Fulmer aka Australian loose ring)
 B. All others including Fulmer 3 pts

(_____)

SUBTRACT

6) Are there players, keys or a cricket on the bit?

- A. Yes 3 pts
 B. No 0 pts

(_____)

SUBTRACT

7) Is the mouthpiece rubber, copper, sweet iron, or a flavoured material?

- A. Yes 3 pts
 B. No 0 pts

(_____)

SUBTRACT

TOTAL: _____

Total score of:

1 – 5 > Mild

6 – 19 > Moderate

20 or more > Severe

TACK: BIT LAB

LEVERAGE BITS

Type of Bit _____ BIT # _____

1) How many pieces are there in the horse's mouth?

TOTAL SCORE

- A. 1 to 3 pieces 1 pt
- B. More than 3 pieces 5 pts

2) Is it a gag / elevator bit?

- A. Yes 5 pts
- B. No 0 pts

3) What is the size, height and shape of the port?

- A. No port and a broken mouth piece 0 pts
- B. High port with steep narrow tongue relief
Port meets the cross piece
squarely (90 degree angle) 10 pts
- C. High port with broad tongue relief
Port meets cross piece on a rounded angle 5 pts
- D. Medium or low port with broad tongue relief.
Port meets cross piece on a rounded angle 1 pts
- E. No port. Unbroken arched cannon 2 pts
- F. No port. Straight unbroken cannon 3 pt

4) How is the port angled with respect to the shanks?

- A. Port slopes back more than the shanks 1 pt
- B. Port is parallel to the shanks 2 pts
- C. Port slopes forward more than the shanks 10 pts
- D. No port. 0 pts

5) How does the mouthpiece slope side to side?

- A. Broken mouth like a common snaffle
WITH a solid bar connecting the shanks 1 pt
- B. Broken mouth like a common snaffle
WITHOUT a solid bar connecting the shanks 10 pts
- C. Solid mouth perpendicular to shanks 1 pt
- D. Solid mouth slopes down to shanks 10 pts

6) How are the shanks bent?

- A. They aren't bent 3 pts
- B. Backwards toward the horses chest 1 pt
- C. Forward 5 pts

7) How long are the shanks? (For bits like kimberwicks which don't actually have shanks, measure between the mouthpiece and where the reins attach)

- | | | |
|------------------------------|-------|-------|
| A. 1" or less | 1 pt | |
| B. More than 1" and up to 3" | 2 pts | |
| C. More than 3" and up to 4" | 4 pts | |
| D. More than 4" | 7 pts | _____ |

8) What kind of texture or shape does the mouthpiece have?

- | | | | |
|----------------------------------|--------|---|-------|
| A. Sharp (triangular or edged) | 10 pts | + | |
| B. Prickly | 10 pts | | |
| C. Rough (twisted wire or chain) | 10 pts | | |
| D. Twisted metal | 5 pts | | |
| E. Wrapped with smooth wire | 3 pts | | |
| F. Smooth | 1 pt | | _____ |

9) How thick are the cannons?

- | | | | |
|----------------------------|-------|---|---------------|
| A. 1/2" or more | 2 pts | X | |
| B. 3/8" but less than 1/2" | 3 pts | | |
| C. Less than 3/8" | 4 pts | | _____ = _____ |

10) Where does the curb chain / chin strap attach?

- | | |
|---|-------|
| A. To the same ring as the bridle cheeks | 0 pts |
| B. Separate ring below the ring for the cheeks | 2 pts |
| C. Separate ring behind the ring for the cheeks | 5 pts |
- (_____)

SUBTRACT

11) How are the shanks attached to the cannons?

- | | |
|---|-------|
| A. Through holes in the cannons (like most Pelhams) | 1 pt |
| B. All others including welded solid | 3 pts |
- (_____)

SUBTRACT

12) Are there players, keys or a cricket on the bit?

- | | |
|--------|-------|
| A. Yes | 3 pts |
| B. No | 0 pt |
- (_____)

SUBTRACT

13) Is the mouthpiece copper, sweet iron, or a flavoured material?

- | | |
|--------|-------|
| A. Yes | 3 pts |
| B. No | 0 pts |
- (_____)

SUBTRACT

TOTAL: _____

Total score of:

1-5 > Mild

6-19 > Moderate

20 or more > Severe

HEALTH: PARASITES

Parasite Presentation

What is a Parasite? It is an animal that lives off of another animal (the host). It uses the host to provide it with a home and food. It may eat the same food as the host or it might use the fluid from the host's body (often blood). Ensure the members know the difference between an external parasite and an internal parasite. Damage done to the inside of the horse can be permanent. There are over 12 different kinds of worms and they can produce 1000's of eggs a day.

Some of the signs that would indicate internal parasites are listed on page 109 in the manual. Review these signs with the members.

Discuss some of the ways we can protect our horses from parasite damage: dewormers, insecticides, bug masks and fly sheets, etc.

This is a very fun way to learn about icky parasites! You will find a sheet of parasites (internal and external) attached. Select enough parasites as you have members. Cut them out and place them in a paper bag. Allow the members to reach in and draw out one parasite. Each child will research their parasite (refer to pages 108 – 114) and prepare a brief description. They should include 1-3 main points, whether it is an internal parasite or an external parasite and how to get rid of it!

The Performance

The parasites are all decked out in sunglasses and ball caps on backwards (lookin' real bad...) standing beside each other. One at a time they take a step forward, introduce themselves and tell a few facts. If you have more than one child playing the same parasite, they can say it in unison or share the lines. It is better if they memorize the lines so encourage them to keep it brief!

Here is an example:

"Hi, I am Louie the Lice! I lay eggs in your horse's hair. I make your horse really itchy! You have to use a special chemical mix to get rid of me!!"

Get together prior to the performance (we just do it at a meeting) for a bit of a practice. Keep things "light". Let the kids plan what they are going to say but if it sounds too long they might appreciate you suggesting they cut some of it out. You might need to prompt them to speak up louder and sound tougher like only a parasite can!



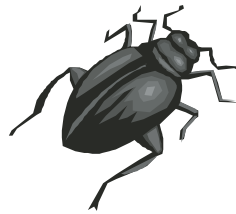
Maria the mosquito



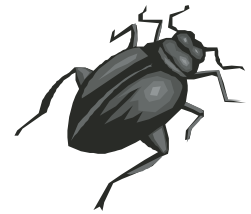
Bert the bot fly



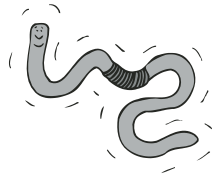
Frankie the fly



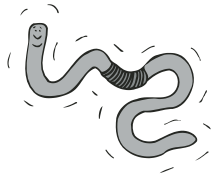
Louie the lice



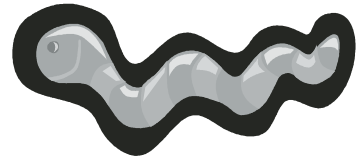
Mike the mite



Petey the pinworm



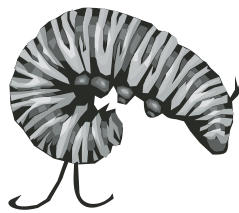
Ralph the roundworm (ascarid)



Tom the tapeworm



Butch the bloodworm (strongyle)



Bernie the bot larvae

HEALTH: DEWORMING

Deworming Programs

- Frequency of deworming will depend upon a lot of factors. Here are several things to take into consideration: climate & season, number of horses, age, health, feeding situations (pasture vs dry lot), manure management practices, pasture rotation, exposure to other livestock.
- Recommended frequency is every two to six months.
- There will always be internal parasites in the body of the horse. Good deworming practices will help to control the amount.
- Damage done to internal organs (lungs, liver, arteries and intestines) can be permanent.
- Young horses (birth to 2 years) are at greater risk because they tend to eat manure and dirt. They also have smaller intestines so a blockage is more likely. They should be treated for tapeworms in midwinter.
- Older horses are more susceptible to worm infestations. They should also be treated for tapeworms in midwinter.
- Review the signs (refer to Manual - page 109): rough, dull coat / sheds out later than others / thin with a potbelly / thin, even though they are fed well / frequent colic and diarrhea / worms or eggs in manure / rubbing their tail
- There are over 12 kinds of worms and they can produce 100's of 1000's of eggs a day!
- Five main types:
 - Strongyles (blood worms, palisade worms)
 - Ascarids (intestinal worms also called round worms)
 - Pinworms
 - Bots
 - Tapeworms
- Bots – treatment in the fall / Tapeworms – treatment in midwinter
- Dewormers: 5 different forms – paste, gel, powder, granules and liquid
- To prevent parasites from becoming immune to one particular class, a rotation between classes of dewormers is recommended. Check the chemical content of dewormers, not just the brand name as many brands contain the same drugs.
- Three classes of dewormers: Avermectins, Benzimidazoles, Tetrahydropyrimidines.

In preparation for this exercise members should read pages 108 – 114. Leaders will need to prepare by collecting empty paste deworming boxes with their paper inserts. It is important to find boxes from the three different classes available (see above) as the members will have to research to find the active ingredient. In this activity members will design five deworming programs. Members should work with a partner with guidance provided by the leader as required.

The first step is to determine the active ingredient in the pastes. The members will need to read the info provided with each dewormer to find the active ingredient. They will write the brand name and active ingredient in the appropriate space on their worksheet. They may be surprised to discover the brands they have been using are all in the same class! Once that task has been completed they can go ahead and design the five programs keeping in mind the points mentioned above and referring to the instruction / information sheets provided with each deworming product. While we have provided some general guidelines for the leaders regarding the deworming programs, there are no right or wrong answers to this activity. It is intended to give the 4-H members a deeper understanding of internal parasites, the different types of paste available and when to use them. As long as they have considered the facts and made an effort to apply their knowledge to each of the following situations, they have succeeded! Always recommend they discuss their personal situations with their Vet. The second step is to design the programs.

Design a Deworming Program for the following horses:

- A. 10 horses / 1000 acres pasture / horses are free to roam and graze
- B. 20 horses / kept in small pens, (as in a boarding facility) 2-3 horses per paddock / fed hay twice a day on the ground
- C. 2 horses / 4 acres divided into 2 paddocks
- D. 12 young horses (yearlings / 2 year olds) kept in large paddocks on a breeding farm
- E. 15 horses ranging in age from 19 – 34 living on a retirement ranch that specializes in the care of seniors

Record the letter corresponding to each class under the month you would recommend using it.

Eg. Jan Mar
 "A" "T"

Leaders info:

Here are a few commonly used dewormers as examples. Feel free to add more brands that are available in your area.

Class	Brand Name	Active Ingredient
A vermectins	Panomec	ivermectin
	Quest Gel	moxidectin
B enzimidazoles	Safe-Guard	fenbendazole
T etrahydropyrimidines	Strongid P	pyrantel pamoate
	Exodus	pyrantel pamoate

The members should show an obvious rotation of classes. Look for a Bot treatment in the late fall or early winter months. Look for a Tapeworm treatment in midwinter for the young horses and the seniors. The recommended frequency is 2-6 months. For horses in smaller confined spaces, young horses and seniors look for deworming frequency closer to the 2 month end of the scale while horses kept in larger areas could be closer to the 6 month end. Allow the members to make their own assumptions for each situation. For example, pasture rotation, manure management practices, etc.

Parasite Control Worksheet

Class	Brand	Active Ingredient
Avermectins		
Benzimidazoles		
Tetrahydropyrimidines		

Situation	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
A 10 horses / 1000 acres												
B 20 horses / small pens												
C 2 horses /4 acres												
D 12 young horses / paddocks												
E 15 seniors												

A – Avermectin

B – Benzimidazole

T – Tetrahydropyrimidine

HEALTH: THE DIGESTIVE SYSTEM

This activity is intended to educate our older members about the digestive system of the horse in a fun interactive way.

In preparation for this activity members in levels 4-7 can read pages 96 – 99 in their manuals.

Leaders need to cut out the digestive parts and their descriptions. There should be 21 cards all together in no particular order. The Anus card has it's description already on it. Whoever draws this card is dubbed Team Captain. They will be the keeper of the name cards. Have 3 small prizes available.

- Step 1 - Distribute descriptions by turning them upside down on a flat surface and let the members pick one. If you have a small group, have each member draw 2 or 3 cards each.
- Members must use their manuals to figure out which part is being described on their card.
- Once they have found it, they report to their team Captain who will check to make sure they are correct. Then their Captain will give them the corresponding name card.
- Once everyone receives their name card they can begin step 2.
- Step 2 – Put the 10 parts in order on a table with the descriptions below each name or if you have a real active group, have them put themselves in order according to the card they hold.
- Present the Captain with a prize for being such a great sport (Captain Anus) and helping with the game.

Bonus questions – Tell everyone to close their manuals. Have a couple of prizes on hand for these questions.

What is the total length of the digestive system? (27 metres or 90 feet)

What is the total capacity of the digestive system? (227 litres or 50 gallons)

TEETH

TONGUE

PHARYNX

ESOPHAGUS

STOMACH

CECUM

SMALL INTESTINE

LARGE COLON

SMALL COLON

RECTUM

ANUS

- feces passed out here

<ul style="list-style-type: none"> • the incisors pull or pick up the feed • the molars grind it as it is being mixed with saliva 	<ul style="list-style-type: none"> • it is mixed with saliva and moved to the back of the mouth
<ul style="list-style-type: none"> • very strong muscles • forces the food down 	<ul style="list-style-type: none"> • muscles move in wave-like motions in one direction only • this movement prevents vomiting
<ul style="list-style-type: none"> • glands secrete gastric juices that mix with the saliva-soaked food • gastric juices are a mixture of water, hydrochloric acid and enzymes (pepsin) • the enzymes break down vegetable fats and changes proteins into a form that can be absorbed by the body 	<ul style="list-style-type: none"> • the mesentery membrane keeps this attached to the backbone • enzymes from the liver and pancreas are secreted here • food breaks down into small molecules that are absorbed through hair-like "villa"
<ul style="list-style-type: none"> • a.k.a. "water gut" • holds 36 litres (8 gallons) • reservoir for storing water • digests roughage and absorbs nutrients 	<ul style="list-style-type: none"> • 3 to 4 metres long (10-12 feet) • Holds 91 litres (20 gallons) • Uses friendly bacteria to breakdown fibrous portions of food and release carbohydrates
<ul style="list-style-type: none"> • fluid content is re-absorbed into the horse's body 	<ul style="list-style-type: none"> • horse droppings are molded here • they should consist of 25% solids and 75% water

SAFETY: SIGHT

Eye Sight and Blind Spots

Prior to the session draw the picture from page 179, of the Reference Manual, on a board or flip chart. Do not label.

Tell the members to focus on something in the room. Ask them to cover one eye and ask if they can still see it. (yes)

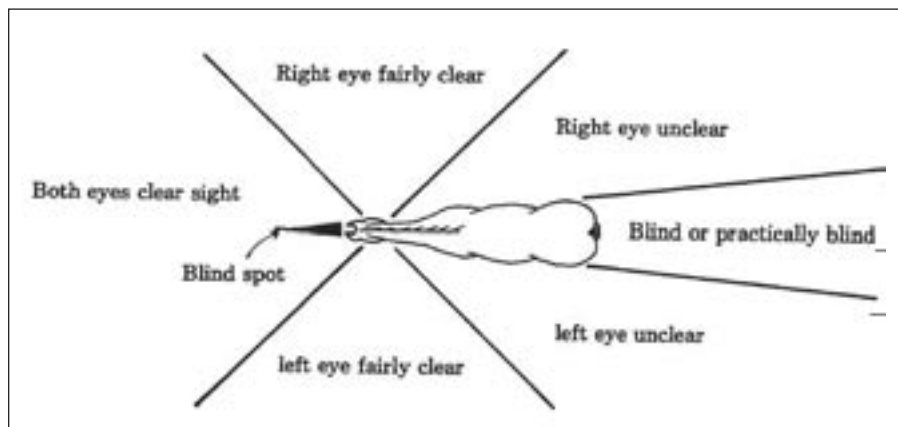
Uncover that eye and cover the other eye and ask again. (yes) Explain that our eyes are on the front of our head and they work together to focus on the same thing.

Horses have eyes on the side of their heads. They see two distinctly different pictures at the same time. If I were a horse....what would happen if I covered up one of my eyes? What would I see? (Everything on that side of the room)

Have the members refer to their manuals, page 179. Refer to the diagram you drew on the board. Ask the members what a "blind spot" is. Where are the blind spots for a horse. (there are 3)

Ask for only one at a time and invite the member who gave you the answer to come up to the board and draw/label it on the diagram.

Ask the members why this it is important to know and what we can do to be safe while working / passing through a horse's blind spot. (speak to your horse)



SAFETY: TYING

Tying your Horse Safely

For this session members will need a partner and a ruler. If some of your members don't know each other, encourage them to choose a partner they may not know very well. This is a great opportunity for members to get to know each other better and make new members feel welcome.

Ask the members:

What shouldn't you tie your horse to?

(The kids are great at this once they get rolling!)

- wire fence, cross rails on a wood fence, flimsy trees, doors, gates, anything that moves. Never tie with the reins. Why?

What should you tie your horse to?

- strong post in the ground, hitching rail, strong tree trunk, etc.
- Always use a halter and lead rope to tie your horse.

It is important not to tie your horse too low. Why? (could get a leg over the rope, etc)

The best height to tie your horse is always wither height. If you can't find something at this height (or can't reach!) then your second choice would be to tie at least 1 metre from the ground. (3 times the length of the ruler they brought)

Have the members partner up – They will measure 1 metre up from the floor on the side of their partner. This is the level they should never tie their horse below. First choice: wither height; second choice: 1 metre.

It is easier for kids to remember how high 1 metre is if they have a reference (their armpit!).

Safety Knots

(figure "4" method)

Members can stay with the same partners. One will be the "human" and the other will be the "post".

Demonstrate the figure "4" method.



- Humans need their leadropes and halters.
- Posts should take the leadrope in their left hand and hold it up and out as if it were attached to a horse.
- Humans should then pass the rope from left to right behind the post. (Around their partner's waist) Now tie the safety knot. Allow for about 2' of leadrope from the post to your horse's halter. Check all knots. Show them how to check to knot – the line from the halter will go directly to the post / pull on the end and the knot should release.
- Change positions (post / human) and repeat the exercise.
- Mention that when tying to horizontal rails or bull rings – go from top to bottom as shown on page 2 of the manual.

Discuss the extra measure for "Houdini" horses that can untie knots. (tail through loop) Caution members never to use this method when tying in a horse trailer. Ask members to describe cross-tying.

