Upper Midwest Endurance & Competitive Rides Association

PERSEVERE

New Rider Handbook

MnDRA

Table of Contents

Getting Started

Introduction

Distance Riding Divisions 3
Electrolytes 4
What to Expect When You Arrive 5
TrotOut Diagram 6
Sample Entry Form 7

Competitive Trail and Novice Divisions

Division Overviews 8
Ride Overview 9–10
Sample Score Sheet 11
Score Sheet Detail 12-16

Limited Distance and Endurance Divisions

Division Overviews 17
Ride Overview 18-19
Sample Ride Sheet 20-21
Ride Sheet Detail 22
Finish Information 23
Best Condition Award 24
What is a CRI? 25-26

Education for all Distance Riders

Camping with Your Horse 27
Feeding the Distance Horse 28-33
Conditioning 34-37
Sample Training Log 38

Miscellaneous

Horse Camping, Trail Etiquette and Random Tips 39
Ride and Year End Awards 40-41
Endurance & Competitive Trail Orgs within UMECRA 42
Recommended Books and Websites 42
Glossary 43-44

Introduction to Distance Riding

Welcome to the sport of Distance Riding!! In this sport, the emphasis is on the horse **not** the rider or the equipment you use. Safety and the welfare of the horse are our primary concern at all events. Conditioning and proper nutrition are key ingredients in preparing the horse for distance riding.
Distance Riding offers you the opportunity to travel with your horse and to enjoy riding scenic trails along a marked course in major parks, forests and even private land. This is a social event that involves family members and friends of any age or riding ability. Horse camping, potluck dinners and awards ceremonies take place at almost all events. There is generous camaraderie with veterans and even "not yet" veterans providing assistance to those new to the sport.
There are several divisions to choose from that you will find at most all competitions. On a ride of 35 miles or less the horse must be at least 48 months old. Horses entered in distances of 50 or more miles must be at least 60 months of age at the time of the ride with the exception of those entered in single day 100 mile rides. Equines entered in single day 100 mile distances must be at least 72 months of age at the time of the ride. Their age is calculated by their actual birth date. If no proof of birth date is available, the vet will determine eligibility. Mares in foal up to the 6th month are permitted in Competitive Trail Divisions only. They are not permitted in LD or Endurance. Here is a short description of the divisions:

- **Competitive Trail and Novice Rides**: Novice division distances are 10-15 miles. Competitive Trail distances are 25-50 miles and will be ridden on more than one loop of trail. Both are ridden within a set time period at speeds of 5 1/2 to 7 miles per hour. These rides are not a race; all competitors have the same set time to finish. You have to option to ride in a group of 4-6 riders. Horses are scored by veterinarians on such factors as pulse, respiration, soundness, fatigue and attitude. Horsemanship is not judged. The winner of the competition is determined by the horse that has the most points at the end of the final vet check.
  - *This manual is focused on the competitive trail division because this is where we, as an organization, recommend riders start off their distance riding careers.
- **Limited Distance Endurance**: This division covers distances 35 miles or less. Often referred to as LD, this distance has no minimum time but it does have a maximum time. For example, the maximum time to complete a 25 mile ride is 6 hours (Including all vet check holds). Other distance maximum times are listed on a chart in the UMECRA rulebook. There will be at least one vet check usually near the ½ way point. At the final vet check, the placing of the riders and horses is determined in the order the horses meet the pulse criteria that was set forth by the vet at the pre-ride meeting. The pulse criteria must be met within the 6 hour time frame, including all vet check holds).
- **Endurance**: This division covers distances of at least 50 miles. There will be several vet checks along the way. There is also no minimum time for these rides, but there is a maximum time. For example, the maximum time to complete a 50 mile ride is 12 hours, (including all vet check holds) other distance maximum times are listed on a chart in the UMECRA rulebook. The finish order is determined in the order that the horses cross the marked finish line.

If you enjoy trail riding and are interested in learning more about the wellbeing and fitness of your horse, we think this sport is for you. We hope this booklet will help you, and will entice you to give distance riding a try. In this sport you get points and awards for completing any competition –

TO FINISH IS TO WIN!!

Electrolytes

It is important to know something about electrolytes **prior** to attending a competition. Because of its importance, this section is mentioned more than once in this handbook.
Electrolytes in short are a horse's Gatorade. You will see riders dosing electrolytes to their horses with 60cc dosing syringes throughout ride camp. Most have their own special way of mixing them but two of the most common bases are yogurt and applesauce. Electrolytes are commonly given before, during and after the competition.
Especially in hot, humid weather, significant amounts of electrolytes are lost in the sweat. Sodium, chloride and potassium are the primary ions lost, along with smaller amounts of calcium, magnesium and other trace minerals. Increasing scientific data indicates that supplementing during exercise, and thereby minimizing depletion is beneficial in possibly averting metabolic problems such as thumps, tyingup, poor gut sounds and other symptoms associated with "exhausted horse syndrome." The body does not store excess electrolytes against future need, therefore "preloading" several days before a ride will not replace supplementation during the ride itself. However, orally syringing a day or two before the ride (especially before and during transport) may help trigger a "thirst response" to encourage drinking. Likewise, supplementing throughout the day may encourage drinking as well as replacing electrolytes lost through sweating. As with every other feed supplied throughout an endurance ride, small and frequent amounts are usually preferable to large and infrequent amounts. Electrolytes are often added to feed or water, but some horses may refuse the too salty flavor, and therefore also refuse much needed food and water. Although horses do develop an appetite for needed salt to replace depleted storage, this is not an instantaneous response. Don't rely on this mechanism during a ride! Oral syringing is a good alternative that has worked well for many horses and riders. Take advantage of the increasing body of scientific data and consider the use of researchbased electrolytes formulated specifically for endurance horses.

What to Expect When You Arrive

When you first arrive at the ride location, often referred to as Ride Camp, you will probably quickly spot the organizers, if they don't spot you first! Try to avoid the area where there are people and horses gathering, this is the vet area. If possible stop and talk to ride management about where to park. Some state parks require advanced camping reservations. If this is the case it will be indicated on the ride flyer. In this case proceed to your reserved camp site.
After parking and settling your horse(s) with food and water, you should find the sign up area and fill out your entry form if you haven't sent one in already. If you have preentered, still go to sign up and check in. You will need to bring a copy of your Negative Coggins test and, in some states, a health certificate. The signup person will give you your ride sheet. This is an excellent time to have the ride manager pointed out if they are not the one doing the sign up. Inform them if you are a new rider. The Ride Manager will be able to help you with questions or refer you to someone they have designated as a novice rider contact person.

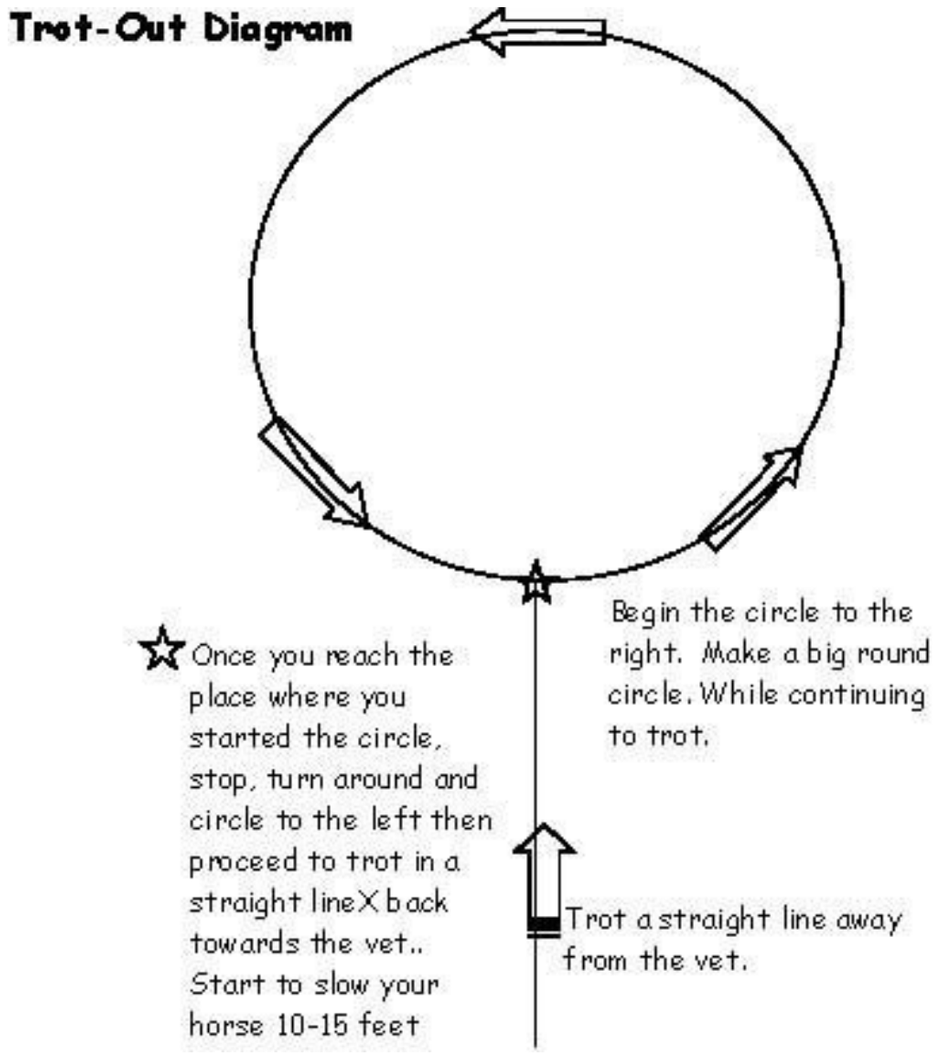
Dr. Nicole examines a horse at the Pre Ride Vet In Exam.

After you have your ride sheet you will need to get your horse and lead him/her to the Vet Area for your preride exam (vet in). The Vet In process is the same for all competitors no matter what division you are riding (Competitive Trail, Novice, Limited Distance or Endurance). The Vet Area is usually easy to find. It will be in an open area and will probably have many people standing around with their horses waiting in line or grazing randomly. The veterinarians are, in essence, the judges of the event. They will check the horse's pulse, respiration, gut sounds and other metabolic criteria along with looking for problem arenas such as lameness, soreness or any injuries (lesions). To check for lameness or soreness the vets will ask you to trot your horse in hand. You will be asked to trot the horse out away from them in a straight line and then make a circle in each direction creating a lollipop pattern (see diagram on next page). The trot out is essential for the vets to determine any issues the horse has before, during and after the event. This is something you will want to practice at home. Horses are expected to have good manners during the vet check. At the end of the exam your horses rump will be marked with the rider number that is on your ride sheet. See Scoring for additional information about the vet check.

Theresa Meyer conducts the ride meeting at MNDRA T

There will be a ride meeting to cover the details of each division. The meeting will sometimes be held in the morning just before the event starts or in the evening prior to the event. The Novice Division will have a ride meeting prior to the event designed especially for new riders. There will be a brief orientation about the trails, noting trail markings, water stops and any trail hazards. Feel free to ask any questions after the ride meeting. If you have a question, chances are so does someone else!
Most all competitors will set out a few buckets of water and other items they may want at the vet check or final check for their horse. Some additional items people bring to the check areas follows: Treats, Carrots, Apples, Hay, Soaked Beet Pulp, Grain, Brushes, Rain Sheets, Fleece/Wool Coolers, Sponges, Water Scrapers and just about anything under the sun - The most important thing you can bring with you is water and if you are riding LD or Endurance you will need a stethoscope or an electronic heart monitor. If it's cool and windy out a wool or fleece cooler (blanket) may be necessary to keep your horses muscles from cramping from the cold.

Trot-Out Diagram



The trot out area will be similar to this. Here Whitney Lian trots her horse back towards the vet.

Sample Entry Form

UMECRA ENTRY AGREEMENT

AMOUNT PAID
RIDER NUMBER

Name of Ride: _____

Circle one: **COMP** **END** **LD** **NOVICE** **DRIVE** **Distance** _____

UMECRA DIVISION

HW ❑ 186-over LW ❑ 185-under JR ❑ end comp 16 18 DR ❑

AERC DIVISION

HW ❑ Over 211 MW ❑ 186-210 LW ❑ 161-185 FW ❑ below 160 JR ❑ Under 18

Rider Name _____ UMECRA Rider No. _____ AERC Rider No. _____

Street _____ City _____ State _____ Zip _____

Phone _____ Emergency Contact, Phone. _____

Emergency contact person on grounds (at ride) _____

Name of Horse _____ Owner _____

Age _____ Breed _____ Sex _____ Color _____ Reg. No. _____ Accession # _____ AERC/UMECRA horse Number _____

READ THIS CAREFULLY BEFORE SIGNING

I wish to participate in the above-named ride, attending the event premises with my horse(s) and possibly with family or other support. All references herein to "e", "I" or "my" or such other designations shall include my family and support group, together with my equine(s) or other pets or animals. I acknowledge I am speaking for them in making my entry and am responsible for their behavior and safety. In participating, I fully understand and recognize the inherent risks and dangers involved (whether directly explained but certainly as reasonably foreseeable or as should have been reasonably foreseeable to a prepared participant), as well as the fact that significant unanticipated, uncontrollable and unexpected risks may arise during the ride. I understand competitive and endurance riding involves being in remote areas for extended periods of time, far from communications, transportation, and medical facilities. I recognize other persons may be in the vicinity of the event and whether or not they are participating directly or merely bystanders, I accept that I personally owe them a duty of reasonable care to prevent damage or injury to them, their families or property arising from my participation or the care, custody or control of my equine(s) or other animals or family or friends. I recognize ride management cannot eliminate or control all potential hazards to me or my horse or act to guarantee our safety. I agree to abide by the rules of the ride and UMECRA, which incorporate the rules at AERC for endurance riding, and am familiar with those rules.

WARNING: Under the Equine Activity Liability Act, each participant who engages in an equine activity expressly assumes the risks of engaging in and legal responsibility for injury, loss, or damage to any person or property resulting from the risk of equine activities.

WARNING: Under applicable state laws, an equine professional or event organizer, manager or staff is, or may not be, not liable for an injury to, or the death of, a participant in equine activities resulting from the inherent risks of equine activities.

WARNING: Under applicable state laws and other recreational or equine activity liability act(s), an equine professional or event organizer, manager or staff is, or may not be, liable for an injury to or the death of a participant or the horse(s) of a participant in an equine activity resulting from an inherent risk of the equine activity.

NOTICE: A person who is engaged for compensation in the rental of equines or equine equipment or tack or in the instruction of a person in the riding or driving of an equine or in being a passenger upon an equine may not be liable for the injury or death of a person involved in equine activities resulting from the inherent risks of equine activities, as defined in applicable state laws.

NOTICE: Riders and equine owners must carry their own personal liability, equine liability and personal healthcare coverage. UMECRA insurance does NOT cover ride participants for personal liability or their family or supporters personal health or emergency or veterinary care.

I know and understand competitive or endurance riding is an inherently dangerous sporting event and agree to assume the complete risk of injury or damage which my horse might sustain or cause in competing in or attending this ride. As a result, I agree to indemnify and hold harmless the ride management, ride landowners, veterinarians, ride members and agents from and against all loss or damage, including property loss, suffered during or in connection with the loss, resulted directly or indirectly from negligent acts or omissions of the ride management, ride landowners, ride veterinarians, UMECRA, AERC, their directors, officers, committee members or agents. **I HAVE READ AND UNDERSTAND THIS RELEASE.**

Rider's Signature_____Date_____

As parent and/or legal guardian of the above-named junior rider, for and in consideration of this child's participation in this ride, I agree to the terms above-stated as well on behalf of myself, my family and this child, and will hold harmless anyone so consenting.

I HAVE READ AND UNDERSTAND THIS RELEASE.

Signature_____Date_____

I have agreed to **SPONSOR** the above named junior and promise to abide by all the AERC and UMECRA rules covering the sponsor-junior relationship.

Signature_____Date_____

Revised December 2014

Competitive Trail and Novice Division Overview

Umecra's Novice Division is a great place to start for many different reasons. Anyone can ride the Novice Division. Only those riders that have not ridden more than one 25 mile competition are eligible for placing and year end points and awards. Those riders who have competed in more than one 25 mile competition will ride for mileage only and will not place in the ride or in year end points. Novice rides are 10-15 miles long and are led by an experienced member chosen by ride management. The scoring criterion for Novice is the same that applies to the Competitive Trail. In both divisions the rider must care for their own mount at all times. As long as you're part of the competition all feeding, watering or other care must be attended to by the rider only. You are also not allowed crew (people to help you) on the trail.

A Group of Competitive Trail Riders at Maplewood.

Although there are currently no weight divisions in Novice, Competitive Trail has two weight divisions (heavyweight and lightweight) and a junior division. Riders will be weighed in with all of their tack. Heavyweight is described as weighing over 186 lbs and Lightweight is 185 lbs and under. Juniors are defined as any rider under 18 yrs old at the start of the ride season (usually April).

In a Competitive Trail Competition, practice and experience will help you maintain a higher point total, not simply because you will know what to expect but more importantly your horse will. Don't get discouraged with low scores for your first few rides. Feel free to ask questions about your scores. If you're riding the 25+ mile division for your first try, make sure to ask ride management to help you select a group of experienced competitors to help guide you through your first few rides. If you're riding the Novice division a leader will be appointed automatically to each group.

Water Stop at Charity Cup

At registration you will be asked to sign up for a group. Groups consist of around 4-6 riders. Each group will all have the same optimum finish time. The time allowed will be an average pace between 5 ½ & 7 mph. You can finish 5 minutes before or after your optimum time without losing any points. Groups will normally leave camp in 15 minute increments.

Prior to the ride you will attend the ride meeting. Ask for the ride meeting time at registration. Here you will be given a map of the trail and the ride manager will cover the trail markings, any difficult terrain, water stops, water crossings and except for Novice your hold time between the first and second loop (normally about 40 min). Novice Rides will have a special meeting with additional information including who will be guiding them on the trail.

The Ride – Competitive Trail and Novice

About 15 to 20 minutes prior to the start of the ride, riders will start gathering near the vet area and some will start to warm up their horses by walking and some slow trotting around the camp roads or in a designated area.
A volunteer (called the timer) will check you in; they will most likely be standing with a clip board looking at everyone's number. Go ahead and tell them your number and they will mark that you are present. If you do not check in with the timer they will likely call out your number a few minutes before the ride start time to make sure you are present. The timer will indicate that the trail is open and your ride will begin. The group of riders will proceed to the trailhead and start following ribbons, plates and other markings that were discussed at the ride meeting. It is important to know that all forward motion must be done while mounted. If an area is dangerous, ride management will most likely have mentioned it at the ride meeting and stated that it is ok to dismount and walk if you need to. Please do not put yourself at danger. If you feel you need to dismount to get by an obstacle do so, do not put you or your horse in danger at any time. You will likely be able to meet your window of time using a steady trot with periods of walking and stopping for water, even a few bites of grass.
Before you know it, you will be nearing camp. On the last loop there will be a marker on the trail indicating that there is 2 miles to go to camp. Riders will walk their horses in from here to ensure the lowest possible pulse and respiration scores. Once you have crossed the two mile marker you are not allowed to stop your horse (you must maintain forward motion). If you are riding multiple loops riders will try to estimate one or two miles from camp and begin to walk. When you arrive in camp stay mounted and go to the area where the timer is to dismount. The timer will give you a small card which she will write the time you arrived (time in). You will have 10 minutes from this time until your pulse/respiration check. Hold onto this card you will need it later!

Go to the area where you set out your water and anything else you decided you may need at the vet check. You may be required to unsaddle your horse and even if you are not, you can do so to allow the horse to cool down faster. At the very least offer your horse water and then do whatever else you choose to do at your vet area. You will see some riders brush the horses face or wipe it with a towel. This will help prevent him/her from being itchy and help prevent them from rubbing on you, or worse, the vet! They may also offer a few treats and/or hay or other feed mixture. Riders in other divisions are allowed to put water on their horse to help them cool faster but unless given specific permission by the vet in the pre-ride meeting, you are not allowed to put water on the horse at the vet check!!

Whether this is a final check or a mid check the process is somewhat the same at both the vet in exam and the final exam. If it's a mid check, you will not be asked to trot circles, only a straight line out and back and you will only be scored on your horse's pulse and respirations. Other criteria will be evaluated but not scored.

A vet or a volunteer will let your group know where you are to stand with your horse for the PR check. Stand quietly with your horse and let him/her settle down. Do not let them graze, this will increase the heart rate. Everyone has their own process to settle their horses and experienced horses will normally stand very quiet and lower their heads. You will soon learn what works for you and your horse. Pulse takers will most likely pay attention to when your 10 minutes are up, but if for some reason you are close to the 10 minutes and no one is hovering around you yet, please let them know. Volunteer pulse takers will walk to everyone in your group's horse so all P/R's can be checked at the same time. The pulse taker will ask you for that small card you got from the timer. The pulse is checked for 15 seconds, this number multiplied by 4 would be your horse's heart beats per minute. The respiration is checked for a full minute.

Keep your horse quiet while they are checking your horse, things can change really fast if you don't! You are permitted to ask for a recheck, if your first check was done by a volunteer your recheck will most likely be done by the vet. When asking for a recheck you must take into consideration that regardless if it is higher or lower, it is the PR you will be scored on.

If you're at a mid-check you will most likely want to return to your trailer for your hold. This is normally about 40 minutes. During this time you should tie your horse or put them in whatever enclosure you have for them. Make sure they have plenty of water and hay. If you chose to feed any grain or beet pulp give this to them as well. You may also choose to clean the horse up a bit if there is a lot of crusty dirt or sand on them to prevent rubs. There is also another important thing to take care of, YOU! Get yourself something to eat and drink, fill your water bottles for the trail. This time will go by quickly so don't waste too much time. By the time you take care of these few simple things it will be time to saddle your horse and return to the timer to check in to go back out for your next loop! Immediately prior to leaving for the timer is a good time to dose your horse with electrolytes, this will ensure it does not disturb him/her from eating or drinking during the hold. Review Electrolytes page 4 for additional information.

Sample Competitive Trail/Novice Score Sheet

DATE	NAME OF RIDE						RIDERS NAME	HORSES NAME	PLACING
	DIVISION	HW	LW	JR	NOV	DR			FINAL SCORE
	MILEAGE						STREET ADDRESS	BREED	
NUMBER	DAY	1	2	3	4	5	CITY, STATE, ZIP	ATTENTION RIDERS: REVIEW SCORING AND REPORT ERRORS BEFORE LEAVING GROUNDS	TOTAL DEDUCT

	PRE RIDE	POST RIDE
PULSE		
RESP.		
TEMP.		

NOT CONSIDERED IN SCORING

DEHYDRATION		
C R T		
MUCUS MEMBRANES		
CUT SOUNDS		
ANAL TONE		

SCORING

PULSE	RESP
9 = 0	2 = 0
10 = 3	3 = 2
11 = 6	4 = 4
12 = 9	5 = 6
13 = 12	6 = 8
14 = 15	7 = 10
15 = 18	8 = 12
16 = 21	9 = 14
17 = 24	10 = 16
	11 = 18
	12 = 20
	13 = 22
	14 = 24
	15 = 26
	16 = 28
	17 = 30

ON MANDATORY RECHECKS, SCORE 2ND AND DEDUCT AN ADDITIONAL 30 POINTS.

	1st	Re	2nd	Re	3rd	Re	4th	Re	5th	Re	6th	Re	7th	Re
PULSE														
RESP														
SCORE														

STARTING WITH 400 PTS PER DAY MINUS DEDUCTIONS LISTED BELOW. NO + PTS GIVEN.

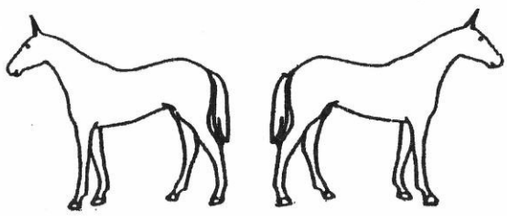
P/R DEDUCT

TROT OUT — COMPARE TO PRE RIDE

	SCORE
SOUND 0	
GRADE 1 1-20 DIFFICULT TO OBSERVE, NOT CONSISTENTLY OBSERVABLE.	
GRADE 2 21-40 DIFFICULT TO OBSERVE AT WALK OR TROTTING STRAIGHT.	
GRADE 3 41-65 CONSISTENTLY OBSERVABLE AT A TROT.	
GRADE 4 OBVIOUSLY LAME, MARKED NODDING. NO PLACING, MILAGE ONLY.	
GRADE 5 LAME AT A WALK, MINIMAL WEIGTH BEARING, INABILITY TO MOVE. DISQUALIFIED.	
FATIGUE/ATTITUDE 0-40.	

TROT DEDUCT

MAKE NOTE OF ALL LESIONS & SORENESS



LEGS	PRE-RIDE		POST RIDE		SCORE
PAIN 1-10 PER LEG	LF	RF	LF	RF	
	LR	RR	LR	RR	
HEAT 0-5 PER LEG	LF	RF	LF	RF	
	LR	RR	LR	RR	
FILLING 0-5 PER LEG	LF	RF	LF	RF	
	LR	RR	LR	RR	

LEG DEDUCT

MUSCLE PAIN	PRE-RIDE	POST RIDE	SCORE
BACK 1-10			
SHOULDERS 0-10			
OTHERS, SPECIFY 0-10			

MUSCLE DEDUCT

PRE-RIDE TROT OUT OBSERVATION, NO POINTS SHALL BE DEDUCTED.
NOTE-- GRADE #2 OR GREATER SHALL NOT BE ALLOWED TO START.

	SCORE	NOTES
GAIT		
ATTITUDE		
FATIGUE		

MISC

MANNERS---- 1-10 SCORE ANY TIME	
TIME PENALTY-- 1 POINT PER MIN.	
BOOTS---- 2 PTS PER LEG PER DAY	
LESIONS---- COMPARE WITH PRE-RIDE	

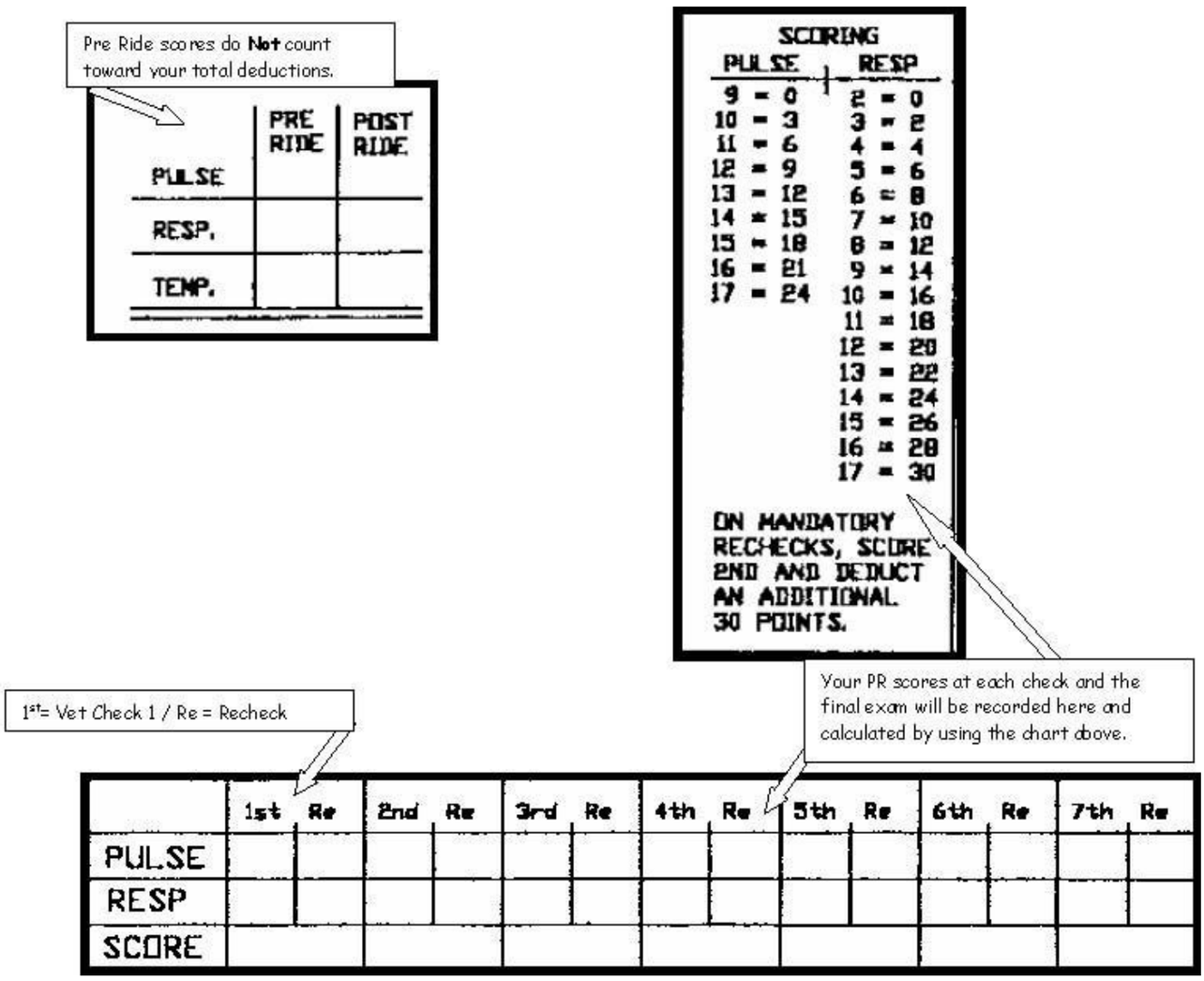
MISC DEDUCT

Competitive Trail Scoring

Scoring determines your placing so it is important to understand the score sheet. You will receive a score sheet when you enter. This is what you present to the vet at the pre-ride vet exam. After the pre-ride exam the vet scribe will take your card and have it available for the vet at the final check. At the mid-checks you will only be given the small piece of paper and that information will be transferred to the score sheet by ride management. The score sheet will be returned to you after all calculations in placings have been determined, usually they are handed out at the awards ceremony.
You and your horse will start with 400 points. The pre-ride vet in is a baseline and will not deduct points from your score.

Scoring (point deductions) is calculated as follows:

At both the midcheck and final check you will be scored on your horse's pulse and respirations.



Example 1: Pulse 10, Respiration 4 Score = 7 Pts
Example 2: Pulse 12, Respiration 2 Score = 9 Pts

The vet will also check dehydration, capillary refill rate (CRT), mucus membranes, gut sounds and anal tone at all exams. This criterion is not scored but is used to help the vet determine if the horse is under stress and may guide him to recommending treatments and/or disqualification when necessary.

NOT CONSIDERED IN SCORING		
DEHYDRATION		
C R T		
MUCUS MEMBRANES		
GUT SOUNDS		
ANAL TONE		

Dr. Dean Peterson checks a horse's right rear for pain, heat and filling during a vet exam.

Checking for Gut Sounds.

Dr. Nicole checks respirations during a vet exam.

Dr. Dean checks the Muscle Tone on T.J Edwards Mule while Carmen Stueck records the information for him. This volunteer position is called Scribing.

At your final check the Vet will check each leg for pain, heat or filling (swelling). They will assign a score of 0-10 for pain. 0= zero points deducted, no pain. 10= 10 points deducted, worst pain. Heat and filling will be scored similarly as 0-5. Pain for back, shoulders or any other muscle pain is scored as 0-10.

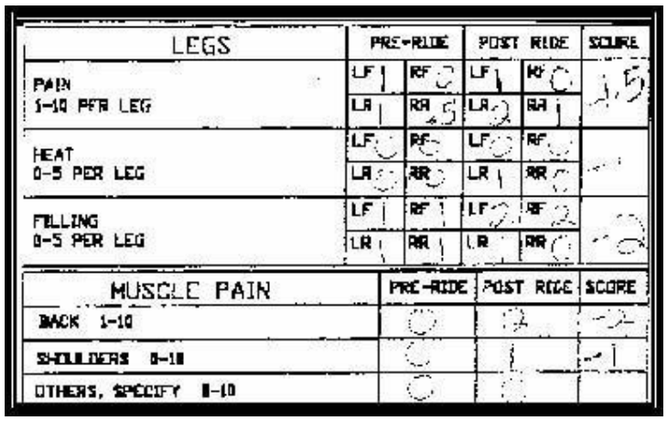
LEGS
PAIN 1-10 PER LEG
HEAT 0-5 PER LEG
FILLING 0-5 PER LEG

MUSCLE PAIN	PRE-RIDE	POST RIDE	SCORE	
BACK 1-10				
SHOULDERS 0-10				
OTHERS, SPECIFY 0-10				MUSCLE DEDUCT

Back, Shoulders and Other Muscles will be scored 0-10 for pain.

The PreRide scores are a **baseline**. You will only be deducted points for the difference from the horses PreRide score to the PostRide score.

Leg Scores Example:



LEGS	PRE-RIDE		POST RIDE		SCORE
PAIN 1-10 PER LEG	LF 1	RF .5	LF 1	RF 0	1.5
	LR 1	RR .5	LR 2	RR 1	
HEAT 0-5 PER LEG	LF 0	RF 0	LF 0	RF 0	-1
	LR 0	RR 0	LR 1	RR 0	
FILLING 0-5 PER LEG	LF 1	RF 1	LF 2	RF 2	-2
	LR 1	RR 1	LR 2	RR 0	

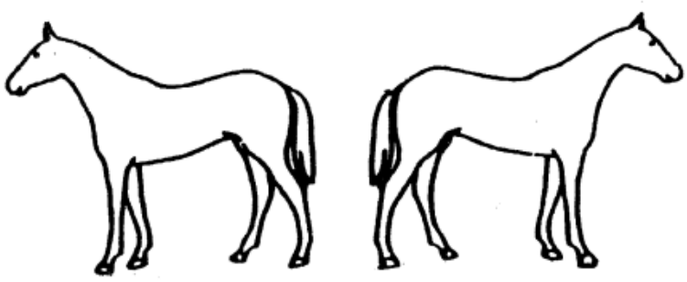
MUSCLE PAIN	PRE-RIDE	POST RIDE	SCORE
BACK 1-10	0	2	-2
SHOULDERS 0-10	0	1	-1
OTHERS, SPECIFY 0-10	0	0	

At VetIn the LF and the RF did not change in Pain. The LR went from a 1 to a 2, this is a deduct of 1 pt. The RR went from .5 to 1 this is a1/2 pt change. Final deductions for pain would be 1 ½ pts.

Along the same lines as the scoring of the legs, muscle pain scores are the difference between pre and post ride scores as well.

The next scores on your score sheet will depend a lot on your trot out and will be scored only at the final vet exam. You need to practice your trot out at home! Your horse should not lag behind you nor should it drag you across camp back to your trailer! A nice springy steady trot throughout the entire trot out pattern is ideal. This will help you with your Trot Out, Gait, Attitude and Fatigue scores tremendously.

MAKE NOTE OF ALL LESIONS & SORENESS



PRE-RIDE TROT OUT OBSERVATION, NO POINTS SHALL BE DEDUCTED.
NOTE--GRADE #2 OR GREATER SHALL NOT BE ALLOWED TO START.

	SCORE	NOTES
GAIT		
ATTITUDE		
FATIGUE		

Any cuts or girth marks the horse has pre-ride should be noted. If the vet misses something make sure to point it out. Otherwise you will be deducted for it post ride. More information next page.

The vet will make notes here pre-ride noting your horses gait and attitude at the start. Some horses pin their ears when they trot, sometimes the vet will note that at pre-ride and then not deduct post-ride since it's not something that changed.

If you look at the possible deductions for the final trot out you can see how this one element can really cost a lot of points! Up to 65 points can be deducted for lameness (before elimination), and up to 40 points for fatigue and attitude.

**Please note that at the Pre-Ride exam if your horse is considered grade 2 or greater he will not be allowed to start, look at the trot out section below for the description of grade 2 lameness.

TROT OUT COMPARE TO PRERIDE		SCORE
	SOUND 0	
	GRADE 1 1-20 DIFFICULT TO OBSERVE, NOT CONSISTENTLY OBSERVABLE.	
	GRADE 2 21-40 DIFFICULT TO OBSERVE AT WALK OR TROTTING STRAIGHT.	
	GRADE 3 41-60 CONSISTENTLY OBSERVABLE AT A TROT.	
	GRADE 4 OBVIOUSLY LAME, MARKED NODDING. NO PLACING, MILAGE ONLY.	
	GRADE 5 LAME AT A WALK, MINIMAL WEIGTH BEARING, INABILITY TO MOVE. DISQUALIFIED.	
	FATIGUE/ATTITUDE 0-40.	

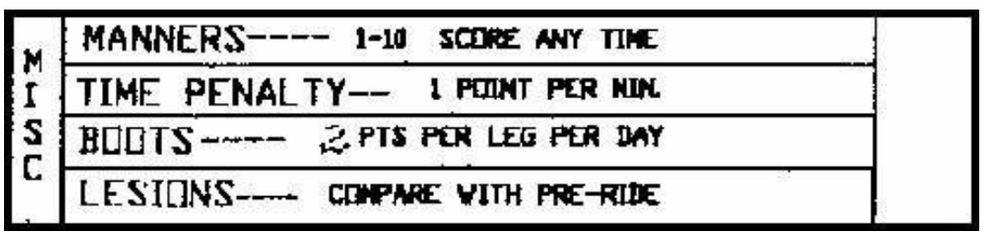
The Misc Section (Manners, Time Penalty, Boots and Lesions):

The Manners section can be used to deduct points at any time during any of the vet evaluations. If your horse is touchy or hard for the vet to evaluate, they may take points off for manners. It is a good idea to get your horse accustomed to being handled before the event. The horse will need to allow his/her gums to be touched, legs to be evaluated without lifting their foot off the ground, their anal tone to be checked and stand quietly while the other criteria is evaluated.
The Time Penalty section is where you can lose points for arriving at the timer (considered the finish line) too early or too late. You are given an optimum finish time; you must finish within 5 minutes of that time (5 minutes before it or 5 minutes after it). This gives you what is referred to as a time penalty "window". You will be deducted one point per minute for the time you are over or under this time penalty window. Remember that once you and your horse have crossed the 2 mile marker, you must maintain forward motion. This rule is in effect so riders cannot just stop outside of camp and wait for time to pass if they are going to arrive too early.

The school of thought on the time penalty is that it is one of the least important pieces of criteria to meet. If you are running a few minutes late you will only lose a few points however, if you try to make it in faster by making your horse move out you are risking your PR scores. A single extra count on pulse will cost you 3 points, a single additional breath 2 points and signs of fatigue can also cost you greatly. On the contrary, being 2 minutes late will only cost you 2 points -

To keep the playing field even, if boots, bandages, or wraps are used, your horse will be penalized two points per leg per day. Any material at or above the coronary band will result in a 2 point per leg per day deduction. Boots designed to protect the sole of the hoof which do not go above the coronary band are permitted, and will not be penalized. The welfare of your horse is top priority. For instance, if you know your horse interferes or over reaches please do not skip the boots because of the penalties, you will lose more points because of the lesions and you may end up with a lame horse that could possibly even be disqualified (often times called "pulled", you may hear a rider say "my horse was pulled for lameness today").

We have discussed the lesions section a little above with the horse diagram. The vet should mark any lesions or marks on the horse pre-ride on the diagram. This way you do not get points deducted from your final score for something that did not happen during the ride. Do not be afraid to point out any lesions your horse has to the vet.



Limited Distance & Endurance

The Limited Distance division covers distances 35 miles or less and is usually 25 miles. Often referred to as LD, this distance has no minimum time but it does have a maximum time. For example, the maximum time to complete a 25 mile ride is 6 hrs, other distance maximum times are listed on a chart in the UMECRA rulebook. There are no weight divisions in LD, although there is a Junior division for riders under 18 years of age as of January 1 of the competing year.

Endurance covers distances of 50 miles or greater. There is also no minimum time for the completion of the ride however, there are maximum times. For instance, 50 milers have 12 hours and 100 milers have 24 hours for completion. This time includes hold times, so if you start a 50 miler at 6 am, you will need to cross the finish line by 6 pm to receive a completion. There are several weight divisions for AERC. They are determined by weighing with tack:

Featherweight – 160 lbs or less Middleweight – 186210 lbs
Lightweight – 161-185 lbs Heavyweight – 211 lbs and over. There are two weight divisions under UMECRA they are also determined by weighing with tack:
Lightweight – 185 lbs or less Heavyweight – 186 lbs and over. There is also a Junior division for riders that were under 18 yrs of age as of January 1 of the competing year.

Some things to note about these divisions:

- At registration you should ask when you are to attend the ride meeting. If it is in the morning, try to have your horse ready prior to the meeting and leave him/her tied to the trailer safely while you attend the meeting.
- After the vet in ride management will not take your card from you as they do in the Competitive trail division. You will be required to have this card on you and available at all times
- If this is your first competition feel free to ask ride management or the novice rider contact if they know of another rider that would be willing to ride with you. Indicate the pace you intend to go so he/she can match you with someone that will be riding a similar pace

Horses cool off in the early morning hours vet check at Mosquito Run 2008

At the ride meeting you will be given a map of the trail and the ride manager will cover the trail markings, any difficult terrain, water stops, water crossings and also vet criteria. The vet criteria will be important for you to remember, so write it down on your map if you need to. This information will include the maximum pulse your horse can have to pass a vet check and to finish the ride (these numbers may be different), your hold times and also if you are required to do an Exit CRI prior to continuing after the first loop. See pages 25-26 for CRI information.

The LD and Endurance Ride

These rides start early in the morning, some will even start just before dawn. Endurance riders will usually leave first and then LD Riders within an hour after them. You should start to warm up your horse about 15 minutes prior to the ride start time if you plan to go out at the start time. Some riders prefer to leave camp a few minutes after the start time. Some horses, especially those that are not used to the commotion, can become hard to handle with the commotion at the start. These riders will normally not warm up with the others, in order to help their horses remain calm. Riders that are leaving at the start time will walk around the camp roads or in a designated are and add in some intermittent trotting as they go.

A volunteer (called the timer) will check you in, they will most likely be standing with a clip board looking at everyone's number. Go ahead and tell them your number and they will mark that you are present. If you do not check in with the timer they will likely call out your number a few minutes before the ride start time to make sure you are there. If you are starting late, that is ok, just let them know your number as you leave camp and they will mark you as present as well. The timer or another volunteer will yell out that the trail is open at the start time and the ride will begin. The loops vary from ride to ride. Some 50 milers will have a 25 mile loop to start and others will use 4 loops between 10 and 15 miles each. Most riders slow their horses when they are near the vet check and will often dismount a few hundred yards from the timer and begin to remove the bit and even loosen their horse's cinch. This is a good way to get your horse to start to relax and get their pulse down. Experienced horses take this as a cue that it is time to settle in to the vet check routine and will pulse down right away. It is important to note that unlike Competitive Trail where you are restricted by the rule: "forward motion only when mounted", in an Endurance or LD ride you can dismount and move forward with your horse at any time you choose. You need to first go to the timer, you should get out your vet card and when you arrive, hand it to the timer. You will learn to do all of this as your horse walks beside you to save time. A lot of riders will put the vet card in a zip lock bag to prevent it from being damaged and especially from getting wet, if you do this, please take it out of the bag before handing it to the timer. He/She will write your "in time" on the vet card. Proceed to your vet area where you've set out all of your things.

You will first want to offer your horse water and then start building a routine of whatever else you think your horse will need/want before they are ready for the pulse check. Some riders will immediately take their horse to the designated pulse area, usually marked by white pvc poles on the ground, these riders are probably experienced and know their horses pulse is already at criteria. Until you are sure your horse's pulse is down you should check it with a stethoscope or an electronic heart monitor. In the vet area you will see some riders brush the horses face or wiping it with a towel. This will help prevent him/her from being so itchy and rubbing on you or worse, the vet! They may also offer a few treats and/or hay or other feed mixture.

You may sponge water from buckets and/or dump buckets or containers of water on your horse to help cool them. Make sure if you are putting water on them that you are scraping it off with a scraper or your hand. Water can act as an insulator and hold heat in and instead of cooling the horse will actually cause them to get hotter. You may choose to remove the saddle if it is hot out or if you feel for some reason your horse is going to have a difficult time meeting pulse criteria. Often times mid-check criteria is 64 beats per minute, remember to listen for this at the ride meeting, ask a vet if you have forgotten.

When you feel your horse is calm and ready for the pulse check, check the rate yourself by either using a stethoscope or a heart rate monitor. If your horse is below criteria you should proceed to the designated area for pulse checks. Be very careful if your horse is only at criteria, the walk to the pulse area could increase the rate and you will fail the check. Once in the designated pulse area a pulse taker will check your horse. If the pulse is not down, you will be asked to leave the pulse area so other riders can enter. You should wait a few minutes or return to your vet area and continue to cool the horse, recheck their pulse and then go back. Once the horse is checked and meets criteria your card will be marked with his/her pulse rate and "out time", this is the time you will be allowed to leave for your second loop. At some rides you will immediately be checked for soundness by doing a trot out, others will have you return 10 minutes before your out time for a CRI. See pages 25-26 for CRI information.

The vet will first determine from the trot out whether your horse is sound. Then they will check your horses' metabolic criteria; these two examinations will determine if your horse is "fit to continue". If your horse is fit to continue you will be permitted to continue the ride. If for any reason, be it metabolic or lameness related, you're not allowed to continue the vet will keep your vet card and you will be eliminated from the competition. If this happens feel free to ask questions and get advice as how to prevent this from happening again and/or special treatment your horse may need after you return to your campsite or even when you return home.

Sponging will help lower the horses pulse by cooling them.

Typical pulse lane set up.

Limited Distance and Endurance Ride Sheet

The Endurance and LD Ride sheet is the same however they are normally different colors, endurance being white and LD being blue. The sheet differs from the Competitive Trail Score sheet. The Front:

RIDE NAME_____ DATE_____ DISTANCE_____ RIDER #

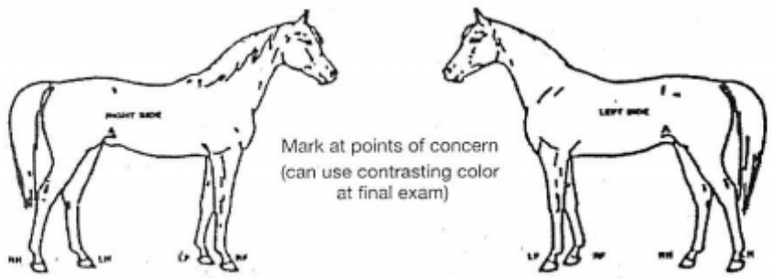
Rider Name_____

Junior Rider____ Sponsor's Name (Juniors)_____

Horse Name_____ Age____ Breed_____ Color_____

Body Condition Score
(Must be between 3 & 8)
Circle Score

1 – Poor
2 – Very Thin
3 – Thin
4 – Moderately Thin
5 – Moderate
6 – Moderately Fleshy
7 – Fleshy
8 – Fat
9 – Extremely Fat



Mark at points of concern
(can use contrasting color
at final exam)

FINISH TIME: _____

Pre-Ride (First) Examination			Post-Ride (Final) Examination		
P_____ R_____ T_____			P_____ R_____ T_____ Time_____ Cardiac Recovery Index (CRI)		
Parameter	A,B,C,D	Comments	Parameter	A,B,C,D	Comments
Mucus Membranes			Mucus Membranes		
Capillary Refill			Capillary Refill		
Jugular Refill			Jugular Refill		
Skin Tenting			Skin Tenting		
Gut Sounds Grade each quadrant			Gut Sounds Grade each quadrant		
Anal Tone			Anal Tone		
Muscle Tone			Muscle Tone		
Back Withers			Back Withers		
Tack Galls			Tack Galls		
Wounds			Wounds		
Gait			Gait		
Impulsion			Impulsion		
Attitude			Attitude		
Overall Impression			Overall Impression		
Signature of Examiner_____			Signature of Examiner_____		

Reason of elimination_____ Signature_____

file: RiderCard2015 1.0

See pages 22 and 23 for a description of the ride sheet.

The Back:

RIDER #_____ NAME_____

CHECK #/NAME						
MILEAGE						
ARRIVAL TIME						
PR TIME						
PULSE						
OUT TIME						
Mucus Membranes						
Capillary Refill						
Jugular Refill						
Skin Tenting						
Gut Sounds Grade each quadrant						
Anal Tone						
Muscle Tone						
Back Withers						
Tack Galls						
Wounds						
Gait						
Impulsion						
Attitude						
Overall Impression						
COMMENTS						
Cardiac Recovery Index (CRI) Note time if possible						
Examiner						

See pages 22 and 23 for a description of the ride sheet.

LD and Endurance Ride Sheet Details

Ride Management will fill the top portion of your card (name, date etc) The horse models will be marked with any areas showing soreness or places with lesions. The rest of the front page is dedicated to the pre-ride exam and the post-ride exam. The back page is for the vet's evaluation of the horse at the vet checks.

Arrival Time: This is the time the timer writes on the card when you hand them your card on your way to the vet check. **PR Time:** This time will be written on the card by the person taking your horses pulse. The time will be the time that you entered the pulse area (pulse box) **and** your horse met pulse criteria. **Pulse:** The pulse your horse had when it met criteria. It could be lower than actual criteria is. **Out Time:** Once you have received your PR Time you will add the hold time to get your Out Time. For example: PR Time is 8:30am, you have a 40 minute hold, your Out Time would be 9:10am. The timer will ask you for your card when you leave for your subsequent loops, they will look at your Out Time to make sure your hold time is up. It is a good idea to check this time at the vet check to ensure it is correct.

All of the following parameters will be judged by the vet as A+, A, A,B+, B, B, C+, C, C, D. With A+ being the best.

Mucus Membranes: The inside of the mouth, eyelids, etc. Their color and moisture can be signs of dehydration and fatigue. **Capillary Refill:** The time, in seconds, it takes the horse's gum to return to a pink color after it has been blanched with thumb pressure. **Jugular Refill:** The time, in seconds, it takes for the horse's jugular to refill after it has been depressed with finger pressure. Slow refill could be a sign of dehydration. **Gut Sounds:** The sounds of the intestinal system (random gurgling noises). Often diminishing with fatigue, their total absence can indicate a serious metabolic problem with the horse. **Skin Tenting:** A test for dehydration; pinch a fold of skin between your fingers and note the number of seconds it takes to flatten back out. The longer the time, the greater the dehydration of the horse. Over three to four seconds indicates potentially serious dehydration. To be accurate on endurance horses, this test should be applied at the point of the shoulder, not up on the neck. **Anal Tone:** The muscle tone of the anus; loss of anal tone is a sign of fatigue. **Muscle Tone:** Evaluates how loose or tight the large muscles are, a horse with loose muscle tone is considered good. **Back/Withers:** Checked for soreness and any lesions. **Tack Galls:** Places where the girth or other tack has rubbed the horse. **Wounds:** Could be from a number of things; sticks, rocks, over reaching, interfering etc. **Gait:** The horse's way of movement, checked at the trot out. **Impulsion:** The horse's desire to move forward. **Attitude:** Overall attitude of the horse (ear pinning, lip curling, tail switching etc.). A crabby horse could be a sign of pain or fatigue. **Overall Impression:** The vet will use all of the above parameters to give your horse an overall score.

On the bottom of the back page is for the CRI's done at the vet checks. The first pulse taken will go in the #1 spot and the second in the #2 spot. Your final CRI will go on the front page. Please refer to pages 25-26 for CRI information.

LD and Endurance at the Finish

Limited Distance and Endurance differ by what takes place at the finish and how placing is determined.

The **Limited Distance** ride finish differs from the endurance finish in that there is no true "finish line". Once you are in camp and given the timer your ride card to receive your in-time, you will, as quickly as possible, go to the pulse area to meet the pulse criteria set for the finish (often 60 bpm). You may choose to go to your vet area first as discussed to cool your horse and ensure their pulse is down, as discussed earlier. Remember the final pulse criteria number could possibly be **less** than what it was to pass the mid-check exam, for instance the horse may have only had to reach 64 beats per minute to pass the mid-check but the final check could be 60 bpm. Once your horse meets the criteria you will be placed accordingly. It is a good idea to not rush into camp on the last loop because your horse may not necessarily be placed in the order you came into camp with other riders because you still need to meet pulse criteria. After meeting pulse criteria you must present the horse to the vet for the final exam, sometimes referred to as the completion exam, within ½ hour from the in-time written by the timer on your ride card. If you are showing for the Best Condition Award this examination will take place at this time as well. See page 24 on Best Condition Award.

The **Endurance** ride does have a finish line. This line should be in a safe area and clearly marked, such as the one pictured to the right. Once your horse crosses this line you have finished the required trail. A volunteer will probably be out here to write down the order which horses have crossed the line. They will determine the finishing order of any horses coming in together. The volunteer may not write anything on your card, if this is the case you will need to go to the timer to have them write your in time on your card.

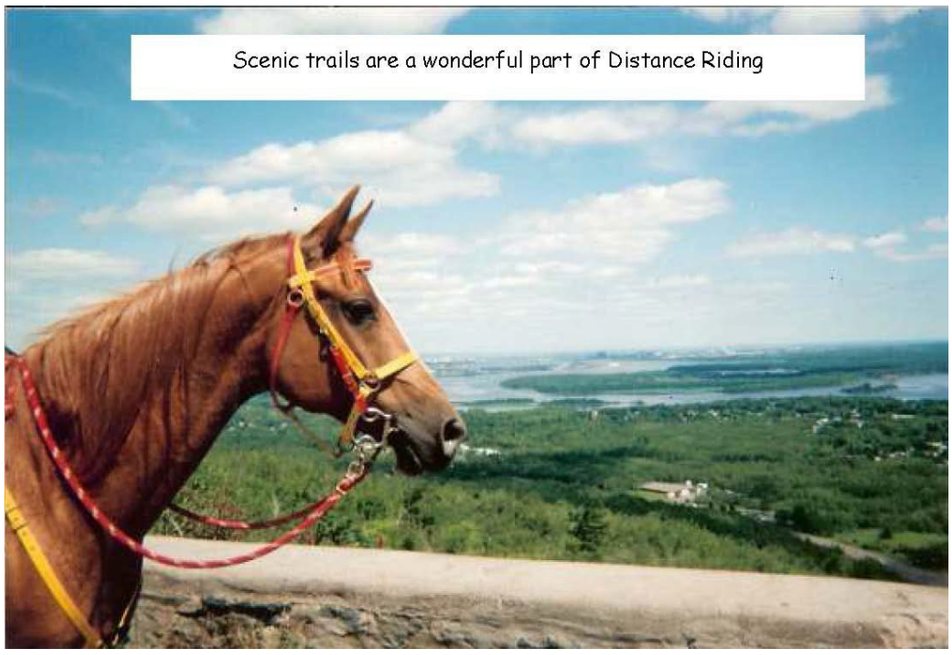
You do not have to go to the vet area. You can present your horse at anytime within an hour after your finish time. If you choose to show for Best Condition Award you will need to present the horse within ½ hour of the finish time. Some riders wait the full hour or ½ hour to present and others will present for the completion exam after only a few minutes. There are many reasons for these decisions and you will learn what works best for you and your horse. Please understand that just because you crossed the finish line, you have not completed the ride until your final exam (vet out) has been done and your horse is again determined "Fit to Continue". Even though you do not intend to continue because you are finished with the ride, AERC and UMECRA use the "Fit to Continue" criteria in order for a horse to be considered for placings and completion.

Best Condition Award

If you have finished top ten, you will also be eligible for the Best Condition award (BC), and you will have to present your horse specifically for this award. You should pay attention at the rider meeting to the instructions for Best Condition but, if you have any questions feel free to ask a vet or volunteer. How you deal with your horse during this period can be quite individualized. For example, if your horse has a tendency to cramp, you will want to walk him, massage him, put warm covers on his back and croup, and do whatever else you can to keep him loose. If your horse's pulse hangs until he urinates, and he won't go until he's left alone, you will want to put him in a secluded spot and go away. If your horse overheats easily and the day is hot, you are going to be looking for a lot of water. In short, you must cater to your horse's particular needs, and try to make him as comfortable and happy as possible. Frequently the horse that wins Best Condition looks amazingly fresh and strong.
It is worthwhile at your first few competitions if you are in camp during BC judging to watch the Best Condition presentations to see how riders present their horses and to talk to the riders and crew as these are usually your most experienced and best competitors.
If you don't have any special problems or concerns with your horse, the best thing to do is to let the horse wander and graze, just as you did during the checks. Take a few minutes to wash off the trail grime and brush out his mane and tail. Keep water at his disposal. Provide dampened hay if there is no grass—dry feed can cause a dehydrated horse to choke. From time to time have him trot to warm him back up a little.

Best Condition judging will be done similar to the final vet exam, only a special section of the ride sheet or another form will be filled out to calculate who will receive the award. There are many riders who feel that the Best Condition Award is superior to placing order of the ride as this is the horse that has been determined as being in the "Best Condition".

This is only a brief description of LD and Endurance. The AERC has a very detailed and informative Rider Handbook detailing Limited Distance and Endurance. It can be found on the website, www.aerc.org, under education. There is other valuable information under this tab as well.



Scenic trails are a wonderful part of Distance Riding

JUST WHAT IS A CRI?

Provided by: www.distanceriding.org

The Cardiac Recovery Index, CRI, or "Ridgway Trot" has proven to be a very useful tool for determining when a horse is becoming overstressed. Its unique value is that it detects problems at their on-set; before other indicators register that a danger zone has been crossed.

The CRI is performed as follows. The horse's pulse is taken and the time is noted (for example, pulse 64; time = 1:03:07). The horse is then trotted in hand approximately 125 feet (about 45 steps) away from a point and then turned around and trotted back. After 60 seconds have passed from the initial pulse taking, the pulse is rechecked. It should be no higher than the first reading (for example, pulse 64). An accurate pulse count is imperative or the test will not be valid. If the pulse has increased the second time it is checked, there is cause for concern. While a four beat per minute increase (64 to 68) is not alarming, as the increase grows so should concern. A 64 to 72 reading, for example, would be fair warning that the horse is in enough distress that continuing the ride would be risky. Generally speaking, if the veterinarian gets a poor CRI reading, he will ask the rider to come back again for a recheck. At that time the CRI would be repeated, and unless it had normalized, the horse would probably be pulled from the ride. The veterinarian would most likely evaluate the horse as a whole before making his decision, but poor metabolic readings or lameness inevitably seem to accompany a poor CRI.

CRI Cardiac Recovery Index The cardiac recovery index measures how well a horse recovers after a short stress. While a horse may come into the vet check with a high heart rate, the rider can lower the heart rate in a number of ways. A conditioned horse's heart rate will lower on its own with little help of the rider. The rider can facilitate the lowering of the heart rate by cooling the horse, through water on the neck and legs of the horse, or even by icing the horse down. As the temperature of the horse declines, the heart rate will also decline. However, if the horse has been over stressed, even after the heart rate has come down, if the horse is stressed again, the heart rate will jump up again.

When the rider presents the horse to the vet for the CRI, the vet takes the pulse. Let's say the horse's rate is at criteria of 64 (or 16 in 15 seconds). Since the horse has been in the check for several minutes, the vet may be suspicious that the horse is not in very good shape. The vet check's his/her watch and asks the rider to trot the horse out to a point 125 feet away and back. While the horse is trotting, the vet checks for lameness. From the time of the start of the trot, to the time the vet checks the heart rate again, is exactly one minute not more and not less. This time, since the horse was stressed and barely recovered, the heart rate is up to 80 (or 20 in 15 seconds). The vet would give a warning, ask for the horse to rest and come back, or pull the horse depending on many factors. What would show on the card was 16/20.

Now let's say there is a horse that is better conditioned that comes to the vet. The initial heart rate is still at 64 (16 in 15). The horse trots out and back. The rider calms the horse. The vet takes the heart rate again, and now the rate is 60 (15 in 15). This horse is ready to go. The added stress of trotting out 250 feet not only did not stress the horse, but the horse was in such good shape that the rate continued to drop. What would show on the card was 16/15.

One more example. A horse comes to the vet with a rate of 40 (10 in 15). After the trot out, the rate is 36 (9 in 15). You might think this horse hadn't even started the ride. What would show on the card was 10/9.

When the horse is presented to the vet, the heart rate should be lower than criteria. If the heart rate is above criteria, the vet will probably look at the card to see how long it took the horse to come down to criteria. If the heart rate is still at criteria, and the horse has been waiting around for several minutes, again the vet might be a bit concerned. After the CRI, the heart rate must come down to the same rate or below as at the start of the CRI. If it does not come down, then the vet can ask for a recheck, or can pull the horse. If the heart rate comes back to the same level as at the start of the CRI, then the horse is doing fine. If the heart rate is below the start of the CRI, then the horse is doing extremely well.

As always, there are some tricks you can play to lower the heart rate even while the vet is checking.

- First, if another horse walks by, particularly a best buddy, then the horse's rate is sure to go up. Stand such that you block the horse's view of whatever might excite him.
- Do not let the horse eat while the vet is taking the pulse.
- Do not let the horse throw his head way up. Preferably, have the horse hold his head in a "neutral" position.
- If you have a calming technique, such as gently rubbing the horse, do so.
- For yourself, take a deep breath and try to relax to show your horse that the excitement is over, no more trotting right now.

Camping With Your Horse

Camping with a horse is a little more involved than camping by yourself, but with planning and practice you can devise ways of doing it safely and comfortably.
Facilities at ride camps vary widely. Some camps are set up at State Parks with all the amenities, while most others are held in parks, forests or private land with open fields and no amenities at all (pit toilets will be available). Unless you know in advance what will be available, it is safest to assume that you will have to provide everything, including drinking water for your horse. Always bring an ample supply of hay, grain and electrolytes with you; it's better to have some left over than to run short.

Be sure to bring along horse blankets, fly sheets, and insect repellents. Some camps are infested with flies, and without protection your horse will be miserable. On other occasions, the weather can take a sudden turn for the worse, and without a blanket your horse will be shivering while his blanket is home in the barn.
For many people the camping part of endurance riding is very enjoyable, while for others it is just a necessary inconvenience. The former are likely to put a lot of time and money into their ride camp including living quarter trailers, campers or motorhomes. Others will be happy to sleep in a tent or even the back seat of their pickup truck. No matter what your preference you will find that you will require an alarming amount of equipment and supplies to camp with your horse. It's also very likely that you will find yourself forgetting at least one vital item per trip. One practical way of avoiding this aggravation is to make out a checklist of things you will need and then refer to it as you pack up.
There are many ways to keep your horse at a ride. The most obvious and easiest is to simply tie him with a lead rope to the horse trailer but this has distinct disadvantages, as a horse tied to a trailer cannot move around much and he cannot lie down. The metal swingouts with stretchy tie ropes are a vast improvement and give the horse more room to move about (HiTie, Spring Tie, etc.).
Another method to be considered is a high picket line, sometimes called a high line. This involves the use of a stout rope tied six feet or more off the ground. A steel ring is placed on the rope, and the horse is tied to the ring. This allows the horse to walk the length of the line, which is much more comfortable for him. Feed and water buckets can be hung at each end of the line for safe and easy access. You can tie several horses to one picket line by putting "stoppers" in the rope (short pegs that won't allow the rings to pass) to keep them separated. If you use a picket line, be sure to tie the horse short enough that he doesn't get his legs tangled. Any horse that is tied, whether to a trailer or a picket line, should have some form of emergency release; a "panic snap" or safety halter is very important.

Corrals can be made of metal or PVC plastic pipe. These can be transported on the side of the trailer and erected in a few minutes at the campsite. However, they do not allow much room for movement, and unless they're staked down a horse can lift them off the ground. Some riders prefer an electric fence corral. Such a corral is made by using electrically charged tape, strung on plastic or fiberglass poles. The tape is made of nylon with fine wires woven in to carry the electricity; a battery operated fence charger electrifies the tape. This kind of paddock can be any size or shape desired, can be put up or taken down easily, and allows the horse maximum freedom to move about with the least chance of getting tangled in something. The big drawback is that a panicked horse can run through the electric fence so the paddock may not be secure for animals with this tendency.

There is no foolproof way to contain a horse, especially in a strange environment. Sleep in your clothes and have your boots and a flashlight near the bed!

Feeding the Distance Horse

Provided by: www.aerc.org

Although feed manufacturers would like to convince you that top performance is only obtainable through buying another bucket, many a champion endurance horse has competed successfully for years on nothing more than good pasture, water, salt and a little grain. There are very few absolutes in nutrition and infinite ways to adjust a program to meet individual preferences and needs. Use this section and its suggestions as a guideline, not a rule book.

Feeding for Training

Which fuel the body uses for work varies, based upon the intensity and duration of exercise demands. The short, intense bursts of (anaerobic) speed seen in quarter horse racing, for example, utilizes almost exclusively carbohydrates (sugars) stored within the muscles and liver. Endurance (aerobic) exercise relies almost entirely upon fats, with a small amount of carbohydrates used as a "pilot light" to help burn fats efficiently. The body maintains a relatively limited supply of carbohydrates (in the form of glycogen) within the liver and, to a lesser extent, within the muscles themselves. If utilized exclusively, energy supplies would quickly run out before the end of an endurance ride, resulting in fatigue and metabolic trouble. Fats, on the other hand, can be stored almost without limit within the body, and supply more than sufficient energy for endurance exercise. Therefore, fats and their metabolic products are the primary fuel source for the endurance horse, with small amounts of carbohydrates to help maintain the "pilot light."

Fats are derived as a digestive product from the fiber in forages such as hay, beet pulp and pasture. Beneficial microbes in the horse's cecum and colon ferment fiber to produce volatile fatty acids which, in turn, are absorbed and utilized as a fuel source within the muscle cells, or stored away in the form of adipose tissue (body fat). Additional dietary fats can be added directly in the ration in the form of vegetable oil or animal fats. As fats contain 2.2 times the calories of an equivalent amount of either carbohydrates or protein, adding moderate amounts of fat to the diet is an excellent way to help maintain a good body weight in hardworking endurance horses. Although human marathon athletes perform best with minimal body fat, endurance horses seem to do better with a reasonable amount of body fat cover. Field research on 100 mile endurance horses has strongly suggested that horses in reasonable body condition have a better chance of completing, with fewer metabolic problems, than do excessively "lean, mean racing machines." Therefore, the ration should provide sufficient calories so that ribs can be easily felt, but not clearly seen, and hip bones are not visible. If you feel you need to apologize or "explain" your horse's appearance in non-endurance company, he's probably too thin! Highfat rations have also been suggested to provide other metabolic benefits, such as decreased heat load (useful during a hot summer ride season) and more efficient utilization of the short supply glycogen. However, to fully gain such benefits, the average 1000 pound horse needs to consistently consume approximately four cups of vegetable oil per day for an extended period of time, an amount not all horses will willingly consume.

Grains are digested differently from forages, in that enzymes in the small intestine break down their starch (carbohydrate) content, which are then absorbed into the bloodstream as glucose. Research indicates that the digestive system of most horses cannot optimally handle more than about four to five pounds of grain at one time. As the digestive enzymes are overwhelmed by the largesse, excess undigested grain is passed along to the cecum, where it is fermented as though forage. Resulting changes in the microbial populations can have profound deleterious effects. At best, too much grain decreases the efficiency by which nutrients are derived from the feed. At worst, the shifts in the microbial population can release toxic substances, which in turn can cause colic and laminitis. For these reasons, horses should not receive more than 50% of their total ration in the form of grain and preferably no more than approximately four pounds at any one time.

The average 1000 pound horse needs approximately 15 megacalories (Mcals = 1000 calories) of energy per day for maintenance, not including the added energy demands needed for exercise. There are several complicated formulas that estimate the additional caloric requirements of exercise, but a reasonable approximation can be obtained by using the figure 0.07 Mcal per mile per 100 pounds of weight (both horse, rider and tack weight combined) traveling between 4 and 8 mph; and 0.10 Mcal per mile per 100 pounds at approximately 12 mph. At higher speeds, energy costs increase dramatically. As an example, an average horse and rider conditioning at relatively slow speeds for 35 miles a week can expect to require an extra 4.2 Mcals of energy per day (the cost of riding 35 miles divided by seven days). When added to the daily maintenance requirement of 15 Mcals, this horse would need a total of 19.2 Mcals per day to supply his energy demands. When you calculate that a 100 mile ride may use upwards of 80 Mcals for exercise alone, it becomes much more apparent why so much attention is paid towards supplying sufficient calories to these hardworking athletes.

Most horses are only capable of consuming between 2% and 3% of their body weight per day, thus a 1000 pound horse generally cannot consume more than between 20 to 30 pounds of feed on a dry matter basis (the amount of feed after disallowing for water content). Most hays and grain are 90% dry matter, therefore you can expect a maximum intake of between 22 and 33 pounds of feed per day. Horses consuming green pasture, with its 75% to 80% water content, must consume much more on a pound-for-pound basis to obtain the same nutrition. Formulate your ration so that, ideally, at least 1.5% of the horse's body weight is provided in the form of forage to maintain adequate bulk in the diet. Always provide a bare minimum of 1% of the horse's body weight in the form of forage. Example, a 1000 pound horse x 1.5% = 15 pounds; allowing for 90% dry matter, provide 16 to 17 pounds of forage daily. At least half of the forage ration should be in the form of long-stem hay, or pasture. If desired, the other 50% can be in the form of beet pulp, hay pellets or hay cubes. Using the above example, at least eight pounds should be long-stem hay, and eight pounds could be fed as pellets, cubes or beet pulp.

Most grass or cereal grain hays contain between .7 and .8 Mcal per pound, and alfalfa contains approximately .9 Mcals per pound. Using the above estimate of 19.2 Mcal daily requirement, a horse would have to consume more than 27 pounds of grass hay to maintain weight. Many horses would be unwilling or unable to consume this amount, so more energy dense concentrates must replace a portion of the ration to provide sufficient calories. Most grains contain between 1.3 and 1.5 Mcal per pound, while fats contain approximately 4 Mcals per pound. Replacing six pounds of hay with five pounds of a good quality grain mix and a cup of vegetable oil, split into two equal meals, will raise the total calorie content of the ration to approximately 23 Mcals, sufficient for most horses on a moderate conditioning program.

Err on the side of caution when feeding grain on non-work days, especially if your horse is confined to a stall or small pen. A good rule of thumb is to reduce the grain ration by half on days when the horse is not exercised in some manner. To avoid digestive upset, grain should constitute no more than 50% of the total ration. Example, if your horse's total maximum daily intake is 20 pounds, do not feed more than ten pounds of grain per day—look into other ways of increasing calories by the addition of fats or beet pulp. If you are feeding a substantial amount of grain or fat (more than four pounds daily), splitting the concentrates into two or more meals minimizes likelihood of digestive upset and maximizes efficiency.

The dietary addition of fat can be provided in several ways. Although some horses prefer the taste of corn oil, any good quality vegetable oil is satisfactory. There is no significant difference in nutrition or caloric content between different types. Depending on the conditions, vegetable oil may begin to oxidize and go rancid within a week of being exposed to light, heat and oxygen, significantly reducing its nutritional value and increasing free radicals and peroxides. Many horses that refuse fats in their diet are simply objecting to rancidity in elderly vegetable oil. To keep fats as fresh as possible, keep oil in a cool, dark place (the refrigerator is ideal) and in containers which only hold a seven to ten day supply. If larger quantities are purchased for the lower cost, pour a week's supply into smaller containers and keep the main supply container separate and tightly closed.

Contrary to common belief, horses are very capable of efficiently digesting and absorbing fats from animal sources. Due to its saturated molecular structure, animal fats also do not go rancid quite as quickly as vegetable fats. The most common source of animal fat available for equine diets is the prilled "dry" fat available from feed suppliers catering to cattle and swine producers. Many horses that object to the texture of liquid fats in their ration will accept the addition of dry fats. As with the addition of any new feed, start adding fats slowly and increase over time. If feeding more than two cups of fat per day, try to split the added fat into two or more meals to maximize digestive efficiency.
Another forage to consider is beet pulp, the forage byproduct remaining after the sugar is fully extracted from sugar beets. The fiber it contains is highly digestible and palatable to horses, and because it is digested in the hindgut similar to grass or hay, can safely be fed to horses in amounts up to half of the forage ration (about ten pounds dry weight for most horses). Its inclusion is an excellent way to increase the calorie content of the ration without the risks of excessive grain. Although dry (unsoaked) beet pulp has been safely fed to many horses without incident, some horses (especially greedy eaters) may choke on any small, pelleted feed, including dry beet pulp. As additional fluid intake is always a benefit to endurance horses, soaking for a half hour or so before feeding is a good idea. Adding water is not necessary with beet pulp based commercial mixes, but mashes of any type should ideally be provided wet and soupy during competition to maximize fluid intake and help avoid dehydration.

Although alfalfa hay is plentiful and cheap in many parts of the country, it is generally not the best primary forage for endurance horses. The high protein content (significant in even poor quality alfalfa) produces metabolic waste heat that must be dissipated through sweat loss during hot weather, potentially contributing to dehydration during rides when water consumption may not be optimal. This metabolic heat may help during cold weather to "stoke the furnace," but is a hindrance during hot weather and sustained exercise. In addition, the high calcium content, when fed in large amounts, has been suggested to inhibit the body's ability to mobilize calcium stores in bone tissue during exercise, thereby contributing to the incidence of tying up and synchronous diaphragmatic flutter ("thumps"). While small amounts of alfalfa do no harm, and may help prevent calcium depletion during rides, it should ideally be viewed as a supplement to good quality grass hay, and not a replacement. Try to minimize alfalfa in the diet to less than 50% of the ration and, ideally, less than 25%.
Protein is probably the most overused and overrated nutrient in the adult horse's diet. Mature horses, even at hard work, only require approximately 10% crude protein in the ration. Additional protein provides no additional benefits to performance and in fact, has been implicated in increased incidence of metabolic failure in other equestrian disciplines. Sufficient protein is easily provided by a diet of reasonable quality grass hay or pasture and a good quality balanced grain mix from a reputable company. More is not better!
Always provide free choice salt and fresh, clean water. While electrolytes formulated for endurance horses may be beneficial during rides, they are not necessary at home, nor is fancy "designer" salt or mineral mix. Plain, iodized salt is sufficient. Block salt is convenient, but if possible, loose salt in a box or in the bottom of the feed manger allows for adequate consumption without long periods of licking or biting a block. A recipe for homemade electrolytes consists of equal parts iodized table salt and Lite salt (a mix of half potassium chloride and half sodium chloride). Mix three parts of this mixture to one part calcium carbonate (ground limestone). While this recipe is sufficient for home use or during transport, ongoing research at several universities is providing ever increasing knowledge about the exact role of electrolytes in endurance competition. As your miles and experience build, consider using specific endurance formulas during competition, especially if you or the control judge or treatment vet suspect electrolyte depletion may be affecting performance and health. As with everything in endurance, try different methods until you determine the best program for you.

Avoid the urge to provide your horse with a variety of vitamin and mineral supplements to improve performance, add a shiny coat, boost the immune system or just because "he might need it." Nutritional problems among horses are almost always caused by excess rather than deficits in the diet. Rely on obtaining the best quality hay possible, supplement with a highquality balanced grain mix from a reputable mill, and provide salt and fresh water. In general, unless specifically prescribed by a veterinarian, the only exceptions to the no supplement rule of thumb are:

1. Inquire as to whether your area is low in selenium. An inexpensive serum blood test may be helpful to establish selenium status. As selenium can easily be fed in sufficient amounts to produce toxicity as well, determine whether a deficiency exists before adding a supplement.
2. Research has suggested that the addition of 20 to 25 mg of biotin on a daily basis may improve the quality of hoof tissue. As biotin is a water soluble B-vitamin, excesses are excreted quickly through the kidneys, and are not stored in the body. Therefore, feeding more than 20 to 25 mg daily will only add to the costs, not benefits. Clinical trials indicate that biotin improves the quality of hoof tissue, but not the rate at which it grows—therefore, daily and consistent supplementation and patience is necessary before noticeable improvement will be seen.
3. The daily addition of 1000 IU of vitamin E may be helpful in reducing oxidative damage to body tissues produced by free radicals. This is especially relevant if a significant amount of fats are fed on a regular basis.
4. Healthy horses are capable of synthesizing sufficient vitamin C within the liver. However, recent research is indicating that additional vitamin C may be helpful specifically during periods of stress, such as prolonged transport. Ten grams twice a day is a sufficient amount. Daily supplementing with additional vitamin C as part of the normal routine during non-stress periods does not provide additional benefits to the immune system, and may suppress the body's ability to synthesize its own supplies.

Feeding During Competition

The two most important things you'll give your horse on ride day are directions and water. The rule of "never try out anything new at a ride" also applies to nutrition. Try not to provide more than a few pounds of any feed which is not routinely fed at home, as abrupt changes in feed, along with the stress and dehydration which often accompanies any competition, may contribute to incidence of colic. Begin nutritional preparation for a ride several days before leaving home. Encourage maximum intake of forages, especially beet pulp, as clinical trials have demonstrated that a combination of hay and beet pulp provides a significant reservoir of fluid and electrolytes in the hindgut to draw upon during exercise. As the movement of forages through the digestive tract takes several days, forages should be provided in abundance several days prior to the ride. Continue to provide forage free choice during transport, as soon as you arrive at base camp and throughout the night. Longstem hay is preferable over cubes or pellets as the added bulk will help maintain gut motility. It is best not to feed large amounts of grain within four hours of the start of the ride, as the glucose peak produced during digestion of simple carbohydrates adversely affects the utilization of body fats needed during a long day of exercise. Providing a few pounds of grain for a day or two prior to the ride is more than sufficient to "top up" glycogen stores within the liver and muscles. However, adding a handful or two of grain for flavor to an overnight beet pulp mash will do no harm. The point is to avoid large grain meals immediately before exercise.

Pay the utmost attention to maintaining hydration and gut motility before worrying about boosting energy. Assuming your horse is fit for the job at hand, a well hydrated horse with ongoing gut motility will outperform a dehydrated and colicky horse every time, regardless of the amount of "rocket fuel" on board. Plan your day so that your horse can snack his way throughout the ride, rather than exercise nonstop and then eat only while at control checks. Take the opportunity whenever possible to stop for a few minutes of grazing along the trail or carry a few pounds of hay with you between checks. Doing so will help avoid dehydration, maintain good gut motility and thereby maintain energy and performance. At control checks, provide plenty of free choice forage and ideally, a sloppy mash of well soaked beet pulp. Grain, wheat bran, carrots, etc., can be added to the mash to increase palatability and supply additional energy. Do not rely upon wheat bran to act as a laxative and avoid colic—bran provides bulk in some species (such as humans), but does not have the same benefits in herbivores.

Do not add fats immediately before or during the ride. Although it would seem like a good source of energy, a high fat ration tends to decrease forage intake needed to maintain motility and hydration. The relatively small amount of fat in commercial grain mixes (even "high fat" formulations) is not a concern.

Feeding after the competition

Once you've successfully crossed the finish line and received your final control check, don't assume the energy demands of the day are over for your horse. Depending on the length and intensity of your ride, it can take days or even weeks to fully replace the fluids, calories and nutrients used during competition. Allow your horse plenty of opportunity to drink his fill to replace lost fluids, including during the trailer ride home. Provide plenty of forage free choice. The "stress hormones" produced during exercise may continue to deplete the body of electrolytes for several days following the ride and continued supplementing with electrolytes may help ensure a quick recovery.
Research has suggested that glycogen repletion is increased during the 24 hours following strenuous exercise and may help avoid sore or stiff muscles. Small amounts of grain every few hours— not exceeding his normal accustomed amounts—are helpful, as long as your horse is not unduly dehydrated or experiencing metabolic trouble. If you are in doubt about gut motility, check with the control judge or treatment vet before feeding anything other than forage and water.
Even though a 100 mile endurance ride can use upwards of 80 Mcals to provide needed energy, don't try to replace the expended calories overnight. Giving your horse access to all the forage he can eat, moderate amounts of grain and judicious amounts of fat over the next week or two will gradually replace the lost calories without risking digestive upset.

Electrolytes

Especially in hot, humid weather, significant amounts of electrolytes are lost in the sweat. Sodium, chloride and potassium are the primary ions lost, along with smaller amounts of calcium, magnesium and other trace minerals. Increasing scientific data indicates that supplementing during exercise, and thereby minimizing depletion is beneficial in possibly averting metabolic problems such as thumps, tying up, poor gut sounds and other symptoms associated with "exhausted horse syndrome." The body does not store excess electrolytes against future need, therefore "preloading" several days before a ride will not replace supplementation during the ride itself. However, orally syringing a day or two before the ride (especially before and during transport) may help trigger a "thirst response" to encourage drinking. Likewise, supplementing throughout the day may encourage drinking as well as replace electrolytes lost through sweating. As with every other feed supplied throughout an endurance ride, small and frequent amounts are usually preferable to large and infrequent.

Electrolytes are often added to feed or water, but some horses may refuse too salty a flavor, and therefore also refuse much needed food and water. Although horses do develop an appetite for needed salt to replace depleted stores, this is not an instantaneous response. Don't rely on this mechanism during a ride! Oral syringing is a good alternative that has worked well for many horses and riders. Take advantage of the increasing body of scientific data and consider the use of research based electrolytes formulated specifically for endurance horses.

Formulating the best nutritional strategy for you and your horse is as individual as any other aspect of a successful conditioning program. Absolutes such as "always" and "never" are rarely applicable—for every horse that does well on one program, an entirely different strategy will work just as well for another. Use these few baseline suggestions along with your own common sense and knowledge of your horse to create the feeding and management program that works best for you and your horse.

Sometimes riders will electrolyte on the trail at water stops after the horse has drank.

Conditioning

Provided by: www.aerc.org

In conditioning, the ultimate goal is to develop to maximum potential whatever natural athletic ability any given individual possesses. The object of this chapter is to acquaint the reader with the basic principles of conditioning and to suggest some methods and time frames appropriate for preparing a horse for competition in an endurance test. Each horse is an individual and each horse's ideal conditioning program should be tailored to the horse and to its environment. For example, horses running each day on 50 acres of hilly pasture will need far less conditioning under saddle than a horse kept in a 15' by 20' corral most of the time. The novice endurance rider would do well to find an experienced rider with a record of developing horses that have competed successfully over many years as a mentor.

Science, methodology and time charts are not the whole story, however. Conditioning horses is as much an art form as a science. Trainers concern themselves with more than pulse rates and blood counts, although these things are surely important. The best trainers have developed an intuitive "feel" for how the horse is doing overall. They know whether an individual prefers routine or diversity. They know the difference between the horse being lazy or being bored, between being eager or actually being fearful. They know if the horse likes his work—and if he doesn't they worry about how to get him to like it. "Know your horse" is the best piece of advice you'll probably ever get, although it might be some time before you understand what it means. You should also occasionally ask yourself what your horse thinks of you.

Finally, all the knowledge and intuition in the world won't count for much unless the conditioning program is conscientiously applied. Everyone has duties that will sometimes interrupt the schedule, but it is all too easy to let the whole program become haphazard. If you skip one day you can't make it up by riding twice as hard the next. If you are serious about what you are doing, you must maintain your momentum, and balance this with patience.

Note that horses have a very different physiology than people. Horses are prey animals and foragers who were made to cover distance easily and were made to run quickly to flee danger. The horse's ability to oxygenate muscle and its overall cardiovascular system are far superior to a human's. Be leery of some of the older literature on training programs for endurance horses. These were basically attempts to adapt human running programs and probably called for far too much mileage and not enough rest for the horse.

Before getting started, the rider should realize that any endurance prospect has a limit to his innate ability, and that this limit might not be sufficient to satisfy the rider's competitive goals. Recognizing this problem and coming to terms with it is perhaps the most difficult thing any horseman will ever do. You can't make a Kentucky Derby winner out of a plow horse, no matter how hard you try. If your goal in endurance riding is to find a companion that can carry you quietly across the miles while you enjoy the beauty of the countryside, your needs will be quite different from the ambitious individual who plans to win next year's national championships or to try out for the international team. By the way, the ambitious individual who plans to win next year's national championship better have started several years earlier or spent a lot of money to buy an already well conditioned top prospect. It takes at least three years to get a horse ready to do a top quality 100. Rushing this process is just asking for injury. Decide honestly what you want to do and choose your horse and your conditioning program accordingly.

If you are in satisfactory health, you should consider some type of exercise other than riding to improve your own fitness, because when you become fatigued you will not ride as well. Someone who is off balance or tense from pain will adversely affect the performance of the horse, causing him to tighten or twist his back, or compensate in other ways. This added effort accelerates fatigue and increases the likelihood of injury.

Aside from developing your overall fitness, cross-training can also acquaint you with how it feels to work hard physically. It gives you a much better empathy with your horse when you are both undergoing the same remodeling. Lack of time is no excuse because you can walk or run alongside your horse as you warm him up every day. However, just as with the horse, your exercise program should be carefully constructed and implemented. Consult a knowledgeable person to help you get started with a schedule appropriate to your present state of fitness.
While some successful endurance horses have never seen the inside of a schooling arena, excellent balanced riding really helps the endurance horse and poor riding really hurts. If you are a skilled rider, great, if not, seriously consider lessons so that you can ride with rhythm, balance, and alignment. And consider equitation lessons for your horses. Joggers often notice that while they get fit from their activity they also tend to get stiff. The same holds true for endurance horses. Elementary schooling in an arena (dressage) is a good way to get the horse to stretch and bend. Specific exercises can also help strengthen specific physical weaknesses, resulting in a horse that is better balanced overall and therefore less prone to injury. Last but not least, it trains the horse to be more disciplined and responsive to your demands. More and more of the leading riders use dressage training for themselves and their horses.
Teaching your horse to jump a small course of fences or cavallettis can also be beneficial. Like dressage, it helps the horse learn to use his body in different ways and to handle himself better. Besides, you are bound to encounter obstacles on endurance rides from time to time, and if your horse has at least been exposed to the basics, you are less likely to get stranded someday on the wrong side of a log.

Where to Begin

It should be noted that it takes years to give the horse the tendon and ligament foundation to go fast over long distances. By contrast it is easy to condition the muscles and heart quickly. But without the structural foundation, the horse will break down. Before you begin any conditioning program, be sure your horse has been recently wormed and has his feet in good working order. Assuming he is already broken to ride, and assuming that he is healthy and neither too thin nor obese, you can start by riding two or three miles at about 5 mph. If you have already been riding the horse on a fairly regular basis for some time, then you can probably double the beginning mileage.
Many people prefer to work an endurance horse three days a week, allowing for several rest days, particularly if the horse has lots of pasture to run in. For horses confined to small corrals or with limited turnout, some work five days a week may be appropriate but several of those days should be light.
All of your work for the first two to three months will be slow, rarely faster than a trot. Depending on your personal preferences and what is available, you may want to ride trails, make some rounds in a field, or hack down a country road. Don't forget to do a certain amount of basic arena schooling. This need not take up your whole days routine, but 20 or 30 minutes twice a week incorporated into the other work will be of great benefit. Concentrate on teaching transitions from one gait to another, prompt (but smooth and calm) reactions to the aids, lateral and longitudinal bending, etc.

Offer as much variety as you can in your program. Riding over hills is excellent exercise, requiring somewhat different muscular effort than flat terrain. The more places you can go to work, the better. At these early stages, however, take it easy. Young, unfit horses have neither the balance nor the strength to negotiate difficult terrain well. Be especially conservative as you tackle downhill grades; they are very destructive to juvenile joints.

On days that you add distance to your mileage, compensate by cutting back on the speed you usually travel. On days when you go a little faster than the previous day, cut back on the total mileage. If you go for a tough, hilly ride, don't make it the longest distance your horse has ever attempted. Just use common sense whenever you up the ante.

The most accurate single indicator of condition is the horse's pulse rate, and this is why endurance riders are so preoccupied with their stethoscopes and heart monitors. A necessary first step in learning to condition a horse is in learning to take his pulse. To use your stethoscope (which you can purchase at most drugstores or through your veterinarian), stand on the left side of the horse and put the round flat piece behind and slightly above the elbow. Some individuals are easy to hear; others are more difficult. If you cannot pick up the ticking sound with your horse at rest, exercise him and try again. Exercise will make the beat louder and faster. Most horses will have a resting count of 32 to 44 beats per minute (bpm). By contrast, the working trot for a horse over level terrain and excellent footing may be anywhere from 90 to 140 while horses at a full gallop may have a heart rate well over
200. (Note that you will only be able to observe these rates with an onboard heart monitor.) As you listen you will hear a "lubdub" sound. This counts as one beat, i.e., lubdub, lubdub, lubdub = three counts.

Many endurance riders use heart monitors both when they condition at home and when they compete. These monitors cost $125 and up, but they can be very useful. They are a big step up in determining working rates, because by the time you stop your horse, dismount, and get out your stethoscope and watch, the rate will have already dropped significantly—in fact, it may have dropped in half. A heart monitor is also essential if you want to do interval training later on (see Phase II). Knowing what to expect of your horse's heart rate on the trail takes practice and experience. The working heart rate and the heart rate recovery as you change paces, go uphill and downhill, change footing and in general change the stress levels is one the best indicators of how your horse is doing.

One should do a "mini-control check" at the end of each workout, that is, trot the horse for soundness, check the metabolic factors— particularly for dehydration, check for any signs of injury, and check the pulse. See Chapter Twelve for the factors examined in a control check. An experienced person can perform this check in a couple of minutes. There is no substitute for knowing your horse and comparing how he is doing to his norm.

How quickly the heart rate drops when you stop work reflects the capacity of the horse to perform at that level. In general, no matter what the horse has been doing he should be able to recover to the low 70s within ten minutes of the time he finishes his exercise. However, during a competition, you should expect to recover to the low 60s within ten minutes of coming into a control check. If it takes you much in excess of ten minutes to recover to the low 70s on a ride, then you are going faster than you should. If you do not recover during a ride within 30 minutes of the time you arrive in a check, you will be eliminated. Aside from overwork, a poor recovery can indicate pain from illness or injury. If your horse usually recovers to a certain heart rate within ten minutes of a particular workout, and then one day hangs at eight beats or more higher, you'd better try to determine why.

Don't be unduly alarmed if a poor recovery should pop up on the first spring day that the temperature soars. Winter coats and hot weather make poor bedfellows. Boggy footing is another reason your horse might not recover within the usual time frame. Use common sense to try to get to the bottom of uncharacteristic responses. If a poor recovery cannot be readily attributed to weather, footing or other such variables, it is very likely that you've pushed harder than you should.

When you begin conditioning your horse, you should have at least one place to ride where you know exactly how far you are going. You can measure a spot with a surveyor's wheel (you can rent one from a rentall), a vehicle's odometer, or a pedometer. Experiment and see how long it takes your horse to cover the distance at different gaits. Does he walk at 3 mph.? Does he trot at 8 or 12 mph? How slowly can he canter? How fast is his hand gallop? You must develop a feel for times and distances so that you can pace yourself in competition. You should also check your horse's pulse reactions at various

times. Become so familiar with how they work that you can accurately estimate what the rate will be. It's all part of knowing your horse.
The basic principle in conditioning is called progressive loading. It means systematically exposing the horse to small but steadily increasing levels of demand. Once complete adaptation to a particular level has been achieved, no further training effect can be expected of that level. Only increased demands will result in further progress. Your job each day is to determine how much more difficulty to add, and to recognize when adaptation has been achieved. Keep in mind that while you want to constantly challenge the horse's metabolic upper limits, if you go too far too fast, constructive stress becomes destructive strain. Breakdowns usually occur after a series of strains finally overpowers the body's ability to adapt.

It is a good idea for you to use the CRI during or at the end of your training sessions to be sure that you are not overlooking some problem that may be lurking. This simple to use test gives remarkable insight into the condition of the horse. See page on "Just What is the CRI?"
The backbone of any conditioning program is Long Slow Distance (LSD) work. LSD is a working trot for horses with occasional walking breaks, involving use of a steady rate of energy expenditure over increasing distances. It is aerobic work, meaning that the body is able to perform at that level without going into oxygen debt. LSD teaches the body to use more oxygen, increasing both its ability to carry oxygen to the cells and also to extract it once it gets there. The fitter the horse becomes, the faster he can go without becoming fatigued. In the beginning, the "S" in LSD will be about 5 mph. Gradually you will be able to increase this to around 10 mph, depending on your horse, the terrain, footing, and weather. Distances will also increase, starting with two or three miles and moving to 15 or so. Aside from speed and distance, you can increase the difficulty of LSD work by increasing the difficulty of the terrain.

Throughout the first three months of work, the primary objective is to lay down a solid foundation for developing not only the cardiovascular and muscular systems, but also the bony frame (including the tendons, ligaments and cartilage). All the horse's systems strengthen and thicken in response to progressively increasing demands, but they vary in the speed of their responses. Soft joints, tendons and cartilage are just beginning to respond when the muscles are already up to full power (bony structures take four to five times as long to condition as muscles), so you must make haste slowly. Pushing too hard early in the program is the easiest way to put a quick end to a promising prospect. Just be patient.

If your endurance prospect is a fully mature animal, his bones will be less subject to improvement by conditioning than those of the adolescent. However, to some extent, you can still strengthen the elasticity of the joint cartilage, tendons and ligaments through the principle of progressive loading. As with the young horse, figure on at least 90 days of LSD before you get into more demanding work.

Always be on the alert for signs of excessive stress. If a normally eager horse becomes dull, if he goes off his feed, or if his stride becomes a little shorter than usual, you should be on full alert. Most horses express how they feel very honestly. Your logical response to these signs is to give a few days off and then come back with more modest demands. Drop back to whatever level of work the horse can comfortably accommodate. It is very tempting during these first months of rather boring work to convince yourself that it would be just as beneficial to do the recommended amount of mileage, but at a faster than recommended speed. You are strongly cautioned against this, inviting though it might be. Increase distance if you feel that your horse can do more but do not imagine that faster work will serve your long term goals. It must be repeated that joints, tendons and ligaments are very unforgiving of abuse.

Once serious damage has been done, a truly full recovery is unlikely.

Sample Training Log…

You can easily make a training log using Microsoft Word or Excel.

Quick-Entry Training and Conditioning Log

Ride Date	Distance Ridden	Time	Pre HR	Post HR	Comments, observations, etc.	See Details

Horse Camping, Trail Etiquette and Random Tips…

The Following tips are just that "Tips" they are not rules or must do's take them only for what they are -

- #1 Tip… **Do not try anything new at a ride!** This means how you contain your horse, the tack you use, the feed you give, the way you ride, the way you hold your mouth when you ride -

NOTHING NEW!!

- If you think there is something that is "just not right" with your horse at **any** time take him/her to the vet **immediately**. Better safe than sorry!
- Most Ride Camps frown on the use of generators. Generally, if you wish to run a generator through the night you may want to park a long ways from most other riders.
- If you are going to arrive late, let management know in advance, once you are parked, be as quiet as possible setting up camp. It may be a good idea to park as far away as possible from other campers; however ride management may have a specific place they would like you to park.
- We are always on public or private land, regardless, leave your camping area fit for the next camper. Ride Management or public park signs will indicate what you should do with your manure. Be sure to place garbage in designated areas or be prepared to carry it home with you.
- Check your horses hooves regularly, clean them out and check their shoes at every stop
- When riding on the trails whether you are entered in the competition or not, if you are going to pass a rider, first be sure it is SAFE! Then give them ample warning by yelling to them that you are coming and let them know which side you are going to pass on – "Passing on your left." Slow down, keep control of your horse and pass with as much courtesy as possible. Try to make special considerations when passing trail riders!
- At a water stop ask other riders if it is ok if you leave. Leaving can cause the other horse to want to leave as well and it may not be possible for the rider to get him/her to take that much needed drink.
- If your horse has kicked at other horses in the past or even if they have acted like they may kick, tie a red ribbon in their tail. Also beware of horses that have the red ribbon in their tail by giving them extra room when you pass or follow them. Putting a red ribbon in your horse's tail does not excuse the behavior, you should still be very aware of your horse's body language and even though you are in essence telling others your horse is prone to kick ultimately your horses actions are **your** responsibility.
- In general do not tailgate another horse, ribbon or no ribbon.
- If a gate is open when you get to it, leave it open, if it is closed, close it after you have passed through. If you are in a group of riders wait until the person that opened the gate is remounted and proceed in the order that you were in when you arrived at the gate.
- Follow all posted rules – Stay on Trail, Dogs on Leash, No Sponging from Tank, etc…
- ALWAYS bring a lawn chair, you will be sorry if you don't have one!

In general, be courteous to others, thank the vets, ride management, volunteers and do like your mother taught you –

"Do unto others as you want done unto you!"

Ride Day and Year End Awards

Ride Day Awards

Almost all competitions have a potluck and awards ceremony on Saturday evening. Even if you are only riding Sunday, attending the potluck is an excellent way to meet the riders, the management and their families.

Everyone who finishes receives a completion award. Top six awards will be given out to Endurance and Competitive Trail divisions by weight class and Limited Distance by Senior and Junior classes. Novice riders receive placing awards to third place. There will also be an option for Best Condition in Endurance and Limited Distance as well as a High Point Award in Competitive Trail. The Competitive Trail High Point award is given to the rider with the most points in all weight divisions (HW, LW and Junior). Ride Management may give out other awards as they wish. For instance, they may give an award to the rider who traveled the furthest to get to the ride or some rides have a "turtle" award for the rider who finishes an endurance ride in last place or possibly a "hard luck" award for someone who just had tough luck all day.

Riders gather together for the Awards Ceremony and Potluck.

UMECRA YEAR END AWARDS

High Point Top 10 Awards

This annual award is given to the top ten equine/rider teams in Endurance, Limited Distance and Competitive Trail who accumulate the most points. The equine/rider team must accumulate a minimum total of 40 points in Competitive Trail/40 points in Limited Distance/60 points in Endurance.

Restricted Mileage High Point Awards

This annual award is given to the top six teams in Endurance and Competitive Trail. Points are accumulated as an equine/rider team. To qualify in Endurance you must accumulate a minimum of 40 points and 295 or fewer miles. For Limited Distance and Competitive Trail the minimum point total is 20 and mileage is 195 or less. Special Note: A team CAN place in both the Endurance and Competitive divisions. A team CANNOT place in the same division in more than one weight division nor can they have placed in the High Point Top Ten.

Competitive Novice Top 5

This annual award is given to the top 5 equine/rider teams in the Competitive Novice division who accumulate the most points. Points are accrued according to the points chart which takes into consideration placing and mileage. To qualify in the Novice division riders must have completed a minimum of 40 miles total in the Competitive Novice division, with the exception that ONE of those rides can be a 25 - 30 mile Competitive Trail ride.

Charles Phillips Memorial Versatilty Award

This annual award is given to the equine/rider team that accumulates the most points in all distance riding divisions. Each team must complete a minimum of two events in each category (Competitive, Limited Distance and Endurance). Riders must complete a nomination form to qualify for this award.

Rookie Endurance or Competitive

This annual award is given to the top 5 "Rookie" teams in Endurance and/or Competitive Trail, senior division only. Rookie is defined as a rider who has not competed in more than 2 sanctioned events in the division they are nominating for. Points are calculated in the Rookie division using the standard points chart however, a Rookie only competes against other nominated Rookies. Example: It's possible to finish 6th overall and 1st in the Rookie division. Riders can only nominate one horse/rider team per division. Endurance teams: Riders may have not yet competed in more than 2 AERC sanctioned Endurance competitions and must accumulate a minimum of 40 points. Competitive teams: Riders may have not yet competed in more than 2 UMECRA sanctioned Competitive Trail competitions and must accumulate a minimum of 20 points.

UMECRA Senior Equine Award

This annual award is given to the senior equine with the highest score (UMECRA points + UMECRA miles) in any combination of divisions (Endurance, Limited Distance, Competitive, Novice and Driving) and with any number of riders. A senior equine is defined as one that is 20+ years of age prior to the end of the current ride season.

High Point Senior/Junior Awards

These annual awards are given to one senior and one junior rider who have compiled the highest number of points on any number of horses accumulated through all divisions.

High Point Family Award

This annual award is given to the family that accumulates the most points in Endurance and Competitive Trail on any number of horses.

Louise Riedel Memorial Top Ten Horse Mileage Award

These annual awards are given to the top ten horses for the most mileage accumulated in all divisions with any number of riders.

Rider Mileage Awards

Chevrons are awarded for each 500 miles of Endurance and 250 miles of Competitive Trail. Miles are recorded automatically from ride results.

1000 Mile Equine Award

Nominating for this award accumulates the miles of an equine starting at the date of nomination and continues with any UMECRA member rider and any change of ownership. Competitive, Endurance, Limited Distance and Driving miles all count together.

100 Mile Equine Award

Annual award based on the completion of a one-day 100 mile event(s) by an equine/rider team. A plaque and medallion are awarded for the first 100 mile event completed. Additional medallions are awarded for each multiple of three events completed.

UMECRA Scholarship Fund Program

Scholarship funds are available for attending college, university, or tech school, for members with a minimum of two years membership and who have competed in at least 25 rides.

Other distance riding organizations found on page 43 also give out similar awards to their members, be sure to check out their websites for more info.

Endurance and Competitive Trail Organization websites…

AERC – American Endurance Ride Conference – www.aerc.org UMECRA – Upper Midwest Endurance & Competitive Rides Association – www.umecra.com AHDRA – Arabian Horse Distance Riding Association – www.ahdra1.com APDRA – Appaloosa Distance Riding Association - http://www.angelfire.com/wi2/apdra/index.html DRAW – Distance Riders Association of Wisconsin GLDRA – Glacial Lakes Distance Riders Association MDDA – The Midwest Driving Association – www.midwestdistancedriving.org MNDRA – Minnesota Distance Riding Association – www.mndra.com NATRC – North American Trail Ride Conference – www.natrc.org FEI – Federation Equestre Internationale – www.fei.org USEF – United States Equestrian Federation – www.usef.org

Recommended websites for nutrition and conditioning information…

www.aerc.org – look under the Education tab.

www.endurance.net – There is a lot of good information here, browse around, even join the endurance chat group called ridecamp!

http://www.shadyacres.com/susan/ Nutrition based information.

Recommended books for nutrition and conditioning information…

The Complete Guide to Endurance Riding and Competition
By Donna SnyderSmith

Go the Distance: The Complete Resource for Endurance
By Nancy S. Loving

All Horse Systems Go: The Horse Owner's FullColor Veterinary Care and Conditioning Resource for Modern Performance, Sport and Pleasure Horses By Nancy S. Loving

Conditioning Sport Horses
By Hilary M. Clayton

Endurance Riding – From Beginning to Winning By Lew Hollander Also available from this author is a CD, The Bible of Endurance Riding

All About Endurance Riding
By Marcy Pavord

Glossary

Aerobic: A horse's muscular system getting energy from a chemical reaction using oxygen, delivered by the blood. The horse can continue as long as enough fuel and oxygen are available. **Anaerobic:** A horse's muscular system getting energy from a chemical reaction not using oxygen. Used for short bursts of high speed; quickly builds up toxins and exhausts the muscles. **Anaerobic Threshold:** The speed at which a horse's muscular system changes from aerobic to anaerobic reactions; the highest speed he can maintain for a long distance. **Anal Tone:** The muscle tone of the anus; loss of anal tone is a sign of fatigue. **Arrival Time:** The time a horse and rider physically arrive at a control check. **Azotouria:** see Tying Up. **BC:** Best Condition. **Best Condition:** An award based on the horse's physical condition as determined by the control judges, riding time, and weight carried. **Borium:** A hard material applied to horseshoes, for greater wear and traction. **Cantle Bag:** A storage pack attached to the cantle of the saddle. **Capillary Refill:** The time, in seconds, it takes the horse's gum to return to a pink color after it has been blanched with thumb pressure. **Cardiac Recovery Index:** A metabolic evaluation where the horse's pulse is taken, the horse is trotted out 125 feet and back, and the pulse is taken again exactly one minute from the beginning of the trot. Failure of the pulse to recover to or below the original value is an indication of potential problems. **CRI:** Cardiac Recovery Index, explained above. **Crupper:** A device attached to the saddle and running under the horse's tail to keep the saddle from sliding forward. **Dehydration:** Loss of bodily fluids through sweating, without adequate replacement by drinking. An endurance horse on a hot day can lose over 50 pounds of water. Necessary electrolytes are lost, too. Excessive dehydration can be life-threatening. **Electrolytes:** Ions of salts, necessary for bodily functions and lost in the sweat. Excessive loss can cause cramping, "thumps," and even become life threatening. Commonly these are Calcium, Sodium, Potassium, Magnesium, and Chloride. **Elevator:** A ride which allows riders starting one distance to change to a longer distance ride upon completion of the shorter. **Endurance Ride:** A ride of 50 or more miles in length held over a specified course under strict control by control judges, with no minimum time limit. **Fanny Pack:** A storage pack carried around the rider's waist. **Fartlek:** Speed play, a type of conditioning utilizing randomly mixed speeds and distances. **Fit to Continue:** The criteria horses must meet to continue in an AERC ride and to meet within one hour of finishing a ride in order to receive a completion. This means that the horse must have satisfactory recovery in all metabolic parameters, and the horse must not have "an irregularity of gait consistently observable at a walk and/or a trot" if that "irregularity is thought to cause pain or threaten the athletic future of the horse." **Gate:** A type of control check where the hold time does not start until the horse recovers to the set pulse criteria. **Gut Sounds:** The sounds of the intestinal system (random gurgling noises). Often diminishing with fatigue, their total absence can indicate a serious metabolic problem with the horse. **Hold Time:** The time a horse and rider must remain in a control check.

Hoof Boots: A clamp on, nail-less alternative to iron horseshoes. Most models of hoof boots are used in place of or over iron horseshoes for cushioning, traction and protection. Most riders also carry a hoof boot as an emergency "spare tire" for when a horse loses a shoe. **Interval Training:** Repeated short bursts of high speed interspersed with recovery periods; an advanced conditioning method for horses that already have a solid LSD foundation.

IV: Fluid given intravenously to a sick or dehydrated horse; may contain electrolytes and/or medications. **Laminitis (founder):** Inflammation of the laminate of the hoof. Extremely painful condition requiring immediate veterinary treatment, as it is life threatening. Early signs are heat in the hooves and a "tucked up" stance where the horse holds his hind hooves close in under himself and the forefeet out in front. **LSD:** Long Slow Distance, the fundamental conditioning tool. **Mucous Membranes:** The inside of the mouth, eyelids, etc. Their color and moisture are signs of dehydration and fatigue. **Out Time:** The time a horse and rider are authorized to leave a control check. **Panting:** Rapid, shallow respiration that a horse uses to help cool himself. Not a sign of any problem if the horse's other parameters are good. **Crew:** People who assist the rider and help care for the horse. **Pulled:** Not permitted to continue riding due to lameness, metabolic factors, rider option, overtime, etc. **P&R:** Pulse and Respiration. Although the term P&R is generally used to describe recovery at gates, only the pulse is required to reach a fixed criteria for the hold time to begin. As some horses pant, respiration is evaluated by the control judge during the control exam. **P&R Time:** Time at which P&R is taken and the horse reaches criteria. **Road Founder:** Founder (laminitis) caused by concussion, usually from too much high speed on hard surfaces during a ride. May take several days to show up after a ride, and in severe cases is life threatening. **Riding Time:** The time from the start of the ride until the horse and rider cross the finish line, excluding all hold times. **Skin Tenting:** A test for dehydration; pinch a fold of skin between your fingers and note the number of seconds it takes to flatten back out. The longer the time, the greater the dehydration of the horse. Over three to four seconds indicates potentially serious dehydration. To be accurate on endurance horses, this test should be applied at the point of the shoulder, not up on the neck. **Thumps:** A rhythmic contraction of the diaphragm muscles, in time with the horse's heartbeat. Caused by electrolyte imbalance. **Timer:** Ride officials who record "in" and "out" times of riders. **Trot Out:** A process where the horse is trotted in hand for inspection by the control judges to check for lameness and impulsion. **Tying Up:** A life-threatening condition (azotouria), usually occurring in the first few miles of a ride, where a horse's muscles cramp so badly he can barely move. An emergency requiring immediate veterinary care, and not moving the horse. Not to be confused with cramping, which occurs after many miles of stress.

Happy Trails